

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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REPORT OF THE U.S. GEOLOGICAL SURVEY'S ANALYTICAL EVALUATION PROGRAM--STANDARD REFERENCE WATER SAMPLES M-82 (MAJOR CONSTITUENTS), T-83 (TRACE CONSTITUENTS), N-8 (NUTRIENTS), and P-2 (PRECIPITATION SNOWMELT).

By Victor J. Janzer

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PROGRAM--STANDARD REFERENCE WATER SAMPLES M-82 (MAJOR
CONSTITUENTS), T-83 (TRACE CONSTITUENTS), N-8
(NUTRIENTS), AND P-2 (PRECIPITATION SNOWMELT)

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ABSTRACT

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

This report presents analytical data submitted by the participating laboratories that analyzed the respective reference samples distributed in October 1982. Relative performance ratings achieved by the laboratories for each determination and statistical evaluation of the data are given in 14 tables.

INTRODUCTION

The U.S. Geological Survey began an interlaboratory testing program of reference water samples in 1962. Principal purposes of the program are to provide a means for participating water laboratories to: (1) Identify analytical problem areas, (2) ascertain the accuracy and precision of the analytical methods for determining the various constituents and physical properties of water and (3) provide reference samples for continuing quality assurance testing. Only 23 laboratories participated in the 1962 effort to determine 6 constituents in a single major-constituent type of Standard Reference Water Sample (SRWS). Now, more than 120 laboratories participate in the program, which currently uses seven SRWS types; major constituents, trace constituents, nutrients, herbicides and insecticides, water and suspended-sediment mixture for trace metals, and precipitation snowmelt.

Participation in this continuing quality-assurance program is mandatory for all laboratories providing water-analysis data for Geological Survey use. Major constituent, trace-constituent, and nutrient SRWS are prepared and distributed to participating laboratories twice each year. One or more of the other SRWS types also may be included.

This report presents analytical data submitted by the participating laboratories that analyzed the respective reference samples distributed in October 1982. Relative performance ratings achieved by the laboratories for each determination and statistical evaluation of the data are given in 14 tables.

PURPOSE AND PLAN

As a means of providing an independent and objective evaluation of the water-quality data published by the U.S. Geological Survey and other cooperating laboratories, SRWS are prepared and distributed for analysis at regular intervals. This report summarizes the analytical results submitted by 85 laboratories for SRWS M-82 (major constituents), SRWS T-83 (trace constituents), SRWS N-8 (nutrients), and SRWS P-2 (precipitation snowmelt), distributed during October 1982. All samples are not necessarily analyzed by all laboratories nor do all laboratories participate in each round of analyses.

"Instructions for Analysis and Reporting Results" accompanied SRWS at the time of their distribution. Each laboratory was requested to indicate references for the analytical methods used. Furthermore, each participating laboratory was asked to perform at least those determinations that it makes routinely and no restrictions were placed on the choice of methods to be used. This program serves as a quality-control tool to alert participating laboratories to deficiencies in their analytical operations and to provide reference solutions for a continuing program of quality-assurance testing. Non-Geological Survey laboratories participating in this study are identified in this report only by a confidential code number. U.S. Geological Survey laboratories participating in this study are identified by location and their respective code numbers.

PREPARATION OF SAMPLES

SRWS M-82 (major constituents), SRWS T-83 (trace constituents), and SRWS N-8 (nutrients), were each prepared from untreated natural surface water collected from the same source. Samples were filtered through a 5- μ m (micrometer) nominal size prefilter and a 0.45 μ m membrane filter into a large polyethylene drum. Thymol, about 1.25 mg/L (milligrams per liter), was added to each batch of approximately 1,200 L (liters) of filtered water used to prepare samples SRWS M-82 and T-83.

No further additions were made to SRWS M-82, but SRWS T-83 was acidified to a pH of about 1.5 with nitric acid and selected trace-element salts were then added. Each sample was mixed overnight with a motor-driven stirrer after which it was again filtered through a 0.45- μ m membrane filter and then passed through a flow-through ultraviolet [254 nm (nanometer)] sterilizer and packaged in dry-heat sterilized 1-L Teflon^{1/} bottles, under ultraviolet radiation.

Approximately 400-L of untreated surface water were collected and filtered through a 0.45- μ m membrane filter to prepare SRWS N-8 (nutrients). Mercuric chloride (50 mg/L) as a preservative and sodium chloride (450 mg/L) were then added. The sample was mixed overnight with a motor-driven stirrer, packaged without sterilization and stored at 4°C (Celsius). The samples were packed in ice prior to distribution.

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

SRWS P-2 (precipitation snowmelt) was prepared by melting snow collected in several 200-L polyethylene drums. After melting, the sample was filtered through a 0.45- μm membrane filter. Specific conductance of the sample was adjusted to the desired range by addition of tap water. After mixing overnight with a motor-driven stirrer, the sample was again filtered through a 0.45- μm filter, sterilized by passage through a flow-through ultraviolet sterilizer (254 nm) and packaged in sterile 1-L Teflon bottles under ultraviolet radiation.

DETERMINATIONS

Determinations made for each of the SRWS are listed below. An explanation of the abbreviations and symbols for the properties and constituents determined in the SRWS is presented in table 1; the abbreviations and symbols are used in tables 3-14. Additional abbreviations and symbols used in tables 7-14 are explained in table 2.

Standard Reference Water Sample M-82, (major constituents) (results in milligrams per liter^{1/})

Alkalinity (as CaCO ₃)	Iodide	Potassium
Boron	Magnesium	Silica
Bromide	Nitrate as nitrogen	Sodium
Calcium	Nitrite as nitrogen	Specific
conductance Chloride	pH	Strontium
Dissolved solids	Phosphorus, total	Sulfate
Fluoride	as phosphorus	Vanadium

Determinations

Standard Reference Water Sample T-83 (trace constituents) (results in micrograms per liter^{2/})

Acidity (as CaCO ₃)	Cobalt	Nickel
Aluminum	Copper	Selenium
Antimony	Iron	Silver
Arsenic	Lead	Strontium
Barium	Lithium	Thallium
Beryllium	Manganese	Zinc
Cadmium	Mercury	
Chromium, total	Molybdenum	

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

^{2/} Except acidity (milligrams per liter).

Standard Reference Water Sample N-9 (nutrients)
(results in milligrams per liter)

Ammonia as nitrogen	Organic nitrogen as nitrogen
Nitrate as nitrogen	Orthophosphate as phosphorus
Nitrite as nitrogen	Phosphorous, total as phosphorus

Standard Reference Water Sample P-2 (precipitation snowmelt)
(results in milligrams per liter ^{3/})

Calcium	Nitrate as nitrogen	Sodium
Chloride	pH	Specific conductance
Fluoride	Potassium	Sulfate
Magnesium		

^{3/} Except pH (units) and specific conductance (microsiemens or micromhos per centimeter at 25°C).

LABORATORY PERFORMANCE AND REPORTED VALUES

To facilitate inter-laboratory performance comparisons, ratings based on the analyses reported for each SRWSs are included as tables 3-6 in this report. Laboratory performance for each constituent is rated on an arbitrary scale of 0 to 4 based on the number of "standard deviations" from the mean as indicated below:

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

Averages of the constituent ratings for each Standard Reference Water Samples are calculated for each laboratory and are given in the tables of overall laboratory performance (tables 3-6).

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

1. American Public Health Association and others, 1980, Standard methods for the examination of water and wastewater [15th ed.]: Washington, D.C., 1134 p.
2. American Society for Testing and Materials, 1982, Annual book of ASTM standards, Part 31: Philadelphia, PA, U.S.A., 1554 p.
3. Kopp, J. F., and McKee, G. F., 1978, Methods for chemical analysis of water and wastes: Cincinnati, Ohio, U.S. Environmental Protection Agency, 460 p.
4. Skougstad, M. W., Fishman, M. J., Friedman, L. C., Erdmann, D. E., and Duncan, S. S., eds., 1979, Methods for determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A1, 626 p.
5. Fishman, M. J., and Bradford, W. L., eds., 1982, A supplement to methods for the determinations of inorganic substances in water and fluvial sediments: (Supplement to U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A1), U.S. Geological Survey Open-File Report 82-272, 136 p.
6. Fishman, M. J., and Pyen, Grace, 1979, Determination of selected anions in water by ion chromatography: U.S. Geological Survey Water-Resources Investigations 79-101, 30 p.

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

Values reported for all constituents analyzed in each SRWS are listed in tables 7, 9, 11 and 13. Each value has been rounded off, when necessary, to conform to U.S. Geological Survey policy on reporting analytical data as given by Bishop and others (1978).

STATISTICAL EVALUATION

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

Outlying values for the remaining SRWS were rejected on the basis of statistical tests as outlined in American Society for Testing and Materials (1982). After rejection of the outliers, the data remaining for each constituent were used to calculate the means, standard deviations, and percent deviation from the mean for each value. Outliers are not recalculated when determining the means and standard deviations for each determination listed by "method." The total range for each constituent included those values rejected as outliers. Confidence limits about the mean also were calculated and define the range within which the true value may be expected to occur with a confidence level of 95 percent.

The mean, standard deviation, and confidence limits about the mean are usually reported to one more significant figure than the reported value. Statistical information is tabulated for each method used by three or more laboratories to determine a specific constituent. Tables 8, 10, 12, and 14 listing the mean and standard deviation for the constituent determined by each method, and the number of laboratories which used it, follow the analytical-data tables for each SRWS.

PARTICIPATING LABORATORIES

U.S. Geological Survey

ARIZONA, Yuma: 046
COLORADO, Denver: 059
FLORIDA, Ocala: 035

GEORGIA, Doraville: 055
GEORGIA, Doraville: 071
LOUISIANA, Baton Rouge: 065

Cooperator

ALABAMA, Montgomery: Alabama Environmental Health
ALABAMA, University: Geological Survey of Alabama

ALASKA, College: Division of Geological & Geophysical Surveys

CALIFORNIA, Bryte: California Department of Water Resources
CALIFORNIA, Castaic: Department of Water Resources Chemical Laboratory
CALIFORNIA, Davis: Radiobiology Institute
CALIFORNIA, La Mesa: San Diego Water Utilities Laboratory
CALIFORNIA, La Verne: Metropolitan Water District of Southern California
CALIFORNIA, Los Gatos: Santa Clara Valley Water District
CALIFORNIA, Oakland: East Bay Municipal Utility District
CALIFORNIA, Sacramento: U.S. Bureau of Reclamation, Planning Division

COLORADO, Aurora: Core Laboratories Incorporated
COLORADO, Denver: Denver Water Department
COLORADO, Denver: Colorado University, Denver
COLORADO, Golden: Rockwell International

FLORIDA, Live Oak: Suwannee River Water Management District
FLORIDA, Orlando: Orlando Utilities Commission
FLORIDA, Palatka: St. John's River Water Management District
FLORIDA, Tallahassee: Tallahassee Water Quality Laboratory
FLORIDA, West Palm Beach: South Florida Water Management District

GEORGIA, Athens: Soil Testing & Plant Tissue Analysis Laboratory
GEORGIA, Atlanta: Environmental Protection Division

ILLINOIS, Champaign: Illinois Environmental Protection Agency
ILLINOIS, Chicago: Illinois Environmental Protection Agency

INDIANA, Indianapolis: Marion County Public Health Laboratory

IOWA, Des Moines: University Hygienic Laboratory

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

LOUISIANA, Lake Charles: Core Labs, Inc.

MAINE, Augusta: Maine Department of Environmental Protection

MASSACHUSETTS, Barnstable: Barnstable County Health Department
MASSACHUSETTS, Wellesley Hills: Research and Materials Division

Cooperator--continued

MINNESOTA, Minneapolis: Analytical Services, Minnesota Department of Health
MINNESOTA, St. Paul: Metropolitan Waste Control Commission

MISSOURI, Columbia: Environmental Trace Substances Research Center
MISSOURI, Jefferson City: Division of Environmental Quality

MONTANA, Butte: Montana Bureau of Mines & Geology

NEVADA, Reno: Desert Research Institute
NEVADA, Reno: Nevada State Health Laboratory

NEW JERSEY, Tom's River: Ocean County Health Department
NEW JERSEY, Trenton: New Jersey Department of Health

NEW MEXICO, Albuquerque: New Mexico State Scientific Laboratory
NEW MEXICO, Albuquerque: New Mexico Water Resources Laboratory
NEW MEXICO, Gallup: Soil, Water, and Materials Testing Laboratory

NEW YORK, Buffalo: Erie County Laboratory
NEW YORK, Central Islip: Suffolk County Health Services Department
NEW YORK, Farmingdale: ECO Test Laboratory
NEW YORK, Hempstead: Nassau County Department of Health
NEW YORK, New York: New York City Department of Health Laboratories
NEW YORK, Oakdale: Suffolk County Water Authority
NEW YORK, Rochester: Monroe County Health Laboratory
NEW YORK, Rochester: Rochester Pure Waters District
NEW YORK, Wantagh: Cedar Creek Wastewater Reclamation Plant
NEW YORK, Westbury: New York Testing Laboratory

NORTH CAROLINA, Charlotte: Mecklenburg County Environmental Health Department

NORTH DAKOTA, Bismarck: North Dakota State Water Commission
NORTH DAKOTA, Bismarck: Public Health Laboratory

OHIO, Dayton: The Miami Conservancy District
OHIO, Medina: Medina County Sanitary Engineering Department

OKLAHOMA, Norman: Oklahoma Geological Survey
OKLAHOMA, Oklahoma City: Oklahoma State Department of Agriculture

OREGON, Corvallis: Forestry Sciences Laboratory
OREGON, Sandy; Bureau of Water Works

PENNSYLVANIA, Harrisburg: Department of Environmental Resources, Bureau of Labs
PENNSYLVANIA, Pittsburgh: Pennsylvania Department of Environmental Resources

PUERTO RICO, Mayaguez: Quality Control Research Institute
PUERTO RICO, San Juan: Department of Natural Resources

SOUTH CAROLINA, Columbia: South Carolina Water Resources Commission

SOUTH DAKOTA, Brookings: Water Quality Laboratory
SOUTH DAKOTA, Vermillion: South Dakota Geological Survey

Cooperator--continued

TENNESSEE, Chattanooga: Tennessee Valley Authority, Laboratory Branch

VIRGINIA, Culpeper: Environmental Systems Service

VIRGINIA, Richmond: Division of Consolidated Laboratories

WASHINGTON, Redmond: Department of Ecology

WASHINGTON, Richland: Battelle Pacific NW Laboratories

WASHINGTON, Richland: Rockwell Hanford Operation

WEST VIRGINIA, Morgantown: West Virginia Geologic and Economic Survey

WISCONSIN, Milwaukee: Milwaukee Metropolitan Sewerage District

WYOMING, Cheyenne: Department of Environment Quality

WYOMING, Laramie: Wyoming Department of Agriculture

REFERENCES

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

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

_____, 1982, Annual book of ASTM standards, Part 31: Philadelphia, Pa., 1554 p.

Table 1. -- Explanation of abbreviations and symbols for properties and constituents determined in Standard Reference Water Samples

ACID (CAC03)	= Acidity, as calcium carbonate
AG	= Silver
AL	= Aluminum
ALK (CAC03)	= Alkalinity, as calcium carbonate
AS	= Arsenic
B	= Boron
BA	= Barium
BE	= Beryllium
BR	= Bromide
CA	= Calcium
CD	= Cadmium
CL	= Chloride
CO	= Cobalt
CR TOT	= Chromium, total (all species)
CU	= Copper
DSRD 180	= Dissolved solids, residue at 180°C
F	= Fluoride
FE	= Iron
HG	= Mercury
I	= Iodide
K	= Potassium
LI	= Lithium
MG	= Magnesium
MN	= Manganese
MO	= Molybdenum
NA	= Sodium
NH3-N	= Ammonia, as nitrogen
NI	= Nickel
NO3-N	= Nitrate, as nitrogen
NO2-N	= Nitrite, as nitrogen
ORG-N	= Organic nitrogen
PB	= Lead
PH	= pH, units
P04-P	= Orthophosphate, as phosphorus
P, TOTAL	= Phosphorus, total, (all species), as phosphorus
SB	= Antimony
SE	= Selenium
SI02	= Silica
S04	= Sulfate
SP. COND.	= Specific conductance $\frac{1}{}$
SR	= Strontium
TL	= Thallium
V	= Vanadium
ZN	= Zinc

$\frac{1}{}$ Microsiemens or micromhos per centimeter at 25°C.

Table 2. -- Explanation of Abbreviations and Symbols Used in Computer Printout Sections

ABS - absorption
ACD - acid
ALK - alkalinity
APDC - ammonium pyrrolidine dithiocarbamate
AUTO - automated
AVG - average
BLK - block
CO'METRIC - colorimetric
COND. - conductivity
DC - direct current
DEV - deviation
DIG - digestion
DSRD - dissolved residues
EDTA - ethylene diamine tetraacetic acid
IC - inductively coupled
IGNORED - values reported as less than detection level and not used in statistical analyses
INTRVL - interval
K & HG SO4 - potassium & mercuric sulfate
LAB - laboratory
MIBK - methyl isobutyl ketone
N - number of samples or constituents involved in average or mean
ND - not determined
NO - number
PCT - percent
PDCA - pyrrolidine dithiocarbamic acid
PERSULF - persulfate
PHOSPHOMOLYBD - phosphomolybdate
REJECT - values identified as an outlier and not used in statistical analyses
SP. - specific
SPADNS - sodium 2-(parasulfophenylazo)-1,8-dihydroxy-3,6-naphthalene disulfonate
SRWS - standard reference water sample
STD - standard
TOT - total
< - less than

TABLE 3. OVERALL LABORATORY PERFORMANCE SRMS M82

RATING	4 (EXCELLENT)	3 (GOOD)	2 (SATISFACTORY)	1 (QUESTIONABLE)	0 (POOR)	0.00 TO 0.51 (ID)	0.51 TO 1.00 (STU.)	1.01 TO 1.50 (STU.)	1.51 TO 2.00 (STU.)	> 2.00 (STU.)	CA	CL	USKD	180	F	I	K	MG
LAB 001	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	4	ND	ND	4	ND	ND	4	4
002	1	ND	ND	ND	ND	ND	3	4	ND	ND	4	4	ND	4	ND	ND	4	1
003	2	0	ND	ND	ND	ND	0	4	3	ND	4	4	4	ND	ND	ND	4	0
004	3	ND	ND	ND	ND	ND	4	4	4	ND	4	4	4	4	ND	ND	4	4
005	2	ND	ND	ND	ND	ND	3	1	ND	ND	4	4	4	4	ND	ND	4	5
006	ND	ND	ND	ND	ND	ND	ND	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
007	4	ND	ND	ND	ND	ND	4	3	4	ND	4	4	4	1	ND	ND	4	2
009	4	ND	ND	ND	ND	ND	4	4	4	ND	4	4	4	4	ND	ND	4	0
010	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND
011	2	ND	ND	ND	ND	ND	0	3	4	ND	4	4	4	3	ND	ND	4	4
012	2	ND	ND	ND	ND	ND	1	0	1	ND	1	1	1	1	ND	ND	ND	ND
013	ND	3	ND	ND	ND	ND	4	4	ND	ND	4	4	4	4	ND	ND	4	4
014	0	3	ND	ND	ND	ND	4	4	4	ND	4	4	4	3	ND	ND	4	4
015	4	4	4	4	4	4	4	4	2	ND	4	4	4	3	ND	ND	4	4
016	ND	ND	ND	ND	ND	ND	0	3	ND	ND	ND	ND	ND	ND	3	ND	3	3
017	ND	4	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	4
018	0	3	4	4	4	4	3	4	ND	ND	3	ND	ND	3	ND	3	4	4
019	0	4	ND	ND	ND	ND	0	3	4	ND	4	4	4	0	ND	ND	4	4
020	1	3	0	4	4	4	4	4	4	ND	4	4	4	4	ND	ND	4	4
021	1	4	4	4	4	4	4	4	2	ND	4	2	4	3	ND	ND	0	4
022	4	4	4	4	4	4	4	3	3	ND	3	3	3	3	ND	ND	4	4
024	0	0	ND	ND	ND	ND	0	0	0	ND	0	0	0	3	ND	ND	4	1
025	ND	0	ND	ND	ND	ND	3	4	ND	ND	ND	ND	ND	ND	ND	ND	4	4
026	4	3	4	4	4	4	4	4	4	ND	4	ND	ND	4	ND	ND	4	4
027	1	ND	ND	ND	ND	ND	0	0	4	ND	4	4	4	4	ND	ND	ND	ND
028	4	ND	ND	ND	ND	ND	4	4	4	ND	4	4	4	4	ND	ND	4	4
029	2	ND	ND	ND	ND	ND	4	ND	4	ND	4	4	4	ND	ND	ND	2	4
030	4	ND	ND	ND	ND	ND	3	4	ND	ND	4	4	4	3	ND	ND	3	3
031	ND	ND	ND	ND	ND	ND	4	3	ND	ND	4	ND	ND	0	ND	ND	3	3
032	3	1	ND	ND	ND	ND	0	4	3	ND	0	3	3	3	ND	ND	4	2
034	2	3	ND	ND	ND	ND	4	4	4	ND	4	4	4	4	ND	ND	4	4
035	4	ND	ND	ND	ND	ND	4	4	4	ND	4	4	4	4	ND	ND	4	4
036	4	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	4	ND	ND	ND	ND
037	4	ND	ND	ND	ND	ND	4	3	4	ND	4	4	4	3	ND	ND	3	4
038	4	4	4	4	4	4	4	4	4	ND	4	4	4	3	ND	ND	3	3
040	4	ND	ND	ND	ND	ND	ND	3	4	ND	ND	ND	ND	ND	ND	ND	ND	ND
041	ND	ND	ND	ND	ND	ND	3	2	ND	ND	ND	ND	ND	ND	ND	ND	3	4
043	4	ND	ND	ND	ND	ND	3	4	0	ND	4	0	0	4	ND	ND	4	1
044	4	ND	ND	ND	ND	ND	4	3	0	ND	4	0	0	4	ND	ND	4	3
045	4	ND	ND	ND	ND	ND	3	ND	4	ND	4	4	4	ND	ND	ND	4	4
046	4	ND	ND	ND	ND	ND	3	2	3	ND	3	3	3	3	ND	ND	0	4
047	2	ND	ND	ND	ND	ND	3	4	4	ND	4	4	4	4	ND	ND	4	3

ABBREVIATIONS
 ND = NOT DETERMINED
 LT = LESS-THAN VALUE REPORTED, NOT RATED
 N = NUMBER OF CONSTITUENTS LABORATORY DETERMINED
 AVG = AVERAGE LABORATORY PERFORMANCE RATING

TABLE 3. OVERALL LABORATORY PERFORMANCE SRWS M82

LAB	RATING	ALK(CACU3)B	BK	0.00 TO 0.50 STD. DEV.			0.51 TO 1.00 STD. DEV.			1.01 TO 1.50 STD. DEV.			1.51 TO 2.00 STD. DEV.			> 2.00 STD. DEV.			CA	CL	DSRD 180	F	I	K	MG	
				4 (EXCELLENT)	3 (GOOD)	2 (SATISFACTORY)	1 (QUESTIONABLE)	0 (POOR)	4 (EXCELLENT)	3 (GOOD)	2 (SATISFACTORY)	1 (QUESTIONABLE)	0 (POOR)	4 (EXCELLENT)	3 (GOOD)	2 (SATISFACTORY)	1 (QUESTIONABLE)	0 (POOR)								4 (EXCELLENT)
048	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
049	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
050	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
051	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
052	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
053	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
054	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
055	4	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
056	0	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
058	0	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
059	2	4	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
060	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
061	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
062	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
063	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
064	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
065	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
066	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
067	3	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
068	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
069	3	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
070	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
071	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
072	4	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
074	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
075	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
077	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
079	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
080	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
081	0	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
082	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
083	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
084	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
085	1	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
086	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
087	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
091	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
092	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
094	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
095	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
096	4	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
097	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 3. OVERALL LABORATORY PERFORMANCE SKWS M82

RATING	0.00 TO 0.50		0.51 TO 1.00		1.01 TO 1.50		1.51 TO 2.00		> 2.00		PH	S102	S04	SP. COND.	SK	V	N	AVG.
	NA	NO2-N	NUS-N	P, TOTAL	STD. DEV.	STU. DEV.	STD. DEV.	STU. DEV.	STD. DEV.	STD. DEV.								
001	4	ND	4	0	4	4	4	4	4	4	ND	4	4	ND	ND	9	3.44	
002	3	LT	4	4	3	4	4	4	4	4	ND	1	4	ND	ND	11	2.91	
003	4	3	4	4	4	4	4	4	4	4	ND	0	0	ND	ND	15	2.40	
004	4	ND	LT	3	4	4	4	4	4	4	3	4	4	4	ND	14	3.79	
005	4	ND	ND	ND	4	4	4	4	4	4	ND	ND	3	ND	ND	9	3.11	
006	ND	ND	4	0	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	3	1.33	
007	4	ND	4	4	ND	ND	ND	ND	ND	ND	1	4	3	ND	ND	12	3.17	
009	4	3	4	4	4	4	4	4	4	4	1	4	0	ND	ND	15	2.93	
010	3	LT	LT	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	3.50	
011	4	LT	LT	4	4	4	4	4	4	4	3	3	4	ND	ND	12	3.17	
012	ND	3	4	4	3	4	4	4	4	4	ND	1	4	ND	ND	10	2.30	
013	4	ND	ND	ND	0	4	4	4	4	4	4	4	4	0	ND	12	3.00	
014	4	ND	ND	4	4	4	4	4	4	4	4	4	4	4	ND	15	3.00	
015	4	3	4	3	2	4	4	4	4	4	3	4	2	4	1	20	3.20	
016	4	ND	ND	ND	4	4	4	4	4	4	ND	0	3	ND	ND	8	2.13	
017	4	ND	ND	3	2	4	4	4	4	4	4	ND	0	4	ND	10	3.30	
018	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	4	4	4	ND	13	3.08	
019	4	LT	0	1	3	3	4	4	4	4	3	4	3	0	LT	16	2.06	
020	4	LT	LT	4	4	4	4	4	4	4	0	3	2	3	LT	16	3.00	
021	4	3	4	4	3	4	4	4	4	4	3	0	3	4	4	16	3.00	
022	4	ND	4	3	1	4	4	4	4	4	2	4	3	4	3	17	3.35	
024	0	LT	0	1	3	3	0	0	0	0	3	0	2	ND	ND	15	1.13	
025	3	ND	ND	3	0	ND	ND	ND	ND	ND	2	ND	2	4	3	11	2.55	
026	4	ND	ND	ND	2	4	4	4	4	4	4	4	4	4	ND	14	3.79	
027	4	1	LT	4	1	4	4	4	4	4	ND	3	4	ND	ND	12	2.42	
028	4	3	4	1	3	4	1	2	4	4	1	2	4	0	ND	16	3.00	
029	ND	1	0	0	4	4	4	4	4	4	ND	3	4	ND	ND	8	2.25	
030	3	1	0	4	3	4	4	4	4	4	ND	3	4	ND	ND	13	2.92	
031	4	3	4	ND	4	4	4	4	4	4	ND	3	4	ND	ND	11	3.18	
032	4	ND	4	3	4	4	4	4	4	4	ND	3	0	ND	ND	15	2.87	
034	4	1	4	4	4	4	4	4	4	4	4	3	3	3	ND	17	3.47	
035	2	3	4	4	4	4	4	4	4	4	4	4	4	3	ND	16	3.63	
036	ND	ND	ND	ND	4	4	4	4	4	4	ND	ND	1	ND	ND	5	3.40	
037	4	LT	LT	1	3	4	4	4	4	4	2	3	4	ND	ND	13	3.23	
038	4	ND	ND	3	4	4	4	4	4	4	4	4	3	4	3	16	3.03	
040	ND	1	0	3	4	4	4	4	4	4	ND	ND	4	ND	ND	7	2.71	
041	3	ND	ND	ND	4	4	4	4	4	4	ND	ND	4	ND	ND	7	3.29	
043	3	3	4	0	4	4	4	4	4	4	0	2	3	ND	ND	15	2.60	
044	3	3	4	0	2	4	4	4	4	4	4	3	4	ND	ND	15	3.00	
045	2	ND	ND	4	2	4	4	4	4	4	ND	ND	4	ND	ND	9	3.44	
046	0	ND	4	ND	3	4	4	4	4	4	ND	ND	3	ND	ND	13	2.54	
047	4	1	0	4	4	4	4	4	4	4	0	2	4	ND	ND	15	2.87	

ABBREVIATIONS
 ND = NOT DETERMINED
 LT = LESS-THAN VALUE REPORTED, NUI RATED
 N = NUMBER OF CONSTITUENTS LABORATORY DETERMINED
 AVG = AVERAGE LABORATORY PERFORMANCE MATING

TABLE 3. OVERALL LABORATORY PERFORMANCE SRWS M82

LAB	RATING	RATING				RATING				RATING				RATING				AVG.
		4 (EXCELLENT)	3 (GOOD)	2 (SATISFACTORY)	1 (QUESTIONABLE)	0 (POOR)	0.00 TO 0.50	0.51 TO 1.00	1.01 TO 1.50	1.51 TO 2.00	> 2.00	STU. DEV.	STU. DEV.	STU. DEV.	STU. DEV.	STU. DEV.		
048	4	NA	NU2=N	NU3=N	P, TOTAL	PH	SIU2	SU4	SP. CUND.	SK	V	N	AVG.					
049	2	ND	ND	ND	ND	ND	2	ND	ND	4	ND	6	3.67					
050	3	1	1	4	4	4	2	1	ND	ND	ND	4	2.17					
051	3	3	4	4	4	4	4	4	2	ND	LT	4	1.75					
052	4	4	4	4	4	0	ND	4	2	3	4	10	2.00					
053	4	4	4	4	4	4	3	4	2	3	4	18	3.38					
054	4	4	4	4	4	4	4	4	4	ND	ND	14	2.44					
055	4	4	4	4	4	2	4	4	4	4	1	14	2.50					
056	0	ND	ND	LT	0	3	4	3	2	ND	ND	19	3.16					
058	0	3	4	4	4	3	4	4	4	4	4	13	2.00					
059	4	LT	LT	LT	4	3	0	3	3	4	4	20	2.80					
060	3	LT	LT	4	2	3	ND	3	0	ND	LT	17	3.47					
061	0	LT	4	4	ND	3	ND	4	1	ND	ND	12	2.00					
062	4	ND	ND	ND	ND	ND	4	4	ND	ND	ND	10	2.00					
063	4	3	4	4	ND	3	0	4	4	4	3	18	3.90					
064	4	ND	ND	ND	ND	3	ND	3	4	ND	ND	10	3.53					
065	4	4	ND	ND	ND	4	2	0	4	ND	ND	10	2.90					
066	4	LT	LT	LT	4	3	ND	ND	4	ND	ND	12	2.25					
067	ND	LT	LT	LT	ND	4	ND	ND	ND	ND	ND	8	3.50					
068	4	LT	LT	LT	4	4	2	4	3	1	LT	7	3.29					
069	3	LT	LT	LT	2	3	3	0	3	0	LT	16	3.38					
070	4	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	14	2.29					
071	4	3	4	4	ND	ND	4	4	ND	4	3	6	3.83					
072	4	ND	4	4	3	4	ND	4	4	ND	ND	12	3.58					
074	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	14	3.64					
075	3	LT	0	0	3	4	ND	4	3	ND	ND	3	2.00					
077	3	3	4	4	4	4	4	4	4	4	ND	13	2.85					
079	4	0	0	0	4	4	2	3	2	3	ND	15	3.47					
080	3	LT	LT	LT	4	0	ND	3	ND	ND	ND	16	2.75					
081	4	4	4	4	ND	4	4	3	3	3	ND	10	1.80					
082	2	LT	LT	LT	4	4	3	1	2	0	ND	15	3.20					
083	ND	3	0	0	0	2	ND	ND	ND	ND	ND	14	2.57					
084	0	ND	4	4	ND	ND	ND	3	4	ND	ND	4	1.25					
085	4	ND	4	4	1	3	ND	4	3	ND	ND	8	3.25					
086	4	ND	ND	ND	ND	2	2	4	1	ND	ND	14	2.43					
087	0	3	4	4	3	3	3	0	1	3	ND	10	2.60					
091	0	LT	LT	LT	3	3	ND	4	3	ND	ND	18	2.69					
092	0	1	1	1	3	4	ND	ND	0	ND	ND	12	2.58					
094	2	3	4	4	3	3	1	1	3	ND	ND	10	2.80					
095	2	3	4	4	ND	4	ND	3	0	ND	ND	13	2.38					
096	4	3	4	4	4	1	ND	3	4	ND	ND	13	2.62					
097	0	ND	ND	ND	3	3	0	ND	4	ND	ND	16	3.51					
												12	2.00					

TABLE 4 OVERALL LABORATORY PERFORMANCE SKWS T85
 ABBREVIATIONS
 ND = NOT DETERMINED
 LT = LESS-THAN VALUE REPORTED, NOT RATED
 N = NUMBER OF CONSTITUENTS LABORATORY DETERMINED
 AVG = AVERAGE LABORATORY PERFORMANCE RATING

RATING	4 (EXCELLENT)	3 (GOOD)	2 (SATISFACTORY)	1 (QUESTIONABLE)	0 (POOR)	AL	AS	BA	BE	CO	CU	CR TOT	CU
LAB	AC10	CAC	U3	AG	AL	AS	BA	BE	CO	CU	CR TOT	CU	CU
	0.00 TO 0.50 STD. DEV.	0.51 TO 1.00 STD. DEV.	1.01 TO 1.50 STD. DEV.	1.51 TO 2.00 STD. DEV.	> 2.00 STD. DEV.								
001	ND	ND	3	ND	ND	4	4	3	ND	ND	ND	ND	ND
002	4	3	ND	0	0	ND	4	ND	3	ND	LT	4	ND
003	ND	4	2	ND	2	ND	4	ND	3	ND	3	0	4
004	ND	ND	ND	4	4	ND	4	4	3	ND	3	3	3
005	ND	4	ND	ND	4	ND	4	ND	4	ND	2	4	4
007	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	4	ND	ND
009	ND	4	2	4	4	ND	4	ND	3	ND	2	4	4
010	1	4	ND	4	4	ND	4	ND	ND	ND	4	4	4
012	ND	ND	ND	4	ND	ND	4	ND	0	ND	4	4	1
013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
014	ND	4	4	3	3	ND	4	ND	3	ND	ND	4	4
015	4	3	2	4	4	ND	4	3	4	4	4	4	4
016	ND	LT	ND	ND	ND	ND	4	ND	LT	ND	LT	LT	LT
017	ND	ND	0	4	4	ND	4	ND	1	2	1	2	2
018	ND	ND	3	2	4	ND	4	ND	3	0	3	2	2
019	ND	0	3	4	4	ND	4	4	1	2	4	4	4
020	4	LT	4	3	3	ND	4	LT	LT	4	4	4	4
021	0	4	3	0	0	ND	4	3	4	3	4	4	4
022	2	3	ND	4	4	ND	4	3	4	4	3	0	0
024	4	4	3	2	0	ND	4	2	0	ND	4	1	1
025	ND	0	4	1	4	ND	4	4	3	4	4	2	2
026	ND	4	ND	ND	4	ND	4	1	ND	ND	ND	4	4
027	4	ND	ND	ND	ND	ND	4	ND	3	ND	ND	LT	4
028	4	ND	3	4	2	ND	4	ND	3	4	0	0	0
029	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	4	4
030	ND	4	ND	ND	ND	ND	4	ND	ND	ND	4	4	4
032	ND	0	4	3	3	ND	4	1	4	ND	4	2	2
034	ND	0	3	0	2	ND	4	ND	1	ND	4	4	4
036	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND
037	ND	LT	4	ND	3	ND	4	LT	ND	ND	ND	ND	ND
038	ND	4	3	3	4	ND	4	4	3	3	3	3	3
040	ND	3	ND	ND	ND	ND	4	ND	3	ND	3	3	4
041	ND	ND	3	ND	ND	ND	4	ND	3	ND	ND	2	4
043	ND	4	ND	4	2	ND	4	ND	2	ND	3	4	4
044	4	4	ND	1	3	ND	4	ND	3	ND	4	4	4
047	2	4	0	3	3	ND	4	4	4	4	4	4	4
048	ND	4	ND	LT	ND	ND	4	ND	4	4	LT	3	3
049	ND	ND	ND	ND	4	ND	4	4	ND	ND	ND	3	3
050	ND	4	ND	0	ND	ND	4	ND	3	ND	4	3	3
051	3	LT	3	LT	3	ND	4	ND	4	ND	4	4	4
053	ND	1	4	0	1	ND	4	1	0	3	4	3	3
054	ND	0	0	0	1	ND	4	ND	0	ND	0	0	0

TABLE 4 OVERALL LABORATORY PERFORMANCE SRWS T83
 ABBREVIATIONS
 ND = NOT DETERMINED
 LT = LESS THAN VALUE REPORTED, NOT RATED
 N = NUMBER OF CONSTITUENTS LABORATORY DETERMINED
 AVG = AVERAGE LABORATORY PERFORMANCE RATING

RATING	0.00 TO 0.50 STD. DEV.		0.51 TO 1.00 STD. DEV.		1.01 TO 1.50 STD. DEV.		1.51 TO 2.00 STD. DEV.		> 2.00 STD. DEV.			
	4 (EXCELLENT)	3 (GOOD)	2 (SATISFACTORY)	1 (QUESTIONABLE)	0 (POOR)	4 (EXCELLENT)	3 (GOOD)	2 (SATISFACTORY)	1 (QUESTIONABLE)	0 (POOR)		
LAB	AC10	CACU	SAG	AL	AS	BA	BE	CO	CO	CK	TOT	CU
055	0	4	3	3	4	3	1	3	4	3	3	3
056	ND	1	ND	ND	4	4	ND	3	ND	4	4	4
058	0	4	4	4	4	4	4	3	3	3	3	0
059	4	4	3	4	4	4	4	4	4	4	4	4
060	3	ND	ND	ND	ND	ND	ND	0	ND	0	0	0
062	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
063	ND	ND	2	4	ND	4	ND	3	0	4	4	4
064	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2
065	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
066	ND	3	4	4	4	ND	ND	4	ND	4	4	4
067	ND	3	ND	0	0	0	ND	ND	ND	4	4	0
068	1	LT	LT	4	LT	LT	LT	4	4	3	3	3
069	ND	3	4	4	LT	3	2	3	4	2	4	4
070	ND	ND	ND	ND	ND	4	ND	4	ND	4	4	4
071	ND	ND	ND	ND	ND	4	4	4	4	ND	3	3
072	3	3	4	4	ND	4	ND	4	ND	4	4	4
075	ND	3	4	4	LT	ND	ND	3	ND	4	4	4
076	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	4	4
077	1	2	ND	ND	4	0	ND	4	2	3	3	0
079	3	3	4	4	4	1	4	4	1	3	3	4
080	ND	LT	0	4	LT	4	4	3	0	4	4	2
081	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
082	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	1	2
083	ND	ND	ND	ND	ND	ND	ND	0	ND	2	2	4
084	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
085	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
086	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
091	ND	LT	0	0	4	0	ND	3	ND	4	4	3
092	ND	4	ND	3	LT	3	0	4	4	3	3	0
094	4	ND	ND	ND	ND	ND	ND	3	0	4	4	4
095	ND	3	ND	ND	ND	ND	ND	ND	ND	2	2	ND
096	ND	3	3	4	4	4	ND	3	ND	4	4	3
097	ND	ND	ND	ND	ND	ND	ND	4	ND	0	0	4

TABLE 4 OVERALL LABORATORY PERFORMANCE SRWS T83
 ABBREVIATIONS
 ND = NOT DETERMINED
 LT = LESS-THAN VALUE REPORTED, NOT RATED
 N = NUMBER OF CONSTITUENTS LABORATORY DETERMINED
 AVG = AVERAGE LABORATORY PERFORMANCE RATING

LAB	RATING	FE	HG	LI	MN	MU	NI	PB	SB	SE	SR
001	4 (EXCELLENT)	ND	4	ND	ND	ND	ND	2	ND	1	ND
002	3 (GOOD)	4	ND	ND	4	ND	ND	0	ND	ND	ND
003	2 (SATISFACTORY)	4	ND	ND	ND	ND	ND	ND	ND	ND	ND
004	1 (QUESTIONABLE)	3	LT	3	4	ND	4	ND	ND	4	4
005	0 (POOR)	3	ND	ND	4	ND	ND	ND	ND	2	ND
007		ND	3	ND	4	ND	ND	ND	ND	ND	ND
009		3	0	ND	3	ND	4	3	ND	2	ND
010		ND	ND	ND	4	ND	ND	4	ND	ND	ND
012		0	ND	ND	1	ND	0	3	ND	ND	ND
013		ND	ND	4	ND	ND	ND	ND	ND	ND	0
014		3	ND	4	4	ND	ND	ND	ND	4	4
015		4	4	2	4	3	4	2	2	3	4
016		ND	4	ND	0	ND	LT	4	ND	ND	ND
017		3	ND	ND	4	0	0	0	ND	ND	0
018		3	ND	1	4	4	3	3	ND	4	4
019		3	LT	4	0	2	0	4	3	4	0
020		LT	2	4	4	LT	LT	3	LT	LT	4
021		3	4	4	4	2	1	3	3	2	4
022		3	4	ND	4	ND	4	2	ND	4	4
024		3	LT	ND	3	ND	4	0	2	4	ND
025		0	ND	4	3	4	4	2	0	ND	4
026		1	ND	4	4	ND	ND	ND	ND	ND	4
027		LT	ND	ND	3	ND	ND	LT	ND	ND	ND
028		0	ND	4	2	4	0	4	ND	4	ND
029		ND	2	ND	ND	ND	ND	ND	ND	ND	ND
030		3	ND	ND	0	ND	4	ND	ND	ND	ND
032		4	2	ND	3	ND	0	4	ND	4	ND
034		4	2	4	4	2	ND	3	ND	2	3
036		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
037		LT	LT	ND	4	ND	4	4	LT	ND	4
038		3	2	3	4	4	4	4	ND	3	4
040		0	ND	ND	ND	ND	4	3	ND	ND	ND
041		4	ND	ND	3	ND	ND	ND	ND	ND	ND
043		4	2	ND	3	ND	ND	3	ND	4	ND
044		4	2	ND	2	ND	ND	2	ND	2	ND
047		3	2	ND	0	ND	2	2	3	4	ND
048		3	LT	ND	0	ND	ND	2	ND	0	ND
049		4	ND	3	4	ND	ND	ND	ND	ND	3
050		3	4	ND	4	ND	ND	4	ND	ND	ND
051		4	0	ND	4	ND	3	LT	ND	4	ND
053		3	ND	1	4	0	4	2	0	4	3
054		0	2	ND	0	0	0	1	ND	0	ND

TABLE 4 OVERALL LABORATORY PERFORMANCE SRWS T83
 ABBREVIATIONS
 ND = NOT DETERMINED
 LI = LESS THAN VALUE REPORTED, NOT RATED
 N = NUMBER OF CONSTITUENTS LABORATORY DETERMINED
 AVG = AVERAGE LABORATORY PERFORMANCE RATING

RATING	4 (EXCELLENT)	3 (GOOD)	2 (SATISFACTORY)	1 (QUESTIONABLE)	0 (POOR)	HG	LI	MN	MO	NI	PB	SB	SE	SR
LAB	FE	LI	MN	MO	NI	PB	SB	SE	SR					
055	4	3	4	2	4	3	3	4	3	4	3	3	4	3
056	3	ND	4	ND	ND	3	ND	4	3	ND	3	ND	4	ND
058	4	2	3	4	4	2	0	4	4	4	0	4	4	4
059	4	4	3	2	4	3	2	3	3	3	2	3	3	4
060	4	ND	4	ND	4	3	ND	4	ND	4	ND	ND	ND	ND
062	ND	4	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND
063	4	4	4	4	ND	ND	ND	4	ND	ND	ND	ND	ND	4
064	3	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
065	1	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
066	4	4	4	ND	4	3	ND	4	4	ND	3	ND	4	ND
067	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
068	LT	2	2	LT	3	4	3	4	3	3	3	4	4	3
069	LT	4	4	LT	4	3	LT	4	0	3	LT	0	0	3
070	3	ND	4	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND
071	3	ND	4	4	ND	4	ND	4	4	ND	ND	ND	ND	4
072	4	ND	4	ND	3	4	ND	4	ND	ND	ND	ND	ND	ND
075	1	3	2	ND	LT	4	ND	2	3	LT	4	ND	3	ND
076	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
077	3	2	1	ND	0	3	ND	3	0	ND	3	ND	0	3
079	3	LT	4	3	4	4	ND	4	4	ND	4	ND	4	ND
080	0	LT	4	ND	0	4	LT	4	0	4	LT	LT	4	ND
081	3	4	4	4	ND	4	ND	4	4	ND	4	4	4	4
082	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	2	ND	ND	0
083	ND	ND	ND	ND	2	2	ND	ND	2	ND	2	ND	ND	ND
084	4	2	4	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND
085	0	ND	2	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND
086	4	ND	3	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND
091	1	LT	2	ND	4	LT	ND	2	4	4	LT	ND	3	ND
092	4	LT	0	ND	3	3	ND	0	3	3	3	0	0	ND
094	ND	ND	4	ND	4	ND	ND	4	4	ND	ND	ND	ND	ND
095	3	ND	4	ND	ND	4	ND	4	ND	ND	4	ND	ND	ND
096	4	4	4	ND	0	3	ND	4	0	3	3	ND	3	ND
097	ND	3	4	ND	ND	4	ND	4	ND	ND	4	ND	ND	ND

TABLE 4 OVERALL LABORATORY PERFORMANCE SRWS 183

RATING	4 (EXCELLENT)		3 (GOOD)		2 (SATISFACTORY)		1 (QUESTIONABLE)		0 (FOUR)		TL	ZN	N	AVG.
	0.00 TO 0.50	STD. DEV.	0.51 TO 1.00	STD. DEV.	1.01 TO 1.50	STD. DEV.	1.51 TO 2.00	STD. DEV.	> 2.00	STD. DEV.				
064	ND	4	ND	4	ND	2	ND	2	ND	4	ND	4	3.00	3.00
065	ND	3	ND	3	ND	2	ND	2	ND	2	ND	2	1.50	1.50
066	ND	3	ND	3	ND	2	ND	2	ND	2	ND	2	3.77	3.77
067	ND	3	ND	3	ND	2	ND	2	ND	2	ND	2	1.29	1.29
068	LT	4	ND	4	ND	2	ND	2	ND	2	ND	2	3.14	3.14
069	4	4	ND	4	ND	2	ND	2	ND	2	ND	2	3.18	3.18
070	ND	4	ND	4	ND	2	ND	2	ND	2	ND	2	3.86	3.86
071	ND	4	ND	4	ND	2	ND	2	ND	2	ND	2	3.75	3.75
072	ND	3	ND	3	ND	2	ND	2	ND	2	ND	2	3.67	3.67
075	ND	2	ND	2	ND	2	ND	2	ND	2	ND	2	3.00	3.00
076	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.00	4.00
077	ND	1	ND	1	ND	1	ND	1	ND	1	ND	1	1.81	1.81
079	ND	3	ND	3	ND	2	ND	2	ND	2	ND	2	3.17	3.17
080	ND	0	ND	0	ND	0	ND	0	ND	0	ND	0	2.08	2.08
081	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.67	3.67
082	ND	2	ND	2	ND	2	ND	2	ND	2	ND	2	1.40	1.40
083	ND	2	ND	2	ND	2	ND	2	ND	2	ND	2	2.00	2.00
084	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.33	3.33
085	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.00	2.00
086	ND	4	ND	4	ND	4	ND	4	ND	4	ND	4	3.50	3.50
091	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.40	2.40
092	3	0	ND	0	ND	0	ND	0	ND	0	ND	0	2.27	2.27
094	ND	4	ND	4	ND	4	ND	4	ND	4	ND	4	3.38	3.38
095	ND	2	ND	2	ND	2	ND	2	ND	2	ND	2	3.00	3.00
096	ND	3	ND	3	ND	3	ND	3	ND	3	ND	3	3.21	3.21
097	ND	4	ND	4	ND	4	ND	4	ND	4	ND	4	3.29	3.29

TABLE 5 OVERALL LABORATORY PERFORMANCE SRWS N8

RATING	0.00 TO 0.50 SID. DEV.				0.51 TO 1.00 SID. DEV.				1.01 TO 1.50 SID. DEV.				1.51 TO 2.00 SID. DEV.				> 2.00 SID. DEV.				P, TOTAL	PU4-P	N	AVG.
	NH3-N	NH2-N	NH3-N	URG-N	NH3-N	URG-N	NH3-N	URG-N	NH3-N	URG-N	NH3-N	URG-N	NH3-N	URG-N	NH3-N	URG-N	NH3-N	URG-N						
001	ND	ND	4	ND	ND	4	ND	0	2	LT	0	ND	ND	4	ND	4	ND	4	3	2.00				
002	1	4	3	LT	LT	3	LT	0	LT	0	ND	ND	ND	4	ND	4	ND	4	3	2.67				
003	3	0	0	ND	LT	0	ND	0	LT	0	ND	ND	ND	4	ND	4	ND	4	3	1.00				
004	4	ND	4	LT	4	4	LT	4	4	4	4	ND	ND	4	ND	4	ND	4	4	4.00				
005	ND	4	4	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	4	ND	4	ND	4	2	4.00				
006	ND	ND	4	ND	ND	4	ND	1	ND	ND	2	ND	ND	4	ND	4	ND	4	2	2.50				
009	4	4	4	2	2	4	2	2	2	2	2	ND	ND	4	ND	4	ND	4	6	3.00				
010	3	0	4	ND	3	4	ND	3	LT	0	ND	ND	ND	4	ND	4	ND	4	6	2.50				
011	1	4	4	ND	ND	4	ND	ND	4	4	ND	ND	ND	4	ND	4	ND	4	4	3.25				
012	3	4	4	3	3	4	3	3	2	2	ND	ND	ND	4	ND	4	ND	4	6	3.17				
014	4	2	4	4	ND	4	4	ND	ND	ND	ND	ND	ND	4	ND	4	ND	4	4	3.50				
017	0	ND	ND	ND	0	ND	ND	0	ND	0	ND	ND	ND	4	ND	4	ND	4	2	0.00				
019	4	2	2	ND	0	ND	ND	0	4	4	ND	ND	ND	4	ND	4	ND	4	5	2.40				
020	2	4	4	ND	3	4	ND	3	LT	0	ND	ND	ND	4	ND	4	ND	4	4	2.25				
021	4	4	4	3	4	4	3	4	4	4	4	ND	ND	4	ND	4	ND	4	6	3.83				
023	ND	ND	0	ND	0	ND	0	0	4	4	ND	ND	ND	4	ND	4	ND	4	3	2.67				
024	4	4	4	0	LT	0	0	LT	LT	0	ND	ND	ND	4	ND	4	ND	4	4	2.00				
025	4	4	3	3	3	4	3	3	ND	0	ND	ND	ND	4	ND	4	ND	4	4	3.40				
027	4	2	2	ND	4	4	ND	4	3	3	ND	ND	ND	4	ND	4	ND	4	5	3.00				
028	4	4	3	4	4	4	4	4	4	4	ND	ND	ND	4	ND	4	ND	4	6	3.83				
029	0	2	4	2	3	4	2	3	4	4	ND	ND	ND	4	ND	4	ND	4	6	2.50				
030	1	4	4	3	3	4	3	3	4	4	ND	ND	ND	4	ND	4	ND	4	6	3.17				
034	3	0	2	ND	3	4	ND	3	4	4	ND	ND	ND	4	ND	4	ND	4	5	2.40				
035	4	4	4	3	4	4	3	4	4	4	ND	ND	ND	4	ND	4	ND	4	6	3.83				
036	4	4	4	0	3	4	0	3	3	3	ND	ND	ND	4	ND	4	ND	4	6	3.00				
040	2	2	4	2	2	4	2	3	ND	0	ND	ND	ND	4	ND	4	ND	4	5	2.60				
043	3	ND	2	4	4	4	4	ND	4	4	ND	ND	ND	4	ND	4	ND	4	4	3.25				
044	4	0	4	3	4	4	3	4	4	4	ND	ND	ND	4	ND	4	ND	4	6	3.17				
047	4	4	4	4	4	4	4	3	4	4	ND	ND	ND	4	ND	4	ND	4	6	3.83				
048	2	2	3	ND	LT	3	ND	LT	LT	0	ND	ND	ND	4	ND	4	ND	4	3	2.33				
051	0	4	2	4	1	4	4	1	0	0	ND	ND	ND	4	ND	4	ND	4	6	1.83				
052	4	4	4	ND	ND	4	ND	ND	2	2	ND	ND	ND	4	ND	4	ND	4	6	3.50				
053	4	4	0	ND	3	4	ND	3	4	4	ND	ND	ND	4	ND	4	ND	4	5	3.00				
054	4	0	3	4	4	4	4	4	2	4	ND	ND	ND	4	ND	4	ND	4	6	2.83				
055	3	2	2	4	4	4	4	4	4	4	ND	ND	ND	4	ND	4	ND	4	6	3.17				
056	4	0	3	ND	2	4	ND	2	2	2	ND	ND	ND	4	ND	4	ND	4	5	2.20				
058	0	0	2	3	3	4	3	3	3	3	ND	ND	ND	4	ND	4	ND	4	6	1.67				
059	4	4	4	1	3	4	1	3	LT	0	ND	ND	ND	4	ND	4	ND	4	5	3.20				
060	4	4	4	2	3	4	2	3	ND	0	ND	ND	ND	4	ND	4	ND	4	5	3.40				
061	0	2	3	ND	ND	3	ND	ND	0	0	ND	ND	ND	4	ND	4	ND	4	4	1.25				
066	2	2	3	3	3	4	3	3	3	3	ND	ND	ND	4	ND	4	ND	4	6	2.50				

ABBREVIATIONS
 ND = NOT DETERMINED
 LT = LESS THAN VALUE REPORTED, NOT RATED
 N = NUMBER OF CONSTITUENTS LABORATORY DETERMINED
 AVG = AVERAGE LABORATORY PERFORMANCE RATING

TABLE 5 OVERALL LABORATORY PERFORMANCE SKWS N8

RATING 4 (EXCELLENT) 0.00 TO 0.50 STD. DEV. ABBREVIATIONS
 3 (GOOD) 0.51 TO 1.00 STD. DEV. ND = NOT DETERMINED
 2 (SATISFACTORY) 1.01 TO 1.50 STD. DEV. LT = LESS THAN VALUE REPORTED, NOT RATED
 1 (QUESTIONABLE) 1.51 TO 2.00 STD. DEV. N = NUMBER OF CONSTITUENTS LABORATORY DETERMINED
 0 (POOR) > 2.00 STD. DEV. AVG = AVERAGE LABORATORY PERFORMANCE RATING

LAB	NH5-N	NH4-N	NO2-N	NO3-N	ORG-N	P _i	TOTAL	P04-P	N	AVG.
069	0	0	4	4	1	3	3	LT	5	1.60
070	4	2	4	4	ND	3	3		5	3.20
074	3	ND	ND	ND	3	ND	4		3	3.33
075	LT	4	3	3	2	0	LT		4	2.25
077	3	4	4	4	ND	1	2		5	2.80
078	2	2	3	3	ND	LT	LT		3	2.33
079	4	0	4	4	3	3	LT		5	2.80
080	4	4	4	2	3	LT	LT		4	3.25
082	4	4	4	3	ND	3	2		3	3.20
083	ND	4	4	3	ND	3	2		4	3.00
085	0	ND	4	4	1	0	2		5	1.40
086	2	ND	ND	ND	3	ND	ND		2	2.50
091	LT	2	4	4	LT	0	0		4	1.50
092	0	4	4	4	0	2	2		6	2.00
094	2	2	2	2	4	0	0		6	1.67
095	2	4	4	4	3	ND	3		5	3.20
096	3	4	4	4	2	3	4		6	3.33
097	0	0	0	0	ND	3	ND		4	0.75

TABLE 6 OVERALL LABORATORY PERFORMANCE SRWS P2
 ABBREVIATIONS
 MD = NOT DETERMINED
 LT = LESS-THAN VALUE REPORTED, NOT RATED
 N = NUMBER OF CONSTITUENTS LABORATORY DETERMINED
 AVG = AVERAGE LABORATORY PERFORMANCE RATING

RATING	CA	CL	F	K	MG	NA	NO3-N	PH	SU4	SP. COND.	N	AVG.
4 (EXCELLENT)	0.00 TO 0.50	0.51 TO 1.00	1.01 TO 1.50	1.51 TO 2.00	> 2.00	STD. DEV.	STD. DEV.	STD. DEV.	STD. DEV.	STD. DEV.		
3 (GOOD)	3	3	ND	4	4	1	LT	3	3	1	7	2.57
2 (SATISFACTORY)	3	3	4	4	4	0	4	2	3	4	9	3.00
1 (QUESTIONABLE)	4	4	4	0	0	3	3	3	0	3	10	2.80
0 (POUR)	2	4	4	1	4	3	4	0	4	4	10	3.00
	4	ND	4	4	4	4	ND	3	3	4	8	3.75
	3	2	4	4	1	3	2	3	3	4	10	2.90
	0	4	4	LT	4	LT	4	3	3	4	8	3.25
	ND	0	4	ND	ND	ND	4	4	0	3	6	2.17
	4	2	0	0	4	4	ND	ND	4	0	8	2.25
	2	4	4	4	4	3	4	3	4	3	10	3.10
	4	4	4	4	4	3	4	2	4	4	10	3.20
	4	4	4	2	4	0	4	4	4	1	10	1.83
	0	LT	ND	LT	4	0	ND	2	0	3	6	2.29
	4	ND	ND	4	4	4	0	4	ND	0	7	3.22
	4	4	1	4	0	4	4	ND	4	4	9	3.44
	4	4	4	4	4	3	LT	3	4	4	9	2.20
	4	4	4	4	4	0	LT	3	ND	3	5	2.80
	ND	ND	1	4	ND	4	1	2	2	3	10	2.00
	2	2	4	4	4	4	2	2	2	3	7	2.13
	3	3	ND	ND	0	0	2	3	ND	3	8	3.10
	0	0	1	2	ND	4	LT	3	3	4	10	3.60
	4	0	4	4	4	3	4	4	0	4	10	3.50
	4	4	4	4	4	3	2	4	3	4	10	3.13
	3	0	1	1	1	4	2	4	4	4	7	3.30
	4	4	4	2	4	3	ND	0	ND	4	10	4.00
	4	2	4	4	4	3	2	4	4	4	6	0.00
	4	ND	ND	4	4	4	ND	4	ND	4	4	3.20
	0	ND	ND	0	0	0	ND	ND	ND	ND	4	2.40
	4	LT	ND	2	4	3	LT	3	LT	ND	5	2.56
	4	2	4	4	0	0	2	4	1	3	10	3.10
	4	3	ND	0	1	4	1	4	2	4	9	1.56
	4	4	4	4	4	3	4	4	3	0	10	3.60
	0	0	4	0	0	LT	4	4	0	2	10	1.80
	4	4	4	4	4	4	3	1	4	4	10	2.60
	0	4	4	4	0	4	3	4	3	0	5	2.88
	0	3	1	4	0	0	3	4	4	0	8	2.57
	3	LT	4	LT	LT	LT	ND	1	4	3	5	2.80
	4	4	ND	2	1	4	ND	3	3	3	6	2.80
	4	ND	ND	1	4	1	4	4	ND	0	5	2.57
	4	0	LT	LT	4	ND	LT	4	2	ND	5	2.80
	4	4	4	4	4	4	4	4	4	3	10	3.90
	0	3	4	4	0	4	LT	4	4	4	9	3.00

TABLE 6 OVERALL LABORATORY PERFORMANCE SRWS P2

RATING	ABBREVIATIONS										AVG.	
	CA	CL	F	K	Mg	NA	NO3-N	PH	SU4	SP. COND.		N
4 (EXCELLENT)	4	ND	ND	4	4	3	ND	2	0	ND	6	2.83
3 (GOOD)	4	4	ND	ND	4	4	4	ND	4	ND	6	4.00
2 (SATISFACTORY)	4	2	4	4	1	1	2	3	1	3	10	2.50
1 (QUESTIONABLE)	4	4	4	4	4	1	4	3	4	0	10	3.20
0 (POOR)	4	3	4	1	4	1	4	4	LT	4	9	3.22
	ND	ND	ND	ND	ND	ND	4	1	ND	ND	2	2.50
	0	2	4	0	0	1	4	3	0	2	10	1.60
094	3	4	ND	4	4	4	2	4	4	4	9	3.67

TABLE 7 ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR ALK(CAC03)

CODE	REPORTED VALUE	PCI. DEV. FROM MEAN	METHODS	REFERENCES
002	37	12.9	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
003	29	11.5	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
004	31	5.4	TITRATION, ELECTROMETRIC, MANUAL	3
005	36	9.9	TITRATION, ELECTROMETRIC, MANUAL	1,2
007	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
009	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
010	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2
011	36	9.9	TITRATION, ELECTROMETRIC, MANUAL	1,2
012	30	8.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
014	38	16.0	TITRATION, ELECTROMETRIC, MANUAL	4
015	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	4
018	38	16.0	TITRATION, ELECTROMETRIC, MANUAL	3
019	20	39.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
020	37	12.9	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
021	28	14.5	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
022	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
024	42	28.2	TITRATION, ELECTROMETRIC, MANUAL	4
026	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2
027	28	14.5	TITRATION, ELECTROMETRIC, MANUAL	1,2
028	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	4
029	30	8.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
030	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
032	35	6.8	TITRATION, ELECTROMETRIC, MANUAL	4
034	30	8.4	TITRATION, ELECTROMETRIC, MANUAL	1,2
035	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
036	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
037	34	3.8	TITRATION, ELECTROMETRIC, MANUAL	4
038	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
040	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
043	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
044	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
045	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
046	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
047	29	11.5	TITRATION, ELECTROMETRIC, MANUAL	4
050	31	5.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
051	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
052	36	9.9	TITRATION, ELECTROMETRIC, MANUAL	3
053	30	8.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
054	69	110.6	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
055	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2
056	38	16.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
058	53	61.7	TITRATION, ELECTROMETRIC, MANUAL	1,2
059	36	9.9	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
060	23	29.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
062	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	4
063	31	5.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
064	30	8.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
065	31	5.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
067	35	6.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4

TABLE 7 ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR ALK(CAC03)

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
002	37	12.9	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
003	29	11.5		
004	31	5.4	TITRATION, COLORIMETRIC, AUTOMATED	3
005	36	9.9	TITRATION, COLORIMETRIC, MANUAL	1,2
007	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
009	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
010	53	0.7	TITRATION, COLORIMETRIC, MANUAL	1,2
011	36	9.9	TITRATION, COLORIMETRIC, MANUAL	1,2
012	30	8.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
014	38	16.0	TITRATION, ELECTROMETRIC, AUTOMATED	4
015	32	2.3	TITRATION, ELECTROMETRIC, AUTOMATED	4
018	38	16.0	TITRATION, COLORIMETRIC, AUTOMATED	4
019	20	59.0	TITRATION, ELECTROMETRIC, MANUAL	3
020	37	12.9	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
021	28	14.5	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
022	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	4
024	42	28.2	TITRATION, ELECTROMETRIC, AUTOMATED	1,2
026	33	0.7	TITRATION, COLORIMETRIC, MANUAL	1,2
027	28	14.5	OTHER	1,2
028	32	2.3	TITRATION, ELECTROMETRIC, AUTOMATED	4
029	30	8.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
030	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
032	35	6.8	OTHER	
034	30	8.4	TITRATION, COLORIMETRIC, MANUAL	1,2
035	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
036	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
037	34	3.8	TITRATION, ELECTROMETRIC, AUTOMATED	4
038	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
040	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
043	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
044	33	0.7	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
045	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
046	33	0.7	TITRATION, ELECTROMETRIC, AUTOMATED	4
047	29	11.5	OTHER	1,2,3,4
050	31	5.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
051	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
052	36	9.9	TITRATION, COLORIMETRIC, AUTOMATED	3
053	30	8.4	OTHER	
054	69	110.6	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
055	32	2.3	TITRATION, COLORIMETRIC, MANUAL	1,2
056	38	16.0		
058	53	61.7		
059	36	9.9	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
060	23	29.8		
062	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
063	51	5.4	TITRATION, ELECTROMETRIC, AUTOMATED	4
064	30	8.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
065	51	5.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
067	55	6.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR ALK(CAC03)

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
068	31	5.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
069	31	5.4	TITRATION, ELECTROMETRIC, AUTOMATED	4
072	32	2.3	TITRATION, COLORIMETRIC, MANUAL	1,2
074	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
075	36	9.9	TITRATION, ELECTROMETRIC, MANUAL	1,2
077	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
079	32	2.3	TITRATION, ELECTROMETRIC, AUTOMATED	4
080	37	12.9	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
081	44	34.3	REJECT	4
082	35	6.8	TITRATION, ELECTROMETRIC, AUTOMATED	4
085	37	12.9	TITRATION, ELECTROMETRIC, MANUAL	3
086	31	5.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
087	32	2.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
091	31	5.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
094	30	8.4	TITRATION, ELECTROMETRIC, MANUAL	1,2
095	34	3.8	TITRATION, COLORIMETRIC, MANUAL	4
096	32	2.3	TITRATION, ELECTROMETRIC, AUTOMATED	1,2
097	45	37.3	REJECT	1,2

TOTAL RANGE 20 TO 69 MEAN: 32.8
 STANDARD DEVIATION 2.5 95 % CONFIDENCE INTRVL OF MEAN 32.8 + OR - 0.7

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR B

CODE	REPORTED VALUE	TU	700	95 % CONFIDENCE INTRVL OF MEAN	57	MEAN:	57 + UR -	23	REFERENCES
003	700								
013	20		121.5	REJECT					2,4
014	100		65.1						1,2,3,4
015	30		74.5						
017	30		47.7						
018	10		47.7						
019	30		82.6						
020	110		47.7						
021	60		91.9						1,2,3,4
022	50		4.7						1,2,3,4
024	260		47.7						
025	170		353.7	REJECT					1,2,3,4
026	20		196.6						
032	150		65.1						
034	10		161.7						1,2,3,4
038	30		82.6						
053	130		47.7						
054	210		126.8						1,2,3,4
055	40		266.4						5
056	100		30.2						4
058	0		74.5						
059	30		100.0						
063	30		47.7						
068	50		47.7						
072	320		458.4	REJECT					2,4
081	20		65.1						2,4
085	70		22.1						5
087	30		47.7						2,4
096	0		100.0						

TOTAL RANGE STANDARD DEVIATION 0 TU 56 700 95 % CONFIDENCE INTRVL OF MEAN 57 MEAN: 57 + UR - 23

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE #82 REPORT FOR BR

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
015	0.230	2.2	OTHER	
018	0.216	4.0	OTHER	
020	0.440	95.6	COLORIMETRIC, CHLORAMINE-T	1
026	0.240	6.7	OTHER	
053	0.860	282.2	REJECT	
058	0.099	56.0	OTHER	
059	0.120	46.7	COLORIMETRIC, CATALYTIC OXIDATION	2,4
063	0.230	2.2	COLORIMETRIC, CHLORAMINE-T	1
068	0.270	20.0	OTHER	
069	0.310	57.8	COLORIMETRIC, CHLORAMINE-T	1
071	0.190	15.6	OTHER	
087	0.130	42.2	COLORIMETRIC, CATALYTIC OXIDATION	2,4

TOTAL RANGE 0.099 TO 0.860 MEAN: 0.225
 STANDARD DEVIATION 0.096 95 % CONFIDENCE INTRVL OF MEAN 0.225 + OR - 0.065

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR CA

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	13.6	2.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
002	13.0	6.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
003	8.9	35.8	REJECT	5
004	13.2	4.8	EMISSION, IC PLASMA	1,2,3,4
005	13.0	6.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
007	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
009	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
011	11.0	20.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
013	16.0	15.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
014	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
015	14.0	0.9	TITRATION, EDTA	1,3
016	22.0	58.6	REJECT	1,2,3,4
017	13.8	0.5	EMISSION, IC PLASMA	5
018	15.0	8.1	EMISSION, IC PLASMA	5
019	10.0	27.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
020	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
021	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
022	14.0	0.9	EMISSION, IC PLASMA	5
024	8.0	42.3	REJECT	1,2,3,4
025	15.0	8.1	OTHER	1,3
026	14.0	0.9	TITRATION, EDTA	1,2,3,4
027	4.9	64.7	REJECT	1,2,3,4
028	13.4	3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
030	13.0	6.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
031	13.5	2.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
032	18.0	29.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
034	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
035	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
037	13.3	4.1	OTHER	1,2,3,4
038	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
041	15.0	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
043	15.0	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
044	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
045	13.0	6.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
046	15.0	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
047	13.0	6.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
049	15.0	8.1	EMISSION, IC PLASMA	5
051	10.2	26.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
052	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
053	38.0	174.0	REJECT	1,3
054	14.0	0.9	TITRATION, EDTA	1,2,3,4
055	13.0	6.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
056	20.0	44.2	REJECT	1,2,3,4
058	13.8	0.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
059	14.0	0.9	EMISSION, IC PLASMA	5
060	52.0	130.7	REJECT	1,2,3,4
061	16.0	15.4	TITRATION, EDTA	1,3
062	14.0	0.9	EMISSION, IC PLASMA	5
063	15.0	8.1	EMISSION, IC PLASMA	5

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR CA

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
064	12.4	10.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
065	11.0	20.7	TITRATION, EDTA	1,3
066	13.0	6.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
068	15.0	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
069	22.8	64.4	REJECT	1,2,3,4
070	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
071	13.0	6.3	EMISSION, IC PLASMA	5
072	14.4	3.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
075	12.0	13.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
077	15.0	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
079	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
080	14.0	0.9	TITRATION, EDTA	1,3
081	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
082	14.5	4.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
084	13.0	6.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
085	18.0	29.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
086	14.0	0.9	TITRATION, EDTA	1,3
087	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
091	14.0	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
092	13.5	2.7	TITRATION, EDTA	1,3
094	13.0	6.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
095	15.0	8.1	EMISSION, IC PLASMA	5
096	14.0	0.9	EMISSION, IC PLASMA	5
097	14.0	0.9	TITRATION, EDTA	1,3

TOTAL RANGE 4.9 TU 38.0 MEAN: 13.87
 STANDARD DEVIATION 1.35 95 % CONFIDENCE INTRVL OF MEAN 13.87 + OR - 0.33

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR CL

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
002	2.5	9.8	TITRATION, MERCURIC NITRATE	1,2,3,4
003	3.1	11.9	OTHER	
004	2.6	6.2	TITRATION, SILVER NITRATE	1,2,4
005	1.5	45.9	TITRATION, MERCURIC NITRATE	1,2,3,4
006	5.3	91.3	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
007	2.0	27.8	TITRATION, SILVER NITRATE	1,2,4
009	2.5	9.8	COLORIMETRIC, FERRIC THIOCYANATE, MANUAL	2,4
011	3.2	15.5	TITRATION, SILVER NITRATE	1,2,4
012	5.0	80.4	TITRATION, SILVER NITRATE	1,2,4
013	2.6	6.2	TITRATION, SILVER NITRATE	1,2,4
014	2.5	9.8	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
015	2.4	13.4	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
016	2.0	27.8	TITRATION, MERCURIC NITRATE	1,2,3,4
018	2.6	6.2	ION-CHROMATOGRAPHY	2,6
019	2.3	17.0	ION-CHROMATOGRAPHY	2,6
020	2.5	9.8	TITRATION, MERCURIC NITRATE	1,2,3,4
021	2.8	1.0	TITRATION, MERCURIC NITRATE	1,2,3,4
022	2.2	20.6	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
024	4.6	66.0	ION-SELECTIVE ELECTRODE	2
025	2.7	2.6	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
026	2.4	13.4	TITRATION, SILVER NITRATE	1,2,4
027	6.0	116.5	TITRATION, MERCURIC NITRATE	1,2,3,4
028	3.0	8.3	OTHER	
030	3.0	8.3	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
031	2.2	20.6	ION-CHROMATOGRAPHY	2,6
032	2.8	1.0	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
034	2.5	9.8	TITRATION, SILVER NITRATE	1,2,4
035	2.7	2.6	TITRATION, MERCURIC NITRATE	1,2,3,4
036	3.0	8.3	TITRATION, MERCURIC NITRATE	1,2,3,4
037	2.0	27.8	TITRATION, MERCURIC NITRATE	1,2,3,4
038	3.0	8.3	TITRATION, MERCURIC NITRATE	1,2,3,4
040	2.0	27.8	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
041	1.7	38.7	TITRATION, SILVER NITRATE	1,2,4
043	2.7	2.6	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
044	3.3	19.1	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
046	4.0	44.4	TITRATION, SILVER NITRATE	1,2,4
047	3.0	8.3	OTHER	
048	2.0	***	IGNORED	1,2,4
050	4.0	44.4	TITRATION, MERCURIC NITRATE	1,2,3,4
051	1.0	***	IGNORED	1,2,4
052	2.6	6.2	OTHER	
053	7.0	152.6	TITRATION, MERCURIC NITRATE	1,2,3,4
054	26.0	858.3	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
055	2.7	2.6	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
056	2.6	6.2	TITRATION, MERCURIC NITRATE	1,2,3,4
058	3.3	19.1	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
059	2.7	2.6	TITRATION, SILVER NITRATE	1,2,4
060	3.0	8.3	TITRATION, SILVER NITRATE	1,2,4
061	3.7	53.5	TITRATION, SILVER NITRATE	1,2,4

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR CL

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
062	2.8	1.0	TITRATION, SILVER NITRATE	1,2,4
063	2.8	1.0	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
064	3.3	19.1	TITRATION, MERCURIC NITRATE	1,2,3,4
065	2.1	24.2	TITRATION, SILVER NITRATE	1,2,4
067	2.5	9.8	TITRATION, SILVER NITRATE	1,2,4
068	2.7	2.6	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
069	3.0	8.3	TITRATION, SILVER NITRATE	1,2,4
070	3.0	8.3	TITRATION, SILVER NITRATE	1,2,4
071	2.3	17.0	ION-CHROMATOGRAPHY	2,6
072	2.7	2.6	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
074	7.4	167.1	REJECT	1,3,4
075	2.0	27.8	TITRATION, SILVER NITRATE	1,2,4
077	2.2	20.6	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
079	2.2	20.6	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
080	1.0	63.9	TITRATION, SILVER NITRATE	1,2,4
081	2.0	27.8	TITRATION, SILVER NITRATE	1,2,4
082	4.2	51.6	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
085	2.5	9.8	TITRATION, MERCURIC NITRATE	1,2,3,4
086	5.3	91.3	TITRATION, SILVER NITRATE	1,2,4
087	4.0	44.4	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	2,4
091	3.0	8.3	TITRATION, SILVER NITRATE	1,2,4
092	2.5	9.8	TITRATION, SILVER NITRATE	1,2,4
094	1.8	35.0	TITRATION, SILVER NITRATE	1,2,4
095	3.3	19.1	TITRATION, SILVER NITRATE	1,2,3,4
096	2.0	27.8	TITRATION, MERCURIC NITRATE	1,2,4
097	1.2	56.7	TITRATION, SILVER NITRATE	1,2,4

TOTAL RANGE 1.0 TO 26.0 MEAN: 2.77
STANDARD DEVIATION 0.83 95 % CONFIDENCE INTRVL OF MEAN 2.77 + OR - 0.20

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR DSKD 180

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
002	87	0.3	RESIDUE, FILTRABLE	1
003	80	8.3	RESIDUE ON EVAPORATION	4
004	82	6.0	RESIDUE, FILTRABLE	1
007	84	3.7	RESIDUE ON EVAPORATION	4
009	86	1.4	RESIDUE, FILTRABLE	1
011	91	4.3	RESIDUE, FILTRABLE	3
012	108	23.8	RESIDUE, FILTRABLE	1
014	82	6.0	RESIDUE ON EVAPORATION	4
015	104	19.2	RESIDUE, FILTRABLE	1
019	89	2.0	RESIDUE, FILTRABLE	1
020	90	3.1	RESIDUE, FILTRABLE	1
021	70	19.8	RESIDUE, FILTRABLE	1
022	98	12.3	RESIDUE, FILTRABLE	3
024	57	34.7	RESIDUE, FILTRABLE	3
027	93	6.6	RESIDUE, FILTRABLE	1
028	82	6.0	RESIDUE, FILTRABLE	1
029	83	4.9	RESIDUE ON EVAPORATION	4
032	94	7.7	RESIDUE ON EVAPORATION	4
034	85	2.6	RESIDUE, FILTRABLE	1
035	87	0.3	RESIDUE ON EVAPORATION	4
037	85	2.6	RESIDUE, FILTRABLE	3
038	86	1.4	RESIDUE, FILTRABLE	1
043	117	34.1	RESIDUE, FILTRABLE	1
044	53	39.3	RESIDUE, FILTRABLE	1
045	90	3.1	RESIDUE ON EVAPORATION	1
046	96	10.0	RESIDUE ON EVAPORATION	2
047	92	5.4	RESIDUE, FILTRABLE	4
053	89	2.0	RESIDUE, FILTRABLE	1
054	218	149.8	RESIDUE, FILTRABLE	3
055	87	0.3	RESIDUE ON EVAPORATION	4
058	76	12.9	RESIDUE, FILTRABLE	3
059	84	3.7	RESIDUE, FILTRABLE	1
061	78	10.6	RESIDUE ON EVAPORATION	4
062	84	3.7	RESIDUE, FILTRABLE	4
064	85	2.6	RESIDUE, FILTRABLE	1
065	83	4.9	RESIDUE ON EVAPORATION	4
066	76	12.9	RESIDUE ON EVAPORATION	4
067	88	0.8	RESIDUE, FILTRABLE	4
068	77	11.8	RESIDUE, FILTRABLE	1
072	90	3.1	RESIDUE ON EVAPORATION	3
075	89	2.0	RESIDUE, FILTRABLE	2
077	85	2.6	RESIDUE, FILTRABLE	1
079	108	23.8	RESIDUE ON EVAPORATION	4
080	136	55.8	RESIDUE ON EVAPORATION	2
081	97	11.2	RESIDUE ON EVAPORATION	2
082	95	8.9	RESIDUE ON EVAPORATION	4
084	87	0.3	RESIDUE, FILTRABLE	2
085	68	22.1	RESIDUE, FILTRABLE	1
087	91	4.3	RESIDUE, FILTRABLE	1
091	86	1.4	RESIDUE, FILTRABLE	1
092	85	2.6	RESIDUE, FILTRABLE	1
094	120	37.5	RESIDUE ON EVAPORATION	2
095	98	12.3	RESIDUE, FILTRABLE	3
096	80	8.3	RESIDUE, FILTRABLE	1
097	88	0.8	RESIDUE ON EVAPORATION	2

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR F

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	0.5	11.7	ION CHROMATOGRAPHY	2,6
003	0.6	6.0	OTHER	
004	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
005	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
007	0.7	23.6	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
009	0.6	6.0	ION SELECTIVE ELECTRODE, AUTOMATED	4
011	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
012	0.4	29.3	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
013	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
014	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
015	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	2,6
018	0.5	11.7	ION CHROMATOGRAPHY	2,6
019	0.9	59.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
020	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
021	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	4
022	0.5	11.7	COLORIMETRIC, LANTHANUM ALIZARIN "COMPLEXONE", AUTOMATED	1
024	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
026	0.6	6.0	COLORIMETRIC, SPADNS	1,2,3
027	0.6	6.0	COLORIMETRIC, SPADNS	1,2,3
028	0.6	6.0	ION SELECTIVE ELECTRODE, AUTOMATED	4
030	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
031	0.8	41.3	ION CHROMATOGRAPHY	2,6
032	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
034	0.6	6.0	COLORIMETRIC, ZIRCUNUM ERIOCHROME	1,2,3,4
035	0.6	6.0	ION SELECTIVE ELECTRODE, AUTOMATED	4
036	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	4
037	0.5	11.7	COLORIMETRIC, LANTHANUM ALIZARIN "COMPLEXONE", AUTOMATED.	1,2,3,4
038	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1
043	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
044	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
046	0.5	11.7	COLORIMETRIC, ZIRCUNUM ERIOCHROME	4
047	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
048	0.6	6.0	COLORIMETRIC, SPADNS	1,2,3
052	0.5	11.7	ION SELECTIVE ELECTRODE, AUTOMATED	4
053	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
055	0.5	11.7	ION SELECTIVE ELECTRODE, AUTOMATED	4
056	0.7	23.6	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
058	0.6	6.0	ION SELECTIVE ELECTRODE, AUTOMATED	4
059	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
060	0.7	23.6	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
061	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
062	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
063	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
065	0.4	29.3	COLORIMETRIC, ZIRCUNUM ERIOCHROME	4
067	0.8	41.3	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
068	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
069	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
071	0.6	6.0	ION CHROMATOGRAPHY	2,6
072	0.6	6.0	COLORIMETRIC, LANTHANUM ALIZARIN "COMPLEXONE", AUTOMATED	1

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR F

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
075	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
077	0.5	11.7	ION SELECTIVE ELECTRODE, AUTOMATED	4
079	0.5	11.7	ION SELECTIVE ELECTRODE, AUTOMATED	4
080	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
081	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
082	0.7	23.6	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
084	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
085	0.5	11.7	COLORIMETRIC, SPADNS	1,2,3
087	0.6	6.0	COLORIMETRIC, SPADNS	1,2,3
091	0.5	11.7	COLORIMETRIC, LANTHANUM ALIZARIN "COMPLEXONE", AUTOMATED	1
092	0.6	6.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
095	0.8	41.3	COLORIMETRIC, ZIRCONYL ALIZARIN	1
096	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
097	0.5	11.7	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4

TOTAL RANGE 0.4 TO 0.9 MEAN: 0.57
 STANDARD DEVIATION 0.08 95 % CONFIDENCE INTRVL OF MEAN 0.57 + OR - 0.02

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR 1

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
015	0.044	9.6		
055	0.040	18.0	COLORIMETRIC, CERIC ARSENIUS OXIDATION, MANUAL	2,4
058	0.049	0.4		
059	0.051	4.5	COLORIMETRIC, CERIC ARSENIUS OXIDATION, AUTOMATED	4
063	0.060	23.0	COLORIMETRIC, CERIC ARSENIUS OXIDATION, AUTOMATED	4

TOTAL RANGE 0.040 TO 0.060 MEAN: 0.049
 STANDARD DEVIATION 0.008 95 % CONFIDENCE INTRVL OF MEAN 0.049 + OR - 0.009

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR K

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	1.8	4.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
002	1.7	9.3		
003	1.9	1.3		
004	1.8	4.0		
005	1.8	4.0		
007	2.0	6.7		
009	2.0	6.7		
010	1.9	1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
011	1.9	1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
013	1.9	1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
014	1.9	1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
015	1.6	14.7	OTHER	1,2,3,4
016	1.1	41.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
017	1.8	4.0	OTHER	
018	2.1	12.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
019	1.1	41.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
020	1.9	1.3		
021	3.0	60.0		
022	2.0	6.7		
024	2.0	6.7		
026	1.9	1.3		
027	1.6	14.7	OTHER	1,2,3,4
028	1.5	20.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
030	2.2	17.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
031	2.1	12.0		
032	1.9	1.3		
034	1.9	1.3		
035	1.5	20.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
037	2.1	12.0		
038	2.2	17.3	OTHER	1,2,3,4
041	2.1	12.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
043	2.0	6.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
044	2.0	6.7		
045	2.0	6.7		
046	3.6	92.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
047	1.7	9.3	REJECT	1,2,3,4
049	4.7	150.7	REJECT	1,2,3,4
051	1.3	30.7		
052	1.8	4.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
053	2.0	6.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
054	2.3	22.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
055	1.5	20.0	OTHER	
056	1.5	20.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
058	1.2	36.0		
059	1.9	1.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
060	1.8	4.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
061	2.7	44.0	FLAME, EMISSION, PHOTOMETRIC	1,2
062	1.7	9.3	OTHER	
065	1.8	4.0	OTHER	

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR K

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
064	2.6	38.7		
065	2.3	22.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
066	2.0	6.7		
067	2.0	6.7		
068	1.9	1.3	FLAME, EMISSION, PHOTOMETRIC	1,2
069	1.8	4.0		
070	1.8	4.0		
072	1.9	1.3		
075	2.0	6.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
077	2.1	12.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
079	2.1	12.0		
081	1.5	20.0		
082	1.8	4.0		
085	0.8	57.3		
086	1.8	4.0	FLAME, EMISSION, PHOTOMETRIC	1,2
087	1.8	4.0		
091	3.0	60.0		
094	1.6	14.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
095	1.9	1.3	FLAME, EMISSION, PHOTOMETRIC	1,2
096	1.9	1.3	OTHER	
097	1.5	20.0		

TOTAL RANGE 0.8 TO 4.7 MEAN: 1.87
 STANDARD DEVIATION 0.37 95 % CONFIDENCE INTRVL OF MEAN 1.87 + OR - 0.09

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR MG

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	3.7	3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
002	3.0	15.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
003	1.2	66.4	REJECT	
004	3.5	1.9	EMISSION, IC PLASMA	5
005	3.4	4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
007	4.0	12.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
009	5.0	40.1	REJECT	
011	3.5	1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
013	3.6	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
014	3.7	3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
015	3.8	6.5	EMISSION, IC PLASMA	5
016	3.4	4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
017	3.7	3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
018	3.6	0.9	EMISSION, IC PLASMA	5
019	3.6	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
020	3.6	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
021	3.6	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
022	3.7	3.7	EMISSION, IC PLASMA	5
024	3.0	15.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
025	3.6	0.9	OTHER	
026	3.6	0.9	TITRATION, EDTA	2
028	3.5	1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
030	3.4	4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
031	3.8	6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
032	4.0	12.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
034	3.7	3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
035	3.7	3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
037	3.6	0.9	OTHER	
038	3.8	6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
041	3.7	3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
043	3.0	15.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
044	3.8	6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
045	3.6	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
046	3.5	1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
047	3.4	4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
049	3.9	9.3	EMISSION, IC PLASMA	5
051	3.7	3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
052	3.3	7.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
053	2.9	18.7	OTHER	
054	3.9	9.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
055	5.2	45.7	REJECT	
056	3.6	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
058	3.8	6.5	EMISSION, IC PLASMA	5
059	3.6	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
060	8.0	124.1	REJECT	
061	0.3	***	IGNORED	
062	3.5	1.9	EMISSION, IC PLASMA	5
063	3.7	3.7	EMISSION, IC PLASMA	5
064	3.4	4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR MG

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
065	5.0	40.1	REJECT OTHER	
066	3.3	7.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
067	3.7	3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
068	3.5	1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
069	5.6	56.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
070	3.8	6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
071	3.4	4.7		
072	3.5	1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
075	3.0	15.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
077	3.9	9.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
079	3.5	1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
080	4.4	23.3	OTHER	1,2,3,4
081	3.6	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
082	3.7	3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
084	3.5	1.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
085	4.0	12.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
086	3.6	0.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
087	4.0	12.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
091	2.8	21.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
092	3.7	3.7	OTHER	1,2,3,4
094	3.2	10.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
095	3.1	13.1	EMISSION, IC PLASMA	5
096	3.4	4.7	TITRATION, EDTA	2
097	4.7	31.7	REJECT	

TOTAL RANGE 1.2 TU
STANDARD DEVIATION 0.29

MEAN: 3.57
95 % CONFIDENCE INTERVAL OF MEAN 3.57 ± 0.07

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR NA

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	6.0	3.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
002	5.7	8.0		
003	6.3	1.7		
004	6.5	4.9		
005	6.3	1.7		
007	6.0	3.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
009	6.4	3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
010	6.6	6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
011	5.9	4.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
013	6.4	3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
014	6.3	1.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
015	6.5	4.9	EMISSION, IC PLASMA	5
016	5.9	4.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
017	6.5	4.9	EMISSION, IC PLASMA	5
018	6.5	4.9	EMISSION, IC PLASMA	5
019	6.1	1.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
020	6.1	1.6		
021	6.3	1.7		
022	6.4	3.3		
024	10.4	61.4	REJECT	
025	6.6	6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
026	6.5	4.9	EMISSION, IC PLASMA	5
027	6.2	0.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
028	6.5	4.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
030	6.8	9.7		
031	6.2	0.0		
032	6.3	1.7		
034	6.3	1.7		
035	7.2	16.2		
037	6.4	3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
038	6.1	1.6	OTHER	
041	6.6	6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
043	5.7	8.0		
044	6.7	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
045	5.4	12.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
046	8.0	29.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
047	6.5	4.9	FLAME EMISSION, PHOTOMETRIC	1,2
049	7.0	13.0		
051	5.6	9.6		
052	5.8	6.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
053	6.0	3.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
054	6.2	0.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
055	6.0	3.2	OTHER	
056	4.0	35.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
058	4.6	25.8		
059	6.5	4.9	EMISSION, IC PLASMA	5
060	6.8	9.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
061	4.6	25.8	FLAME EMISSION, PHOTOMETRIC	1,2
062	6.4	3.3	EMISSION, IC PLASMA	5

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR NA

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
063	6.4	3.3	EMISSION, IC PLASMA	5
064	6.3	1.7		
065	6.0	3.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
066	6.2	0.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
068	6.1	1.6		
069	5.8	6.4		
070	6.4	3.3	EMISSION, IC PLASMA	5
071	6.4	3.3		
072	6.4	3.3		
075	5.8	6.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
077	6.6	6.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
079	6.3	1.7		
080	5.6	9.6	FLAME EMISSION, PHOTOMETRIC	1,2
081	6.4	3.3		
082	7.3	17.8		
084	8.2	32.3	FLAME EMISSION, PHOTOMETRIC	1,2
085	6.2	0.0		
086	6.5	4.9	FLAME EMISSION, PHOTOMETRIC	1,2
087	9.0	45.2	REJECT	
091	8.5	37.2		
092	3.8	38.7		
094	5.1	17.7	OTHER	
095	5.2	16.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
096	6.1	1.6	EMISSION, IC PLASMA	5
097	4.4	29.0	EMISSION, IC PLASMA	5

TOTAL RANGE 3.8 TO 10.0 MEAN 6.20
 STANDARD DEVIATION 0.77 95 % CONFIDENCE INTRVL OF MEAN 6.20 + OR - 0.18

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR N02-N

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
002	< 0.01	***	IGNORED	1,3,4
003	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
009	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
010	< 0.05	***	IGNORED	1,3,4
011	< 0.01	***	IGNORED	1,3,4
012	0.00	100.0	OTHER	2,6
015	0.00	100.0	ION CHROMATOGRAPHY	1,3,4
019	< 0.01	***	IGNORED	1,3,4
020	< 0.01	***	IGNORED	1,3,4
021	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
024	< 0.01	***	IGNORED	1,3,4
027	0.01	275.1	OTHER	1,3,4
028	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
029	0.01	275.1	COLORIMETRIC, DIAZOTIZATION	1,3,4
030	0.01	275.1	COLORIMETRIC, DIAZOTIZATION	1,3,4
031	0.00	100.0	ION CHROMATOGRAPHY	2,6
034	0.01	275.1	COLORIMETRIC, DIAZOTIZATION	1,3,4
035	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
037	< 0.01	***	IGNORED	1,3,4
040	0.01	275.1	COLORIMETRIC, DIAZOTIZATION	1,3,4
043	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
044	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
047	0.01	275.1	COLORIMETRIC, DIAZOTIZATION	1,3,4
048	< 0.10	***	IGNORED	1,3,4
051	0.01	275.1	COLORIMETRIC, DIAZOTIZATION	1,3,4
052	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
053	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
055	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
058	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
059	< 0.00	***	IGNORED	1,3,4
060	< 0.01	***	IGNORED	1,3,4
061	< 0.01	***	IGNORED	1,3,4
063	0.00	100.0	ION CHROMATOGRAPHY	2,6
066	< 0.01	***	IGNORED	1,3,4
067	< 0.10	***	IGNORED	1,3,4
068	< 0.01	***	IGNORED	1,3,4
069	< 0.01	***	IGNORED	1,3,4
071	0.00	100.0	ION CHROMATOGRAPHY	2,6
075	< 0.00	***	IGNORED	1,3,4
077	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
079	0.02	650.2	REJECT	2,6
080	< 0.00	***	IGNORED	1,3,4
082	< 0.00	***	IGNORED	1,3,4
083	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
087	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
091	< 0.02	***	IGNORED	2,6
092	0.01	275.1	ION CHROMATOGRAPHY	1,3,4
094	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
095	0.00	100.0	COLORIMETRIC, DIAZOTIZATION	1,3,4
096	0.00	100.0	OTHER	1,3,4

TOTAL RANGE 0.00 TO 0.02 MEAN: 0.003
 STANDARD DEVIATION 0.0004 95 % CONFIDENCE INTRVL OF MEAN 0.003 + UK - 0.002

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR N03-N

CODE	REPORTED VALUE	PC.T. DEV. FROM MEAN	METHODS	REFERENCES
001	< 0.4	***	IGNORED ION CHROMATOGRAPHY	
002	< 0.1	***	IGNORED COLORIMETRIC, BRUCINE	2,6
003	0.0	100.0		1,2,3,4
004	< 0.0	***	IGNORED OTHER	
006	0.0	100.0	COLORIMETRIC, BRUCINE	1,2,3,4
007	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
009	0.0	100.0	COLORIMETRIC, BRUCINE	1,2,3,4
010	< 0.1	***	IGNORED COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
011	< 0.0	***	IGNORED COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
012	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
015	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
019	0.1	485.7	ION CHROMATOGRAPHY	2,6
020	0.1	***	COLORIMETRIC, BRUCINE	1,2,3,4
021	0.0	100.0	COLORIMETRIC, BRUCINE	1,2,3,4
022	0.0	100.0	COLORIMETRIC, DEVARDA'S ALLOY REDUCTION, DIAZOTIZATION	1
024	0.3	657.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
027	< 0.1	***	REJECT COLORIMETRIC, BRUCINE	1,2,3,4
028	0.0	100.0	IGNORED COLORIMETRIC, BRUCINE	1,2,3,4
029	0.1	485.7	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
030	0.1	485.7	COLORIMETRIC, BRUCINE	1,2,3,4
031	0.0	100.0	ION CHROMATOGRAPHY	2,6
032	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
034	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
035	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
037	< 0.1	***	IGNORED COLORIMETRIC, DEVARDA'S ALLOY REDUCTION, DIAZOTIZATION	1
040	0.1	485.7	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
043	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
044	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
046	0.0	100.0	COLORIMETRIC, BRUCINE	1,2,3,4
047	0.1	485.7	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
048	< 0.1	***	IGNORED COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
051	< 0.1	***	IGNORED COLORIMETRIC, BRUCINE	1,2,3,4
052	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
053	0.0	100.0	COLORIMETRIC, BRUCINE	1,2,3,4
054	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
055	0.0	100.0	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	1,2,3,4
056	< 0.1	***	IGNORED COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
058	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	3
059	< 0.0	***	IGNORED COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
060	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
061	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
063	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
066	< 0.1	***	IGNORED OTHER	
067	< 0.1	***	IGNORED COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
068	< 0.0	***	IGNORED COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
069	< 0.0	***	IGNORED COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
071	0.0	100.0	ION CHROMATOGRAPHY	2,6
072	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
075	0.1	485.7	COLORIMETRIC, BRUCINE	1,2,3,4

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR N03-N

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
077	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
079	0.2	71.4	REJECT	1,2,3,4
080	<	***	IGNDRED	3
081	<	100.0	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION OTHER	
082	<	***	IGNORED	1
083	0.1	485.7	COLORIMETRIC, DEVAROA'S ALLOY REDUCTION, DIAZOTIZATION COLORIMETRIC, BRUCINE	1,2,3,4
084	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
085	0.0	100.0	COLORIMETRIC, BRUCINE	1,2,3,4
087	0.0	100.0	COLORIMETRIC, BRUCINE	1,2,3,4
091	<	***	IGNORED	1,2,3,4
092	<	***	IGNORED	1,2,3,4
094	0.0	100.0	COLORIMETRIC, BRUCINE	1,2,3,4
095	0.0	100.0	COLORIMETRIC, BRUCINE	1,2,3,4
096	0.0	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION COLORIMETRIC, BRUCINE	1,2,3,4

TOTAL RANGE 0.0 TO 0.4 MEAN: 0.02
 STANDARD DEVIATION 0.04 95 % CONFIDENCE INTRVL OF MEAN 0.02 + OR - 0.01

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR P, TOTAL

CODE	REPORTED VALUE	PCI, DEV. FROM MEAN	METHODS	REFERENCES
001	2.70	565.5	REJECT	COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
002	0.18	11.0		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
003	0.17	4.9		
004	0.20	23.4		
006	0.36	122.1	REJECT	COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
009	0.18	11.0		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
010	0.19	17.2		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
012	0.15	7.5		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
014	0.15	7.5		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
015	0.14	13.6		EMISSION, IC PLASMA
017	0.20	23.4		EMISSION, IC PLASMA
019	0.22	35.7		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
020	0.17	4.9		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
021	0.17	4.9		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
022	0.14	13.6		COLORIMETRIC, BLK DIG, H2S04, K&HG SU4, PHOSPHOMOLYBU DATE
024	0.22	35.7		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
025	0.14	13.6		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
027	0.15	7.5		COLORIMETRIC, BLK DIG, H2S04, K&HG SU4, PHOSPHOMOLYBU DATE
028	0.09	44.5		COLORIMETRIC, BLK DIG, H2S04, K&HG SU4, PHOSPHOMOLYBU DATE
029	0.26	60.4		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
030	0.15	7.5		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
032	0.20	23.4		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
034	0.15	7.5		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
035	0.15	7.5		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
037	0.10	38.3		EMISSION, IC PLASMA
038	0.14	13.6		COLORIMETRIC, BLK DIG, H2S04, K&HG SU4, PHOSPHOMOLYBU DATE
040	0.13	19.8		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
043	1.50	825.3	REJECT	COLORIMETRIC, BLK DIG, H2S04, K&HG SU4, PHOSPHOMOLYBU DATE
044	0.05	69.2		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
045	0.17	4.9		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
047	0.17	4.9		COLORIMETRIC, BLK DIG, H2S04, K&HG SU4, PHOSPHOMOLYBU DATE
048	0.18	11.0		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
051	0.39	140.6		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
053	0.17	4.9		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
054	0.16	1.3		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
055	0.16	1.3		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
056	0.06	63.0		COLORIMETRIC, BLK DIG, H2S04, K&HG SU4, PHOSPHOMOLYBU DATE
058	0.17	4.9		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
059	0.15	7.5		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
060	0.12	26.0		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
066	0.15	7.5		OTHER
068	0.17	4.9		COLORIMETRIC, BLK DIG, H2S04, K&HG SU4, PHOSPHOMOLYBU DATE
069	0.12	26.0		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
072	0.14	13.6		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
075	0.20	23.4		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
077	0.16	1.3		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU
079	0.17	4.9		COLORIMETRIC, BLK DIG, H2S04, K&HG SU4, PHOSPHOMOLYBU DATE
080	0.16	1.3		COLORIMETRIC, BLK DIG, H2S04, K&HG SU4, PHOSPHOMOLYBU DATE
082	0.17	4.9		COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR P, TOTAL

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
083	0.31	91.2	REJECT	
085	0.23	41.9	OTHER	
087	0.13	19.8	COLORIMETRIC, H2SO4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU	1,2,3,4
091	0.19	17.2	COLORIMETRIC, BLK DIG, H2SO4, K&MG SO4, PHOSPHOMOLYBDATE	4
092	0.20	23.4	OTHER	
094	0.19	17.2	COLORIMETRIC, H2SO4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU	1,2,3,4
096	0.16	1.3	COLORIMETRIC, H2SO4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU	1,2,3,4
097	0.19	17.2	COLORIMETRIC, H2SO4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBU	1,2,3,4

TOTAL RANGE 0.05 TO 2.70 MEAN: 0.162
 STANDARD DEVIATION 0.038 95 % CONFIDENCE INTRVL OF MEAN 0.162 + OR - 0.011

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR PH

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	6.9	0.1		
002	6.5	5.7	ELECTROMETRIC	1,2,3,4
003	6.7	2.8		
004	6.9	0.1		
005	7.0	1.6		
009	7.8	13.2	ELECTROMETRIC	1,2,3,4
011	7.0	1.6	ELECTROMETRIC	1,2,3,4
012	7.3	5.9		
013	5.9	14.4		
014	6.8	1.3		
015	7.5	8.8		
016	7.0	1.6		
017	6.3	8.6		
019	6.5	5.7		
020	6.8	1.3		
021	6.6	4.2		
022	6.1	11.5		
024	6.6	4.2		
025	5.8	15.8		
026	6.3	8.6		
027	6.2	10.0	ELECTROMETRIC	1,2,3,4
028	6.6	4.2	ELECTROMETRIC	1,2,3,4
029	6.9	0.1	ELECTROMETRIC	1,2,3,4
030	6.6	4.2		
031	7.1	3.0		
032	6.9	0.1		
034	7.1	3.0		
035	6.8	1.3		
036	6.8	1.3		
037	7.2	4.5		
038	7.1	3.0	ELECTROMETRIC	1,2,3,4
040	6.8	1.3	ELECTROMETRIC	1,2,3,4
041	7.0	1.6	ELECTROMETRIC	1,2,3,4
043	6.7	2.8		
044	6.3	8.6		
045	7.4	7.4	ELECTROMETRIC	1,2,3,4
046	6.6	4.2		
047	6.7	2.8	ELECTROMETRIC	1,2,3,4
048	7.3	5.9		
050	7.4	7.4		
051	6.7	2.8		
052	6.9	0.1	ELECTROMETRIC	1,2,3,4
053	7.8	13.2	ELECTROMETRIC	1,2,3,4
054	7.0	1.6		
055	7.4	7.4	OTHER	
056	7.3	5.9		
058	6.6	4.2		
059	7.3	5.9	ELECTROMETRIC	1,2,3,4
060	7.2	4.5	OTHER	

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR PH

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
061	7.4	7.4	ELECTROMETRIC	1,2,3,4
063	6.6	4.2		
064	6.5	5.7		
065	6.8	1.3	ELECTROMETRIC	1,2,3,4
066	6.5	5.7		
067	6.8	1.3	OTHER	
068	6.8	1.3		
069	6.6	4.2		
072	7.0	1.6		
075	6.9	0.1		
079	7.0	1.6		
080	7.8	13.2	ELECTROMETRIC	1,2,3,4
081	6.7	2.8		
082	7.1	3.0		
083	6.3	8.6		
085	7.3	5.9		
086	7.4	7.4	ELECTROMETRIC	1,2,3,4
087	7.0	1.6		
091	7.2	4.5		
092	6.8	1.3	ELECTROMETRIC	1,2,3,4
094	6.5	5.7	OTHER	
095	7.0	1.6	OTHER	
096	7.7	11.7	ELECTROMETRIC	1,2,3,4
097	7.3	5.9		

TOTAL RANGE 5.8 TO 7.8 MEAN: 6.89
 STANDARD DEVIATION 0.42 95 % CONFIDENCE INTRVL OF MEAN 6.89 + OR - 0.10

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR SI02

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
004	8.2	4.3	EMISSION, IC PLASMA	5
007	6.9	12.2	COLORIMETRIC, SODIUM SULFITE REDUCTION TO MOLYBDATE BLUE	4
009	8.8	11.9	COLORIMETRIC, MLYBDOUSILICIC ACID	1,2,3
011	8.4	6.8	COLORIMETRIC, MLYBDOUSILICIC ACID	1,2,3
013	8.0	1.8	COLORIMETRIC, MLYBDOUSILICIC ACID	1,2,3
014	7.9	0.5	CU METRIC, AMINO-NAPHTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
015	8.4	6.8	EMISSION, IC PLASMA	5
017	7.8	0.8	EMISSION, IC PLASMA	5
018	6.6	16.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
019	8.4	6.8	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
020	10.0	27.2	REJECT	4
021	8.2	4.3	COLORIMETRIC, MLYBDOUSILICIC ACID	1,2,3
022	7.2	8.4	COLORIMETRIC, MLYBDOUSILICIC ACID	4
024	8.2	4.3	COLORIMETRIC, MLYBDOUSILICIC ACID	1,2,3
025	7.2	8.4	COLORIMETRIC, SODIUM SULFITE REDUCTION TO MOLYBDATE BLUE	4
026	7.9	0.5	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
028	6.9	12.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
032	8.0	1.8	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
034	7.6	3.3	COLORIMETRIC, MLYBDOUSILICIC ACID	1,2,3
035	8.0	1.8	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
037	7.0	11.0	COLORIMETRIC, MLYBDOUSILICIC ACID	1,2,3
038	8.1	3.0	EMISSION, IC PLASMA	5
043	5.1	35.1	REJECT	4
044	7.7	2.1	COLORIMETRIC, SODIUM SULFITE REDUCTION TO MOLYBDATE BLUE	1,2,3
046	7.6	3.3	COLORIMETRIC, MLYBDOUSILICIC ACID	4
047	6.4	18.6	COLORIMETRIC, SODIUM SULFITE REDUCTION TO MOLYBDATE BLUE	4
048	7.8	0.8	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
049	8.6	9.4	COLORIMETRIC, MLYBDOUSILICIC ACID	1,2,3
051	7.1	9.7	EMISSION, IC PLASMA	5
052	7.6	3.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
054	8.2	4.3	OTHER	4
055	7.8	0.8	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
056	8.1	3.0	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
058	4.0	49.1	REJECT	4
059	8.2	4.3	EMISSION, IC PLASMA	5
062	7.8	0.8	EMISSION, IC PLASMA	5
063	9.1	15.7	EMISSION, IC PLASMA	5
065	8.5	8.1	COLORIMETRIC, SODIUM SULFITE REDUCTION TO MOLYBDATE BLUE	4
068	8.7	10.7	EMISSION, IC PLASMA	4
069	8.2	4.3	CU METRIC, AMINO-NAPHTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3
071	7.9	0.5	EMISSION, IC PLASMA	5
077	7.6	3.3	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
079	7.0	11.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
081	7.9	0.5	COLORIMETRIC, SODIUM SULFITE REDUCTION TO MOLYBDATE BLUE	4
082	8.3	5.6	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
086	8.5	8.1	COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	4
087	7.3	7.2	COLORIMETRIC, MLYBDOUSILICIC ACID	1,2,3
096	8.2	4.3	COLORIMETRIC, MLYBDOUSILICIC ACID	1,2,3
097	11.0	59.9	REJECT	5
			CU METRIC, AMINO-NAPHTHOL SULFONIC ACID REDUCE-HETEROPOLY BLUE	3

TOTAL RANGE 4.0 TO 11.0
STANDARD DEVIATION 0.60

95 % CONFIDENCE INTRVL OF MEAN 7.86 ± UR - 0.16
MEAN: 7.86

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE #82 REPORT FOR S04

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	29.0	5.4	ION CHROMATOGRAPHY	2,6
002	21.5	21.8	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
003	34.0	23.6		
004	28.0	1.8	OTHER	
007	29.0	5.4	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
009	26.0	5.5	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
011	25.0	9.1	GRAVIMETRIC, BARIUM SULFATE	1,2,3
012	22.0	20.0	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
013	29.0	5.4	THURIN TITRATION	2,4
014	27.0	1.9	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
015	28.0	1.8	ION CHROMATOGRAPHY	2,6
016	13.0	52.7	REJECT	3
018	29.0	5.4	COLORIMETRIC, CHLORANILATE, AUTOMATED	2,6
019	27.0	1.9	ION CHROMATOGRAPHY	2,6
020	25.0	9.1	GRAVIMETRIC, BARIUM SULFATE	1,2,3
021	20.0	27.3	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
022	29.0	5.4	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
024	20.0	27.3	GRAVIMETRIC, BARIUM SULFATE	1,2,3
026	26.0	5.5	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
027	25.0	9.1	OTHER	
028	24.0	12.8	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
029	30.0	9.0	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
030	30.0	9.0	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
031	25.0	9.1	ION CHROMATOGRAPHY	2,6
032	26.0	5.5	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
034	30.0	9.0	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
035	29.0	5.4	THURIN TITRATION	2,4
037	29.5	7.2	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
038	29.0	5.4	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
043	24.0	12.8	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
044	25.0	9.1	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
046	36.0	30.9	THURIN TITRATION	2,4
047	51.0	12.7	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
048	29.7	8.0	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
051	22.2	19.3	GRAVIMETRIC, BARIUM SULFATE	1,2,3
052	28.0	1.8	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
053	26.0	5.5	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
054	28.0	1.8	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
055	28.0	1.8	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
056	30.0	9.0	GRAVIMETRIC, BARIUM SULFATE	1,2,3
058	27.6	0.3		
059	30.0	9.0	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
060	29.5	7.2	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
061	27.4	0.4	GRAVIMETRIC, BARIUM SULFATE	1,2,3
062	27.0	1.9	GRAVIMETRIC, BARIUM SULFATE	1,2,3
063	29.0	5.4	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
064	29.4	6.9	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
065	2.9	89.5	REJECT	2,4
068	27.0	1.9	TURBIDIMETRIC, BARIUM SULFATE	1,2,3

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR 804

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	REJECT	METHODS	REFERENCES
069	39.0	41.8	REJECT	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
070	27.0	1.9		COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
071	28.0	1.8		ION CHROMATOGRAPHY	2,6
072	28.1	2.1		COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
074	31.0	12.7		TURBIDIMETRIC, BARIUM SULFATE	1,2,3
075	28.0	1.8		TURBIDIMETRIC, BARIUM SULFATE	1,2,3
077	27.0	1.9		COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
079	30.0	9.0		COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
080	30.0	9.0		TURBIDIMETRIC, BARIUM SULFATE	1,2,3
081	25.0	9.1		GRAVIMETRIC, BARIUM SULFATE	1,2,3
082	22.8	17.1		COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
084	30.0	9.0		TURBIDIMETRIC, BARIUM SULFATE	1,2,3
085	28.0	1.8		TURBIDIMETRIC, BARIUM SULFATE	1,2,3
086	28.0	1.8		TURBIDIMETRIC, BARIUM SULFATE	1,2,3
087	20.0	27.3		GRAVIMETRIC, BARIUM SULFATE	1,2,3
091	26.5	3.7		TURBIDIMETRIC, BARIUM SULFATE	1,2,3
094	33.0	20.0		TURBIDIMETRIC, BARIUM SULFATE	1,2,3
095	30.0	9.0		ION CHROMATOGRAPHY	2,6
096	29.0	5.4		TURBIDIMETRIC, BARIUM SULFATE	1,2,3

TOTAL RANGE 2.9 TO 39.0 MEAN: 27.51
 STANDARD DEVIATION 3.12 95 % CONFIDENCE INTRVL OF MEAN 27.51 + OR - 0.77

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR SP. CDND.

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	140	0.8	DIRECT READING INSTRUMENT	4
002	140	0.6	DIRECT READING INSTRUMENT	4
003	113	16.7		
004	140	0.6	DIRECT READING INSTRUMENT	4
005	145	4.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
007	144	3.7	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
009	117	15.8	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
011	140	0.8	DIRECT READING INSTRUMENT	4
012	139	0.1	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
013	137	1.4	DIRECT READING INSTRUMENT	4
014	139	0.1	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
015	149	7.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
016	130	6.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
017	1940	296.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
018	136	2.1	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	4
019	132	5.0	DIRECT READING INSTRUMENT	4
020	127	8.6	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
021	134	3.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
022	146	5.1	DIRECT READING INSTRUMENT	4
024	152	9.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
025	128	7.9	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
026	137	1.4	DIRECT READING INSTRUMENT	4
027	137	1.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
028	141	1.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
029	145	2.9	OTHER	
030	137	1.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
031	142	2.2	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
032	116	16.5	DIRECT READING INSTRUMENT	4
034	144	3.7	DIRECT READING INSTRUMENT	4
035	137	1.4	DIRECT READING INSTRUMENT	4
036	124	10.7	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
037	136	0.7	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
038	146	5.1	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
040	138	0.7	DIRECT READING INSTRUMENT	4
041	142	2.2	DIRECT READING INSTRUMENT	4
043	144	3.7	DIRECT READING INSTRUMENT	4
044	141	1.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
045	142	2.2	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
046	145	4.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
047	140	0.8	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
048	140	0.8	DIRECT READING INSTRUMENT	4
050	160	15.2	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
052	127	8.6	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
053	148	6.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
054	143	2.9	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
055	138	0.7	DIRECT READING INSTRUMENT	4
056	148	6.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
058	143	2.9	DIRECT READING INSTRUMENT	4
059	145	4.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	4

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR SP. COND.

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
060	20	85.6	REJECT	
061	156	12.3	DIRECT READING INSTRUMENT	4
063	135	2.8	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
064	140	0.8	DIRECT READING INSTRUMENT	4
065	143	0.8	DIRECT READING INSTRUMENT	4
066	136	2.9	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
068	134	2.1	DIRECT READING INSTRUMENT	4
069	134	3.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
072	141	3.5	DIRECT READING INSTRUMENT	4
075	130	1.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
077	140	6.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
079	140	0.8	DIRECT READING INSTRUMENT	4
081	126	9.3	DIRECT READING INSTRUMENT	4
082	146	5.1	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
084	148	6.5	DIRECT READING INSTRUMENT	4
085	137	1.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
086	144	3.7	DIRECT READING INSTRUMENT	4
087	125	10.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
091	153	10.1	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
092	130	6.4	DIRECT READING INSTRUMENT	4
094	98	29.5	REJECT	4
095	132	5.0	DIRECT READING INSTRUMENT	4
096	161	15.9	DIRECT READING INSTRUMENT	4
097	140	0.1	OTHER	4
		0.8	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4

TOTAL RANGE 20 TO 1940 MEAN: 138.9
 STANDARD DEVIATION 9.0 95 % CONFIDENCE INTRVL OF MEAN 138.9 + OR - 2.1

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR SR

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
004	110	3.7	REJECT	1,2,4
013	40	65.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
014	110	3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
015	120	5.0	EMISSION, IC PLASMA	5
017	120	5.0	EMISSION, IC PLASMA	5
018	120	5.0	EMISSION, IC PLASMA	5
019	70	38.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
020	100	12.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
021	110	3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
022	120	5.0	EMISSION, IC PLASMA	5
025	120	5.0	EMISSION, IC PLASMA	5
026	120	5.0	EMISSION, IC PLASMA	5
028	0	100.0	REJECT	1,2,4
034	130	13.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
035	100	12.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
038	120	5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
049	120	5.0	EMISSION, IC PLASMA	5
053	130	13.8	EMISSION, IC PLASMA	5
055	110	3.7	OTHER	1,2,4
058	120	5.0	ATOMIC ABSORPTION, DIRECT, AIR	5
059	120	5.0	EMISSION, IC PLASMA	5
063	120	5.0	EMISSION, IC PLASMA	5
068	140	22.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
069	80	30.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
071	120	5.0	EMISSION, IC PLASMA	5
077	110	3.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
079	100	12.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
081	100	12.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
082	160	40.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
087	100	12.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4

TOTAL RANGE 0 TO 170 MEAN: 114
 STANDARD DEVIATION 17 95 % CONFIDENCE INTRVL OF MEAN 114 + OR - 7

TABLE 7. ANALYTICAL DATA STANDARD REFERENCE SAMPLE M82 REPORT FOR V

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
015	<	191.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
019	<	***	IGNORED ATOMIC ABSORPTION, FLAMELESS	3
020	<	***	IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
021	10	2.9	ATOMIC ABSORPTION, FLAMELESS	3
022	3	70.9	EMISSION, IC PLASMA	5
025	4	61.2	EMISSION, IC PLASMA	5
036	4	61.2	EMISSION, IC PLASMA	5
051	<	***	IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
053	5	51.5	ATOMIC ABSORPTION, FLAMELESS	3
055	33	220.4	COLUMBIMETRIC, CATALYTIC OXIDATION	4
058	9	12.6	COLUMBIMETRIC, CATALYTIC OXIDATION	4
059	<	***	IGNORED EMISSION, IC PLASMA	5
063	2	80.6	EMISSION, IC PLASMA	5
068	<	***	IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,3
069	<	***	IGNORED ATOMIC ABSORPTION, FLAMELESS	3
071	3	70.9	EMISSION, IC PLASMA	5

TOTAL RANGE 2. TO 11.5 MEAN: 10.3
 STANDARD DEVIATION 11.5 95 % CONFIDENCE INTRVL OF MEAN 10.3 + OR - 8.2

TABLE 8. STATISTICS BY METHOD FOR SAMPLE: M82

DETERMINATION: ALK(CAC03)

METHOD	MEAN	STD DEV	N
TITRATION, COLORIMETRIC, AUTOMATED	35.0	2.9	4
TITRATION, COLORIMETRIC, MANUAL	33.0	2.3	10
TITRATION, ELECTROMETRIC, AUTOMATED	32.8	2.1	10
TITRATION, ELECTROMETRIC, MANUAL	32.6	2.3	30
OTHER	30.5	3.1	4
***** OVER ALL *****	32.8	2.5	60

DETERMINATION: B

METHOD	MEAN	STD DEV	N
COLORIMETRIC, CARMINE (CARMINIC ACID)	23	6	3
COLORIMETRIC, CURCUMIN	110	34	5
EMISSION, DC PLASMA	56	64	5
EMISSION, IC PLASMA	23	13	7
***** OVER ALL *****	57	56	26

DETERMINATION: BR

METHOD	MEAN	STD DEV	N
COLORIMETRIC, CHLORAMINE-T	0.327	0.106	3
OTHER	0.229	0.030	5
***** OVER ALL *****	0.225	0.096	11

DETERMINATION: CA

METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	13.79	1.51	43
EMISSION, IC PLASMA	14.18	0.73	11
TITRATION, EDTA	13.81	1.36	8
***** OVER ALL *****	13.87	1.35	65

DETERMINATION: CL

METHOD	MEAN	STD DEV	N
COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	2.66	0.52	18
ION-CHROMATOGRAPHY	2.35	0.17	4
TITRATION, MERCURIC NITRATE	2.86	0.90	14
TITRATION, SILVER NITRATE	2.67	1.06	23
OTHER	2.80	0.23	4
***** OVER ALL *****	2.77	0.83	69

TABLE 8. STATISTICS BY METHOD FOR SAMPLE: M82

DETERMINATION: USRU 180			
METHOD	MEAN	STD DEV	N
RESIDUE, FILTRABLE	85.1	11.1	25
RESIDUE, FILTRABLE	86.7	16.8	7
RESIDUE ON EVAPORATION	88.5	12.8	6
RESIDUE ON EVAPORATION	88.0	7.6	13
***** OVER ALL *****	87.3	11.8	53
DETERMINATION: F			
METHOD	MEAN	STD DEV	N
COLORIMETRIC, LANTHANUM ALIZAKIN "COMPLEXONE", AUTOMATED	0.52	0.05	4
COLORIMETRIC, ZIRCONIUM ERIOCHROME	0.50	0.10	3
COLORIMETRIC, SPADNS	0.58	0.04	5
ION CHROMATOGRAPHY	0.58	0.13	5
ION SELECTIVE ELECTRODE, AUTOMATED	0.52	0.04	9
ION SELECTIVE ELECTRODE, MANUAL	0.57	0.08	32
***** OVER ALL *****	0.57	0.08	62
DETERMINATION: I			
METHOD	MEAN	STD DEV	N
***** OVER ALL *****	0.049	0.008	5
DETERMINATION: K			
METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	1.85	0.30	28
FLAME, EMISSION, PHOTOMETRIC	2.07	0.42	4
OTHER	1.79	0.19	8
***** OVER ALL *****	1.87	0.37	68
DETERMINATION: MG			
METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	3.55	0.28	46
EMISSION, IC PLASMA	3.64	0.15	10
OTHER	3.64	0.53	5
***** OVER ALL *****	3.57	0.29	65

TABLE 8. STATISTICS BY METHOD FOR SAMPLE: M62

DETERMINATION: NA		MEAN	STD DEV	N
METHOD				
ATOMIC ABSORPTION, DIRECT, AIR		6.15	0.67	28
EMISSION, IC PLASMA		6.30	0.41	10
FLAME EMISSION, PHOTOMETRIC		6.28	1.33	5
OTHER		5.40	1.40	3
***** OVER ALL *****		6.20	0.77	72
DETERMINATION: NU2-N				
METHOD				
COLORIMETRIC, DIAZOTIZATION		0.003	0.005	21
ION CHROMATOGRAPHY		0.000	0.000	4
OTHER		0.003	0.006	3
***** OVER ALL *****		0.003	0.004	30
DETERMINATION: NU3-N				
METHOD				
COLORIMETRIC, BRUCINE		0.03	0.05	12
COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION		0.01	0.04	21
ION CHROMATOGRAPHY		0.00	0.00	3
***** OVER ALL *****		0.02	0.04	41
DETERMINATION: P, TOTAL				
METHOD				
COLORIMETRIC, BLK DIG, H2SO4, K&HG SO4, PHOSPHOMOLYBDATE		0.156	0.028	10
COLORIMETRIC, H2SO4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD		0.160	0.041	32
EMISSION, IC PLASMA		0.147	0.050	3
OTHER		0.192	0.029	5
***** OVER ALL *****		0.162	0.038	52
DETERMINATION: PH				
METHOD				
ELECTROMETRIC		7.04	0.52	21
OTHER		6.98	0.35	5
***** OVER ALL *****		6.89	0.42	73

TABLE 8. STATISTICS BY METHOD FOR SAMPLE: M82

METHOD	MEAN	STD DEV	N
DETERMINATION: S102			
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	7.33	0.70	6
COLORIMETRIC, MOLYBDOUSILICIC ACID	7.95	0.54	11
COLORIMETRIC, SODIUM SULFITE REDUCTION TO MOLYBDATE BLUE	7.70	0.59	6
COLORIMETRIC, ASCORBIC ACID REDUCTION TO MOLYBDATE BLUE, AUTO.	7.67	0.62	8
EMISSION, IC PLASMA	8.27	0.40	11
***** OVER ALL *****	7.86	0.60	45
DETERMINATION: S04			
METHOD	MEAN	STD DEV	N
COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	27.31	2.33	16
GRAVIMETRIC, BARIUM SULFATE	24.62	3.38	9
ION CHROMATOGRAPHY	28.00	1.63	7
THORIN TITRATION	31.33	4.04	3
TURBIDIMETRIC, BARIUM SULFATE	27.89	3.02	26
***** OVER ALL *****	27.51	3.12	65
DETERMINATION: SP. COND.			
METHOD	MEAN	STD DEV	N
DIRECT READING INSTRUMENT	137.8	6.7	27
WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	139.6	9.1	39
***** OVER ALL *****	138.9	9.0	70
DETERMINATION: SR			
METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	109	22	15
EMISSION, IC PLASMA	120	0	11
***** OVER ALL *****	114	17	28
DETERMINATION: V			
METHOD	MEAN	STD DEV	N
EMISSION, IC PLASMA	3.2	0.8	5
***** OVER ALL *****	10.3	11.5	10

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE T83 REPORT FOR ACIDSCAC03

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
002	1459.0	1.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
010	1600.0	8.2	TITRATION, COLORIMETRIC, MANUAL	1,2,3
015	1500.0	1.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
020	1484.0	0.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
021	3200.0	116.4	REJECT	1,2,3,4
022	1400.0	5.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
024	1500.0	1.4	TITRATION, COLORIMETRIC, MANUAL	1,2,3
027	1450.0	2.0	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
028	1456.0	1.6	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
044	1500.0	1.4	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
047	1400.0	5.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
051	1414.0	4.4	TITRATION, COLORIMETRIC, MANUAL	1,2,3
055	1300.0	12.1	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
058	738.0	50.1	REJECT	1,2,3,4
059	1502.0	1.6	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
060	1533.0	3.6	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
062	1400.0	5.3	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
068	1600.0	8.2	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
072	1520.0	2.8	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
077	1600.0	8.2	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
079	1442.0	2.5	TITRATION, ELECTROMETRIC, MANUAL	1,2,3,4
085	1500.0	1.4	TITRATION, COLORIMETRIC, MANUAL	1,2,3,4
094	1500.0	1.4	TITRATION, COLORIMETRIC, MANUAL	1,2,3

TOTAL RANGE 738.0 TO 3200.0 MEAN: 1479.05
 STANDARD DEVIATION 73.96 95 % CONFIDENCE INTRVL OF MEAN 1479.05 + OR - 33.67

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 183 REPORT FOR AG

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
002	3	28.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
003	2	14.3		
004	<	***	IGNORED OTHER	
005	2	14.3		
009	2	14.3	ATOMIC ABSORPTION, FLAMELESS	3
010	2	14.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
015	3	28.6		
016	<	***	IGNORED	
019	5	114.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
020	<	***	IGNORED	1,2,3
021	2	14.3		
022	3	28.6		
024	2	14.3		
030	2	14.3		
032	0	100.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
034	0	100.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
037	<	***	IGNORED	
038	2	14.3	OTHER	
040	3	28.6	ATOMIC ABSORPTION, FLAMELESS	3
043	2	14.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
044	2	14.3		
047	2	14.3	ATOMIC ABSORPTION, FLAMELESS	3
048	2	14.3	ATOMIC ABSORPTION, FLAMELESS	3
050	2	14.3	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,2,4
051	<	***	IGNORED	
053	4	71.4	ATOMIC ABSORPTION, FLAMELESS	3
054	0	100.0		
055	2	14.3		
056	4	71.4		
058	2	14.3	ATOMIC ABSORPTION, FLAMELESS	3
059	2	14.3	ATOMIC ABSORPTION, FLAMELESS	3
066	3	28.6		
067	3	28.6	OTHER	
068	<	***	IGNORED	
069	3	28.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
072	3	28.6		
075	3	28.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3
077	1	57.1		
079	3	28.6		
080	<	***	IGNORED	
080	5	28.6	ATOMIC ABSORPTION, FLAMELESS	3
091	<	***	IGNORED	
092	2	14.3	ATOMIC ABSORPTION, FLAMELESS	3
095	3	28.6	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,2,4
096	3	28.6	ATOMIC ABSORPTION, FLAMELESS	3

TOTAL RANGE 0 TU 5 MEAN: 2.3
STANDARD DEVIATION 1.0 95 % CONFIDENCE INTRVL OF MEAN 2.3 + UR - 0.4

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 183 REPORT FOR AL

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
003	50	55.6	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE, MANUAL	1, 2, 3, 4
009	50	55.6	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE, MANUAL	1, 2, 3, 4
014	100	11.2	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3
015	170	51.0	EMISSION, IC PLASMA	3
017	900	699.4	REJECT	
018	160	42.1	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3
019	80	28.9	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3
020	100	11.2	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3
021	80	28.9	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3
024	80	28.9	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3
025	230	104.3	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3
026	100	11.2	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3
028	160	42.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE, MANUAL	1, 2, 3, 4
032	100	11.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE, MANUAL	1, 2, 3, 4
034	150	33.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE, MANUAL	1, 2, 3, 4
037	90	20.1	EMISSION, DC PLASMA	
038	80	28.9	EMISSION, IC PLASMA	
047	850	655.0	REJECT	3
051	160	42.1	ATOMIC ABSORPTION, DIRECT, FLAMELESS	1, 2, 3, 4
053	100	11.2	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3
054	0	100.0		
055	150	33.2	ATOMIC ABSORPTION, CHELATION EXTRACTION, NITROUS OXIDE, MANUAL	2, 4
058	100	11.2	ATOMIC ABSORPTION, CHELATION EXTRACTION, AIR-ACETYLENE, MANUAL	1
059	80	28.9	EMISSION, DC PLASMA	
063	50	55.6	EMISSION, IC PLASMA	
066	90	20.1	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3
068	100	***	IGNORED	
069	110	2.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE, MANUAL	1, 2, 3, 4
072	100	11.2	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3
075	140	24.4	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE, MANUAL	1, 2, 3, 4
079	90	20.1	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3
080	240	113.2	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE, MANUAL	1, 2, 3, 4
091	230	104.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE, MANUAL	1, 2, 3, 4
096	70	37.8	ATOMIC ABSORPTION, DIRECT, FLAMELESS	3

TOTAL RANGE 0 TO 55
 STANDARD DEVIATION 0 TO 55
 900 MEAN: 113
 95 % CONFIDENCE INTRVL OF MEAN 113 + UR - 20

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE T83 REPORT FOR AS

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	2	46.5	ATOMIC ABSORPTION, FLAMELESS	3
004	3	19.7	OTHER	
009	3	19.7	ATOMIC ABSORPTION, FLAMELESS	3
010	4	7.1	ATOMIC ABSORPTION, FLAMELESS	3
014	4	7.1	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
015	4	7.1	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
018	6	60.6	ATOMIC ABSORPTION, FLAMELESS	3
019	3	19.7	ATOMIC ABSORPTION, FLAMELESS	3
020	5	***	IGNORED	
021	3	19.7	ATOMIC ABSORPTION, FLAMELESS	3
022	3	19.7	ATOMIC ABSORPTION, FLAMELESS	3
024	1	73.2	ATOMIC ABSORPTION, HYDRIDE, (NABH4), AUTOMATED	4
025	8	114.2	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
028	3	19.7	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
028	3	19.7	ATOMIC ABSORPTION, FLAMELESS	3
032	5	33.9	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
034	57	426.0	ATOMIC ABSORPTION, FLAMELESS	3
038	5	33.9	ATOMIC ABSORPTION, FLAMELESS	3
041	2	46.5	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
043	4	7.1	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
044	0	100.0	ATOMIC ABSORPTION, FLAMELESS	3
047	2	46.5	ATOMIC ABSORPTION, FLAMELESS	3
048	25	***	IGNORED	2,3,4
050	10	167.7	SPECTROPHOTOMETRIC, SILVER DIETHYL DITHIOCARBAMATE	3
051	1	***	ATOMIC ABSORPTION, FLAMELESS	1
053	10	167.7	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	3
054	0	100.0	ATOMIC ABSORPTION, FLAMELESS	3
055	3	19.7	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
056	4	7.1	ATOMIC ABSORPTION, HYDRIDE, (ZINC), MANUAL	1,2,3,4
058	3	19.7	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
059	3	19.7	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
066	3	19.7	ATOMIC ABSORPTION, HYDRIDE, (NABH4), AUTOMATED	4
067	33	783.5	ATOMIC ABSORPTION, FLAMELESS	3
068	3	19.7	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
069	1	***	ATOMIC ABSORPTION, FLAMELESS	3
075	5	***	IGNORED	
076	3	19.7	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
077	4	7.1	ATOMIC ABSORPTION, FLAMELESS	3
079	3	19.7	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
080	5	***	IGNORED	
081	7	87.4	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1
091	3	19.7	ATOMIC ABSORPTION, FLAMELESS	3
092	1	***	IGNORED	
096	3	19.7	ATOMIC ABSORPTION, HYDRIDE, (NABH4), MANUAL	1

TOTAL RANGE 0 TU 57 MEAN: 5.7
 STANDARD DEVIATION 2.3 95 % CONFIDENCE INTRVL OF MEAN 3.7 + OR - 0.8

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 183 REPORT FOR 8A

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	140	23.5	ATOMIC ABSORPTION, FLAMELESS	3
002	1890	932.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
003	230	25.7	EMISSION, IC PLASMA	5
004	170	7.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
005	170	7.1	ATOMIC ABSORPTION, FLAMELESS	3
009	170	7.1	EMISSION, IC PLASMA	5
010	180	1.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
014	160	12.6	ATOMIC ABSORPTION, FLAMELESS	3
015	170	7.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	3
017	170	7.1	EMISSION, IC PLASMA	5
018	180	1.7	EMISSION, IC PLASMA	5
019	230	25.7	ATOMIC ABSORPTION, FLAMELESS	3
020	200	9.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
021	110	39.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
022	180	1.7	EMISSION, IC PLASMA	5
024	280	53.0	ATOMIC ABSORPTION, FLAMELESS	3
025	170	7.1	OTHER	3
026	180	1.7	ATOMIC ABSORPTION, FLAMELESS	3
028	140	23.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
032	200	9.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
034	230	25.7	ATOMIC ABSORPTION, FLAMELESS	3
037	200	9.3	EMISSION, DC PLASMA	2
038	170	7.1	EMISSION, IC PLASMA	5
043	220	20.2	ATOMIC ABSORPTION, FLAMELESS	3
044	210	14.7	ATOMIC ABSORPTION, FLAMELESS	3
047	210	14.7	ATOMIC ABSORPTION, FLAMELESS	3
049	180	1.7	EMISSION, IC PLASMA	5
051	200	9.3	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
053	180	1.7	ATOMIC ABSORPTION, FLAMELESS	3
055	200	9.3	ATOMIC ABSORPTION, FLAMELESS	3
056	170	7.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
058	170	7.1	OTHER	3
059	180	1.7	EMISSION, IC PLASMA	5
063	180	1.7	EMISSION, IC PLASMA	5
067	310	69.4	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
068	100	***	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
069	150	18.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
070	180	1.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
071	190	3.8	EMISSION, IC PLASMA	5
072	190	3.8	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
077	250	36.6	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
079	130	29.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
080	170	7.1	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
091	110	39.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3,4
092	200	9.3	ATOMIC ABSORPTION, FLAMELESS	3
096	170	7.1	EMISSION, IC PLASMA	5

TOTAL RANGE 110 TO 1890 MEAN: 183
 STANDARD DEVIATION 53 95 X CONFIDENCE INTRVL OF MEAN 183 + OR - 10

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 183 REPORT FOR BE

CODE	REPORTED VALUE	PCI. DEV. FROM MEAN	METHODS	REFERENCES
002	<	10	***	1,2,5,4
004	4	17.5	IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	5
015	7	44.3	EMISSION, IC PLASMA	1,2,5,4
019	5	3.1	ATOMIC ABSORPTION, FLAMELESS	3
020	<	10	***	1,2,5,4
021	7	44.3	IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	3
022	5	38.1	ATOMIC ABSORPTION, FLAMELESS	5
024	8	64.9	EMISSION, IC PLASMA	3
025	5	3.1	ATOMIC ABSORPTION, FLAMELESS	5
026	10	106.2	EMISSION, IC PLASMA	5
032	0	100.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,5,4
037	<	10	***	
038	4	17.5	IGNORED EMISSION, IC PLASMA	5
047	5	3.1	EMISSION, IC PLASMA	3
049	4	17.5	ATOMIC ABSORPTION, FLAMELESS	5
053	9	85.6	ATOMIC ABSORPTION, FLAMELESS	3
055	0	100.0	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,5,4
058	4	17.5	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,5,4
059	5	3.1	EMISSION, IC PLASMA	5
068	<	10	***	1,2,5,4
069	2	58.8	IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,5,4
071	5	3.1	EMISSION, IC PLASMA	5
079	4	17.5	ATOMIC ABSORPTION, FLAMELESS	3
080	6	23.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	3
092	17	250.5	REJECT ATOMIC ABSORPTION, FLAMELESS	1,2,5,4

TOTAL RANGE 0 10 17
 STANDARD DEVIATION 0 2.6 4.9
 MEAN: 4.9
 95 % CONFIDENCE INTERVAL OF MEAN 4.9 + UR - 1.2

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE T03 REPORT FOR CD

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
002	5	13.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
003	7	20.6	EMISSION, IC PLASMA	5
004	5	13.9	ATOMIC ABSORPTION, FLAMELESS	3
005	6	3.4	ATOMIC ABSORPTION, EXTRACTION, (APDC/MIBK)	1,4
007	6	3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
009	5	13.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
012	10	72.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
014	5	13.9	EMISSION, IC PLASMA	5
015	6	3.4	ANODIC STRIPPING VOLTAMETRY, DIFFERENTIAL PULSE	2
016	<	***	EMISSION, IC PLASMA	5
017	8	37.8	ATOMIC ABSORPTION, FLAMELESS	3
018	5	13.9	ATOMIC ABSORPTION, FLAMELESS	3
019	8	37.8	ATOMIC ABSORPTION, DIRECT, AIR	3
020	<	***	ATOMIC ABSORPTION, FLAMELESS	1,2,3,4
021	10	***	EMISSION, IC PLASMA	3
022	6	3.4	ATOMIC ABSORPTION, DIRECT, AIR	5
024	10	72.3	ANODIC STRIPPING VOLTAMETRY, DIFFERENTIAL PULSE	1,2,3,4
025	7	20.6	ATOMIC ABSORPTION, DIRECT, AIR	2
027	7	20.6	ATOMIC ABSORPTION, FLAMELESS	1,2,3,4
028	5	13.9	ATOMIC ABSORPTION, EXTRACTION, (APDC/MIBK)	3
032	6	3.4	ATOMIC ABSORPTION, FLAMELESS	1,4
034	8	37.8	ATOMIC ABSORPTION, FLAMELESS	3
038	5	13.9	ATOMIC ABSORPTION, DIRECT, AIR	3
040	5	13.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
041	7	20.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
043	4	31.1	ATOMIC ABSORPTION, FLAMELESS	3
044	5	13.9	ATOMIC ABSORPTION, FLAMELESS	3
047	6	3.4	ATOMIC ABSORPTION, FLAMELESS	3
048	6	3.4	ATOMIC ABSORPTION, FLAMELESS	3
050	5	13.9	ATOMIC ABSORPTION, DIRECT, AIR	3
051	6	3.4	ATOMIC ABSORPTION, FLAMELESS	1,2,3,4
053	2	65.5	ATOMIC ABSORPTION, FLAMELESS	3
054	0	100.0	REJECT	3
055	5	13.9	ATOMIC ABSORPTION, EXTRACTION, (APDC/MIBK)	1,4
056	5	13.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
058	5	13.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
059	5	13.9	ATOMIC ABSORPTION, EXTRACTION, (APDC/MIBK)	1,4
060	6	3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
063	7	65.5	EMISSION, IC PLASMA	5
066	6	20.6	ATOMIC ABSORPTION, FLAMELESS	3
068	6	3.4	ATOMIC ABSORPTION, FLAMELESS	3
069	5	13.9	ATOMIC ABSORPTION, FLAMELESS	3
070	6	13.9	ATOMIC ABSORPTION, FLAMELESS	3
071	6	3.4	EMISSION, IC PLASMA	1,2,3,4
072	6	3.4	ATOMIC ABSORPTION, DIRECT, AIR	5
075	5	13.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
077	6	3.4	ATOMIC ABSORPTION, EXTRACTION, (APDC/MIBK)	1,4
079	6	3.4	ATOMIC ABSORPTION, FLAMELESS	3
080	5	13.9	ATOMIC ABSORPTION, EXTRACTION, (APDC/MIBK)	1,4

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 103 REPORT FOR CD

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
083	190000	549.0	REJECT ATOMIC ABSORPTION, FLAMELESS	3
091	5	13.9	ATOMIC ABSORPTION, FLAMELESS	3
092	6	3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
094	5	13.9	ATOMIC ABSORPTION, FLAMELESS	3
096	5	13.9	ATOMIC ABSORPTION, FLAMELESS	3
097	6	3.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
TOTAL RANGE	0	TU 190000	MEAN: 5.8	
STANDARD DEVIATION	1.4		95 % CONFIDENCE INTRVL OF MEAN 5.0 + OR - 0.4	

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 163 REPORT FOR CU

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
015	5	10.3	OTHER	5
017	8	43.6	EMISSION, IC PLASMA	3
018	11	97.4	ATOMIC ABSORPTION, FLAMELESS	3
019	8	43.6	ATOMIC ABSORPTION, FLAMELESS	1,2,3,4
020	50	***	ATOMIC ABSORPTION, DIRECT, AIR	3
021	4	28.2	ATOMIC ABSORPTION, FLAMELESS	3
022	5	10.3	EMISSION, IC PLASMA	5
025	6	7.7	EMISSION, IC PLASMA	5
028	5	10.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
038	4	28.2	EMISSION, IC PLASMA	5
047	5	10.3	ATOMIC ABSORPTION, FLAMELESS	3
053	7	25.6	ATOMIC ABSORPTION, FLAMELESS	3
055	5	10.3	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2,5
058	4	28.2	ATOMIC ABSORPTION, FLAMELESS	3
059	6	7.7	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2,5
063	1	82.1	EMISSION, IC PLASMA	5
068	6	7.7	ATOMIC ABSORPTION, FLAMELESS	3
069	5	10.3	ATOMIC ABSORPTION, FLAMELESS	3
071	5	10.3	EMISSION, IC PLASMA	5
077	3	46.2	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	1,3
079	9	61.5	ATOMIC ABSORPTION, FLAMELESS	3
080	40	617.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
092	5	10.3	ATOMIC ABSORPTION, FLAMELESS	3
094	35	528.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

TOTAL RANGE 1 TO 40 MEAN: 5.6
 STANDARD DEVIATION 2.2 95 % CONFIDENCE INTVL OF MEAN 5.6 + OR - 1.0

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 183 REPORT FOR CR 101

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
002	< 10	***	OTHER	1,2,3,4
003	7	23.0	ATOMIC ABSORPTION, FLAMELESS	3
004	11	21.0	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,3,4
005	5	45.0	ATOMIC ABSORPTION, FLAMELESS	3
007	10	10.0	ATOMIC ABSORPTION, FLAMELESS	3
009	14	53.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
010	9	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
012	9	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
015	8	12.0	EMISSION, IC PLASMA	1,2,3,4
016	< 10	***	EMISSION, IC PLASMA	3
017	2	78.0	ATOMIC ABSORPTION, FLAMELESS	3
018	7	23.0	EMISSION, IC PLASMA	1,2,3,4
019	8	12.0	ATOMIC ABSORPTION, DIRECT, AIR	3
020	10	10.0	ATOMIC ABSORPTION, FLAMELESS	1,2,3,4
021	8	12.0	EMISSION, IC PLASMA	3
022	11	21.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
024	10	10.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
025	9	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
026	20	119.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
030	8	12.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
032	10	10.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
034	8	12.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
038	7	23.0	ATOMIC ABSORPTION, FLAMELESS	3
040	11	21.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
043	7	23.0	ATOMIC ABSORPTION, FLAMELESS	3
044	9	1.0	ATOMIC ABSORPTION, FLAMELESS	3
047	8	12.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
048	< 10	***	OTHER	1,2,3,4
050	10	10.0	ATOMIC ABSORPTION, FLAMELESS	3
051	9	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
053	8	12.0	ATOMIC ABSORPTION, FLAMELESS	3
054	0	100.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
055	7	23.0	ATOMIC ABSORPTION, FLAMELESS	3
056	9	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
058	7	23.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
059	10	10.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
060	20	119.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
063	8	12.0	EMISSION, IC PLASMA	1,2,3,4
066	9	1.0	ATOMIC ABSORPTION, FLAMELESS	3
067	8	12.0	ATOMIC ABSORPTION, FLAMELESS	3
068	6	34.0	ATOMIC ABSORPTION, FLAMELESS	3
069	4	56.0	ATOMIC ABSORPTION, FLAMELESS	3
070	10	10.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
072	8	12.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
075	8	12.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
077	7	23.0	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,5,4
079	6	34.0	ATOMIC ABSORPTION, FLAMELESS	3
080	9	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
082	16	75.9	ATOMIC ABSORPTION, FLAMELESS	3

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 183 REPORT FOR CR 101

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
083	5	45.0	ATOMIC ABSORPTION, FLAMELESS	3
091	10	10.0	ATOMIC ABSORPTION, FLAMELESS	3
092	11	21.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
094	10	10.0	EMISSION, IC PLASMA	3
095	14	53.9	ATOMIC ABSORPTION, FLAMELESS	3
096	10	10.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
097	17	86.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

TOTAL RANGE 0 10 20 95 % CONFIDENCE MEAN: 9.1
 STANDARD DEVIATION 3.6 9.1 ± UR - 1.0

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 103 REPORT FOR CU

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHOD	REFERENCES
002	43	2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
003	16	57.2	OTHER	
004	37	11.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
005	45	7.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
009	43	2.3	ATOMIC ABSORPTION, FLAMELESS	3
010	43	2.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
012	30	20.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
014	45	7.1	OTHER	
015	45	7.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
016	20	***	EMISSION, IC PLASMA	5
017	50	19.0	ATOMIC ABSORPTION, FLAMELESS	3
018	32	23.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
019	39	7.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
020	40	4.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
021	42	0.0	EMISSION, IC PLASMA	5
022	60	42.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
024	30	20.6	OTHER	
025	50	19.0	OTHER	
026	45	7.1	OTHER	
027	100	***	IGNOKED	1,2,3,4
028	60	42.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
029	39	7.2	OTHER	
030	40	4.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
032	50	19.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
034	44	4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
037	30	20.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
038	37	11.9	ATOMIC ABSORPTION, FLAMELESS	3
040	42	0.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
041	53	26.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
043	41	2.4	ATOMIC ABSORPTION, FLAMELESS	3
044	42	0.0	ATOMIC ABSORPTION, FLAMELESS	3
047	43	2.3	ATOMIC ABSORPTION, FLAMELESS	3
048	36	14.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
049	36	9.6	EMISSION, IC PLASMA	5
050	37	11.9	ATOMIC ABSORPTION, FLAMELESS	3
051	41	2.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
053	47	11.9	ATOMIC ABSORPTION, FLAMELESS	3
054	0	100.0	REJECT	
055	46	9.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
056	43	2.3	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,2,3,4
058	4	90.5	REJECT	
059	4	4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
060	20	52.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
063	44	4.7	EMISSION, IC PLASMA	5
064	50	19.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
066	45	7.1	ATOMIC ABSORPTION, FLAMELESS	3
067	60	42.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
068	48	14.2	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2,5
069	45	7.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 163 REPORT FOR CU

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
070	40	4.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
071	46	9.5	EMISSION, IC PLASMA	5
072	40	4.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
075	40	4.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
076	40	4.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
077	7	83.3	REJECT	1,4
079	40	4.8	ATOMIC ABSORPTION, FLAMELESS	3
080	50	19.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
082	34	19.1	ATOMIC ABSORPTION, FLAMELESS	3
083	44	4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
086	48	14.2	ATOMIC ABSORPTION, FLAMELESS	3
091	35	16.7	REJECT	3
092	3	92.9	ATOMIC ABSORPTION, FLAMELESS	1,2,3,4
094	39	7.2	EMISSION, IC PLASMA	5
096	37	11.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
097	44	4.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

TOTAL RANGE 0 TU 60 MEAN: 42.0
 STANDARD DEVIATION 7.8 95 % CONFIDENCE INTVL OF MEAN 42.0 + UR - 2.0.

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 183 REPORT FOR FE

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
002	50	5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
003	50	3.0	OTHER	
004	40	29.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
005	40	29.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
009	20	35.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
012	70	126.2	REJECT	
014	20	35.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
015	50	3.0	EMISSION, IC PLASMA	5
017	20	55.4	ATOMIC ABSORPTION, FLAMELESS	3
018	40	29.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
019	40	29.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
020	50	***	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
021	20	35.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
022	40	29.3	EMISSION, IC PLASMA	5
024	20	35.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
025	60	158.5	REJECT	
026	50	61.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
027	100	***	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
028	110	255.5	IGNORED	
030	40	29.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
032	30	3.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
034	30	3.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
037	10	***	OTHER	
038	20	35.4	ATOMIC ABSORPTION, FLAMELESS	3
040	240	675.6	REJECT	1,2,3,4
041	30	3.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
043	30	3.0	ATOMIC ABSORPTION, FLAMELESS	3
044	30	3.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
047	40	29.3	ATOMIC ABSORPTION, FLAMELESS	3
048	20	35.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
049	50	3.0	EMISSION, IC PLASMA	5
050	20	35.4	ATOMIC ABSORPTION, FLAMELESS	3
051	30	3.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
053	20	35.4	EMISSION, IC PLASMA	5
054	0	100.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
055	30	3.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
056	40	29.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
058	30	3.0	OTHER	
059	30	3.0	EMISSION, IC PLASMA	5
060	50	3.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
063	30	3.0	EMISSION, IC PLASMA	5
064	40	29.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
065	50	61.6	OTHER	
066	30	3.0	ATOMIC ABSORPTION, FLAMELESS	3
067	10	67.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
068	50	***	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
069	20	35.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
070	20	35.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
071	20	35.4	EMISSION, IC PLASMA	5

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IGNORED

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 103 REPORT FOR FE

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
072	30	3.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
075	50	61.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
077	40	29.3	OTHER	
079	40	29.3	ATOMIC ABSORPTION, FLAMELESS	3
080	160	417.1	REJECT	
081	20	35.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
084	30	3.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
085	60	93.9	OTHER	
086	30	3.0	ATOMIC ABSORPTION, FLAMELESS	3
091	50	61.6	ATOMIC ABSORPTION, FLAMELESS	
092	30	3.0	OTHER	3
095	40	29.3	EMISSION, IC PLASMA	
096	30	3.0	EMISSION, IC PLASMA	5

TOTAL RANGE 0 10 240 MEAN: 31

STANDARD DEVIATION 11 95 % CONFIDENCE INTVL OF MEAN 31 + OR - 3

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 163 REPORT FOR HG

CODE	REPORTED VALUE	PCI. DEV. FROM MEAN	METHODS	REFERENCES
001	0.1	42.6	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
004	< 0.1	***	OTHER	
007	0.3	72.3	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
009	1.2	589.4	REJECT	1,2,3,4
015	0.1	42.6	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, AUTOMATED	3,4
016	0.2	14.9	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
019	< 1.0	***	IGNORDED	
020	< 0.3	***	IGNORDED	
021	0.1	42.6	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
022	0.1	42.6	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, AUTOMATED	3,4
024	< 1.0	***	IGNORDED	
029	0.0	100.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
032	0.4	129.8	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
034	0.0	100.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
037	< 0.0	***	IGNORDED	
038	0.0	100.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, AUTOMATED	3,4
043	0.4	129.8	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
044	0.0	100.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
047	0.4	129.8	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, AUTOMATED	3,4
048	< 0.1	***	IGNORDED	
050	0.1	42.6	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
051	0.6	244.7	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
054	0.0	100.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
055	0.2	14.9	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
056	< 0.2	***	IGNORDED	
058	0.1	42.6	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
059	< 0.1	***	IGNORDED	
062	0.1	42.6	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, AUTOMATED	3,4
066	0.2	14.9	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
067	0.5	167.2	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
068	< 0.2	***	IGNORDED	
069	< 0.7	***	IGNORDED	
075	0.3	72.3	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
077	0.0	100.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, AUTOMATED	3,4
079	< 0.2	***	IGNORDED	
080	< 0.5	***	IGNORDED	
081	0.1	42.6	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
084	0.0	100.0	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
091	< 1.0	***	IGNORDED	
092	< 0.1	***	IGNORDED	
096	0.1	42.6	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4
097	0.3	72.3	ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	1,2,3,4

TOTAL RANGE 0.0 FU 1.2 MEAN: 0.17
 STANDARD DEVIATION 0.17 95 % CONFIDENCE INTERVAL OF MEAN 0.17 ± OR - 0.07

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE T83 REPORT FOR LI

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
004	40	15.0	OTHER	
013	50	6.2	EMISSION, FLAME	1
014	50	6.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
015	60	27.4	OTHER	
018	30	56.3	EMISSION, IC PLASMA	5
019	50	6.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
020	60	27.4	EMISSION, FLAME	1
021	50	6.2	EMISSION, FLAME	1
025	50	6.2	OTHER	
026	50	6.2	OTHER	
028	50	6.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
034	50	6.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
038	40	15.0	EMISSION, IC PLASMA	5
049	40	15.0	EMISSION, IC PLASMA	5
053	30	36.3	OTHER	
055	40	15.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
058	60	27.4	OTHER	
059	50	6.2	EMISSION, IC PLASMA	5
063	50	6.2	EMISSION, IC PLASMA	5
068	60	27.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
069	50	6.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
071	40	15.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
079	30	36.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
081	50	6.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4

TOTAL RANGE 30 TO 60
 STANDARD DEVIATION 9
 MEAN: 47
 95 % CONFIDENCE INTVL OF MEAN 47 + OR - 4

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 163 REPORT FOR MN

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHOD	REFERENCES
002	270	2.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
004	270	2.6	OTHER	1,2,3,4
005	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
007	270	2.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
009	290	4.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
010	270	2.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
012	240	13.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
014	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
015	280	1.0	ATOMIC ABSORPTION, FLAMELESS	3
016	210	24.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
017	270	2.6	EMISSION, IC PLASMA	5
018	270	2.6	EMISSION, IC PLASMA	5
019	340	22.6	ATOMIC ABSORPTION, FLAMELESS	3
020	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
021	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
022	280	1.0	EMISSION, IC PLASMA	5
024	300	8.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
025	290	4.6	ATOMIC ABSORPTION, FLAMELESS	3
026	280	1.0	ATOMIC ABSORPTION, FLAMELESS	3
027	300	8.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
028	250	9.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
030	350	26.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
032	260	6.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
034	270	2.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
037	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
038	270	2.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
041	260	6.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
043	260	6.2	ATOMIC ABSORPTION, FLAMELESS	3
044	250	9.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
047	330	19.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
048	330	19.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
049	280	1.0	EMISSION, IC PLASMA	5
050	270	2.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
051	270	2.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
053	270	2.6	ATOMIC ABSORPTION, FLAMELESS	3
054	0	100.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
055	270	2.6	REJECT	1,2,3,4
056	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
058	260	6.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
059	260	6.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
060	270	2.6	EMISSION, IC PLASMA	3
063	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
064	290	4.6	EMISSION, IC PLASMA	5
065	310	11.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
066	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
068	250	9.8	ATOMIC ABSORPTION, FLAMELESS	3
069	270	2.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
070	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
071	270	2.6	EMISSION, IC PLASMA	5

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE T83 REPORT FOR MM

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
072	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
075	250	9.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
077	320	15.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
079	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
080	270	2.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
081	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
084	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
085	250	9.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
086	300	8.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
091	250	9.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
092	430	55.1	REJECT	3
094	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
095	280	1.0	ATOMIC ABSORPTION, FLAMELESS EMISSION, IC PLASMA	3
096	270	2.6	ATOMIC ABSORPTION, DIRECT, AIR	5
097	280	1.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

TOTAL RANGE 0 TO 430 MEAN: 277
 STANDARD DEVIATION 23 23 95 % CONFIDENCE INTERVAL OF MEAN 277 + OR - 6

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE TR3 REPORT FOR MO

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
015	9	20.0	REJECT EMISSION, IC PLASMA	5
017	200	677.8	ATOMIC ABSORPTION, FLAMELESS	3
018	12	6.7	ATOMIC ABSORPTION, FLAMELESS	3
019	8	28.9	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3
020	100	***	IGNORED ATOMIC ABSORPTION, FLAMELESS	3
021	15	33.3	ATOMIC ABSORPTION, FLAMELESS	3
025	11	2.2	ATOMIC ABSORPTION, FLAMELESS	3
028	12	6.7	ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3
034	15	33.3	ATOMIC ABSORPTION, FLAMELESS	3
038	10	11.1	EMISSION, IC PLASMA	5
053	18	60.0	ATOMIC ABSORPTION, FLAMELESS	3
054	0	100.0	REJECT ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	4
055	7	37.8	ATOMIC ABS,EXTRACTION,8 HYDROXYQUINOLINE/MIBK,NITROUS OXIDE	5
058	10	11.1	EMISSION, IC PLASMA	5
059	8	28.9	ATOMIC ABS,EXTRACTION,8 HYDROXYQUINOLINE/MIBK,NITROUS OXIDE	4
065	12	6.7	EMISSION, IC PLASMA	5
068	100	***	IGNORED ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE	1,2,3
069	1	***	IGNORED ATOMIC ABSORPTION, FLAMELESS	3
071	10	11.1	EMISSION, IC PLASMA	3
079	13	15.6	ATOMIC ABSORPTION, FLAMELESS	3
081	10	11.1	ATOMIC ABSORPTION, FLAMELESS	3

TOTAL RANGE 0 TO 200
 STANDARD DEVIATION 2.9
 MEANS: 11.3
 95 % CONFIDENCE INTERVAL OF MEAN 11.3 + OR - 1.6

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 193 REPORT FOR NI

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REJECT	MEAN:	STANDARD DEVIATION	TU	95 % CONFIDENCE INTRVL OF MEAN	10.6 + DK -	1.7	REFERENCES
004	10	5.6	OTHER								
009	9	15.0	ATOMIC ABSORPTION, FLAMELESS								3
012	44	315.3	ATOMIC ABSORPTION, DIRECT, AIR	REJECT							1,2,3,4
015	9	15.0	ATOMIC ABSORPTION, FLAMELESS								3
016	20	***	ATOMIC ABSORPTION, DIRECT, AIR	IGNORED							1,2,3,4
017	67	532.4	OTHER	REJECT							3
018	7	33.9	ATOMIC ABSORPTION, FLAMELESS								3
019	120	52.7	ATOMIC ABSORPTION, FLAMELESS	REJECT							3
020	50	***	ATOMIC ABSORPTION, DIRECT, AIR	IGNORED							1,2,3,4
021	20	88.8	ATOMIC ABSORPTION, DIRECT, AIR								1,2,3,4
022	10	5.6	OTHER								
024	10	5.6	ATOMIC ABSORPTION, DIRECT, AIR								1,2,3,4
025	10	5.6	OTHER								
026	40	277.6	ATOMIC ABSORPTION, DIRECT, AIR	REJECT							1,2,3,4
030	10	5.6	ATOMIC ABSORPTION, DIRECT, AIR								1,2,3,4
032	0	100.0	ATOMIC ABSORPTION, DIRECT, AIR								1,2,3,4
037	10	5.6	ATOMIC ABSORPTION, DIRECT, AIR								1,2,3,4
038	10	5.6	OTHER								
040	12	13.3	ATOMIC ABSORPTION, DIRECT, AIR								1,2,3,4
047	5	52.8	ATOMIC ABSORPTION, FLAMELESS								3
051	15	41.6	ATOMIC ABSORPTION, DIRECT, AIR								1,2,3,4
053	11	3.8	ATOMIC ABSORPTION, FLAMELESS								3
054	0	100.0	ATOMIC ABSORPTION, DIRECT, AIR								1,2,3,4
055	9	15.0	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)								1,4
058	9	15.0	ATOMIC ABSORPTION, DIRECT, AIR								1,4
059	9	15.0	ATOMIC ABSORPTION, DIRECT, AIR								1,2,3,4
060	12	13.3	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)								1,4
066	10	5.6	ATOMIC ABSORPTION, DIRECT, AIR								1,2,3,4
068	8	24.5	ATOMIC ABSORPTION, FLAMELESS								3
069	11	3.8	ATOMIC ABSORPTION, FLAMELESS								3
072	13	22.7	ATOMIC ABSORPTION, FLAMELESS								3
075	100	***	ATOMIC ABSORPTION, DIRECT, AIR	IGNORED							1,2,3,4
077	21	98.2	ATOMIC ABSORPTION, DIRECT, AIR								1,2,3,4
079	9	15.0	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)								1,4
080	22	107.7	ATOMIC ABSORPTION, FLAMELESS								3
083	17	60.5	ATOMIC ABSORPTION, FLAMELESS								3
091	12	13.3	ATOMIC ABSORPTION, DIRECT, AIR								5
092	8	24.5	ATOMIC ABSORPTION, FLAMELESS								3
094	11	3.8	ATOMIC ABSORPTION, FLAMELESS								3
096	110	938.3	ATOMIC ABSORPTION, FLAMELESS	REJECT							1,2,3,4

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 183 REPORT FOR PB

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	4	55.5	ATOMIC ABSORPTION, FLAMELESS	3
002	46	155.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,5,4
009	24	33.5	ATOMIC ABSORPTION, FLAMELESS	3
010	18	0.1	ATOMIC ABSORPTION, FLAMELESS	3
012	25	39.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
015	8	55.5	EMISSION, IC PLASMA	5
016	20	11.2	ANUOLIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	2
017	97	439.5	EMISSION, IC PLASMA	5
018	10	44.4	ATOMIC ABSORPTION, FLAMELESS	3
019	22	22.4	ATOMIC ABSORPTION, FLAMELESS	3
020	10	44.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,5,4
021	12	33.3	ATOMIC ABSORPTION, FLAMELESS	3
022	30	66.9	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
024	45	150.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,5,4
025	30	66.9	OTHER	
027	80	***	IGNORED	1,2,3,4
028	18	0.1	ATOMIC ABSORPTION, DIRECT, AIR	3
032	16	11.0	ATOMIC ABSORPTION, FLAMELESS	3
034	12	33.3	ATOMIC ABSORPTION, FLAMELESS	3
037	17	5.4	ANUOLIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	2
038	17	5.4	ATOMIC ABSORPTION, FLAMELESS	3
040	27	11.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,5,4
044	9	50.2	ATOMIC ABSORPTION, FLAMELESS	3
045	5	49.9	ATOMIC ABSORPTION, FLAMELESS	3
047	5	72.2	ATOMIC ABSORPTION, FLAMELESS	3
048	32	78.0	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,4
050	17	5.4	ATOMIC ABSORPTION, FLAMELESS	3
051	30	***	IGNORED	1,2,3,4
053	32	78.0	ATOMIC ABSORPTION, DIRECT, AIR	3
054	0	100.0	ATOMIC ABSORPTION, FLAMELESS	1,2,5,4
055	26	44.6	ATOMIC ABSORPTION, DIRECT, AIR	1,4
056	27	50.2	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,4
058	8	55.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,5,4
059	13	27.7	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,4
060	10	44.4	ATOMIC ABSORPTION, DIRECT, AIR	1,2,5,4
066	23	27.9	ATOMIC ABSORPTION, FLAMELESS	3
068	20	11.2	ATOMIC ABSORPTION, FLAMELESS	3
069	11	38.8	ATOMIC ABSORPTION, FLAMELESS	3
071	20	11.2	EMISSION, IC PLASMA	5
072	20	11.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
075	15	16.6	ATOMIC ABSORPTION, FLAMELESS	3
077	24	33.5	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,4
079	19	5.7	ATOMIC ABSORPTION, FLAMELESS	3
080	21	16.8	ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	1,4
081	16	11.0	ATOMIC ABSORPTION, FLAMELESS	3
082	7	61.1	ATOMIC ABSORPTION, FLAMELESS	3
085	7	61.1	ATOMIC ABSORPTION, FLAMELESS	3
091	50	***	IGNORED	3
092	11	38.8	ATOMIC ABSORPTION, FLAMELESS	3

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE T83 REPORT FOR PB

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
095	15	16.6	ATOMIC ABSORPTION, EXTRACTION (PDCA/CHCL3)	2,3
096	13	27.7	ATOMIC ABSORPTION, FLAMELESS	3
097	19	5.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
TOTAL RANGE 0 10 97 MEAN: 18.0				
STANDARD DEVIATION 0 9.6 97 95 % CONFIDENCE INTVL OF MEAN 18.0 + OR - 2.8				

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE T83 REPORT FOR SB

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
015	1	40.0	ATOMIC ABSORPTION, FLAMELESS	3
019	2	20.0	ATOMIC ABSORPTION, FLAMELESS	3
020	<	***	IGNORED	3
021	2	20.0	ATOMIC ABSORPTION, FLAMELESS	3
024	1	40.0	ATOMIC ABSORPTION, HYDRIDE	2,4
025	7	320.0	REJECT OTHER	
037	<	***	IGNORED	
047	2	20.0	ATOMIC ABSORPTION, FLAMELESS	3
055	5	200.0	REJECT ATOMIC ABSORPTION, FLAMELESS	3
055	2	20.0	ATOMIC ABSORPTION, HYDRIDE	2,4
056	10	500.0	REJECT ATOMIC ABSORPTION, FLAMELESS	3
059	1	40.0	ATOMIC ABSORPTION, HYDRIDE	2,4
066	2	20.0	ATOMIC ABSORPTION, HYDRIDE	2,4
069	1	***	IGNORED ATOMIC ABSORPTION, FLAMELESS	3
080	5	***	IGNORED ATOMIC ABSORPTION, FLAMELESS	3
092	2	20.0	ATOMIC ABSORPTION, FLAMELESS	3

TOTAL RANGE 1 10 10 MEAN: 1.7
 STANDARD DEVIATION 0.5 95 % CONFIDENCE INTERVAL OF MEAN 1.7 + OR - 0.4

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 183 REPORT FOR SE

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	2	58.5	ATOMIC ABSORPTION, FLAMELESS	5
004	5	5.7	OTHER	
005	3	37.8	ATOMIC ABSORPTION, FLAMELESS	3
009	3	37.8	ATOMIC ABSORPTION, FLAMELESS	3
014	5	3.7	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
015	6	24.4	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
018	4	17.1	ATOMIC ABSORPTION, FLAMELESS	3
019	4	17.1	ATOMIC ABSORPTION, FLAMELESS	3
020	10	***	IGNORED	3
021	3	37.8	ATOMIC ABSORPTION, FLAMELESS	3
022	5	3.7	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
024	4	17.1	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
028	5	5.7	ATOMIC ABSORPTION, FLAMELESS	3
032	5	3.7	ATOMIC ABSORPTION, FLAMELESS	3
034	3	37.8	ATOMIC ABSORPTION, FLAMELESS	3
038	6	24.4	ATOMIC ABSORPTION, FLAMELESS	3
043	5	3.7	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
044	7	45.1	ATOMIC ABSORPTION, HYDRIDE	3
047	5	3.7	ATOMIC ABSORPTION, FLAMELESS	3
048	20	314.6	REJECT	3
051	5	3.7	ATOMIC ABSORPTION, FLAMELESS	3
053	4	17.1	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
054	0	100.0	ATOMIC ABSORPTION, FLAMELESS	3
055	4	17.1	ATOMIC ABSORPTION, FLAMELESS	3
056	4	17.1	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
058	5	3.7	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
059	6	24.4	ATOMIC ABSORPTION, HYDRIDE	1,2,3,4
066	5	3.7	ATOMIC ABSORPTION, FLAMELESS	3
068	5	3.7	ATOMIC ABSORPTION, FLAMELESS	3
069	9	86.6	ATOMIC ABSORPTION, FLAMELESS	3
075	6	24.4	ATOMIC ABSORPTION, FLAMELESS	1,2,3,4
077	10	107.3	ATOMIC ABSORPTION, HYDRIDE	3
079	5	3.7	ATOMIC ABSORPTION, FLAMELESS	3
080	3	***	IGNORED	3
081	4	17.1	ATOMIC ABSORPTION, FLAMELESS	3
091	6	24.4	REJECT	3
092	14	190.2	ATOMIC ABSORPTION, FLAMELESS	3
096	6	24.4	ATOMIC ABSORPTION, FLAMELESS	3

TOTAL RANGE 0 TO 20 MEAN: 4.8
 STANDARD DEVIATION 1.8 95 % CONFIDENCE INTVL OF MEAN 4.8 + OR - 0.6

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE TR3 REPORT FOR SR

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
004	110	5.3	OTHER	
013	50	57.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
014	110	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
015	120	3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
017	180	55.0	EMISSION, IC PLASMA	5
018	110	5.3	EMISSION, IC PLASMA	5
019	40	65.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
020	110	5.3	OTHER	
021	120	3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
022	120	3.3	EMISSION, IC PLASMA	5
025	120	3.3	EMISSION, IC PLASMA	5
026	120	3.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
034	140	20.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
037	120	3.3	OTHER	
038	120	3.3	EMISSION, IC PLASMA	5
049	130	11.9	EMISSION, IC PLASMA	5
053	100	13.9	OTHER	
055	140	20.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
058	120	3.3	EMISSION, IC PLASMA	5
059	120	3.3	EMISSION, IC PLASMA	5
063	120	3.3	EMISSION, IC PLASMA	5
068	140	20.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
069	90	22.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
071	120	3.3	EMISSION, IC PLASMA	5
077	140	20.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
081	110	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,4
082	240	106.6	REJECT	

TOTAL RANGE 40 TO 27 240 MEAN: 116
 STANDARD DEVIATION 27 95 % CONFIDENCE INTVL OF MEAN 116 + OR - 11

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE 193 REPORT FOR TL

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
019	< 4	28.0	ATOMIC ABSORPTION, FLAMELESS	3
020	< 100	***	IGNORED ATOMIC ABSORPTION, DIRECT, AIR	1,3
021	< 4	28.0	ATOMIC ABSORPTION, FLAMELESS	3
024	< 10	***	IGNORED ATOMIC ABSORPTION, DIRECT, AIR	1,3
028	< 10	220.0	REJECT ATOMIC ABSORPTION, DIRECT, AIR	1,3
037	< 100	***	IGNORED OTHER	
047	< 3	4.0	ATOMIC ABSORPTION, FLAMELESS	3
051	< 60	***	IGNORED ATOMIC ABSORPTION, DIRECT, AIR	1,3
053	< 5	60.0	ATOMIC ABSORPTION, FLAMELESS	3
058	< 1	68.0	ATOMIC ABSORPTION, FLAMELESS	3
059	< 3	4.0	ATOMIC ABSORPTION, FLAMELESS	3
068	< 50	***	IGNORED ATOMIC ABSORPTION, DIRECT, AIR	1,3
069	< 3	4.0	ATOMIC ABSORPTION, FLAMELESS	3
092	< 2	36.0	ATOMIC ABSORPTION, FLAMELESS	3

TOTAL RANGE 1 TO 10 MEAN: 3.1
 STANDARD DEVIATION 1.2 10 95 % CONFIDENCE INTVL OF MEAN 3.1 + OR - 1.0

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE T63 REPORT FOR ZN

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
002	124	2.6	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
003	105	13.2	OTHER	
004	130	7.5	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
005	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
007	100	17.3	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
009	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
010	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
012	106	12.3	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
014	130	7.5	EMISSION, IC PLASMA	5
015	130	7.5	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	
016	110	9.0	EMISSION, IC PLASMA	5
017	222	83.6	EMISSION, IC PLASMA	5
018	140	15.8	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
019	110	9.0	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
020	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
021	120	0.8	EMISSION, IC PLASMA	5
022	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
024	100	17.3	OTHER	
026	130	7.5	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
027	200	65.4	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
028	150	7.5	OTHER	
029	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
030	100	17.3	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
032	110	9.0	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
034	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
036	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
037	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
038	130	7.5	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
040	130	7.5	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
041	110	9.0	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
043	110	9.0	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
044	130	7.5	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
047	140	15.8	ANODIC STRIPPING VOLTAMMETRY, DIFFERENTIAL PULSE	
048	81	33.0	REJECT	
049	130	7.5	EMISSION, IC PLASMA	5
050	119	1.6	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
051	124	2.6	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
053	130	7.5	OTHER	
054	0	100.0	ATOMIC ABSORPTION, DIRECT, AIR	2,3,4
055	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
056	10	91.7	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
058	110	9.0	OTHER	
059	120	0.8	EMISSION, IC PLASMA	5
060	130	7.5	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
063	132	9.2	EMISSION, IC PLASMA	5
064	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
066	120	7.5	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
068	150	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4
069	121	0.1	ATOMIC ABSORPTION, DIRECT, AIR	2,5,4

TABLE 9, ANALYTICAL DATA STANDARD REFERENCE SAMPLE T83 REPORT FOR ZN

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHOD	REFERENCES
070	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2, 3, 4
071	120	0.8	EMISSION, IC PLASMA	5
072	113	6.5	ATOMIC ABSORPTION, DIRECT, AIR	2, 3, 4
075	110	9.0	ATOMIC ABSORPTION, DIRECT, AIR	2, 3, 4
077	140	15.8	ATOMIC ABSORPTION, DIRECT, AIR	2, 3, 4
079	112	7.4	ATOMIC ABSORPTION, DIRECT, AIR	2, 3, 4
080	240	98.5	REJECT	2, 3, 4
082	134	10.8	ATOMIC ABSORPTION, DIRECT, AIR	2, 3, 4
083	110	9.0	ATOMIC ABSORPTION, DIRECT, AIR	2, 3, 4
086	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2, 3, 4
092	65	46.2	REJECT	3
094	119	1.6	ATOMIC ABSORPTION, FLAMELESS	2, 3, 4
095	133	10.0	ATOMIC ABSORPTION, DIRECT, AIR	2, 3, 4
096	130	7.5	EMISSION, IC PLASMA	5
097	120	0.8	ATOMIC ABSORPTION, DIRECT, AIR	2, 3, 4

TOTAL RANGE 0 10 240
 STANDARD DEVIATION 9.9 95 % CONFIDENCE INTERVAL OF MEAN 120.9 ± 0.9 2.6

TABLE 10, STATISTICS BY METHOD FOR SAMPLE: 163

DETERMINATION: ACIDOCACOS		MEAN	STD DEV	N
METHOD				
TITRATION, COLORIMETRIC, MANUAL				
TITRATION, ELECTROMETRIC, MANUAL				
***** OVER ALL *****				
DETERMINATION: AG		1503.50	76.04	4
METHOD				
ATOMIC ABSORPTION, DIRECT, AIR				
ATOMIC ABSORPTION, FLAMELESS				
***** OVER ALL *****				
DETERMINATION: AL		1479.05	73.96	21
METHOD				
ATOMIC ABSORPTION, DIRECT, FLAMELESS				
ATOMIC ABSORPTION, FLAMELESS				
***** OVER ALL *****				
DETERMINATION: AS		116	46	13
METHOD				
ATOMIC ABSORPTION, DIRECT, FLAMELESS				
ATOMIC ABSORPTION, DIRECT, FLAMELESS				
ATOMIC ABSORPTION, HYDRIDE, (NABH ₄), MANUAL				
***** OVER ALL *****				
DETERMINATION: BA		128	56	9
METHOD				
ATOMIC ABSORPTION, FLAMELESS				
ATOMIC ABSORPTION, FLAMELESS				
ATOMIC ABSORPTION, HYDRIDE, (NABH ₄), MANUAL				
***** OVER ALL *****				
DETERMINATION: BE		113	55	31
METHOD				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, FLAMELESS				
EMISSION, IC PLASMA				
***** OVER ALL *****				
DETERMINATION: BE		4.1	2.8	15
METHOD				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, FLAMELESS				
EMISSION, IC PLASMA				
***** OVER ALL *****				
DETERMINATION: BE		3.6	2.1	14
METHOD				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, FLAMELESS				
EMISSION, IC PLASMA				
***** OVER ALL *****				
DETERMINATION: BE		3.7	2.3	34
METHOD				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, FLAMELESS				
EMISSION, IC PLASMA				
***** OVER ALL *****				
DETERMINATION: BE		173	35	14
METHOD				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, FLAMELESS				
EMISSION, IC PLASMA				
***** OVER ALL *****				
DETERMINATION: BE		202	35	13
METHOD				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, FLAMELESS				
EMISSION, IC PLASMA				
***** OVER ALL *****				
DETERMINATION: BE		177	6	11
METHOD				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, FLAMELESS				
EMISSION, IC PLASMA				
***** OVER ALL *****				
DETERMINATION: BE		183	33	43
METHOD				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, FLAMELESS				
EMISSION, IC PLASMA				
***** OVER ALL *****				
DETERMINATION: BE		3.2	3.0	6
METHOD				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, FLAMELESS				
EMISSION, IC PLASMA				
***** OVER ALL *****				
DETERMINATION: BE		6.3	2.0	6
METHOD				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, FLAMELESS				
EMISSION, IC PLASMA				
***** OVER ALL *****				
DETERMINATION: BE		5.0	2.1	8
METHOD				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, DIRECT, NITROUS OXIDE				
ATOMIC ABSORPTION, FLAMELESS				
EMISSION, IC PLASMA				
***** OVER ALL *****				
DETERMINATION: BE		4.9	2.6	20

TABLE 10, STATISTICS BY METHOD FOR SAMPLE: T83

DETERMINATION: CD			
METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	5.9	1.9	17
ATOMIC ABSORPTION, EXTRACTION, (APUC/MIBK)	5.7	0.5	6
ATOMIC ABSORPTION, FLAMELESS	5.5	1.3	19
EMISSION, IC PLASMA	6.3	1.0	6
***** OVER ALL *****	5.8	1.4	51
DETERMINATION: CO			
METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, EXTRACTION (PDCA/MIBK)	4.7	1.5	3
ATOMIC ABSORPTION, FLAMELESS	6.4	2.3	10
EMISSION, IC PLASMA	4.8	2.3	6
***** OVER ALL *****	5.6	2.2	21
DETERMINATION: CR TOT			
METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	10.1	4.4	21
ATOMIC ABSORPTION, FLAMELESS	8.3	2.8	22
EMISSION, IC PLASMA	8.6	4.4	5
***** OVER ALL *****	9.1	3.6	53
DETERMINATION: CU			
METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	42.2	8.2	31
ATOMIC ABSORPTION, FLAMELESS	40.8	5.0	12
EMISSION, IC PLASMA	45.8	8.5	6
OTHER	43.2	5.2	5
***** OVER ALL *****	42.0	7.8	59
DETERMINATION: FE			
METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	29	11	28
ATOMIC ABSORPTION, FLAMELESS	31	8	9
EMISSION, IC PLASMA	28	7	8
OTHER	43	10	6
***** OVER ALL *****	31	11	53

TABLE 10, STATISTICS BY METHOD FOR SAMPLE: 183

DETERMINATION: HG			
METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, AUTOMATED	0.15	0.15	6
ATOMIC ABSORPTION, FLAMELESS, COLD VAPOR, MANUAL	0.19	0.18	21
***** OVER ALL *****	0.17	0.17	27
DETERMINATION: LI			
METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	48	8	9
EMISSION, FLAME	53	6	3
EMISSION, IC PLASMA	42	8	5
OTHER	48	12	6
***** OVER ALL *****	47	9	24
DETERMINATION: MN			
METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	278	25	43
ATOMIC ABSORPTION, FLAMELESS	282	24	9
EMISSION, IC PLASMA	273	7	8
***** OVER ALL *****	277	23	62
DETERMINATION: MO			
METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, FLAMELESS	12.8	3.2	8
EMISSION, IC PLASMA	10.5	1.0	4
***** OVER ALL *****	11.3	2.9	16
DETERMINATION: NI			
METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	11.1	6.3	13
ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)	13.0	6.9	3
ATOMIC ABSORPTION, FLAMELESS	9.5	3.0	11
OTHER	10.0	0.0	4
***** OVER ALL *****	10.6	4.8	32

TABLE 10, STATISTICS BY METHOD FOR SAMPLE: T83

DETERMINATION: P8

METHOD
 ATOMIC ABSORPTION, DIRECT, AIR
 ATOMIC ABSORPTION, EXTRACTION (APDC/MIBK)
 ATOMIC ABSORPTION, FLAMELESS
 ***** OVER ALL *****

MEAN
 23.5
 20.7
 14.8
 18.0

STD DEV
 14.1
 8.8
 6.7
 9.6

N
 11
 6
 25
 48

DETERMINATION: SB

METHOD
 ATOMIC ABSORPTION, FLAMELESS
 ATOMIC ABSORPTION, HYDRIDE
 ***** OVER ALL *****

MEAN
 1.8
 1.5
 1.7

STD DEV
 0.4
 0.6
 0.5

N
 5
 4
 9

DETERMINATION: SE

METHOD
 ATOMIC ABSORPTION, FLAMELESS
 ATOMIC ABSORPTION, HYDRIDE
 ***** OVER ALL *****

MEAN
 4.7
 5.0
 4.8

STD DEV
 2.3
 0.8
 1.8

N
 20
 11
 34

DETERMINATION: SR

METHOD
 ATOMIC ABSORPTION, DIRECT, AIR
 EMISSION, IC PLASMA
 OTHER
 ***** OVER ALL *****

MEAN
 110
 126
 110
 116

STD DEV
 34
 20
 8
 27

N
 12
 10
 4
 26

DETERMINATION: TL

METHOD
 ATOMIC ABSORPTION, FLAMELESS
 ***** OVER ALL *****

MEAN
 3.1
 3.1

STD DEV
 1.2
 1.2

N
 8
 8

DETERMINATION: ZN

METHOD
 ATOMIC ABSORPTION, DIRECT, AIR
 EMISSION, IC PLASMA
 OTHER
 ***** OVER ALL *****

MEAN
 119.9
 127.8
 124.0
 120.9

STD DEV
 10.0
 7.2
 8.9
 9.9

N
 41
 8
 5
 57

TABLE 1: ANALYTICAL DATA.

STANDARD REFERENCE SAMPLE NO REPORT FOR NH3-N

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
002	0.04	78.7	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
003	0.12	36.1	ION SELECTIVE ELECTRODE	1,2,3,4
004	0.23	22.4	ION SELECTIVE ELECTRODE	1,2,3,4
009	0.16	14.8	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
010	0.25	33.1	OTHER	1,2,3
011	0.03	84.0	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
012	0.26	38.4	ION SELECTIVE ELECTRODE	1,2,3,4
014	0.18	4.2	OTHER	1,2,3,4
017	30.00	868.3	REJECT	
019	0.16	14.8	ION SELECTIVE ELECTRODE	1,2,3,4
020	0.31	65.0	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
021	0.17	9.5	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
024	0.19	1.1	ION SELECTIVE ELECTRODE	1,2,3,4
025	0.17	9.5	ION SELECTIVE ELECTRODE	1,2,3,4
027	0.19	1.1	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
028	0.20	6.5	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
029	0.00	100.0	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
030	0.32	70.3	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
034	0.14	25.5	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
035	0.15	20.2	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
036	0.17	9.5	COLORIMETRIC, PHENATE, MANUAL	4
040	0.28	49.0	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
043	0.13	30.8	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
044	0.17	9.5	COLORIMETRIC, INDOPHENOL, AUTOMATED	4
047	0.16	14.8	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
048	0.30	59.7	DISTILLATION-NESSLERIZATION, I-1520, USGS TWRI BKS CH A1	
051	0.88	368.4	REJECT	
052	0.15	20.2	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
053	0.15	9.5	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3,4
054	0.16	14.8	ION SELECTIVE ELECTRODE	1,2,3,4
055	0.13	30.8	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
056	0.23	22.4	COLORIMETRIC, INDOPHENOL, AUTOMATED	4
058	0.01	94.7	ION SELECTIVE ELECTRODE	1,2,3,4
059	0.22	17.1	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
060	0.15	20.2	OTHER	
061	0.36	91.6	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
066	0.30	59.7	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
069	0.36	91.6	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
070	0.17	9.5	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
074	0.14	25.5	OTHER	
075	0.20	***	IGNORED	
077	0.11	41.4	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
078	0.30	59.7	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
079	0.16	14.8	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
080	0.15	20.2	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
082	0.17	9.5	COLORIMETRIC, PHENATE, AUTOMATED	1,2,3
085	0.68	261.9	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
086	0.28	49.0	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4
091	1.00	***	IGNORED	

TABLE 11 ANALYTICAL DATA.

STANDARD REFERENCE SAMPLE NO

REPORT FOR NH3-N

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN		METHODS	REFERENCES
092	0.77	309.9	REJECT	OTHER	1,2,3,4
094	0.28	49.0		OTHER	1,2,3,4
095	0.10	46.8		IUN SELECTIVE ELECTRUDE	1,2,3,4
096	0.25	33.1		IUN SELECTIVE ELECTRUDE	1,4
097	0.56	198.1	REJECT	COLORIMETRIC, DISTILLATION, NESSLERIZATION	1,4

TOTAL RANGE 0.00 TO 30.00 MEAN: 0.188
 STANDARD DEVIATION 0.084 95 % CONFIDENCE INTVL OF MEAN 0.188 + OR - 0.025

TABLE 11 ANALYTICAL DATA.

STANDARD REFERENCE SAMPLE NO

REPORT FOR NUC-11

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	REJECT	METHOD	REFERENCES
002	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,5,4
003	0.18	258.3	REJECT	COLORIMETRIC, DIAZOTIZATION	1,3,4
005	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
009	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
010	0.07	39.3		COLORIMETRIC, DIAZOTIZATION	1,3,4
011	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
012	0.05	0.5		OTHER	
014	0.06	19.4		COLORIMETRIC, DIAZOTIZATION	1,3,4
019	0.04	20.4		COLORIMETRIC, DIAZOTIZATION	1,3,4
020	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
021	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
024	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
025	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
027	0.06	19.4		COLORIMETRIC, DIAZOTIZATION	1,3,4
028	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
029	0.06	19.4		COLORIMETRIC, DIAZOTIZATION	1,3,4
030	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
034	0.02	60.2	REJECT	COLORIMETRIC, DIAZOTIZATION	1,3,4
035	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
036	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
040	0.06	19.4		COLORIMETRIC, DIAZOTIZATION	1,3,4
044	0.08	59.2	REJECT	COLORIMETRIC, DIAZOTIZATION	1,3,4
047	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
048	0.04	20.4		DIAZOTIZATION, I-1540, USGS	
051	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
052	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
053	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
054	0.47	835.5	REJECT	ION CHROMATOGRAPHY	2,6
055	0.06	19.4		COLORIMETRIC, DIAZOTIZATION	1,3,4
056	0.11	119.0	REJECT	COLORIMETRIC, DIAZOTIZATION	1,3,4
058	0.00	100.0	REJECT	COLORIMETRIC, DIAZOTIZATION	1,3,4
059	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,5,4
060	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
061	0.04	20.4		COLORIMETRIC, DIAZOTIZATION	1,3,4
066	0.06	19.4		OTHER	
069	0.50	895.3	REJECT	COLORIMETRIC, DIAZOTIZATION	1,3,4
070	0.06	19.4		COLORIMETRIC, DIAZOTIZATION	1,3,4
075	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
077	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
078	0.04	20.4		COLORIMETRIC, DIAZOTIZATION	1,3,4
079	0.03	40.3		COLORIMETRIC, DIAZOTIZATION	1,3,4
080	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
082	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
083	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
091	0.04	20.4		OTHER	
092	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4
094	0.04	20.4		COLORIMETRIC, DIAZOTIZATION	1,3,4
095	0.05	0.5		OTHER	
096	0.05	0.5		COLORIMETRIC, DIAZOTIZATION	1,3,4

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TABLE 11 ANALYTICAL DATA. STANDARD REFERENCE SAMPLE N8 REPORT FOR N02-N

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	MEAN:	95 % CONFIDENCE INTVL OF MEAN	TU	STANDARD DEVIATION
097	0.10	99.1	REJECT COLURIMETRIC, DIALUTIZATION	0.050	0.050 + UR -	0.007	0.002

REFERENCES
1,3,4

TABLE 11 ANALYTICAL DATA. STANDARD REFERENCE SAMPLE NO3-N REPORT FOR NO3-N

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	REJECT	METHODS	REFERENCES
001	0.40	2.2		ION CHROMATOGRAPHY	2,6
002	0.37	9.5		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
003	0.70	71.2	REJECT	OTHER	
004	0.43	5.2		COLORIMETRIC, CAUMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
005	0.40	2.2		COLORIMETRIC, BRUCINE	1,2,3,4
006	0.40	2.2		COLORIMETRIC, BRUCINE	1,2,3,4
009	0.40	2.2		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
010	0.40	2.2		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
011	0.40	2.2		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
012	0.41	0.3		COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	1,2,3,4
014	0.40	2.2		COLORIMETRIC, BRUCINE	3
019	0.50	22.3		COLORIMETRIC, BRUCINE	1,2,3,4
020	0.20	51.1		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
021	0.41	0.3		COLORIMETRIC, BRUCINE	1,2,3,4
022	0.22	46.2		COLORIMETRIC, BRUCINE	1,2,3,4
023	0.22	79.4		COLORIMETRIC, BRUCINE	1,2,3,4
024	13.00	12.0	REJECT	COLORIMETRIC, BRUCINE	1,2,3,4
025	0.36	22.3		COLORIMETRIC, BRUCINE	1,2,3,4
027	0.50	22.3		COLORIMETRIC, BRUCINE	1,2,3,4
028	0.45	10.1		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
029	0.40	2.2		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
030	0.42	2.7		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
034	0.50	22.3		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
035	0.44	7.6		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
036	0.40	2.2		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
040	0.40	2.2		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
043	0.32	21.7		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
044	0.40	2.2		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
047	0.40	2.2		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
048	0.34	16.8		CADMIUM REDUCTION-DIAZOTIZATION,AUTO, 1-2545, US969 TWRI BK5	1,2,3,4
051	0.50	22.3		COLORIMETRIC, BRUCINE	1,2,3,4
052	0.40	2.2		ION CHROMATOGRAPHY	2,6
053	0.20	51.1		COLORIMETRIC, DEVARDA'S ALLOY REDUCTION, DIAZOTIZATION	1
054	0.47	14.9		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
055	0.51	24.7		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
056	0.36	12.0		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
058	0.51	24.7		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
059	0.40	2.2		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
060	0.41	0.3		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
061	0.46	12.5		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
066	0.45	10.1		OTHER	1,2,3,4
069	0.40	2.2		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	3
070	0.38	7.1		COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	1,2,3,4
075	0.45	10.1		COLORIMETRIC, BRUCINE	1,2,3,4
077	0.38	7.1		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
078	0.34	16.8		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
079	0.40	2.2		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
080	0.50	22.3		COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3
082	0.37	9.5		COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
083	0.35	14.4		COLORIMETRIC, BRUCINE	1,2,3,4

TABLE 11 ANALYTICAL DATA. STANDARD REFERENCE SAMPLE NO. REPORT FOR NO3-N

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
085	0.43	5.2	COLORIMETRIC, BRUCINE	1,2,3,4
091	0.44	7.6	COLORIMETRIC, BRUCINE	1,2,3,4
092	0.40	2.2	COLORIMETRIC, BRUCINE	1,2,3,4
094	0.50	22.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
095	0.40	2.2	COLORIMETRIC, BRUCINE	1,2,3,4
096	0.40	2.2	COLORIMETRIC, BRUCINE	1,2,3,4
097	0.60	46.7	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
TOTAL RANGE 0.20 TU 13.00 MEAN: 0.409				
STANDARD DEVIATION 0.072 95 % CONFIDENCE INTVL OF MEAN 0.409 + OR - 0.020				

TABLE 11 ANALYTICAL DATA. STANDARD REFERENCE SAMPLE NO REPORT FOR URG-N

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
002	< 0.01	***	IGNORED	
004	0.10	***	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	2,3,4
009	0.00	100.0	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3
012	0.13	60.8	OTHER	1,2,3
014	0.34	2.5	COLORIMETRIC, DIGESTION, DISTILLATION, Nesslerization	2,3,4
021	0.18	45.7	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
024	66.00	802.8	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3
025	0.15	60.8	OTHER	
028	0.40	20.6	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	3
029	0.03	91.0	COLORIMETRIC, DIGESTION, DISTILLATION, Nesslerization	2,3,4
030	0.10	69.8	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	3
035	0.14	57.8	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
036	2.40	623.7	DIGESTION, DISTILLATION, TITRATION	2,3,4
040	0.70	111.1	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
043	0.30	9.5	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
044	0.16	51.8	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
047	0.24	27.6	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	3
051	0.25	24.6	COLORIMETRIC, DIGESTION, DISTILLATION, Nesslerization	2,3,4
054	0.30	9.5	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
055	0.30	9.5	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
058	0.17	48.7	OTHER	
059	0.73	120.1	COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE	3,4
060	0.05	84.9	OTHER	
066	0.16	51.8	OTHER	
069	0.76	129.2	COLORIMETRIC, DIGESTION, DISTILLATION, Nesslerization	2,3,4
074	0.08	75.9	OTHER	
075	0.60	80.9	DIGESTION, DISTILLATION, TITRATION	2,3,4
079	0.50	50.8	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	3
080	0.19	42.7	COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE	3
085	0.75	126.2	DIGESTION, DISTILLATION, TITRATION	2,3,4
086	0.14	57.8	COLORIMETRIC, DIGESTION, DISTILLATION, Nesslerization	2,3,4
091	< 1.00	***	IGNORED	
092	0.98	195.5	OTHER	2,3,4
094	0.29	12.5	DIGESTION, DISTILLATION, TITRATION	1,2,3
095	0.48	44.7	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3
096	0.70	111.1	DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE	1,2,3

TOTAL RANGE 0.00 TO 66.00 MEAN: 0.332
 STANDARD DEVIATION 0.261 95 % CONFIDENCE INTVL OF MEAN 0.332 + OR - 0.096

TABLE 11 ANALYTICAL DATA. STANDARD REFERENCE SAMPLE NO REPORT FOR P, TOTAL

CODE	REPORTED VALUE	PC1. DEV. FROM MEAN	METHODS	REFERENCES
001	0.13	229.2	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
002	< 0.01	***	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
003	< 0.01	***	IGNORED	
004	0.03	24.0	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
006	0.09	127.9	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
009	0.00	100.0	OTHER	
010	0.07	77.3	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
012	0.02	49.4	COLORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
017	7.80	653.3	EMISSION, IC PLASMA	
019	0.26	558.4	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
020	0.01	74.7	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
021	0.05	24.0	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
023	0.05	26.6	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
024	< 0.01	***	IGNORED	
025	0.02	49.4	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
027	0.04	1.3	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
028	0.04	1.3	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
029	0.02	49.4	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
030	0.01	74.7	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
034	0.01	74.7	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
035	0.05	26.6	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
036	0.07	77.3	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
040	0.02	49.4	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
044	0.04	1.3	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
047	0.01	74.7	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
048	< 0.10	***	IGNORED	
051	0.09	127.9	PHOSPHOMOLYBDATE, AUTO, I-2600, USGS TWRI BKS CH A1	
053	0.01	74.7	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
054	0.04	1.3	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
055	0.04	1.3	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
056	0.00	100.0	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
058	0.01	74.7	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
059	0.02	49.4	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
060	0.07	77.3	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
066	0.02	49.4	OTHER	
069	0.07	77.3	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
070	0.07	77.3	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
075	0.20	406.5	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
077	0.10	153.2	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
078	< 0.10	***	IGNORED	
079	0.02	49.4	CULORIMETRIC, BLK DIG, H2S04, K&HG S04, PHOSPHOMOLYBDATE	4
080	< 0.02	***	CULORIMETRIC, BLK DIG, H2S04, K&HG S04, PHOSPHOMOLYBDATE	4
082	0.01	74.7	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
083	0.06	51.9	OTHER	
085	0.18	355.8	OTHER	
091	1.00	432.5	REJECT	
092	0.00	100.0	REJECT	
094	0.11	178.6	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
096	0.02	49.4	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4
097	0.02	49.4	CULORIMETRIC, H2S04/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD	1,2,3,4

TOTAL RANGE 0.00 TO 7.80 MEAN: 0.039
 STANDARD DEVIATION 0.033 95 % CONFIDENCE INTVL OF MEAN 0.039 + UK - 0.011

TABLE 11 ANALYTICAL DATA.

STANDARD REFERENCE SAMPLE N8

REPORT FOR P04-P

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	0.04	128.6	ION CHROMATOGRAPHY	2,6
002	< 0.01	***	COLORIMETRIC, ASCORBIC ACID	1,2,5,4
003	< 0.01	***	IGNORED	
004	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	1,2,3,4
009	0.00	100.0	OTHER	
010	< 0.05	***	IGNORED	
011	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	1,2,5,4
012	0.00	100.0	COLORIMETRIC, ASCORBIC ACID	1,2,3,4
019	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	1,2,3,4
020	< 0.01	***	IGNORED	
021	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	3,4
023	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	1,2,3,4
024	< 0.03	***	IGNORED	
027	0.03	71.4	COLORIMETRIC, ASCORBIC ACID	1,2,3,4
028	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	3,4
029	0.02	14.3	COLORIMETRIC, ASCORBIC ACID	1,2,5,4
030	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	3,4
034	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	3,4
035	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	3,4
036	0.05	71.4	COLORIMETRIC, ASCORBIC ACID	1,2,3,4
043	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	3,4
044	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	3,4
047	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	3,4
048	< 0.10	***	IGNORED	
051	0.06	242.9	PHOSPHOMOLYBDATE, AUTOMATED	1,2,5,4
052	0.00	100.0	COLORIMETRIC, ASCORBIC ACID	1,2,3,4
053	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	1,2,3,4
054	0.04	128.6	COLORIMETRIC, ASCORBIC ACID	3,4
055	0.02	14.3	COLORIMETRIC, ASCORBIC ACID	3,4
056	0.00	100.0	COLORIMETRIC, ASCORBIC ACID	3,4
058	0.00	100.0	OTHER	
059	< 0.01	***	IGNORED	
061	0.12	585.8	REJECT	
066	0.00	100.0	COLORIMETRIC, ASCORBIC ACID	1,2,5,4
069	< 0.04	***	IGNORED	
070	0.03	71.4	COLORIMETRIC, ASCORBIC ACID	1,2,3,4
074	0.01	42.9	COLORIMETRIC, ASCORBIC ACID	1,2,3,4
075	< 0.20	***	IGNORED	
077	0.04	128.6	COLORIMETRIC, ASCORBIC ACID	1,2,3,4
078	< 0.10	***	IGNORED	
079	< 0.04	***	IGNORED	
080	< 0.01	***	IGNORED	
082	0.00	100.0	OTHER	
083	0.04	128.6	OTHER	
085	0.04	128.6	OTHER	
091	0.06	242.9	OTHER	
092	0.00	100.0	OTHER	
094	0.10	471.5	OTHER	
096	0.01	42.9	OTHER	

TOTAL RANGE 0.00

STANDARD DEVIATION 0.017

TU 0.12

95 % CONFIDENCE INTERVAL OF MEAN

MEAN: 0.017

0.017 + OR - 0.006

REJECT COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL
 COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL

TABLE 12 STATISTICS BY METHOD FOR SAMPLE: N8

DETERMINATION: NH3-N		MEAN	STD DEV	N
METHOD				
COLORIMETRIC, DISTILLATION, NESSLERIZATION				
COLORIMETRIC, INDOPHENOL, AUTOMATED				
COLORIMETRIC, PHENATE, AUTOMATED				
ION SELECTIVE ELECTRODE				
OTHER				
***** OVER ALL *****				
DETERMINATION: NO2-N				
METHOD				
COLORIMETRIC, DIAZOTIZATION				
OTHER				
***** OVER ALL *****				
DETERMINATION: NO3-N				
METHOD				
COLORIMETRIC, BRUCINE				
COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION				
COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION				
***** OVER ALL *****				
DETERMINATION: URG-N				
METHOD				
COLORIMETRIC, BLOCK DIGESTION, SALICYLATE HYPOCHLORITE				
COLORIMETRIC, DIGESTION, DISTILLATION, NESSLERIZATION				
COLORIMETRIC, DIGESTION, DISTILLATION, PHENATE				
DIGESTION, DISTILLATION, ION SELECTIVE ELECTRODE				
DIGESTION, DISTILLATION, TITRATION				
OTHER				
***** OVER ALL *****				
DETERMINATION: P, TOTAL				
METHOD				
COLORIMETRIC, BLK DIG/H2SO4, K&HG SO4, PHOSPHOMOLYBDATE				
COLORIMETRIC, H2SO4/PERSULF DIG. ASCORBIC ACID PHOSPHOMOLYBD				
OTHER				
***** OVER ALL *****				

TABLE 12 STATISTICS BY METHOD FOR SAMPLE: N9

METHOD	MEAN	STD DEV	N
COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, AUTOMATED	0.014	0.011	12
COLORIMETRIC, ASCORBIC ACID PHOSPHOMOLYBDATE, MANUAL	0.016	0.017	16
OTHER	0.022	0.020	5
***** OVER ALL *****	0.017	0.017	36

DETERMINATION: P04-P

TABLE 13 ANALYTICAL DATA STANDARD REFERENCE SAMPLE P2 REPORT FOR CA

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	1.6	16.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
002	2.1	10.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
003	1.9	0.2	OTHER	
004	1.5	21.2	OTHER	
005	1.8	5.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
009	1.7	10.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
011	4.0	110.0	REJECT	
013	2.0	5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
014	2.4	26.0	OTHER	1,2,3,4
015	1.9	0.2	OTHER	
016	22.0	55.0	REJECT	1,2,3,4
017	1.8	5.5	EMISSION, IC PLASMA	5
018	1.9	0.2	EMISSION, IC PLASMA	5
020	2.0	5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
024	2.4	26.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
025	2.1	10.3	OTHER	
027	0.9	52.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
028	1.9	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
030	2.0	5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
034	2.1	10.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
035	2.0	5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
037	1.9	0.2	OTHER	
041	2.0	5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
044	1.9	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
045	1.8	5.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
049	2.9	52.3	EMISSION, IC PLASMA	5
051	1.8	5.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
052	1.8	5.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
054	2.0	5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
055	1.8	5.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
058	1.0	47.5	OTHER	
059	1.8	5.5	EMISSION, IC PLASMA	5
060	4.9	157.3	REJECT	1,2,3,4
061	2.0	5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
064	1.6	16.0	TITRATION, EDTA	1,3
066	1.9	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
067	1.8	5.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
068	1.8	5.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
069	2.9	52.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
070	1.9	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
071	1.8	5.5	EMISSION, IC PLASMA	5
077	2.0	5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
078	1.9	0.2	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
079	2.0	5.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
085	4.0	110.0	REJECT	1,2,3,4
094	1.7	10.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

TOTAL RANGE 0.9 10 22.0 95 % CONFIDENCE MEAN: 1.90
 STANDARD DEVIATION 0.35 10.35 22.0 95 % CONFIDENCE INTRVL OF MEAN 1.90 + OR - 0.11

TABLE 13 ANALYTICAL DATA STANDARD REFERENCE SAMPLE P2 REPORT FOR CL

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	0.3	51.5	IUN-CHROMATUGRAPHY	2,6
002	1.0	61.8	TITRATION, MERCURIC NITRATE	1,2,5,4
003	0.8	29.4	OTHER	
004	0.6	2.9	TITRATION, SILVER NITRATE	1,2,4
009	0.0	100.0	OTHER	
011	0.6	2.9	TITRATION, SILVER NITRATE	2,4
012	7.0	52.4	COLORIMETRIC, FERRIC THIOCYANATE, MANUAL	1,2,4
013	0.0	100.0	TITRATION, SILVER NITRATE	1,2,4
014	0.6	2.9	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
015	0.5	19.1	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
016	< 1.0	***	TITRATION, MERCURIC NITRATE	1,2,3,4
018	0.5	19.1	IUN-CHROMATUGRAPHY	2,6
020	0.6	2.9	TITRATION, MERCURIC NITRATE	1,2,3,4
024	1.2	94.1	IUN-SELECTIVE ELECTRODE	2
025	1.1	77.9	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
027	3.8	514.7	TITRATION, MERCURIC NITRATE	1,2,5,4
028	2.0	223.5	OTHER	
030	0.8	29.4	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
034	2.5	304.4	TITRATION, SILVER NITRATE	1,2,4
035	0.8	29.4	TITRATION, MERCURIC NITRATE	1,2,3,4
037	< 1.0	***	TITRATION, SILVER NITRATE	1,2,4
041	1.0	61.8	TITRATION, SILVER NITRATE	1,2,4
044	0.0	100.0	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
051	< 1.0	***	TITRATION, SILVER NITRATE	1,2,4
052	0.0	100.0	OTHER	
054	1.0	61.8	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
055	0.6	2.9	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
058	1.8	191.2	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
059	0.6	2.9	IUN-CHROMATUGRAPHY	2,6
060	0.2	67.6	TITRATION, SILVER NITRATE	1,2,4
061	< 0.4	***	TITRATION, SILVER NITRATE	1,2,4
064	0.5	19.1	TITRATION, MERCURIC NITRATE	1,2,3,4
067	10.0	517.6	TITRATION, SILVER NITRATE	1,2,4
068	0.5	19.1	COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
069	1.1	77.9	TITRATION, SILVER NITRATE	1,2,4
071	0.6	2.9	IUN-CHROMATUGRAPHY	2,6
077	0.0	100.0	CULUMIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,5,4
078	0.5	19.1	IUN-CHROMATUGRAPHY	2,6
079	0.2	67.6	CULUMIMETRIC, FERRIC THIOCYANATE, AUTOMATED	1,3,4
085	0.0	100.0	TITRATION, MERCURIC NITRATE	1,2,3,4
094	0.4	55.3	TITRATION, MERCURIC NITRATE	1,2,3,4

TOTAL RANGE 0.0 TU 10.0 MEAN: 0.62
 STANDARD DEVIATION 0.48 10.0 95 % CONFIDENCE INTVL OF MEAN 0.62 + UR - 0.17

TABLE 13 ANALYTICAL DATA STANDARD REFERENCE SAMPLE P2 REPORT FOR F

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	0.2	***	ION CHROMATOGRAPHY	2,6
003	0.1	13.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
004	0.1	13.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
005	0.1	13.5	ION SELECTIVE ELECTRODE, AUTOMATED	4
009	0.1	13.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
011	0.1	13.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
012	0.1	13.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
013	0.0	100.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
014	0.1	13.5	COLORIMETRIC, SPADNS	1,2,3
015	0.1	13.5	ION CHROMATOGRAPHY	2,6
018	0.2	73.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
020	0.2	73.0	ION SELECTIVE ELECTRODE, AUTOMATED	4
023	0.2	73.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
024	0.1	15.5	COLORIMETRIC, SPADNS	1,2,3
027	0.2	73.0	ION SELECTIVE ELECTRODE, AUTOMATED	4
028	0.1	13.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
030	0.1	13.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
034	0.2	73.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
035	0.1	13.5	COLORIMETRIC, ZINCUNUM ERIOCHROME	4
037	0.1	13.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
044	0.1	13.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
052	0.1	13.5	ION SELECTIVE ELECTRODE, AUTOMATED	4
055	0.1	13.5	ION SELECTIVE ELECTRODE, AUTOMATED	4
058	0.1	13.5	ION SELECTIVE ELECTRODE, AUTOMATED	4
059	0.1	13.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
060	0.2	73.0	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
061	0.1	13.5	ION SELECTIVE ELECTRODE, MANUAL	1,2,3,4
067	0.2	***	ION SELECTIVE ELECTRODE, MANUAL	1,2,3
068	0.1	13.5	COLORIMETRIC, SPADNS	1,2,3,4
069	0.1	13.5	ION SELECTIVE ELECTRODE, MANUAL	4
077	0.1	13.5	ION SELECTIVE ELECTRODE, AUTOMATED	2,6
078	0.1	13.5	ION CHROMATOGRAPHY	4
079	0.1	13.5	ION SELECTIVE ELECTRODE, AUTOMATED	4
085	0.1	13.5	COLORIMETRIC, SPADNS	1,2,3

TOTAL RANGE 0.0 TO 0.2
 STANDARD DEVIATION 0.04
 MEAN: 0.12
 95 % CONFIDENCE INTRVL OF MEAN 0.12 + OR - 0.02

TABLE 13 ANALYTICAL DATA STANDARD REFERENCE SAMPLE P2 REPORT FOR K

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	< 0.5	***	IGNORED	
002	0.2	9.1		1,2,3,4
003	0.2	9.1		1,2,3,4
004	0.3	63.6		1,2,3,4
005	0.2	9.1		1,2,3,4
009	0.2	9.1		1,2,3,4
011	< 0.5	***	IGNORED	
013	0.5	172.7	REJECT	1,2,3,4
014	0.2	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
015	0.1	45.5	FLAME, EMISSION, PHOTOMETRIC	1,2
016	< 0.1	***	IGNORED	
017	0.5	172.7	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
018	0.2	9.1		1,2,3,4
020	0.2	9.1		1,2
023	0.2	9.1	FLAME, EMISSION, PHOTOMETRIC	
024	0.2	9.1		1,2
027	0.1	45.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
028	0.2	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
030	0.2	9.1		1,2,3,4
034	0.3	63.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
035	0.1	45.5		
037	0.2	9.1	OTHER	
041	0.2	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
044	0.1	45.5	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
045	0.2	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
049	2.1	45.5	REJECT	
051	0.1	45.5		
052	0.2	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
054	0.0	100.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
055	0.2	9.1	OTHER	
058	0.8	356.4	REJECT	
059	0.2	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
060	0.2	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
061	< 0.4	***	IGNORED	
064	0.1	45.5	FLAME, EMISSION, PHOTOMETRIC	1,2
066	0.3	63.6		
067	< 0.1	***	IGNORED	
068	0.2	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
069	0.2	9.1		
070	0.2	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
077	0.2	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
078	0.2	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
079	0.3	63.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
085	0.0	100.0		
094	0.2	9.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

TOTAL RANGE 0.0 10 2.1 MEAN: 0.18
 STANDARD DEVIATION 0.07 0.07 95 % CONFIDENCE INTVL OF MEAN 0.18 + OR - 0.02

TABLE 13 ANALYTICAL DATA STANDARD REFERENCE SAMPLE P2 REPORT FOR MG

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
002	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
003	0.1	68.4	REJECT	1,2,3,4
004	0.3	5.3	OTHER	
005	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
009	0.4	26.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
011	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
013	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
014	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
015	0.3	5.3	TITRATION, EDTA	2
016	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
017	0.3	5.3	EMISSION, IC PLASMA	5
018	27.0	426.3	REJECT	5
020	0.3	5.3	EMISSION, IC PLASMA	1,2,3,4
024	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
025	0.2	36.8	OTHER	
028	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
030	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
034	0.4	26.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
035	0.4	26.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
037	0.4	26.3	OTHER	
041	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
044	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
045	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
049	0.9	184.2	REJECT	5
051	0.3	5.3	EMISSION, IC PLASMA	1,2,3,4
052	0.0	100.0	REJECT	1,2,3,4
054	0.4	26.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
055	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
056	0.7	121.1	REJECT	1,2,3,4
059	0.3	5.3	EMISSION, IC PLASMA	5
060	0.7	121.1	REJECT	1,2,3,4
061	0.3	***	TITRATION, EDTA	2
064	0.4	26.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
066	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
067	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
068	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
069	0.5	57.9	REJECT	1,2,3,4
070	0.5	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
071	0.3	5.3	EMISSION, IC PLASMA	5
077	0.4	26.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
078	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
079	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
085	1.0	215.8	REJECT	1,2,3,4
094	0.3	5.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

TOTAL RANGE 0.0 10 27.0
 STANDARD DEVIATION 0.04
 MEAN: 0.32
 95 % CONFIDENCE INTRVL OF MEAN 0.32 + OR - 0.02

TABLE 13 ANALYTICAL DATA STANDARD REFERENCE SAMPLE P2 REPORT FOR NA

CODE	REPORTED VALUE	PCI. DEV. FROM MEAN	METHODS	REFERENCES
001	0.5	22.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
002	0.1	84.6	REJECT	
003	0.7	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
004	0.7	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
005	0.6	7.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
009	0.7	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
011	0.5	***	IGNORED	
013	0.6	7.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
014	0.7	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
015	0.7	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
016	0.2	69.1	REJECT	
017	0.6	7.3	EMISSION, IC PLASMA	5
018	0.6	7.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
020	0.7	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
023	0.4	38.2	FLAME EMISSION, PHOTOMETRIC	1,2
024	0.6	7.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
025	0.9	39.0	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
027	0.6	7.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
028	0.7	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
030	0.7	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
034	0.6	7.3	OTHER	
035	0.6	7.3	OTHER	
037	0.7	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
041	0.7	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
044	0.7	8.1	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
045	0.6	7.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
049	1.6	147.2	REJECT	
051	0.7	8.1	EMISSION, IC PLASMA	5
052	0.0	100.0	REJECT	
054	0.6	7.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
055	0.7	8.1	OTHER	
058	0.0	***	IGNORED	
059	0.6	7.3	EMISSION, IC PLASMA	5
060	1.6	147.2	REJECT	
061	2.3	***	IGNORED	
064	0.6	7.3	FLAME EMISSION, PHOTOMETRIC	1,2
066	0.8	23.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
068	0.6	7.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
069	0.6	7.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
070	0.6	7.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
071	0.6	8.1	EMISSION, IC PLASMA	5
077	0.8	23.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
078	0.5	22.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
079	0.8	23.6	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
085	0.5	22.8	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4
094	0.6	7.3	ATOMIC ABSORPTION, DIRECT, AIR	1,2,3,4

TOTAL RANGE 0.0 TO 1.6 MEAN: 0.65
 STANDARD DEVIATION 0.10 95 % CONFIDENCE INTERVAL OF MEAN 0.65 + OR - 0.03

TABLE 13 ANALYTICAL DATA STANDARD REFERENCE SAMPLE P2 REPORT FOR N03-N

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	< 0.40	***	IGNORED ION CHROMATOGRAPHY	2,6
002	0.04	13.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
003	0.02	56.9		
004	0.05	7.6		
009	0.00	100.0	COLORIMETRIC, BRUCINE	1,2,3,4
011	0.03	35.4	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
012	0.00	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
014	0.13	179.9	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3
015	0.05	7.6	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
017	600.00	583.7	REJECT OTHER	
018	0.05	7.6	ION CHROMATOGRAPHY	2,6
020	< 0.10	***	IGNORED COLORIMETRIC, BRUCINE	1,2,3,4
023	< 0.20	***	IGNORED COLORIMETRIC, BRUCINE	1,2,3,4
024	0.12	158.3	COLORIMETRIC, BRUCINE	1,2,3,4
025	0.10	115.3	COLORIMETRIC, BRUCINE	1,2,3,4
027	< 0.10	***	IGNORED COLORIMETRIC, BRUCINE	1,2,3,4
028	0.06	29.2	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
030	0.10	115.3		
034	0.00	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
035	0.04	13.9	COLORIMETRIC, DEVARDA'S ALLOY REDUCTION, DIAZOTIZATION	1,2,3,4
037	< 0.05	***	IGNORED COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1
044	0.00	100.0	COLORIMETRIC, BRUCINE	1,2,3,4
051	< 0.10	***	IGNORED COLORIMETRIC, BRUCINE	1,2,3,4
052	0.00	100.0	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
054	0.12	158.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
055	0.04	13.9	COLORIMETRIC, HYDRAZINE REDUCTION, DIAZOTIZATION	3
058	0.05	7.6		
059	0.02	56.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
060	0.02	56.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
066	0.05	7.6	OTHER	
067	< 0.10	***	IGNORED COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
068	0.05	7.6	ION CHROMATOGRAPHY	2,6
069	< 0.10	***	IGNORED COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
071	0.05	7.6	ION CHROMATOGRAPHY	2,6
077	0.10	115.3	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
078	0.04	13.9	ION CHROMATOGRAPHY	2,6
079	0.04	13.9	COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	1,2,3,4
083	0.04	13.9	COLORIMETRIC, BRUCINE	1,2,3,4
085	0.03	35.4	COLORIMETRIC, BRUCINE	1,2,3,4
094	0.00	100.0	COLORIMETRIC, BRUCINE	1,2,3,4

TOTAL RANGE 0.00 TO 600.00 MEAN: 0.046
 STANDARD DEVIATION 0.038 95 % CONFIDENCE INTVL OF MEAN 0.046 + UR - 0.014

TABLE 13 ANALYTICAL DATA STANDARD REFERENCE SAMPLE P2 REPORT FOR PH

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	7.0	4.6	ELECTROMETRIC	1,2,3,4
002	7.1	6.3	ELECTROMETRIC	1,2,3,4
003	6.4	4.2		
004	7.7	15.2		
005	7.0	4.8	ELECTROMETRIC	1,2,3,4
009	6.9	3.3	ELECTROMETRIC	1,2,3,4
011	7.0	4.8	ELECTROMETRIC	1,2,3,4
012	6.5	2.7		
014	7.0	4.8	ELECTROMETRIC	1,2,3,4
015	7.2	7.7		
016	6.8	1.8		
017	6.8	1.8		
020	6.3	5.7	ELECTROMETRIC	1,2,3,4
023	7.0	4.8		
024	6.1	8.7		
025	6.3	5.7	ELECTROMETRIC	1,2,3,4
027	6.3	5.7	ELECTROMETRIC	1,2,3,4
028	6.7	0.3	ELECTROMETRIC	1,2,3,4
030	6.6	1.2		
034	7.0	4.8	ELECTROMETRIC	1,2,3,4
035	6.6	1.2		
037	6.2	7.2	ELECTROMETRIC	1,2,3,4
041	5.6	16.2	ELECTROMETRIC	1,2,3,4
044	6.6	1.2	ELECTROMETRIC	1,2,3,4
045	6.8	1.8		
051	6.9	3.3	ELECTROMETRIC	1,2,3,4
052	6.7	0.3		
054	6.5	2.7		
055	7.4	10.7		
058	6.8	1.8		
059	6.0	10.2	ELECTROMETRIC	1,2,3,4
060	6.6	1.2	OTHER	
061	7.3	9.2	ELECTROMETRIC	1,2,3,4
064	6.4	4.2		
066	6.7	0.3		
067	6.5	2.7		
068	6.6	1.2	ELECTROMETRIC	1,2,3,4
069	6.6	1.2		
070	6.2	7.2		
077	6.9	3.3	ELECTROMETRIC	1,2,3,4
078	6.9	3.3		
079	6.7	0.3		
083	6.0	10.2		
085	6.9	3.3		
094	6.6	1.2	OTHER	

TOTAL RANGE 5.6 10 7.7 MEAN: 6.68
 STANDARD DEVIATION 0.40 95 % CONFIDENCE INTRVL OF MEAN 6.68 + OR - 0.12

TABLE 13 ANALYTICAL DATA STANDARD REFERENCE SAMPLE P2 REPORT FOR 504

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	2.0	40.9	ION CHROMATOGRAPHY	2,6
002	4.3	27.1	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
003	18.0	432.1	REJECT	
004	2.7	20.2	OTHER	
005	2.3	32.0	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
009	2.3	52.0	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
011	2.4	29.1	GRAVIMETRIC, BARIUM SULFATE	1,2,3
012	8.0	136.5	TURBIDIMETRIC, BARIUM SULFATE	2,4
013	2.6	23.1	THORIN TITRATION	2,4
014	2.5	26.1	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
015	2.8	17.2	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
016	33.0	875.5	COLORIMETRIC, CHLORANILATE, AUTOMATED	3
018	2.9	14.3	ION CHROMATOGRAPHY	2,6
020	4.0	18.2	GRAVIMETRIC, BARIUM SULFATE	1,2,3
024	1.2	64.5	GRAVIMETRIC, BARIUM SULFATE	1,2,3
027	4.7	38.9	OTHER	
028	11.0	225.2	REJECT	
030	2.0	29.1	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
034	2.4	40.9	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
035	3.8	12.3	THORIN TITRATION	2,4
037	2.6	23.1	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
044	2.7	20.2	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
051	1.0	***	IGNORED	
052	0.0	100.0	COLORIMETRIC, BARIUM SULFATE	1,3,4
054	6.0	77.4	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,2,3
055	4.5	33.0	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
058	7.1	109.9	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
059	3.0	11.3	ION CHROMATOGRAPHY	2,6
060	4.5	33.0	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
061	3.8	12.3	GRAVIMETRIC, BARIUM SULFATE	1,2,3
064	4.5	33.0	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
067	5.6	65.5	GRAVIMETRIC, BARIUM SULFATE	1,2,3
068	2.7	20.2	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
069	3.0	11.3	TURBIDIMETRIC, BARIUM SULFATE	1,2,3
070	7.0	106.9	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
071	3.0	11.3	ION CHROMATOGRAPHY	2,6
077	0.0	100.0	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
078	2.9	14.3	ION CHROMATOGRAPHY	2,6
079	8.0	***	IGNORED	
085	10.0	195.6	COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATED	1,3,4
094	2.6	23.1	TURBIDIMETRIC, BARIUM SULFATE	1,2,3

TOTAL RANGE 0.0 TO 33.0 MEANS 3.38
 STANDARD DEVIATION 1.78 95 % CONFIDENCE INTVL OF MEAN 3.38 + OR - 0.61

TABLE 13 ANALYTICAL DATA STANDARD REFERENCE SAMPLE P2 REPORT FOR SP. COND.

CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHODS	REFERENCES
001	22	18.5	DIRECT READING INSTRUMENT	4
002	19	2.3	DIRECT READING INSTRUMENT	4
003	17	8.4		
004	19	2.3	DIRECT READING INSTRUMENT	4
005	18	3.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
009	19	2.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
011	19	2.3	DIRECT READING INSTRUMENT	4
012	20	7.7	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
013	28	50.8	DIRECT READING INSTRUMENT	4
014	17	8.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
015	22	18.5	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
016	17	8.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
017	180	869.6	REJECT	
018	19	2.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
020	19	2.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
023	17	8.4	DIRECT READING INSTRUMENT	4
024	20	7.7	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
025	17	8.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
027	18	3.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
028	19	2.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
030	18	3.0	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
034	19	2.3	DIRECT READING INSTRUMENT	4
035	19	2.3	DIRECT READING INSTRUMENT	4
037	20	7.7	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
041	19	2.3	DIRECT READING INSTRUMENT	4
044	19	2.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
045	19	2.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
052	17	8.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
054	19	2.3	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
055	15	19.2	DIRECT READING INSTRUMENT	4
058	21	13.1		
059	19	2.3	DIRECT READING INSTRUMENT	4
060	161	767.3	DIRECT READING INSTRUMENT	4
061	29	56.2	REJECT	
064	20	7.7	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
066	14	24.6	DIRECT READING INSTRUMENT	4
068	17	8.4	WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	1,2,3,4
069	18	3.0	DIRECT READING INSTRUMENT	4
077	20	7.7	DIRECT READING INSTRUMENT	4
078	15	19.2	DIRECT READING INSTRUMENT	4
079	18	3.0	DIRECT READING INSTRUMENT	4
085	21	13.1	DIRECT READING INSTRUMENT	4
094	19	2.3	DIRECT READING INSTRUMENT	4

TOTAL RANGE 14 10 180 MEAN: 18.6
 STANDARD DEVIATION 1.7 1.7 95 % CONFIDENCE INTERVAL OF MEAN 18.6 + OR - 0.6

TABLE 14 STATISTICS BY METHOD FOR SAMPLE: P2

DETERMINATION: CA

METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	1.92	0.32	30
EMISSION, IC PLASMA	2.04	0.48	5
OTHER	1.85	0.25	4
***** OVER ALL *****	1.90	0.35	42

DETERMINATION: CL

METHOD	MEAN	STD DEV	N
COLORIMETRIC, FERRIC THIOCYANATE, AUTOMATED	0.53	0.38	10
ION-CHROMATOGRAPHY	0.50	0.12	5
TITRATION, MERCURIC NITRATE	0.55	0.34	6
TITRATION, SILVER NITRATE	0.46	0.55	5
OTHER	0.87	1.03	3
***** OVER ALL *****	0.62	0.48	33

DETERMINATION: F

METHOD	MEAN	STD DEV	N
COLORIMETRIC, SPAUNS	0.12	0.05	4
ION SELECTIVE ELECTRODE, AUTOMATED	0.11	0.04	8
IDN SELECTIVE ELECTRODE, MANUAL	0.11	0.05	14
***** OVER ALL *****	0.12	0.04	32

DETERMINATION: K

METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	0.19	0.07	17
***** OVER ALL *****	0.18	0.07	36

DETERMINATION: MG

METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	0.32	0.04	29
EMISSION, IC PLASMA	0.30	0.00	3
OTHER	0.30	0.10	3
***** OVER ALL *****	0.32	0.04	36

TABLE 14 STATISTICS BY METHOD FOR SAMPLE: P2

DETERMINATION: NA

METHOD	MEAN	STD DEV	N
ATOMIC ABSORPTION, DIRECT, AIR	0.68	0.09	16
EMISSION, IC PLASMA	0.60	0.00	3
OTHER	0.67	0.06	3
***** OVER ALL *****	0.65	0.10	38

DETERMINATION: NO3-N

METHOD	MEAN	STD DEV	N
COLORIMETRIC, BRUCINE	0.048	0.051	6
COLORIMETRIC, CADMIUM REDUCTION, DIAZOTIZATION	0.037	0.037	14
ION CHROMATOGRAPHY	0.047	0.005	4
***** OVER ALL *****	0.046	0.038	31

DETERMINATION: PH

METHOD	MEAN	STD DEV	N
ELECTROMETRIC	6.69	0.47	16
***** OVER ALL *****	6.68	0.40	45

DETERMINATION: SO4

METHOD	MEAN	STD DEV	N
COLORIMETRIC, METHYL THYMOL BLUE, AUTOMATIC	2.61	2.30	8
GRAVIMETRIC, BARIUM SULFATE	3.40	1.67	5
ION CHROMATOGRAPHY	2.76	0.43	5
TURBIDIMETRIC, BARIUM SULFATE	3.82	1.74	12
***** OVER ALL *****	3.38	1.78	35

DETERMINATION: SP. COND.

METHOD	MEAN	STD DEV	N
DIRECT READING INSTRUMENT	18.4	2.1	18
WHEATSTONE BRIDGE-TYPE CONDUCTIVITY METER	18.6	1.3	19
***** OVER ALL *****	18.6	1.7	39