

REPORT OF  
ANALYTICAL EVALUATION PROGRAM  
STANDARD REFERENCE WATER SAMPLES NUMBERS 46 AND 47

U.S. GEOLOGICAL SURVEY  
WATER RESOURCES DIVISION  
Lakewood, Colorado  
November 1974

## 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, standard reference water samples are prepared and distributed at regular intervals. This report summarizes the analytical results submitted by 38 laboratories for Standard Reference Water Samples number 46 and 47 distributed on September 20, 1974.

The "Instructions for Analysis and Reporting Results" did not specify any particular order for performing the determinations, nor were any restrictions placed on methods or instruments. Presumably, each laboratory made only those determinations, which it routinely makes in the course of its normal operations. This program operates as a quality-control tool to enable the participating laboratories to detect deficiencies in their analytical programs. Laboratories are identified in this report only by a preassigned code number.

## PREPARATION OF SAMPLES

Approximately 150 gallons of each sample was collected. Thymol was added to both samples and each sample was then filtered through a 0.45- $\mu$ m membrane filter into a large polyethylene drum. Each sample was mixed overnight with a motor-driven stirrer, pumped through an ultraviolet (2537A) sterilizer and packaged in sterile teflon bottles under ultraviolet radiation.

## DETERMINATIONS

|                            |                                       |
|----------------------------|---------------------------------------|
| Silica (SiO <sub>2</sub> ) | Bicarbonate (HCO <sub>3</sub> )       |
| Calcium (Ca)               | Sulfate (SO <sub>4</sub> )            |
| Magnesium (Mg)             | Chloride (Cl)                         |
| Sodium (Na)                | Fluoride (F)                          |
| Potassium (K)              | Nitrate nitrogen (NO <sub>3</sub> -N) |

## DETERMINATIONS--continued

|                            |                |
|----------------------------|----------------|
| Phosphorus, total (P)*     | pH             |
| Dissolved solids (residue) | Boron (B)*     |
| Specific Conductance       | Strontium (Sr) |

\* Sample No. 47 only

## STATISTICAL EVALUATION

A statistical evaluation of the data has established the most reliable estimate of the true value for each of the various constituents determined. Reported values of "less than" and "zero" were considered as "not determined" and hence do not enter into the computation of the means, standard deviations, etc. Mathematical computations are the same as those used previously for similar Standard Reference Water Samples of this type.

The mean, average deviation, percent deviation from the mean, standard deviation, and total range were calculated for each determination. Confidence limits about the mean were also calculated in order to define the concentration range within which the true value may be expected to fall with a confidence level of 95 percent. Outlying values were rejected on the basis of statistical tests as outlined in ASTM Recommended Practice for Dealing with Outlying Observations (1969 Book of ASTM Standards, Part 30, p. 429-445).

## REPORTED VALUES

The following section shows the reported value for each determination by each participating laboratory, and a graphical presentation of each reported value and the frequency of its occurrence. Each reported value has been rounded off, when necessary, to conform to official USGS policy on reporting analytical data. A few extreme values are not shown on the scale.

A summary shows the number of laboratories reporting values for each determination and the percentage of values rejected. The percentages of unrejected values falling within the 95-percent confidence interval, within one standard deviation ( $X \pm \text{STD}$ ), and within two standard deviations ( $X \pm 2 \text{ STD}$ ) are also given.

PARTICIPATING LABORATORIES

Other.--Continued

U.S. Geological Survey

ARIZONA, Yuma  
CALIFORNIA, Menlo Park; Barnes  
CALIFORNIA, Menlo Park; Hem  
GEORGIA, Doraville  
FLORIDA, Ocala

NEW HAMPSHIRE, Concord  
NEW YORK, Albany  
UTAH, Salt Lake City  
WASHINGTON, Tacoma

Other

ALABAMA, University: Geological Survey of Alabama  
ARKANSAS, Little Rock: State Department of Pollution  
Control and Ecology  
ARIZONA, Tucson: University of Arizona Agric. Science  
CALIFORNIA, Oakland: East Bay Municipal Utility District,  
Water Pollution Control Department  
GEORGIA, Athens: Soil Testing and Plant Analysis Laboratory  
GEORGIA, Atlanta: State Department of Natural Resources  
GEORGIA, Atlanta: State Department of Natural Resources,  
Earth and Water Division  
KANSAS, Lawrence, Kansas Geological Survey  
KANSAS, Topeka: Kansas State Department of Health and  
Environment  
MASSACHUSETTS, Wellesley Hills: Massachusetts Department of  
Public Works, Research and Materials Section (Lab No. 1)  
MASSACHUSETTS, Wellesley Hills: Massachusetts Department of  
Public Works, Research and Materials Section (Lab No. 2)  
MISSOURI, Columbia: Environmental Trace Substances Center,  
University of Missouri  
MISSOURI, Jefferson City: Department of Natural Resources,  
Division of Environmental Quality  
MISSOURI, St. Louis: St. Louis Metro Sewer District  
MONTANA, Butte: Montana Bureau of Mines and Geology

NORTH DAKOTA, Bismarck: North Dakota State Laboratories  
NEW MEXICO, Gallup: Bureau of Indian Affairs, Soil Water  
and Materials Testing Laboratory  
OHIO, Dayton: The Miami Conservancy District  
OKLAHOMA, Oklahoma City: Oklahoma Water Resources Board  
PENNSYLVANIA, West Chester: Chester County Health Department  
SOUTH CAROLINA, Columbia: State Pollution Control Authority  
SOUTH DAKOTA, Brookings: State Water Quality Laboratory  
TENNESSEE, Chattanooga: Tennessee Valley Authority  
VIRGINIA, Manassas: Occoquan Watershed Monitoring Laboratory  
VIRGINIA, Richmond: State Consolidated Laboratories  
WEST VIRGINIA, Morgantown: West Virginia Geological Survey  
WISCONSIN, Delafield: Wisconsin Department of Natural Resources  
WYOMING, Laramie: Wyoming Department of Agriculture,  
Division of Laboratories

Foreign

NEW ZEALAND, Petone: D.S.I.R., Chemistry Division

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD                                       |
|---------------|------|-------------------|-----------------------|--|
| 10-74         | 2    | 4.8               | 11.9                  | MOLYBDATE BLUE, USGS TWRI BK5 CH A1          |
| 10-74         | 3    | 4.7               | 9.5                   | TECHNICON AUTOANALYZER, MOLYBIDOSILICATE 4.7 |
| 10-74         | 4    | 4.3               | 0.2                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1       |
| 10-74         | 5    |                   |                       | NOT DETERMINED                               |
| 10-74         | 6    |                   |                       | NOT DETERMINED                               |
| 10-74         | 7    |                   |                       | NOT DETERMINED                               |
| 10-74         | 8    | 4.3               | 0.2                   | TECHNICON AUTOANALYZER, MOLYBIDOSILICATE 4.3 |
| 10-74         | 9    |                   |                       | NOT DETERMINED                               |
| 10-74         | 11   | 2.9               | 32.4                  | MOLYBDATE BLUE, USGS TWRI BK5 CH A1          |
| 10-74         | 12   | 4.6               | 7.2                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1       |
| 10-74         | 13   | 4.1               | 4.4                   | MOLYBDATE BLUE, USGS TWRI BK5 CH A1          |
| 10-74         | 14   | 4.4               | 2.5                   | MOLYBDATE BLUE, USGS TWRI BK5 CH A1          |
| 10-74         | 15   | 5.0               | 16.5                  | TECHNICON AUTOANALYZER, MOLYBIDOSILICATE 5.0 |
| 10-74         | 16   | 2.7               | 37.1                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1       |
| 10-74         | 17   |                   |                       | NOT DETERMINED                               |
| 10-74         | 18   | 4.9               | 14.2                  | MOLYBIDOSILICATE, APHA STD METH, 13ED, 1971  |
| 10-74         | 20   |                   |                       | NOT DETERMINED                               |
| 10-74         | 21   | 4.6               | 7.2                   | MOLYBDATE BLUE, USGS TWRI BK5 CH A1          |
| 10-74         | 22   | 8.7               | 102.8                 | REJECT MOLYBDATE BLUE, USGS TWRI BK5 CH A1   |
| 10-74         | 23   |                   |                       | NOT DETERMINED                               |
| 11-74         | 25   |                   |                       | NOT DETERMINED                               |
| 10-74         | 26   |                   |                       | NOT DETERMINED                               |
| 10-74         | 27   | 4.5               | 4.9                   | TECHNICON AUTOANALYZER, MOLYBIDOSILICATE 4.5 |
| 10-74         | 28   | 4.8               | 11.9                  | OTHER  |
| 10-74         | 29   |                   |                       | NOT DETERMINED                               |
| 9-74          | 30   |                   |                       | NOT DETERMINED                               |
| 10-74         | 31   |                   |                       | NOT DETERMINED                               |
| 10-74         | 32   |                   |                       | NOT DETERMINED                               |
| 10-74         | 33   | 3.8               | 11.4                  | MOLYBIDOSILICATE, APHA STD METH, 13ED, 1971  |
| 10-74         | 34   | 3.5               | 18.4                  | MOLYBIDOSILICATE, APHA STD METH, 13ED, 1971  |
| 10-74         | 35   | 4.4               | 2.5                   | HETEROPOLY BLUE, APHA STD METH, 13ED, 1971   |
| 10-74         | 36   | 4.0               | 6.8                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1       |
| 11-74         | 37   | 4.4               | 2.5                   | OTHER  |
| 10-74         | 38   | 5.0               | 16.5                  | TECHNICON AUTOANALYZER, MOLYBIDOSILICATE 5   |
| 10-74         | 39   | 4.9               | 14.2                  | OTHER  |
| 10-74         | 40   |                   |                       | NOT DETERMINED                               |
| 10-74         | 41   | 3.8               | 11.4                  | MOLYBDATE BLUE, USGS TWRI BK5 CH A1          |
| 10-74         | 42   |                   |                       | NOT DETERMINED                               |

|                    |        |   |                           |             |             |
|--------------------|--------|---|---------------------------|-------------|-------------|
| TOTAL RANGE        | 2.7    | - | 8.7                       |             | SAMPLE 46   |
| MEAN               | 4.2909 |   | AVERAGE DEVIATION         | 0.4760      |             |
| STANDARD DEVIATION | 0.6324 |   | 95 PCT.CONF.INTVL OF MEAN | 4.2909 +OR- | 0.2804 SIO2 |

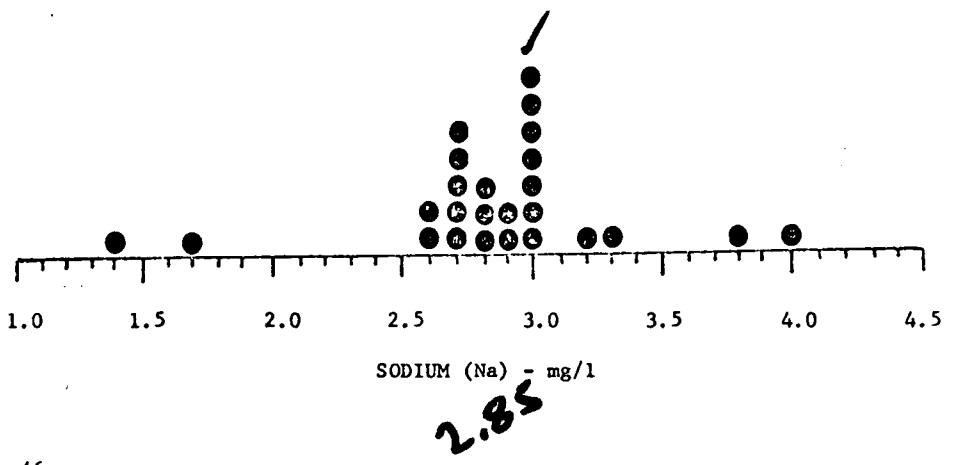
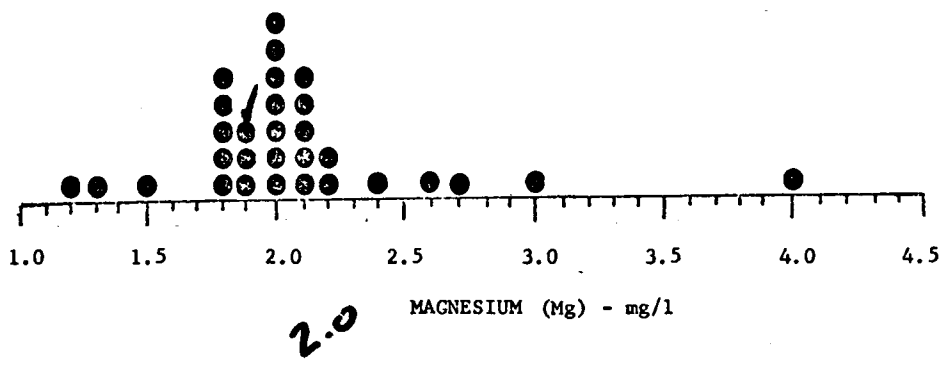
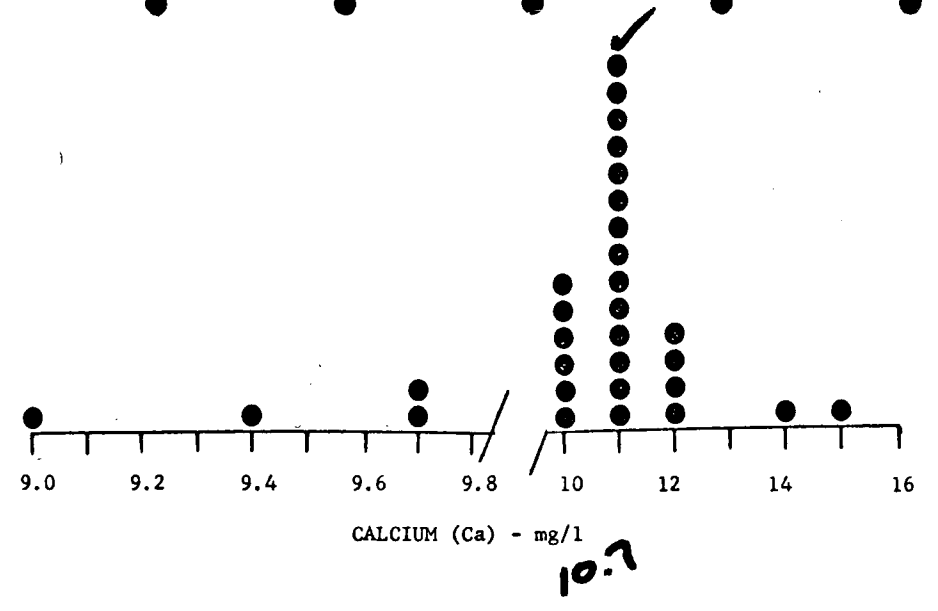
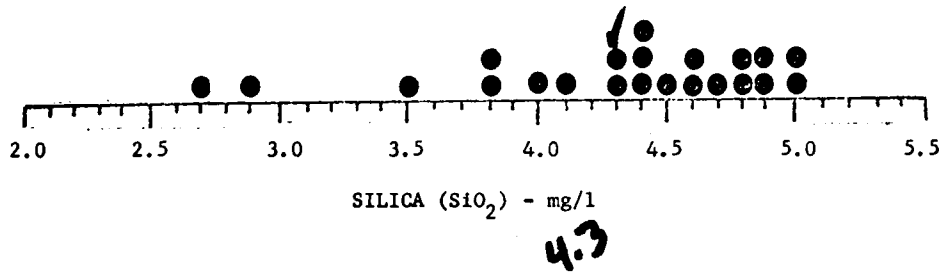
| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD   |
|---------------|------|-------------------|-----------------------|--|
| 10-74         | 2    | 11                | 2.7                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1             |
| 10-74         | 3    | 9.0               | 15.9                  | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 4    | 11                | 2.7                   | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 5    | 11                | 2.7                   | OTHER  |
| 10-74         | 6    | 10                | 6.6                   | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 7    | 12                | 12.1                  | OTHER  |
| 10-74         | 8    | 11                | 2.7                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1             |
| 10-74         | 9    | 140               | *****                 | REJECT EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971 |
| 10-74         | 11   | 12                | 12.1                  | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 12   | 11                | 2.7                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1             |
| 10-74         | 13   | 10                | 6.6                   | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 14   | 11                | 2.7                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1             |
| 10-74         | 15   | 10                | 6.6                   | OTHER  |
| 10-74         | 16   | 11                | 2.7                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1             |
| 10-74         | 17   | 11                | 2.7                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1             |
| 10-74         | 18   | 11                | 2.7                   | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                     |
| 10-74         | 21   | 10                | 6.6                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1             |
| 10-74         | 22   | 11                | 2.7                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1             |
| 10-74         | 23   |                   |                       | NOT DETERMINED                                     |
| 11-74         | 25   | 1.0               | 90.7                  | REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1      |
| 10-74         | 26   | 11                | 2.7                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1             |
| 10-74         | 27   | 12                | 12.1                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1             |
| 10-74         | 28   | 11                | 2.7                   | OTHER  |
| 10-74         | 29   | 10                | 6.6                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1             |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                     |
| 10-74         | 31   |                   |                       | NOT DETERMINED                                     |
| 10-74         | 32   | 15                | 40.1                  | REJECT OTHER                                       |
| 10-74         | 33   | 12                | 12.1                  | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 34   | 10                | 6.6                   | COMPLEXOMETRIC, USGS TWRI BK5 CH A1                |
| 10-74         | 35   | 14                | 30.8                  | REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1      |
| 10-74         | 36   | 6.2               | 42.1                  | REJECT ATOMIC ABS-DIRECT, ASTM METHOD D2576-70     |
| 11-74         | 37   | 9.7               | 9.4                   | OTHER  |
| 10-74         | 38   | 9.7               | 9.4                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1             |
| 10-74         | 39   | 11                | 2.7                   | ATOMIC ABS-DIRECT, ASTM METHOD D2576-70            |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                     |
| 10-74         | 41   | 11                | 2.7                   | COMPLEXOMETRIC, USGS TWRI BK5 CH A1                |
| 10-74         | 42   | 9.4               | 12.2                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1             |

|                    |     |         |     |                           |              |        |           |
|--------------------|-----|---------|-----|---------------------------|--------------|--------|-----------|
| TOTAL RANGE        | 1.0 | -       | 140 |                           |              |        |           |
| MEAN               |     | 10.7071 |     | AVERAGE DEVIATION         | 0.6623       |        | SAMPLE 46 |
| STANDARD DEVIATION |     | 0.8060  |     | 95 PCT.CONF.INTVL OF MEAN | 10.7071 +OR- | 0.3125 | CA        |

| DATE<br>MO-YR      | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD   |
|--------------------|------|-------------------|-----------------------|--|
| 10-74              | 2    | 2.0               | 0.5                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1           |
| 10-74              | 3    | 4.0               | 99.0                  | REJECT TITRIMETRIC-EDTA, ASTM METHOD B, D1126-67 |
| 10-74              | 4    | 2.1               | 4.5                   | CALCULATION, USGS TWRI BKS CH A1                 |
| 10-74              | 5    | 1.3               | 35.3                  | OTHER  |
| 10-74              | 6    | 1.9               | 5.5                   | TITRIMETRIC-EDTA, ASTM METHOD B, D1126-67        |
| 10-74              | 7    | 2.7               | 34.3                  | OTHER  |
| 10-74              | 8    | 1.9               | 5.5                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1           |
| 10-74              | 9    | 1.2               | 40.3                  | TITRIMETRIC-EDTA, ASTM METHOD B, D1126-67        |
| 10-74              | 11   | 2.4               | 19.4                  | CALCULATION, USGS TWRI BKS CH A1                 |
| 10-74              | 12   | 2.0               | 0.5                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1           |
| 10-74              | 13   | 2.2               | 9.4                   | TITRIMETRIC-EDTA, ASTM METHOD B, D1126-67        |
| 10-74              | 14   | 9.0               | 347.7                 | REJECT ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1    |
| 10-74              | 15   | 2.0               | 0.5                   | OTHER  |
| 10-74              | 16   | 2.0               | 0.5                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1           |
| 10-74              | 17   | 2.0               | 0.5                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1           |
| 10-74              | 18   | 5.1               | 153.7                 | REJECT CALCULATION, USGS TWRI BKS CH A1          |
| 10-74              | 20   |                   |                       | NOT DETERMINED                                   |
| 10-74              | 21   | 2.1               | 4.5                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1           |
| 10-74              | 22   | 2.0               | 0.5                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1           |
| 10-74              | 23   |                   |                       | NOT DETERMINED                                   |
| 11-74              | 25   | 0.2               | 90.1                  | REJECT ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1    |
| 10-74              | 26   | 2.0               | 0.5                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1           |
| 10-74              | 27   | 1.8               | 10.5                  | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1           |
| 10-74              | 28   | 2.1               | 4.5                   | OTHER  |
| 10-74              | 29   | 2.1               | 4.5                   | ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971     |
| 9-74               | 30   |                   |                       | NOT DETERMINED                                   |
| 10-74              | 31   |                   |                       | NOT DETERMINED                                   |
| 10-74              | 32   | 2.6               | 29.3                  | ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971     |
| 10-74              | 33   | 1.5               | 25.4                  | CALCULATION, USGS TWRI BKS CH A1                 |
| 10-74              | 34   | 3.0               | 49.2                  | CALCULATION, USGS TWRI BKS CH A1                 |
| 10-74              | 35   | 1.9               | 5.5                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1           |
| 10-74              | 36   | 2.2               | 9.4                   | ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971     |
| 11-74              | 37   | 1.8               | 10.5                  | OTHER  |
| 10-74              | 38   | 1.8               | 10.5                  | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1           |
| 10-74              | 39   | 1.8               | 10.5                  | ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971     |
| 10-74              | 40   |                   |                       | NOT DETERMINED                                   |
| 10-74              | 41   | 2.1               | 4.5                   | CALCULATION, USGS TWRI BKS CH A1                 |
| 10-74              | 42   | 1.8               | 10.5                  | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1           |
| TOTAL RANGE        | 0.2  | -                 | 9.0                   |  |
| MEAN               |      | 2.0103            |                       | AVERAGE DEVIATION 0.2404                         |
| STANDARD DEVIATION |      | 0.3658            |                       | 95 PCT.CONF.INTVL OF MEAN 2.0103 +OR- 0.1391     |
|                    |      |                   |                       | SAMPLE 46 MG                                     |

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 3.0               | 5.2                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 3    | 1.7               | 40.4                  | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 4    | 3.3               | 15.7                  | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 5    |                   |                       | NOT DETERMINED                                      |
| 10-74         | 6    |                   |                       | NOT DETERMINED                                      |
| 10-74         | 7    | 3.2               | 12.2                  | OTHER   |
| 10-74         | 8    | 3.0               | 5.2                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 9    | 1.4               | 50.9                  | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 11   | 2.7               | 5.3                   | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 12   | 2.9               | 1.7                   | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 13   | 2.7               | 5.3                   | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 14   | 4.0               | 40.3                  | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 15   | 3.0               | 5.2                   | OTHER   |
| 10-74         | 16   | 3.0               | 5.2                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 17   | 2.7               | 5.3                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 18   | 0.8               | 71.9                  | REJECT OTHER  |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 21   | 3.0               | 5.2                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 22   | 2.6               | 8.8                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 23   |                   |                       | NOT DETERMINED                                      |
| 11-74         | 25   | 0.3               | 89.5                  | REJECT ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1       |
| 10-74         | 26   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 27   | 2.8               | 1.8                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 28   | 3.0               | 5.2                   | OTHER   |
| 10-74         | 29   | 2.7               | 5.3                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 31   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 32   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 33   | 2.8               | 1.8                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 34   | 2.7               | 5.3                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 35   | 3.8               | 33.2                  | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 36   | 3.0               | 5.2                   | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971        |
| 11-74         | 37   | 2.6               | 8.8                   | OTHER   |
| 10-74         | 38   | 2.9               | 1.7                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 39   | 25                | .776.6                | REJECT ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1       |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 41   | 6.0               | 110.4                 | REJECT FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971 |
| 10-74         | 42   | 2.8               | 1.8                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |

|                    |     |        |    |                           |             |           |
|--------------------|-----|--------|----|---------------------------|-------------|-----------|
| TOTAL RANGE        | 0.3 | -      | 25 |                           |             | SAMPLE 46 |
| MEAN               |     | 2.8520 |    | AVERAGE DEVIATION         | 0.3219      |           |
| STANDARD DEVIATION |     | 0.5157 |    | 95 PCT:CONF.INTVL OF MEAN | 2.8520 +OR- | 0.2129 NA |



SAMPLE NO. 46

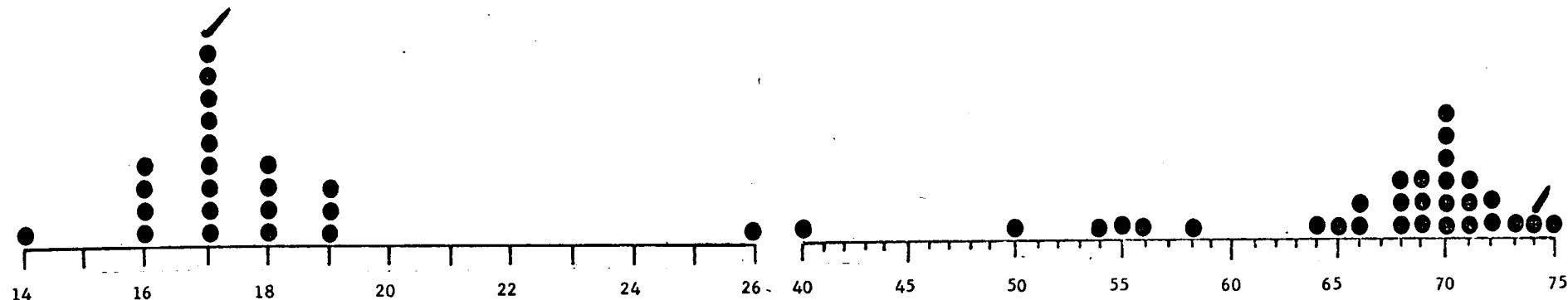


| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 19                | 3.6                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 3    | 22                | 20.0                  | TITRIMETRIC-EDTA, ASTM METHOD B, D1126-67           |
| 10-74         | 4    | 19                | 3.6                   | CALCULATION, USGS TWRI BKS CH A1                    |
| 10-74         | 5    | 17                | 7.3                   | OTHER   |
| 10-74         | 6    | 17                | 7.3                   | TITRIMETRIC-EDTA, ASTM METHOD B, D1126-67           |
| 10-74         | 7    | 18                | 1.8                   | OTHER   |
| 10-74         | 8    | 19                | 3.6                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 9    | 17                | 7.3                   | TITRIMETRIC-EDTA, ASTM METHOD B, D1126-67           |
| 10-74         | 11   | 18                | 1.8                   | CALCULATION, USGS TWRI BKS CH A1                    |
| 10-74         | 12   | 16                | 12.7                  | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 13   | 18                | 1.8                   | TITRIMETRIC-EDTA, ASTM METHOD B, D1126-67           |
| 10-74         | 14   | 20                | 9.1                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 15   | 19                | 3.6                   | OTHER   |
| 10-74         | 16   | 19                | 3.6                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 17   | 18                | 1.8                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 18   | 17                | 7.3                   | CALCULATION, USGS TWRI BKS CH A1                    |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 21   | 19                | 3.6                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 22   | 15                | 18.2                  | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 23   |                   |                       | NOT DETERMINED                                      |
| 11-74         | 25   | 2.0               | 89.1                  | REJECT ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1       |
| 10-74         | 26   | 18                | 1.8                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 27   | 19                | 3.6                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 28   | 19                | 3.6                   | OTHER   |
| 10-74         | 29   | 19                | 3.6                   | ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971        |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 31   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 32   | 28                | 52.7                  | REJECT ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971 |
| 10-74         | 33   | 18                | 1.8                   | CALCULATION, USGS TWRI BKS CH A1                    |
| 10-74         | 34   | 21                | 14.5                  | CALCULATION, USGS TWRI BKS CH A1                    |
| 10-74         | 35   | 20                | 9.1                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 36   | 12                | 34.5                  | REJECT ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971 |
| 11-74         | 37   | 19                | 3.6                   | OTHER   |
| 10-74         | 38   | 18                | 1.8                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |
| 10-74         | 39   | 16                | 12.7                  | ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971        |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 41   | 19                | 3.6                   | CALCULATION, USGS TWRI BKS CH A1                    |
| 10-74         | 42   | 17                | 7.3                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1              |

|                    |     |         |    |                           |                        |
|--------------------|-----|---------|----|---------------------------|------------------------|
| TOTAL RANGE        | 2.0 | -       | 28 |                           | SAMPLE 47              |
| MEAN               |     | 18.3332 |    | AVERAGE DEVIATION         | 1.1333                 |
| STANDARD DEVIATION |     | 1.4700  |    | 95 PCT.CONF.INTVL OF MEAN | 18.3332 +OR- 0.5488 MG |

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 70                | 0.0                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 3    | 71                | 1.4                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 4    | 71                | 1.4                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 5    |                   |                       | NOT DETERMINED                                |
| 10-74         | 6    |                   |                       | NOT DETERMINED                                |
| 10-74         | 7    | 100               | 42.9                  | REJECT OTHER                                  |
| 10-74         | 8    | 74                | 5.7                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 9    | 68                | 2.9                   | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 11   | 68                | 2.9                   | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 12   | 76                | 8.6                   | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 13   | 69                | 1.4                   | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 14   | 59                | 15.7                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 15   | 70                | 0.0                   | OTHER   |
| 10-74         | 16   | 71                | 1.4                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 17   | 70                | 0.0                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 18   | 33                | 52.9                  | REJECT OTHER                                  |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                |
| 10-74         | 21   | 73                | 4.3                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 22   | 50                | 28.6                  | REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1 |
| 10-74         | 23   |                   |                       | NOT DETERMINED                                |
| 11-74         | 25   | 6.5               | 90.7                  | REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1 |
| 10-74         | 26   |                   |                       | NOT DETERMINED                                |
| 10-74         | 27   | 72                | 2.9                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 28   | 67                | 4.3                   | OTHER   |
| 10-74         | 29   | 68                | 2.9                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                |
| 10-74         | 31   |                   |                       | NOT DETERMINED                                |
| 10-74         | 32   |                   |                       | NOT DETERMINED                                |
| 10-74         | 33   | 68                | 2.9                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 34   | 62                | 11.4                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 35   | 81                | 15.7                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 36   | 70                | 0.0                   | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971  |
| 11-74         | 37   | 74                | 5.7                   | OTHER   |
| 10-74         | 38   | 72                | 2.9                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 39   | 70                | 0.0                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                |
| 10-74         | 41   | 70                | 0.0                   | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 42   | 66                | 5.7                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |

|                    |     |         |     |                           |                     |           |
|--------------------|-----|---------|-----|---------------------------|---------------------|-----------|
| TOTAL RANGE        | 6.5 | -       | 100 |                           |                     | SAMPLE 47 |
| MEAN               |     | 69.9998 |     | AVERAGE DEVIATION         | 2.8001              |           |
| STANDARD DEVIATION |     | 4.2622  |     | 95 PCT.CONF.INTVL OF MEAN | 69.9998 +OR- 1.7594 | NA        |

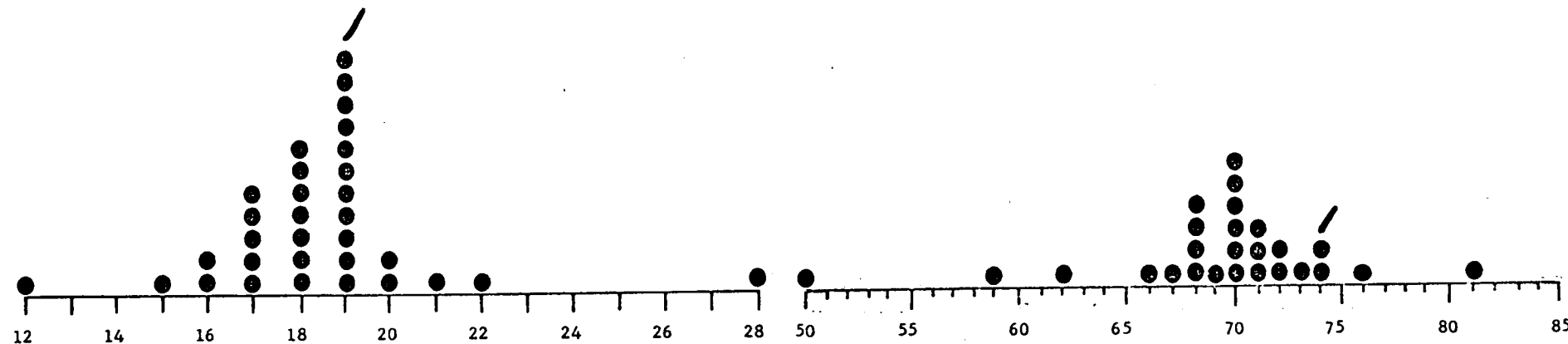


SILICA (SiO<sub>2</sub>) - mg/l

CALCIUM (Ca) - mg/l

17.

68



MAGNESIUM (Mg) - mg/l

SODIUM (Na) - mg/l

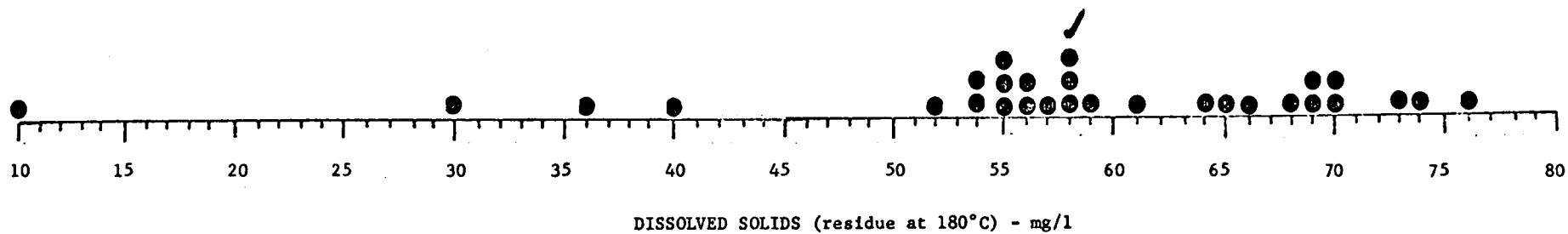
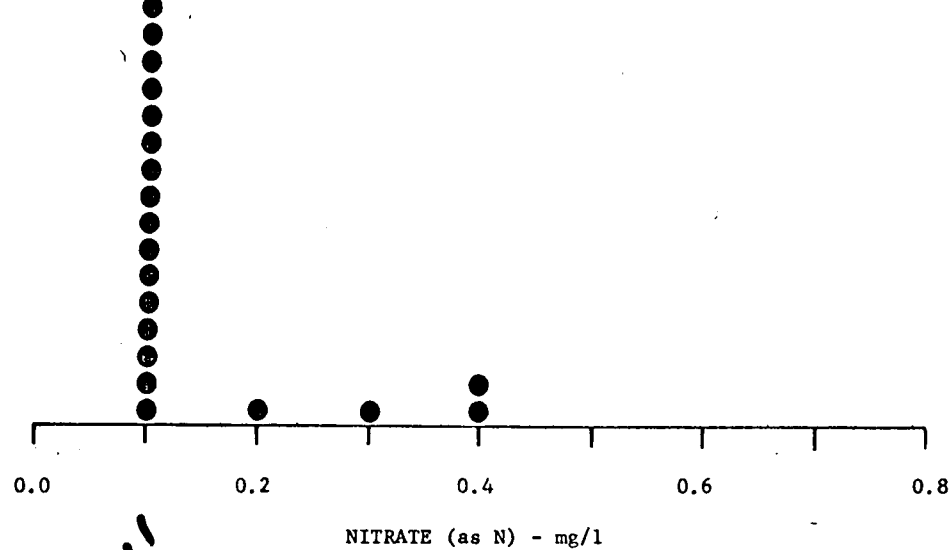
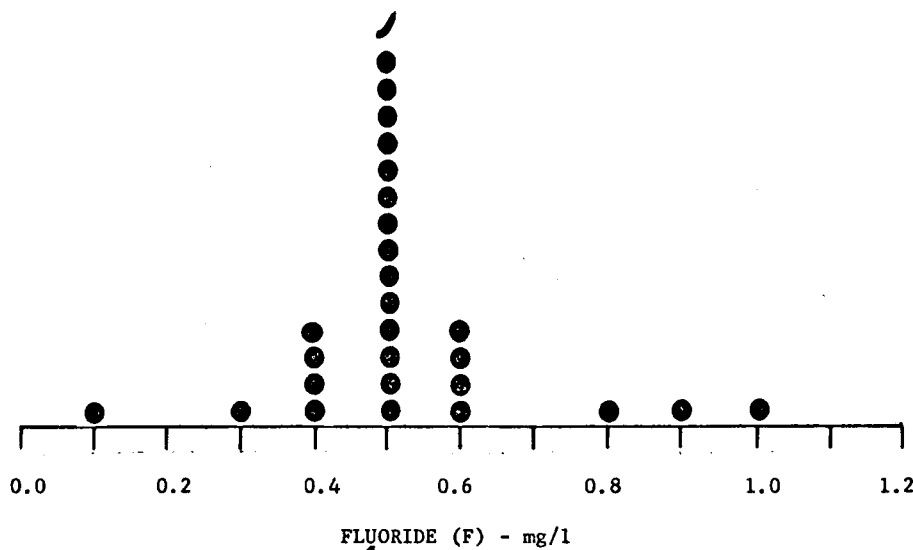
18.

70.

SAMPLE NO. 47

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 2.3               | 3.9                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 3    | 2.7               | 12.8                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 4    | 2.2               | 8.1                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 5    | 0.1               | 95.8                  | OTHER   |
| 10-74         | 6    |                   |                       | NOT DETERMINED                                |
| 10-74         | 7    | 3.3               | 37.9                  | OTHER   |
| 10-74         | 8    | 2.6               | 8.6                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 9    | 2.0               | 16.4                  | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 11   | 2.1               | 12.3                  | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 12   | 4.6               | 92.2                  | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 13   | 2.1               | 12.3                  | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 14   | 2.5               | 4.4                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 15   | 2.4               | 0.3                   | OTHER   |
| 10-74         | 16   | 2.6               | 8.6                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 17   | 2.3               | 3.9                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 18   | 4.6               | 92.2                  | OTHER   |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                |
| 10-74         | 21   | 2.1               | 12.3                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 22   | 2.5               | 4.4                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 23   |                   |                       | NOT DETERMINED                                |
| 11-74         | 25   | 0.2               | 91.6                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 26   | 2.3               | 3.9                   | FLAME PHOTOMETRIC, ASTM METHOD D1428-64(1971) |
| 10-74         | 27   | 2.6               | 8.6                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 28   | 0.2               | 91.6                  | OTHER   |
| 10-74         | 29   | 2.4               | 0.3                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                |
| 10-74         | 31   |                   |                       | NOT DETERMINED                                |
| 10-74         | 32   |                   |                       | NOT DETERMINED                                |
| 10-74         | 33   | 2.2               | 8.1                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 34   | 2.8               | 17.0                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 35   | 2.8               | 17.0                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 36   | 2.0               | 16.4                  | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971  |
| 11-74         | 37   | 2.1               | 12.3                  | OTHER   |
| 10-74         | 38   | 2.0               | 16.4                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 39   | 2.9               | 21.2                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                |
| 10-74         | 41   | 4.0               | 67.1                  | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 42   | 2.7               | 12.8                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |

|                    |     |        |     |                           |             |           |
|--------------------|-----|--------|-----|---------------------------|-------------|-----------|
| TOTAL RANGE        | 0.1 | -      | 4.6 |                           |             | SAMPLE 47 |
| MEAN               |     | 2.3935 |     | AVERAGE DEVIATION         | 0.6260      |           |
| STANDARD DEVIATION |     | 0.9976 |     | 95 PCT.CONF.INTVL OF MEAN | 2.3935 +OR- | 0.3659 K  |



SAMPLE NO. 46

59.

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 95                | 0.7                   | WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1              |
| 10-74         | 3    | 211               | 123.6                 | REJECT WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971 |
| 10-74         | 4    | 94                | 0.4                   | WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1              |
| 10-74         | 5    |                   |                       | NOT DETERMINED                                      |
| 10-74         | 6    | 91                | 3.6                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971        |
| 10-74         | 7    | 88                | 6.7                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971        |
| 10-74         | 8    | 93                | 1.4                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |
| 10-74         | 9    | 90                | 4.6                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971        |
| 10-74         | 11   | 96                | 1.7                   | WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1              |
| 10-74         | 12   | 86                | 8.9                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |
| 10-74         | 13   | 95                | 0.7                   | WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1              |
| 10-74         | 14   | 92                | 2.5                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |
| 10-74         | 15   | 97                | 2.8                   | OTHER   |
| 10-74         | 16   | 99                | 4.9                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |
| 10-74         | 17   | 91                | 3.6                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971        |
| 10-74         | 18   | 100               | 6.0                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971        |
| 10-74         | 20   | 96                | 1.7                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |
| 10-74         | 21   | 95                | 0.7                   | WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1              |
| 10-74         | 22   | 97                | 2.8                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |
| 10-74         | 23   | 100               | 6.0                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |
| 11-74         | 25   | 70                | 25.8                  | REJECT WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971 |
| 10-74         | 26   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 27   | 93                | 1.4                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |
| 10-74         | 28   | 89                | 5.7                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971        |
| 10-74         | 29   | 92                | 2.5                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |
| 9-74          | 30   | 90                | 4.6                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |
| 10-74         | 31   | 96                | 1.7                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |
| 10-74         | 32   | 70                | 25.8                  | REJECT WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971 |
| 10-74         | 33   | 96                | 1.7                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971        |
| 10-74         | 34   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 35   | 120               | 27.2                  | REJECT WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971 |
| 10-74         | 36   | 94                | 0.4                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971        |
| 11-74         | 37   | 103               | 9.1                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971        |
| 10-74         | 38   | 95                | 0.7                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |
| 10-74         | 39   | 90                | 4.6                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 41   | 98                | 3.9                   | WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1              |
| 10-74         | 42   | 100               | 6.0                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1      |

TOTAL RANGE 70 - 211

MEAN 94.3664

STANDARD DEVIATION 4.0042

AVERAGE DEVIATION  
95 PCT.CONF.INTVL OF MEAN

3.2089

94.3664 +OR- 1.4950 SP.COND

SAMPLE 46

| DATE<br>MO-YR      | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN     | METHOD  |                       |
|--------------------|------|-------------------|---------------------------|---|-----------------------|
| 10-74              | 2    | 7.5               | 0.9                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 3    | 7.7               | 1.7                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 10-74              | 4    | 7.5               | 0.9                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 5    | 8.0               | 5.7                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 10-74              | 6    | 7.5               | 0.9                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 10-74              | 7    | 7.4               | 2.9                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 10-74              | 8    | 7.3               | 3.5                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 9    | 7.6               | 0.4                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 10-74              | 11   | 7.7               | 1.7                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 10-74              | 12   | 7.7               | 1.7                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 10-74              | 13   | 7.7               | 1.7                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 14   | 7.7               | 1.7                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 15   | 7.8               | 3.1                       | OTHER   |                       |
| 10-74              | 16   | 7.8               | 3.1                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 17   | 7.3               | 3.5                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 10-74              | 18   | 6.9               | 8.8                       | REJECT GLASS ELECTRODE, APHA STD METH, 13ED, 1971 |                       |
| 10-74              | 20   |                   |                           | NOT DETERMINED                                    |                       |
| 10-74              | 21   | 7.4               | 2.2                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 22   | 7.3               | 3.5                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 23   | 7.4               | 2.2                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 11-74              | 25   | 7.5               | 0.9                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 10-74              | 26   |                   |                           | NOT DETERMINED                                    |                       |
| 10-74              | 27   | 7.6               | 0.4                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 28   | 7.7               | 1.7                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 10-74              | 29   | 7.7               | 1.7                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 9-74               | 30   | 7.5               | 0.9                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 31   | 7.9               | 4.4                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 32   | 7.3               | 3.5                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 10-74              | 33   | 7.4               | 2.2                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 34   | 7.4               | 2.2                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 35   | 7.5               | 0.9                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 10-74              | 36   | 7.5               | 0.9                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 11-74              | 37   | 7.5               | 0.9                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 38   | 7.8               | 3.1                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 39   | 7.7               | 1.7                       | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |                       |
| 10-74              | 40   |                   |                           | NOT DETERMINED                                    |                       |
| 10-74              | 41   | 7.4               | 2.2                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| 10-74              | 42   | 7.6               | 0.4                       | INSTRUMENT, USGS TWRI BKS CH A1                   |                       |
| TOTAL RANGE        |      | 6.9               | -                         | 8.0   | SAMPLE 46             |
| MEAN               |      | 7.5676            | AVERAGE DEVIATION         |   | 0.1540                |
| STANDARD DEVIATION |      | 0.1821            | 95 PCT.CONF.INTVL OF MEAN |   | 7.5676 +OR- 0.0634 PH |

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 60                | 4.0                   | OTHER   |
| 10-74         | 3    |                   |                       | NOT DETERMINED                                |
| 10-74         | 4    | 50                | 13.3                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 5    | 60                | 4.0                   | OTHER   |
| 10-74         | 6    |                   |                       | NOT DETERMINED                                |
| 10-74         | 7    | 80                | 38.7                  | OTHER   |
| 10-74         | 8    | 60                | 4.0                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 9    |                   |                       | NOT DETERMINED                                |
| 10-74         | 11   |                   |                       | NOT DETERMINED                                |
| 10-74         | 12   | 110               | 90.7                  | REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1 |
| 10-74         | 13   |                   |                       | NOT DETERMINED                                |
| 10-74         | 14   |                   |                       | NOT DETERMINED                                |
| 10-74         | 15   |                   |                       | NOT DETERMINED                                |
| 10-74         | 16   | 70                | 21.3                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 17   |                   |                       | NOT DETERMINED                                |
| 10-74         | 18   |                   |                       | NOT DETERMINED                                |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                |
| 10-74         | 21   | 70                | 21.3                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 22   | 60                | 4.0                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 23   |                   |                       | NOT DETERMINED                                |
| 11-74         | 25   |                   |                       | NOT DETERMINED                                |
| 10-74         | 26   | 60                | 4.0                   | OTHER   |
| 10-74         | 27   | 50                | 13.3                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 28   | 50                | 13.3                  | OTHER   |
| 10-74         | 29   |                   |                       | NOT DETERMINED                                |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                |
| 10-74         | 31   |                   |                       | NOT DETERMINED                                |
| 10-74         | 32   |                   |                       | NOT DETERMINED                                |
| 10-74         | 33   | 40                | 30.7                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 34   |                   |                       | NOT DETERMINED                                |
| 10-74         | 35   |                   |                       | NOT DETERMINED                                |
| 10-74         | 36   |                   |                       | NOT DETERMINED                                |
| 11-74         | 37   |                   |                       | NOT DETERMINED                                |
| 10-74         | 38   | 40                | 30.7                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1        |
| 10-74         | 39   |                   |                       | NOT DETERMINED                                |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                |
| 10-74         | 41   |                   |                       | NOT DETERMINED                                |
| 10-74         | 42   |                   |                       | NOT DETERMINED                                |

|                    |    |         |     |                           |              |        |           |
|--------------------|----|---------|-----|---------------------------|--------------|--------|-----------|
| TOTAL RANGE        | 40 | -       | 110 |                           |              |        | SAMPLE 46 |
| MEAN               |    | 57.6921 |     | AVERAGE DEVIATION         | 8.9941       |        |           |
| STANDARD DEVIATION |    | 11.6575 |     | 95 PCT.CONF.INTVL OF MEAN | 57.6921 +OR- | 7.0452 | SR        |





| DETERMINATION | NO. LABS<br>REPORTING | PCT. OF VALUES<br>REJECTED | PCT. OF UNREJECTED VALUES WITHIN |            |             |
|---------------|-----------------------|----------------------------|----------------------------------|------------|-------------|
|               |                       |                            | 95 PCT. CI                       | X +OR- STD | X +OR- 2STD |
| SiO2          | 23                    | 9                          | 43                               | 81         | 95          |
| CA            | 33                    | 9                          | 50                               | 77         | 93          |
| MG            | 33                    | 9                          | 23                               | 77         | 93          |
| NA            | 29                    | 14                         | 40                               | 84         | 92          |
| K             | 31                    | 0                          | 58                               | 81         | 84          |
| HCO3          | 31                    | 3                          | 7                                | 73         | 97          |
| SO4           | 30                    | 3                          | 0                                | 72         | 97          |
| CL            | 34                    | 6                          | 69                               | 78         | 94          |
| F             | 27                    | 7                          | 52                               | 84         | 96          |
| NO3-N         | 33                    | 15                         | 39                               | 75         | 89          |
| P, TOTAL      | 30                    | 10                         | 33                               | 81         | 96          |
| OSRD180       | 28                    | 0                          | 43                               | 71         | 93          |
| SP. COND      | 34                    | 6                          | 16                               | 69         | 97          |
| PH            | 35                    | 6                          | 30                               | 82         | 97          |
| B             | 16                    | 0                          | 38                               | 69         | 100         |
| SR            | 16                    | 6                          | 47                               | 73         | 93          |

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD                                     |
|---------------|------|-------------------|-----------------------|--|
| 10-74         | 2    | 18                | 5.0                   | MOLYBDATE BLUE, USGS TWRI BKS CH A1        |
| 10-74         | 3    | 16                | 6.7                   | TECHNICON AUTOANALYZER, MOLYBDOSILICATE    |
| 10-74         | 4    | 17                | 0.8                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1     |
| 10-74         | 5    |                   |                       | NOT DETERMINED                             |
| 10-74         | 6    |                   |                       | NOT DETERMINED                             |
| 10-74         | 7    |                   |                       | NOT DETERMINED                             |
| 10-74         | 8    | 17                | 0.8                   | TECHNICON AUTOANALYZER, MOLYBDOSILICATE    |
| 10-74         | 9    |                   |                       | NOT DETERMINED                             |
| 10-74         | 11   | 19                | 10.8                  | MOLYBDATE BLUE, USGS TWRI BKS CH A1        |
| 10-74         | 12   | 16                | 6.7                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1     |
| 10-74         | 13   | 17                | 0.8                   | MOLYBDATE BLUE, USGS TWRI BKS CH A1        |
| 10-74         | 14   | 1.8               | 89.5                  | REJECT MOLYBDATE BLUE, USGS TWRI BKS CH A1 |
| 10-74         | 15   | 17                | 0.8                   | TECHNICON AUTOANALYZER, MOLYBDOSILICATE    |
| 10-74         | 16   | 16                | 6.7                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1     |
| 10-74         | 17   |                   |                       | NOT DETERMINED                             |
| 10-74         | 18   | 17                | 0.8                   | MOLYBDATE BLUE, USGS TWRI BKS CH A1        |
| 10-74         | 20   |                   |                       | NOT DETERMINED                             |
| 10-74         | 21   | 18                | 5.0                   | MOLYBDATE BLUE, USGS TWRI BKS CH A1        |
| 10-74         | 22   | 26                | 51.7                  | REJECT MOLYBDATE BLUE, USGS TWRI BKS CH A1 |
| 10-74         | 23   |                   |                       | NOT DETERMINED                             |
| 11-74         | 25   |                   |                       | NOT DETERMINED                             |
| 10-74         | 26   |                   |                       | NOT DETERMINED                             |
| 10-74         | 27   | 18                | 5.0                   | TECHNICON AUTOANALYZER, MOLYBDOSILICATE    |
| 10-74         | 28   | 17                | 0.8                   | MOLYBDOSILICATE, APHA STD METH, 13ED, 1971 |
| 10-74         | 29   |                   |                       | NOT DETERMINED                             |
| 9-74          | 30   |                   |                       | NOT DETERMINED                             |
| 10-74         | 31   |                   |                       | NOT DETERMINED                             |
| 10-74         | 32   |                   |                       | NOT DETERMINED                             |
| 10-74         | 33   | 17                | 0.8                   | MOLYBDOSILICATE, APHA STD METH, 13ED, 1971 |
| 10-74         | 34   | 14                | 18.3                  | MOLYBDOSILICATE, APHA STD METH, 13ED, 1971 |
| 10-74         | 35   | 17                | 0.8                   | HETEROPOLY BLUE, APHA STD METH, 13ED, 1971 |
| 10-74         | 36   | 17                | 0.8                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1     |
| 11-74         | 37   | 18                | 5.0                   | OTHER                                      |
| 10-74         | 38   | 19                | 10.8                  | TECHNICON AUTOANALYZER, MOLYBDOSILICATE    |
| 10-74         | 39   | 19                | 10.8                  | OTHER                                      |
| 10-74         | 40   |                   |                       | NOT DETERMINED                             |
| 10-74         | 41   | 16                | 6.7                   | MOLYBDATE BLUE, USGS TWRI BKS CH A1        |
| 10-74         | 42   |                   |                       | NOT DETERMINED                             |

|                    |     |         |    |                           |              |        |           |
|--------------------|-----|---------|----|---------------------------|--------------|--------|-----------|
| TOTAL RANGE        | 1.8 | -       | 26 |                           |              |        | SAMPLE 47 |
| MEAN               |     | 17.1428 |    | AVERAGE DEVIATION         | 0.8571       |        |           |
| STANDARD DEVIATION |     | 1.1952  |    | 95 PCT.CONF.INTVL OF MEAN | 17.1428 +OR- | 0.5441 | SIO2      |

| DATE<br>MO-YR      | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN     | METHOD   |
|--------------------|------|-------------------|---------------------------|--|
| 10-74              | 2    | 70                | 3.4                       | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1         |
| 10-74              | 3    | 70                | 3.4                       | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971    |
| 10-74              | 4    | 70                | 3.4                       | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971    |
| 10-74              | 5    | 56                | 17.2                      | OTHER  |
| 10-74              | 6    | 65                | 3.9                       | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971    |
| 10-74              | 7    | 40                | 40.9                      | OTHER  |
| 10-74              | 8    | 74                | 9.4                       | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1         |
| 10-74              | 9    | 72                | 6.4                       | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971    |
| 10-74              | 11   | 71                | 4.9                       | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971    |
| 10-74              | 12   | 69                | 2.0                       | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1         |
| 10-74              | 13   | 70                | 3.4                       | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971    |
| 10-74              | 14   | 55                | 18.7                      | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1         |
| 10-74              | 15   | 70                | 3.4                       | OTHER  |
| 10-74              | 16   | 68                | 0.5                       | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1         |
| 10-74              | 17   | 69                | 2.0                       | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971    |
| 10-74              | 18   | 75                | 10.8                      | NOT DETERMINED                                 |
| 10-74              | 20   |                   |                           | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1         |
| 10-74              | 21   | 69                | 2.0                       | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1         |
| 10-74              | 22   | 58                | 14.3                      | NOT DETERMINED                                 |
| 10-74              | 23   |                   |                           | NOT DETERMINED                                 |
| 11-74              | 25   | 5.4               | 92.0                      | REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1  |
| 10-74              | 26   | 70                | 3.4                       | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1         |
| 10-74              | 27   | 73                | 7.9                       | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1         |
| 10-74              | 28   | 68                | 0.5                       | OTHER  |
| 10-74              | 29   | 64                | 5.4                       | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1         |
| 9-74               | 30   |                   |                           | NOT DETERMINED                                 |
| 10-74              | 31   |                   |                           | NOT DETERMINED                                 |
| 10-74              | 32   | 54                | 20.2                      | OTHER  |
| 10-74              | 33   | 72                | 6.4                       | EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971    |
| 10-74              | 34   | 66                | 2.5                       | COMPLEXOMETRIC, USGS TWRI BK5 CH A1            |
| 10-74              | 35   | 86                | 27.1                      | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1         |
| 10-74              | 36   | 29                | 57.1                      | REJECT ATOMIC ABS-DIRECT, ASTM METHOD D2576-70 |
| 11-74              | 37   | 71                | 4.9                       | OTHER  |
| 10-74              | 38   | 68                | 0.5                       | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1         |
| 10-74              | 39   | 50                | 26.1                      | ATOMIC ABS-DIRECT, ASTM METHOD D2576-70        |
| 10-74              | 40   |                   |                           | NOT DETERMINED                                 |
| 10-74              | 41   | 71                | 4.9                       | COMPLEXOMETRIC, USGS TWRI BK5 CH A1            |
| 10-74              | 42   | 66                | 2.5                       | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1         |
|                    |      |                   |                           | SAMPLE 47                                      |
| TOTAL RANGE        | 5.4  | -                 | 86                        | 5.0001   |
| MEAN               |      | 67.6664           | AVERAGE DEVIATION         | 67.6664 +OR-                                   |
| STANDARD DEVIATION |      | 7.1503            | 95 PCT.CONF.INTVL OF MEAN | 2.6697 CA                                      |

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD   |
|---------------|------|-------------------|-----------------------|--|
| 10-74         | 2    | 56                | 5.4                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 3    |                   |                       | NOT DETERMINED                                       |
| 10-74         | 4    | 70                | 18.2                  | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 5    | 68                | 14.8                  | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 6    | 55                | 7.1                   | RESIDUE-FILTERABLE, APHA STD METH, 13ED, 1971        |
| 10-74         | 7    | 59                | 0.4                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 8    | 58                | 2.1                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 9    | 57                | 3.7                   | RESIDUE-FILTERABLE, APHA STD METH, 13ED, 1971        |
| 10-74         | 11   | 64                | 8.1                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 12   | 69                | 16.5                  | RESIDUE-ON-EVAPORATION, ASTM METHOD 8, D1888-67      |
| 10-74         | 13   | 54                | 8.8                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 14   |                   |                       | NOT DETERMINED                                       |
| 10-74         | 15   | 55                | 7.1                   | OTHER  |
| 10-74         | 16   | 58                | 2.1                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 17   | 36                | 39.2                  | RESIDUE-FILTERABLE, APHA STD METH, 13FD, 1971        |
| 10-74         | 18   | 40                | 32.4                  | RESIDUE-FILTERABLE, APHA STD METH, 13FD, 1971        |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                       |
| 10-74         | 21   | 56                | 5.4                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 22   | 76                | 28.3                  | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 23   |                   |                       | NOT DETERMINED                                       |
| 11-74         | 25   | 52                | 12.2                  | RESIDUE-FILTERABLE, APHA STD METH, 13FD, 1971        |
| 10-74         | 26   |                   |                       | NOT DETERMINED                                       |
| 10-74         | 27   | 54                | 8.8                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 28   | 10                | 83.1                  | REJECT RESIDUE-FILTERABLE, APHA STD METH, 13FD, 1971 |
| 10-74         | 29   | 73                | 23.3                  | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                       |
| 10-74         | 31   |                   |                       | NOT DETERMINED                                       |
| 10-74         | 32   | 66                | 11.5                  | RESIDUE-FILTERABLE, APHA STD METH, 13ED, 1971        |
| 10-74         | 33   | 65                | 9.8                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 34   | 55                | 7.1                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 35   | 30                | 49.3                  | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 36   | 61                | 3.0                   | RESIDUE-FILTERABLE, APHA STD METH, 13ED, 1971        |
| 11-74         | 37   |                   |                       | NOT DETERMINED                                       |
| 10-74         | 38   | 58                | 2.1                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 39   | 74                | 25.0                  | RESIDUE-FILTERABLE, APHA STD METH, 13ED, 1971        |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                       |
| 10-74         | 41   | 70                | 18.2                  | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |
| 10-74         | 42   | 69                | 16.5                  | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1          |

|                    |    |         |    |                           |              |                |
|--------------------|----|---------|----|---------------------------|--------------|----------------|
| TOTAL RANGE        | 10 | -       | 76 |                           |              | SAMPLE 46      |
| MEAN               |    | 59.2141 |    | AVERAGE DEVIATION         | 8.1734       |                |
| STANDARD DEVIATION |    | 10.9692 |    | 95 PCT.CONF.INTVL OF MEAN | 59.2141 +OR- | 4.2537 DSRD180 |

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 0.7               | 6.5                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 3    | 0.4               | 39.1                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 4    | 0.7               | 6.5                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 5    |                   |                       | NOT DETERMINED                                      |
| 10-74         | 6    |                   |                       | NOT DETERMINED                                      |
| 10-74         | 7    | 0.5               | 23.9                  | OTHER   |
| 10-74         | 8    | 0.9               | 37.0                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 9    | 0.2               | 69.6                  | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 11   | 0.7               | 6.5                   | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 12   | 0.8               | 21.7                  | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 13   | 0.5               | 23.9                  | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 14   | 0.9               | 37.0                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 15   | 0.7               | 6.5                   | OTHER   |
| 10-74         | 16   | 0.7               | 6.5                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 17   | 0.7               | 6.5                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 18   | 1.7               | 158.7                 | REJECT OTHER  |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 21   | 0.6               | 8.7                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 22   | 1.2               | 82.6                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 23   |                   |                       | NOT DETERMINED                                      |
| 11-74         | 25   | 0.1               | 84.8                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 26   | 0.7               | 6.5                   | FLAME PHOTOMETRIC, ASTM METHOD D1428-64(1971)       |
| 10-74         | 27   | 0.7               | 6.5                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 28   | 0.6               | 8.7                   | OTHER   |
| 10-74         | 29   | 0.6               | 8.7                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 31   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 32   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 33   | 0.7               | 6.5                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 34   | 0.9               | 37.0                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 35   | 0.8               | 21.7                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 36   | 0.6               | 8.7                   | FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971        |
| 11-74         | 37   | 0.6               | 8.7                   | OTHER   |
| 10-74         | 38   | 0.4               | 39.1                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 39   | 0.8               | 21.7                  | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 41   | 2.5               | 280.4                 | REJECT FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971 |
| 10-74         | 42   | 0.7               | 6.5                   | ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1              |

TOTAL RANGE 0.1  
MEAN 0.6571  
STANDARD DEVIATION 0.2168

- 2.5  
AVERAGE DEVIATION  
95 PCT.CONF.INTVL OF MEAN

0.1520  
0.6571 +OR- 0.0841 K

SAMPLE 46

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 33                | 14.6                  | OTHER   |
| 10-74         | 3    | 32                | 11.1                  | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 4    | 27                | 6.2                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 5    |                   |                       | NOT DETERMINED                                      |
| 10-74         | 6    | 29                | 0.7                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 7    |                   |                       | NOT DETERMINED                                      |
| 10-74         | 8    | 34                | 18.1                  | FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS    |
| 10-74         | 9    | 28                | 2.8                   | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 11   | 30                | 4.2                   | FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS    |
| 10-74         | 12   | 28                | 2.8                   | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 10-74         | 13   | 29                | 0.7                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 14   | 22                | 23.6                  | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 15   | 27                | 6.2                   | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 10-74         | 16   | 30                | 4.2                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 17   | 25                | 13.2                  | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 18   | 32                | 11.1                  | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 21   | 29                | 0.7                   | OTHER   |
| 10-74         | 22   | 48                | 66.7                  | REJECT ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1 |
| 10-74         | 23   |                   |                       | NOT DETERMINED                                      |
| 11-74         | 25   | 22                | 23.6                  | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 26   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 27   | 30                | 4.2                   | FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS    |
| 10-74         | 28   | 23                | 20.1                  | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 10-74         | 29   | 29                | 0.7                   | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 31   | 28                | 2.8                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 32   | 25                | 13.2                  | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 10-74         | 33   | 29                | 0.7                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 34   | 37                | 28.5                  | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 35   | 38                | 31.9                  | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 36   | 23                | 20.1                  | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 11-74         | 37   | 29                | 0.7                   | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 38   | 30                | 4.2                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 39   | 24                | 16.7                  | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 41   | 30                | 4.2                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 42   | 32                | 11.1                  | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |

|                    |    |         |    |                           |              |        |           |
|--------------------|----|---------|----|---------------------------|--------------|--------|-----------|
| TOTAL RANGE        | 22 | -       | 48 |                           |              |        | SAMPLE 46 |
| MEAN               |    | 28.7998 |    | AVERAGE DEVIATION         | 2.9067       |        |           |
| STANDARD DEVIATION |    | 3.9601  |    | 95 PCT.CONF.INTVL OF MEAN | 28.7998 +OR- | 1.4786 | HCO3      |

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DFV.<br>FROM MEAN | METHOD                                    |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 15                | 8.2                   | VOLUMETRIC THORIN, ASTM METHOD C, D516-68 |
| 10-74         | 3    | 6.0               | 63.3                  | OTHER                                     |
| 10-74         | 4    | 17                | 4.1                   | VOLUMETRIC THORIN, USGS TWRI BKS CH A1    |
| 10-74         | 5    |                   |                       | NOT DETERMINED                            |
| 10-74         | 6    | 16                | 2.0                   | TURBIDIMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 7    | 17                | 4.1                   | TURBIDIMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 8    | 14                | 14.3                  | OTHER                                     |
| 10-74         | 9    | 17                | 4.1                   | GRAVIMETRIC, APHA STD METH, 13ED, 1971    |
| 10-74         | 11   | 15                | 8.2                   | OTHER                                     |
| 10-74         | 12   | 29                | 77.6                  | OTHER                                     |
| 10-74         | 13   | 15                | 8.2                   | GRAVIMETRIC, APHA STD METH, 13ED, 1971    |
| 10-74         | 14   | 18                | 10.2                  | TURBIDIMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 15   | 16                | 2.0                   | OTHER                                     |
| 10-74         | 16   | 17                | 4.1                   | VOLUMETRIC THORIN, USGS TWRI BKS CH A1    |
| 10-74         | 17   | 12                | 26.5                  | GRAVIMETRIC, APHA STD METH, 13ED, 1971    |
| 10-74         | 18   | 10                | 38.8                  | TURBIDIMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 20   |                   |                       | NOT DETERMINED                            |
| 10-74         | 21   | 16                | 2.0                   | VOLUMETRIC THORIN, USGS TWRI BKS CH A1    |
| 10-74         | 22   | 13                | 20.4                  | TURBIDIMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 23   |                   |                       | NOT DETERMINED                            |
| 11-74         | 25   |                   |                       | NOT DETERMINED                            |
| 10-74         | 26   |                   |                       | NOT DETERMINED                            |
| 10-74         | 27   | 17                | 4.1                   | OTHER                                     |
| 10-74         | 28   | 16                | 2.0                   | TURBIDIMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 29   | 17                | 4.1                   | TURBIDIMETRIC, APHA STD METH, 13ED, 1971  |
| 9-74          | 30   |                   |                       | NOT DETERMINED                            |
| 10-74         | 31   |                   |                       | NOT DETERMINED                            |
| 10-74         | 32   | 28                | 71.4                  | TURBIDIMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 33   | 14                | 14.3                  | GRAVIMETRIC, APHA STD METH, 13ED, 1971    |
| 10-74         | 34   | 13                | 20.4                  | GRAVIMETRIC, APHA STD METH, 13ED, 1971    |
| 10-74         | 35   | 16                | 2.0                   | TURBIDIMETRIC, APHA STD METH, 13ED, 1971  |
| 10-74         | 36   | 23                | 40.8                  | GRAVIMETRIC, APHA STD METH, 13ED, 1971    |
| 11-74         | 37   | 17                | 4.1                   | OTHER                                     |
| 10-74         | 38   | 15                | 8.2                   | OTHER                                     |
| 10-74         | 39   | 17                | 4.1                   | OTHER                                     |
| 10-74         | 40   |                   |                       | NOT DETERMINED                            |
| 10-74         | 41   | 22                | 34.7                  | VOLUMETRIC THORIN, USGS TWRI BKS CH A1    |
| 10-74         | 42   | 12                | 26.5                  | TURBIDIMETRIC, APHA STD METH, 13ED, 1971  |

|                    |     |         |    |                           |              |            |
|--------------------|-----|---------|----|---------------------------|--------------|------------|
| TOTAL RANGE        | 6.0 | -       | 29 |                           |              | SAMPLE 46  |
| MEAN               |     | 16.3332 |    | AVERAGE DEVIATION         | 2.9111       |            |
| STANDARD DEVIATION |     | 4.5662  |    | 95 PCT.CONF.INTVL OF MEAN | 16.3332 +OR- | 1.7049 SO4 |



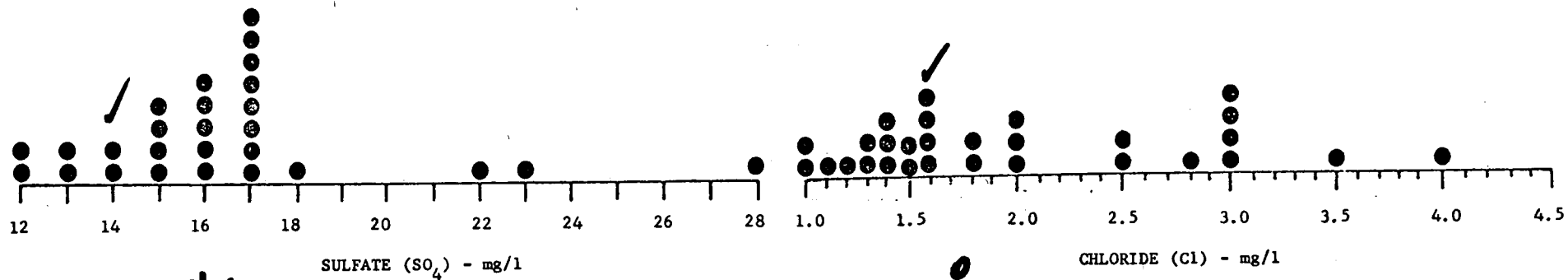
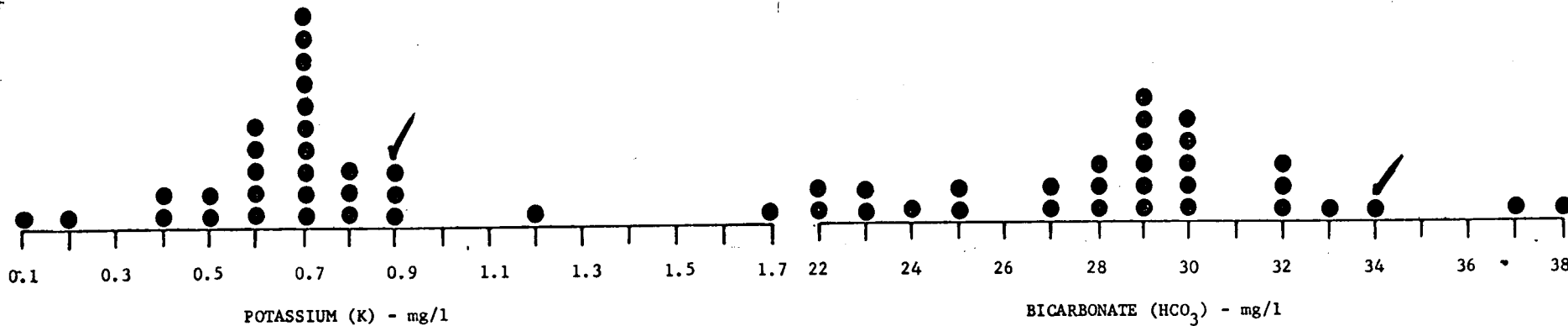
| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 1.3               | 34.3                  | ✓ MERCURIMETRIC THIOCYANATE, ASTM METHOD C, D512-67 |
| 10-74         | 3    | 8.0               | 304.2                 | REJECT SILVER NITRATE, ASTM METHOD B, D512-67       |
| 10-74         | 4    | 2.0               | 1.0                   | - MERCURIMETRIC, USGS TWRI BKS CH A1                |
| 10-74         | 5    |                   |                       | NOT DETERMINED                                      |
| 10-74         | 6    | 2.5               | 26.3                  | ✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971       |
| 10-74         | 7    |                   |                       | NOT DETERMINED                                      |
| 10-74         | 8    | 1.6               | 19.2                  | TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE        |
| 10-74         | 9    | 1.8               | 9.1                   | ARGENOMETRIC, APHA STD METH, 13ED, 1971             |
| 10-74         | 11   | 1.5               | 24.2                  | OTHER   |
| 10-74         | 12   | 1.4               | 29.3                  | OTHER   |
| 10-74         | 13   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 14   | 1.0               | 49.5                  | - MERCURIMETRIC, USGS TWRI BKS CH A1                |
| 10-74         | 15   | 3.0               | 51.6                  | OTHER   |
| 10-74         | 16   | 2.0               | 1.0                   | - MERCURIMETRIC, USGS TWRI BKS CH A1                |
| 10-74         | 17   | 1.6               | 19.2                  | ✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971       |
| 10-74         | 18   | 4.0               | 102.1                 | ✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971       |
| 10-74         | 20   | 1.3               | 34.3                  | OTHER   |
| 10-74         | 21   | 1.4               | 29.3                  | * MERCURIMETRIC THIOCYANATE, ASTM METHOD C, D512-67 |
| 10-74         | 22   | 2.5               | 26.3                  | OTHER   |
| 10-74         | 23   | 1.5               | 24.2                  | ARGENOMETRIC, APHA STD METH, 13ED, 1971             |
| 11-74         | 25   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 26   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 27   | 1.6               | 19.2                  | TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE        |
| 10-74         | 28   | 3.0               | 51.6                  | ✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971       |
| 10-74         | 29   | 1.2               | 39.4                  | ✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971       |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 31   | 1.4               | 29.3                  | - MERCURIMETRIC, USGS TWRI BKS CH A1                |
| 10-74         | 32   | 3.0               | 51.6                  | ✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971       |
| 10-74         | 33   | 3.0               | 51.6                  | ARGENOMETRIC, APHA STD METH, 13ED, 1971             |
| 10-74         | 34   | 2.0               | 1.0                   | MOHR, USGS TWRI BKS CH A1                           |
| 10-74         | 35   | 3.5               | 76.8                  | ✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971       |
| 10-74         | 36   |                   |                       | NOT DETERMINED                                      |
| 11-74         | 37   | 1.6               | 19.2                  | MOHR, USGS TWRI BKS CH A1                           |
| 10-74         | 38   | 1.1               | 44.4                  | TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE        |
| 10-74         | 39   | 1.8               | 9.1                   | TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE        |
| 10-74         | 40   | 1.0               | 49.5                  | MOHR, USGS TWRI BKS CH A1                           |
| 10-74         | 41   | 2.8               | 41.5                  | MOHR, USGS TWRI BKS CH A1                           |
| 10-74         | 42   | 13                | 556.8                 | REJECT MOHR, USGS TWRI BKS CH A1                    |

TOTAL RANGE 1.0 - 13  
MEAN 1.9793  
STANDARD DEVIATION 0.8042

AVERAGE DEVIATION  
95 PCT.CONF.INTVL OF MEAN

0.6585  
1.9793 +OR- 0.3058

SAMPLE 46  
CL



SAMPLE NO. 46

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD   |
|---------------|------|-------------------|-----------------------|--|
| 10-74         | 2    | 0.6               | 14.9                  | OTHER  |
| 10-74         | 3    | 0.6               | 14.9                  | TECHNICON AUTOANALYZER, SPADNS WITH DISTILLATION   |
| 10-74         | 4    | 0.4               | 23.4                  | ION-SELECTIVE ELECTRODE, USGS TWRI RKS CH A1       |
| 10-74         | 5    |                   |                       | NOT DETERMINED                                     |
| 10-74         | 6    |                   |                       | NOT DETERMINED                                     |
| 10-74         | 7    | 0.4               | 23.4                  | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971 |
| 10-74         | 8    | 0.5               | 4.3                   | ZIRCONIUM-ERIOCHROME R, USGS TWRI RKS CH A1        |
| 10-74         | 9    | 0.5               | 4.3                   | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971 |
| 10-74         | 11   | 0.6               | 14.9                  | ION-SELECTIVE ELECTRODE, USGS TWRI RKS CH A1       |
| 10-74         | 12   |                   |                       | NOT DETERMINED                                     |
| 10-74         | 13   | 0.4               | 23.4                  | SPADNS, USGS                                       |
| 10-74         | 14   |                   |                       | NOT DETERMINED                                     |
| 10-74         | 15   | 0.3               | 42.6                  | OTHER  |
| 10-74         | 16   | 0.9               | 72.3                  | ION-SELECTIVE ELECTRODE, USGS TWRI RKS CH A1       |
| 10-74         | 17   | 0.5               | 4.3                   | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971 |
| 10-74         | 18   | 1.0               | 91.5                  | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971 |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                     |
| 10-74         | 21   | 0.5               | 4.3                   | OTHER  |
| 10-74         | 22   | 0.5               | 4.3                   | ION-SELECTIVE ELECTRODE, USGS TWRI RKS CH A1       |
| 10-74         | 23   |                   |                       | NOT DETERMINED                                     |
| 11-74         | 25   |                   |                       | NOT DETERMINED                                     |
| 10-74         | 26   |                   |                       | NOT DETERMINED                                     |
| 10-74         | 27   | 0.5               | 4.3                   | ZIRCONIUM-ERIOCHROME R, USGS TWRI RKS CH A1        |
| 10-74         | 28   | 0.5               | 4.3                   | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971 |
| 10-74         | 29   | 0.5               | 4.3                   | OTHER  |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                     |
| 10-74         | 31   |                   |                       | NOT DETERMINED                                     |
| 10-74         | 32   | 0.4               | 23.4                  | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971 |
| 10-74         | 33   | 0.5               | 4.3                   | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971 |
| 10-74         | 34   | 0.5               | 4.3                   | OTHER  |
| 10-74         | 35   | 0.8               | 53.2                  | SPADNS, APHA STD METH, 13ED, 1971                  |
| 10-74         | 36   | 0.5               | 4.3                   | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971 |
| 11-74         | 37   | 0.5               | 4.3                   | SPADNS, APHA STD METH, 13ED, 1971                  |
| 10-74         | 38   | 0.5               | 4.3                   | OTHER  |
| 10-74         | 39   | 0.5               | 4.3                   | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971 |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                     |
| 10-74         | 41   | 0.1               | 80.9                  | ZIRCONIUM-ERIOCHROME R, USGS TWRI RKS CH A1        |
| 10-74         | 42   | 0.6               | 14.9                  | ZIRCONIUM-ERIOCHROME R, USGS TWRI RKS CH A1        |

TOTAL RANGE  
MEAN  
STANDARD DEVIATION

0.1  
-  
0.5222  
0.1717

1.0  
AVERAGE DEVIATION  
95 PCT.CONF.INTVL OF MEAN

0.1070  
0.5222 +OR- 0.0679

SAMPLE 46

F

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 0.1               | 0.0                   | OTHER   |
| 10-74         | 3    | 0.1               | 0.0                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 4    |                   |                       | NOT DETERMINED  |
| 10-74         | 5    | 0.2               | 100.0                 | REJECT OTHER  |
| 10-74         | 6    | 0.1               | 0.0                   | BRUCINE, APHA STD METH, 13ED, 1971                      |
| 10-74         | 7    | 0.1               | 0.0                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 8    | 0.1               | 0.0                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 9    | 0.3               | 200.0                 | REJECT PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971 |
| 10-74         | 11   | 0.1               | 0.0                   | PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971        |
| 10-74         | 12   | 0.1               | 0.0                   | OTHER   |
| 10-74         | 13   | 0.4               | 300.0                 | REJECT PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971 |
| 10-74         | 14   | 0.1               | 0.0                   | BRUCINE, USGS TWRI, BKS CH A1                           |
| 10-74         | 15   | 0.1               | 0.0                   | TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION             |
| 10-74         | 16   | 0.1               | 0.0                   | BRUCINE, USGS TWRI, BKS CH A1                           |
| 10-74         | 17   | 0.1               | 0.0                   | BRUCINE, APHA STD METH, 13ED, 1971                      |
| 10-74         | 18   | 0.1               | 0.0                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 20   |                   |                       | NOT DETERMINED  |
| 10-74         | 21   | 0.1               | 0.0                   | BRUCINE, USGS TWRI, BKS CH A1                           |
| 10-74         | 22   | 0.4               | 300.0                 | REJECT OTHER  |
| 10-74         | 23   |                   |                       | NOT DETERMINED  |
| 11-74         | 25   | 0.1               | 0.0                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 26   |                   |                       | NOT DETERMINED  |
| 10-74         | 27   | 0.1               | 0.0                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 28   |                   |                       | NOT DETERMINED  |
| 10-74         | 29   | 0.1               | 0.0                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 9-74          | 30   | 0.1               | 0.0                   | TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION             |
| 10-74         | 31   | 0.1               | 0.0                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 32   |                   |                       | NOT DETERMINED  |
| 10-74         | 33   | 0.1               | 0.0                   | PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971        |
| 10-74         | 34   |                   |                       | NOT DETERMINED  |
| 10-74         | 35   | 0.1               | 0.0                   | BRUCINE, APHA STD METH, 13ED, 1971                      |
| 10-74         | 36   | 0.1               | 0.0                   | OTHER   |
| 11-74         | 37   | 0.1               | 0.0                   | OTHER   |
| 10-74         | 38   | 0.1               | 0.0                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 39   | 0.1               | 0.0                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 40   |                   |                       | NOT DETERMINED  |
| 10-74         | 41   |                   |                       | NOT DETERMINED  |
| 10-74         | 42   | 0.1               | 0.0                   | BRUCINE, USGS TWRI, BKS CH A1                           |

|                    |        |   |     |                           |             |        |           |
|--------------------|--------|---|-----|---------------------------|-------------|--------|-----------|
| TOTAL RANGE        | 0.1    | - | 0.4 |                           |             |        | SAMPLE 46 |
| MEAN               | 0.1000 |   |     | AVERAGE DEVIATION         | 0.0000      |        |           |
| STANDARD DEVIATION | 0.0000 |   |     | 95 PCT.CONF.INTVL OF MEAN | 0.1000 +OR- | 0.0000 | NO3-N     |

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 50                | 10.9                  | OTHER   |
| 10-74         | 3    | 51                | 13.1                  | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 4    | 45                | 0.2                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 5    |                   |                       | NOT DETERMINED                                      |
| 10-74         | 6    | 49                | 8.6                   | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 10-74         | 7    |                   |                       | NOT DETERMINED                                      |
| 10-74         | 8    | 49                | 8.6                   | FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS    |
| 10-74         | 9    | 48                | 6.4                   | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 11   | 48                | 6.4                   | FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS    |
| 10-74         | 12   | 48                | 6.4                   | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 10-74         | 13   | 49                | 8.6                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 14   | 37                | 18.0                  | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 15   | 37                | 18.0                  | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 10-74         | 16   | 48                | 6.4                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 17   | 41                | 9.1                   | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 18   | 27                | 40.1                  | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 21   | 48                | 6.4                   | OTHER   |
| 10-74         | 22   | 78                | 72.9                  | REJECT ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1 |
| 10-74         | 23   |                   |                       | NOT DETERMINED                                      |
| 11-74         | 25   | 35                | 22.4                  | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 26   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 27   | 49                | 8.6                   | FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS    |
| 10-74         | 28   | 37                | 18.0                  | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 10-74         | 29   | 48                | 6.4                   | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 31   | 48                | 6.4                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 32   | 41                | 9.1                   | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 10-74         | 33   | 49                | 8.6                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 34   | 51                | 13.1                  | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 35   | 54                | 19.7                  | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 36   | 38                | 15.7                  | POTENTIOMETRIC, APHA STD METH, 13ED, 1971           |
| 11-74         | 37   | 48                | 6.4                   | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 38   | 49                | 8.6                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 39   | 37                | 18.0                  | INDICATOR, APHA STD METH, 13ED, 1971                |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                      |
| 10-74         | 41   | 44                | 2.4                   | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |
| 10-74         | 42   | 50                | 10.9                  | ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1        |

TOTAL RANGE 27  
MEAN  
STANDARD DEVIATION

- 78  
45.0998  
6.2497  
AVERAGE DEVIATION  
95 PCT.CONF.INTVL OF MEAN

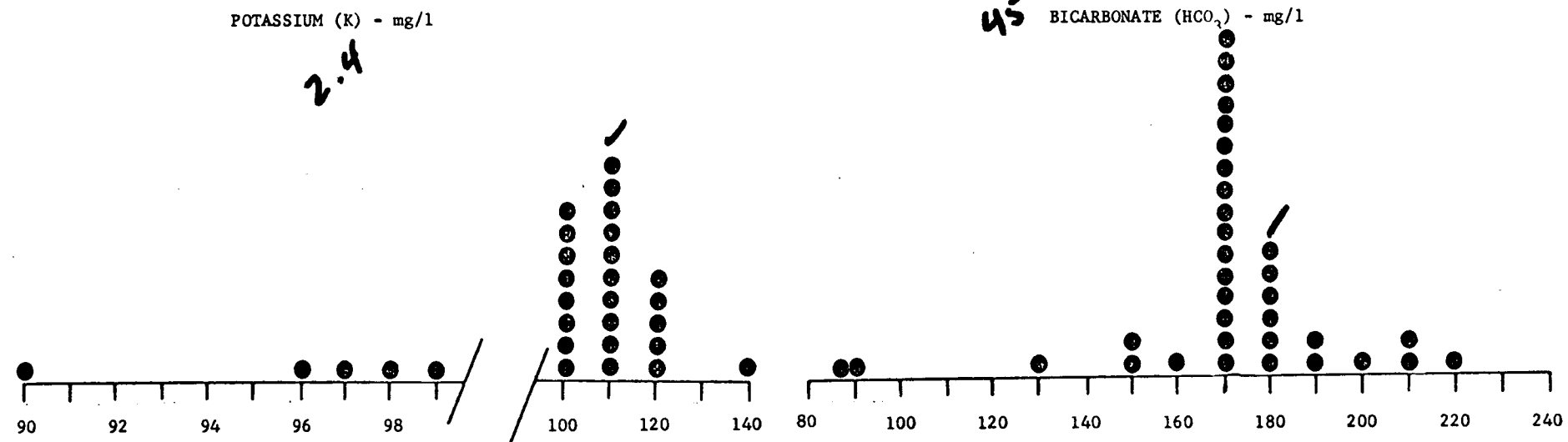
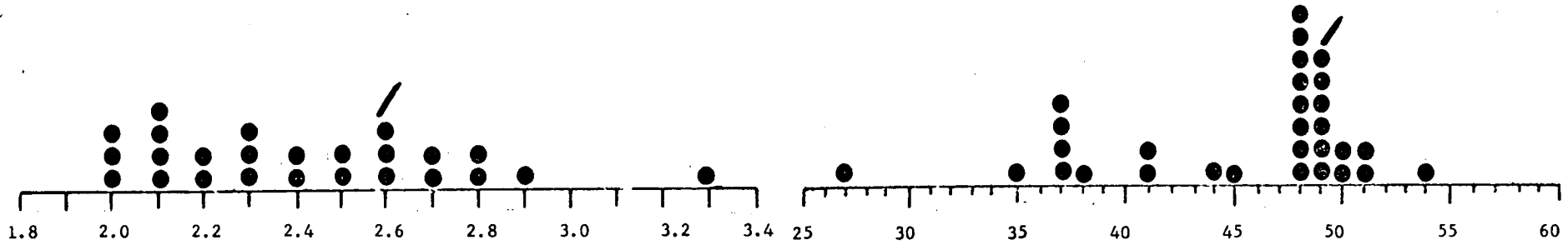
5.1401  
45.0998 +OR- 2.3334  
SAMPLE 47  
HCO3

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 100               | 5.4                   | VOLUMETRIC THORIN, ASTM METHOD C, 0516-68       |
| 10-74         | 3    | 90                | 14.8                  | OTHER   |
| 10-74         | 4    | 100               | 5.4                   | VOLUMETRIC THORIN, USGS TWRI BK5 CH A1          |
| 10-74         | 5    |                   |                       | NOT DETERMINED                                  |
| 10-74         | 6    | 100               | 5.4                   | TURBIDIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 7    | 140               | 32.5                  | REJECT TURBIDIMETRIC, APHA STD METH, 13ED, 1971 |
| 10-74         | 8    | 110               | 4.1                   | OTHER   |
| 10-74         | 9    | 98                | 7.3                   | GRAVIMETRIC, APHA STD METH, 13ED, 1971          |
| 10-74         | 11   | 100               | 5.4                   | OTHER   |
| 10-74         | 12   | 96                | 9.2                   | OTHER   |
| 10-74         | 13   | 110               | 4.1                   | GRAVIMETRIC, APHA STD METH, 13ED, 1971          |
| 10-74         | 14   | 100               | 5.4                   | TURBIDIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 15   | 110               | 4.1                   | OTHER   |
| 10-74         | 16   | 110               | 4.1                   | VOLUMETRIC THORIN, USGS TWRI BK5 CH A1          |
| 10-74         | 17   | 100               | 5.4                   | GRAVIMETRIC, APHA STD METH, 13ED, 1971          |
| 10-74         | 18   | 85                | 19.6                  | TURBIDIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                  |
| 10-74         | 21   | 100               | 5.4                   | VOLUMETRIC THORIN, USGS TWRI BK5 CH A1          |
| 10-74         | 22   | 97                | 8.2                   | TURBIDIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 23   |                   |                       | NOT DETERMINED                                  |
| 11-74         | 25   |                   |                       | NOT DETERMINED                                  |
| 10-74         | 26   |                   |                       | NOT DETERMINED                                  |
| 10-74         | 27   | 110               | 4.1                   | OTHER   |
| 10-74         | 28   | 120               | 13.5                  | TURBIDIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 29   | 110               | 4.1                   | TURBIDIMETRIC, APHA STD METH, 13ED, 1971        |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                  |
| 10-74         | 31   |                   |                       | NOT DETERMINED                                  |
| 10-74         | 32   | 120               | 13.5                  | TURBIDIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 33   | 110               | 4.1                   | GRAVIMETRIC, APHA STD METH, 13ED, 1971          |
| 10-74         | 34   | 100               | 5.4                   | GRAVIMETRIC, APHA STD METH, 13ED, 1971          |
| 10-74         | 35   | 120               | 13.5                  | TURBIDIMETRIC, APHA STD METH, 13ED, 1971        |
| 10-74         | 36   | 120               | 13.5                  | GRAVIMETRIC, APHA STD METH, 13ED, 1971          |
| 11-74         | 37   | 110               | 4.1                   | OTHER   |
| 10-74         | 38   | 99                | 6.3                   | OTHER   |
| 10-74         | 39   | 120               | 13.5                  | OTHER   |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                  |
| 10-74         | 41   | 110               | 4.1                   | VOLUMETRIC THORIN, USGS TWRI BK5 CH A1          |
| 10-74         | 42   | 110               | 4.1                   | TURBIDIMETRIC, APHA STD METH, 13ED, 1971        |

|                    |    |          |     |                           |               |        |           |
|--------------------|----|----------|-----|---------------------------|---------------|--------|-----------|
| TOTAL RANGE        | 85 | -        | 140 |                           |               |        | SAMPLE 47 |
| MEAN               |    | 105.6894 |     | AVERAGE DEVIATION         | 7.9073        |        |           |
| STANDARD DEVIATION |    | 9.2894   |     | 95 PCT.CONF.INTVL OF MEAN | 105.6894 +OR- | 3.5328 | SO4       |

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD                                       |
|---------------|------|-------------------|-----------------------|--|
| 10-74         | 2    | 180               | 2.7                   | MOHR, USGS TWRI BKS CH A1                    |
| 10-74         | 3    | 130               | 25.8                  | SILVER NITRATE, ASTM METHOD B, D512-67       |
| 10-74         | 4    | 190               | 8.4                   | MERCURIMETRIC, USGS TWRI BKS CH A1           |
| 10-74         | 5    |                   |                       | NOT DETERMINED                               |
| 10-74         | 6    | 150               | 14.4                  | MERCURIC NITRATE, APHA STD METH, 13ED, 1971  |
| 10-74         | 7    | 220               | 25.5                  | ARGENOMETRIC, APHA STD METH, 13ED, 1971      |
| 10-74         | 8    | 180               | 2.7                   | TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE |
| 10-74         | 9    | 170               | 3.0                   | ARGENOMETRIC, APHA STD METH, 13ED, 1971      |
| 10-74         | 11   | 170               | 3.0                   | OTHER  |
| 10-74         | 12   | 200               | 14.1                  | OTHER  |
| 10-74         | 13   | 170               | 3.0                   | MERCURIMETRIC, USGS TWRI BKS CH A1           |
| 10-74         | 14   | 150               | 14.4                  | MERCURIMETRIC, USGS TWRI BKS CH A1           |
| 10-74         | 15   | 170               | 3.0                   | OTHER  |
| 10-74         | 16   | 170               | 3.0                   | MERCURIMETRIC, USGS TWRI BKS CH A1           |
| 10-74         | 17   | 170               | 3.0                   | MERCURIC NITRATE, APHA STD METH, 13ED, 1971  |
| 10-74         | 18   | 170               | 3.0                   | MERCURIC NITRATE, APHA STD METH, 13ED, 1971  |
| 10-74         | 20   | 170               | 3.0                   | OTHER  |
| 10-74         | 21   | 170               | 3.0                   | MOHR, USGS TWRI BKS CH A1                    |
| 10-74         | 22   | 210               | 19.8                  | OTHER  |
| 10-74         | 23   | 170               | 3.0                   | ARGENOMETRIC, APHA STD METH, 13ED, 1971      |
| 11-74         | 25   |                   |                       | NOT DETERMINED                               |
| 10-74         | 26   |                   |                       | NOT DETERMINED                               |
| 10-74         | 27   | 180               | 2.7                   | TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE |
| 10-74         | 28   | 170               | 3.0                   | MERCURIC NITRATE, APHA STD METH, 13ED, 1971  |
| 10-74         | 29   | 180               | 2.7                   | MERCURIC NITRATE, APHA STD METH, 13ED, 1971  |
| 9-74          | 30   |                   |                       | NOT DETERMINED                               |
| 10-74         | 31   | 170               | 3.0                   | MERCURIMETRIC, USGS TWRI BKS CH A1           |
| 10-74         | 32   | 180               | 2.7                   | MERCURIC NITRATE, APHA STD METH, 13ED, 1971  |
| 10-74         | 33   | 170               | 3.0                   | ARGENOMETRIC, APHA STD METH, 13ED, 1971      |
| 10-74         | 34   | 90                | 48.7                  | REJECT MOHR, USGS TWRI BKS CH A1             |
| 10-74         | 35   | 180               | 2.7                   | MERCURIC NITRATE, APHA STD METH, 13ED, 1971  |
| 10-74         | 36   | 170               | 3.0                   | MERCURIC NITRATE, APHA STD METH, 13ED, 1971  |
| 11-74         | 37   | 87                | 50.4                  | REJECT MOHR, USGS TWRI BKS CH A1             |
| 10-74         | 38   | 170               | 3.0                   | TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE |
| 10-74         | 39   | 210               | 19.8                  | TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE |
| 10-74         | 40   | 160               | 8.7                   | MOHR, USGS TWRI BKS CH A1                    |
| 10-74         | 41   | 170               | 3.0                   | MOHR, USGS TWRI BKS CH A1                    |
| 10-74         | 42   | 190               | 8.4                   | MOHR, USGS TWRI BKS CH A1                    |

|                    |    |          |     |                           |                      |           |
|--------------------|----|----------|-----|---------------------------|----------------------|-----------|
| TOTAL RANGE        | 87 | -        | 220 |                           |                      |           |
| MEAN               |    | 175.3113 |     | AVERAGE DEVIATION         | 12.2653              | SAMPLE 47 |
| STANDARD DEVIATION |    | 17.5947  |     | 95 PCT.CONF.INTVL OF MEAN | 175.3113 +OR- 6.3140 | CL        |



SAMPLE NO. 47



| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 0.9               | 11.9                  | OTHER   |
| 10-74         | 3    | 0.8               | 0.5                   | TECHNICON AUTOANALYZER, SPADNS WITH DISTILLATION          |
| 10-74         | 4    | 0.8               | 0.5                   | ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1              |
| 10-74         | 5    |                   |                       | NOT DETERMINED  |
| 10-74         | 6    |                   |                       | NOT DETERMINED  |
| 10-74         | 7    | 0.7               | 12.9                  | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 8    | 0.8               | 0.5                   | ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1               |
| 10-74         | 9    | 0.8               | 0.5                   | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 11   | 1.0               | 24.4                  | ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1              |
| 10-74         | 12   |                   |                       | NOT DETERMINED  |
| 10-74         | 13   | 0.7               | 12.9                  | SPADNS, USGS  |
| 10-74         | 14   |                   |                       | NOT DETERMINED  |
| 10-74         | 15   | 0.6               | 25.4                  | OTHER   |
| 10-74         | 16   | 0.8               | 0.5                   | ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1              |
| 10-74         | 17   | 0.9               | 11.9                  | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 18   | 1.3               | 61.7                  | REJECT ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971 |
| 10-74         | 20   |                   |                       | NOT DETERMINED  |
| 10-74         | 21   | 0.8               | 0.5                   | OTHER   |
| 10-74         | 22   | 1.0               | 24.4                  | ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1              |
| 10-74         | 23   |                   |                       | NOT DETERMINED  |
| 11-74         | 25   |                   |                       | NOT DETERMINED  |
| 10-74         | 26   |                   |                       | NOT DETERMINED  |
| 10-74         | 27   | 0.8               | 0.5                   | ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1               |
| 10-74         | 28   | 0.8               | 0.5                   | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 29   | 0.9               | 11.9                  | OTHER   |
| 9-74          | 30   |                   |                       | NOT DETERMINED  |
| 10-74         | 31   |                   |                       | NOT DETERMINED  |
| 10-74         | 32   | 0.7               | 12.9                  | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 33   | 0.8               | 0.5                   | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 34   | 0.8               | 0.5                   | OTHER   |
| 10-74         | 35   | 1.4               | 74.1                  | REJECT SPADNS, APHA STD METH, 13ED, 1971                  |
| 10-74         | 36   | 0.9               | 11.9                  | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971        |
| 11-74         | 37   | 0.9               | 11.9                  | SPADNS, APHA STD METH, 13ED, 1971                         |
| 10-74         | 38   | 0.8               | 0.5                   | OTHER   |
| 10-74         | 39   | 0.8               | 0.5                   | ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 40   |                   |                       | NOT DETERMINED  |
| 10-74         | 41   | 0.5               | 37.8                  | ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1               |
| 10-74         | 42   | 0.8               | 0.5                   | ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1               |

TOTAL RANGE 0.5  
 MEAN 0.8040  
 STANDARD DEVIATION 0.1098

1.4  
 AVERAGE DEVIATION 0.8040  
 95 PCT.CONF.INTVL OF MEAN 0.1098

0:0698  
 0.8040 +OR- 0.0453

SAMPLE 47  
 F

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 2.8               | 2.1                   | OTHER   |
| 10-74         | 3    | 2.9               | 1.4                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 4    | 1.8               | 37.1                  | BRUCINE, USGS TWRI, BK5 CH A1                           |
| 10-74         | 5    | 3.2               | 11.9                  | OTHER   |
| 10-74         | 6    | 2.3               | 19.6                  | BRUCINE, APHA STD METH, 13ED, 1971                      |
| 10-74         | 7    | 2.4               | 16.1                  | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 8    | 2.7               | 5.6                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 9    | 12                | 319.5                 | REJECT PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971 |
| 10-74         | 11   | 2.8               | 2.1                   | PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971        |
| 10-74         | 12   | 3.1               | 8.4                   | OTHER   |
| 10-74         | 13   | 9.4               | 228.6                 | REJECT PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971 |
| 10-74         | 14   | 38                | *****                 | REJECT BRUCINE, USGS TWRI, BK5 CH A1                    |
| 10-74         | 15   | 3.0               | 4.9                   | TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION             |
| 10-74         | 16   | 2.7               | 5.6                   | BRUCINE, USGS TWRI, BK5 CH A1                           |
| 10-74         | 17   | 3.8               | 32.8                  | BRUCINE, APHA STD METH, 13ED, 1971                      |
| 10-74         | 18   | 3.3               | 15.4                  | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 20   |                   |                       | NOT DETERMINED  |
| 10-74         | 21   | 2.6               | 9.1                   | BRUCINE, USGS TWRI, BK5 CH A1                           |
| 10-74         | 22   | 10                | 249.6                 | REJECT OTHER  |
| 10-74         | 23   |                   |                       | NOT DETERMINED  |
| 11-74         | 25   | 2.9               | 1.4                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 26   |                   |                       | NOT DETERMINED  |
| 10-74         | 27   | 2.9               | 1.4                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 28   | 3.7               | 29.3                  | OTHER   |
| 10-74         | 29   | 3.0               | 4.9                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 9-74          | 30   | 2.7               | 5.6                   | TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION             |
| 10-74         | 31   | 3.0               | 4.9                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 32   | 2.8               | 2.1                   | BRUCINE, APHA STD METH, 13ED, 1971                      |
| 10-74         | 33   | 2.3               | 19.6                  | PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971        |
| 10-74         | 34   | 1.2               | 58.1                  | REJECT PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971 |
| 10-74         | 35   | 3.1               | 8.4                   | BRUCINE, APHA STD METH, 13ED, 1971                      |
| 10-74         | 36   | 3.2               | 11.9                  | OTHER   |
| 11-74         | 37   | 3.0               | 4.9                   | OTHER   |
| 10-74         | 38   | 2.8               | 2.1                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 39   | 2.6               | 9.1                   | TECHNICON AUTOANALYZER, CADMIUM REDUCTION               |
| 10-74         | 40   |                   |                       | NOT DETERMINED  |
| 10-74         | 41   |                   |                       | NOT DETERMINED  |
| 10-74         | 42   | 2.7               | 5.6                   | BRUCINE, USGS TWRI, BK5 CH A1                           |

TOTAL RANGE 1.2 - 38  
MEAN 2.8607  
STANDARD DEVIATION 0.4049

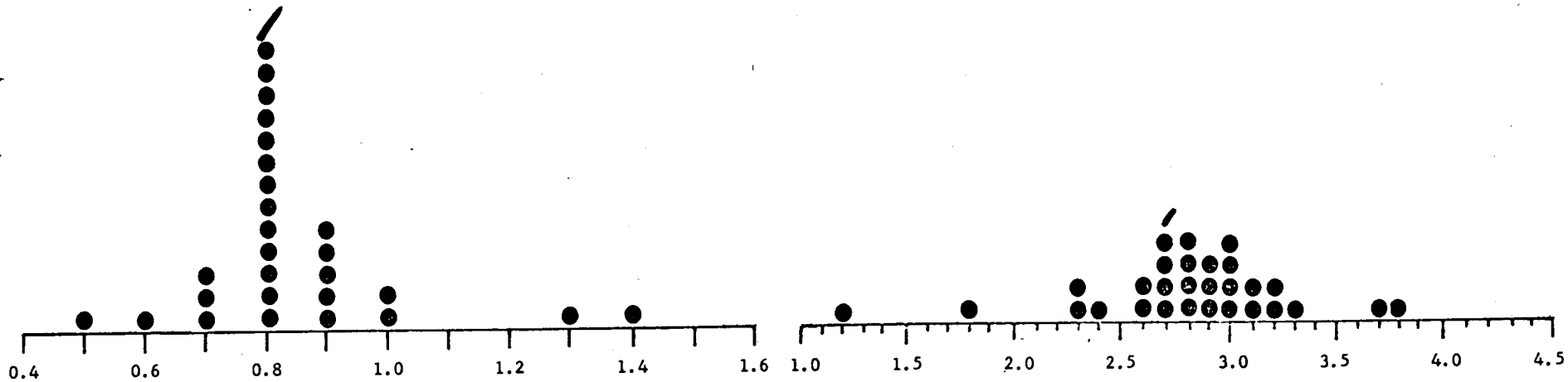
AVERAGE DEVIATION  
95 PCT.CONF.INTVL OF MEAN

0.2893  
2.8607 +OR- 0.1570 NO3-N

SAMPLE 47

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN |                |
|---------------|------|-------------------|-----------------------|----------------|
| 10-74         | 2    | 0.29              | 13.3                  |                |
| 10-74         | 3    | 0.42              | 25.6                  |                |
| 10-74         | 4    | 0.30              | 10.3                  |                |
| 10-74         | 5    | 0.40              | 19.6                  |                |
| 10-74         | 6    | 0.30              | 10.3                  |                |
| 10-74         | 7    | 0.30              | 10.3                  |                |
| 10-74         | 8    | 0.34              | 1.7                   |                |
| 10-74         | 9    | 0.33              | 1.3                   |                |
| 10-74         | 11   |                   |                       | NOT DETERMINED |
| 10-74         | 12   |                   |                       | NOT DETERMINED |
| 10-74         | 13   | 0.06              | 82.1                  | REJECT         |
| 10-74         | 14   | 0.35              | 4.7                   |                |
| 10-74         | 15   | 0.32              | 4.3                   |                |
| 10-74         | 16   | 0.30              | 10.3                  |                |
| 10-74         | 17   | 0.30              | 10.3                  |                |
| 10-74         | 18   | 0.35              | 4.7                   |                |
| 10-74         | 20   |                   |                       | NOT DETERMINED |
| 10-74         | 21   | 0.30              | 10.3                  |                |
| 10-74         | 22   | 1.2               | 258.8                 | REJECT         |
| 10-74         | 23   |                   |                       | NOT DETERMINED |
| 11-74         | 25   | 0.73              | 118.3                 | REJECT         |
| 10-74         | 26   |                   |                       | NOT DETERMINED |
| 10-74         | 27   | 0.33              | 1.3                   |                |
| 10-74         | 28   | 0.30              | 10.3                  |                |
| 10-74         | 29   | 0.30              | 10.3                  |                |
| 9-74          | 30   | 0.32              | 4.3                   |                |
| 10-74         | 31   | 0.31              | 7.3                   |                |
| 10-74         | 32   | 0.30              | 10.3                  |                |
| 10-74         | 33   | 0.39              | 16.6                  |                |
| 10-74         | 34   | 0.30              | 10.3                  |                |
| 10-74         | 35   | 0.33              | 1.3                   |                |
| 10-74         | 36   | 0.40              | 19.6                  |                |
| 11-74         | 37   |                   |                       | NOT DETERMINED |
| 10-74         | 38   | 0.37              | 10.6                  |                |
| 10-74         | 39   | 0.46              | 37.5                  |                |
| 10-74         | 40   |                   |                       | NOT DETERMINED |
| 10-74         | 41   |                   |                       | NOT DETERMINED |
| 10-74         | 42   | 0.32              | 4.3                   |                |

|                    |        |   |     |                           |             |        |         |           |
|--------------------|--------|---|-----|---------------------------|-------------|--------|---------|-----------|
| TOTAL RANGE        | 0.06   | - | 1.2 |                           |             |        |         | SAMPLE 47 |
| MEAN               | 0.3344 |   |     | AVERAGE DEVIATION         | 0.0348      |        |         |           |
| STANDARD DEVIATION | 0.0446 |   |     | 95 PCT.CONF.INTVL OF MEAN | 0.3344 +OR- | 0.0176 | P,TOTAL |           |

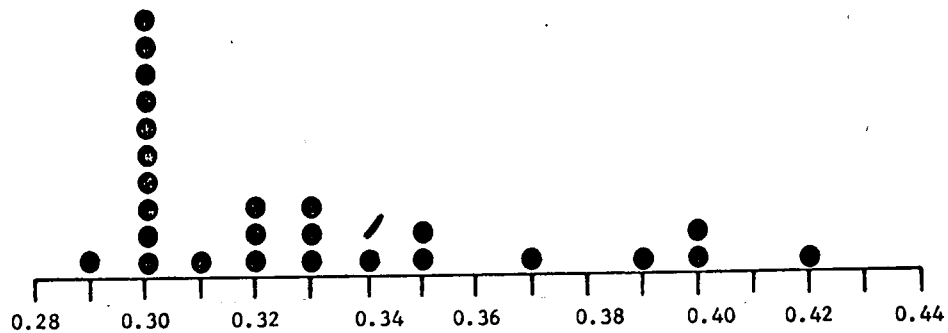


FLUORIDE (F) - mg/l

.8

NITRATE (as N) - mg/l

2.9



PHOSPHORUS, total (as P) - mg/l

.33

SAMPLE NO. 47

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 586               | 5.1                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 3    |                   |                       | NOT DETERMINED                                  |
| 10-74         | 4    | 580               | 4.0                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 5    | 664               | 19.0                  | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 6    | 649               | 16.4                  | RESIDUE-FILTERABLE, APHA STD METH, 13ED, 1971   |
| 10-74         | 7    | 549               | 1.6                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 8    | 574               | 2.9                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 9    |                   |                       | NOT DETERMINED                                  |
| 10-74         | 11   | 575               | 3.1                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 12   | 609               | 9.2                   | RESIDUE-ON-EVAPORATION, ASTM METHOD B, D1888-67 |
| 10-74         | 13   | 550               | 1.4                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 14   |                   |                       | NOT DETERMINED                                  |
| 10-74         | 15   | 510               | 8.6                   | OTHER   |
| 10-74         | 16   | 619               | 11.0                  | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 17   | 532               | 4.6                   | RESIDUE-FILTERABLE, APHA STD METH, 13ED, 1971   |
| 10-74         | 18   | 535               | 4.1                   | RESIDUE-FILTERABLE, APHA STD METH, 13ED, 1971   |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                  |
| 10-74         | 21   | 642               | 15.1                  | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 22   | 565               | 1.3                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 23   |                   |                       | NOT DETERMINED                                  |
| 11-74         | 25   | 568               | 1.8                   | RESIDUE-FILTERABLE, APHA STD METH, 13ED, 1971   |
| 10-74         | 26   |                   |                       | NOT DETERMINED                                  |
| 10-74         | 27   | 508               | 8.9                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 28   | 414               | 25.8                  | RESIDUE-FILTERABLE, APHA STD METH, 13ED, 1971   |
| 10-74         | 29   | 588               | 5.4                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 9-74          | 30   |                   |                       | NOT DETERMINED                                  |
| 10-74         | 31   |                   |                       | NOT DETERMINED                                  |
| 10-74         | 32   | 630               | 12.9                  | RESIDUE-FILTERABLE, APHA STD METH, 13ED, 1971   |
| 10-74         | 33   | 546               | 2.1                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 34   | 440               | 21.1                  | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 35   | 538               | 3.5                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 36   | 472               | 15.4                  | RESIDUE-FILTERABLE, APHA STD METH, 13ED, 1971   |
| 11-74         | 37   |                   |                       | NOT DETERMINED                                  |
| 10-74         | 38   | 538               | 3.5                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 39   | 574               | 2.9                   | RESIDUE-FILTERABLE, APHA STD METH, 13ED, 1971   |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                  |
| 10-74         | 41   | 524               | 6.1                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |
| 10-74         | 42   | 539               | 3.4                   | RESIDUE-ON-EVAPORATION, USGS TWRI BKS CH A1     |

SAMPLE 47

TOTAL RANGE 414  
MEAN  
STANDARD DEVIATION

- 664  
557.7825  
58.3306

AVERAGE DEVIATION  
95 PCT.CONF.INTVL OF MEAN

43.8571  
557.7825 +OR- 22.6201 DSRD180

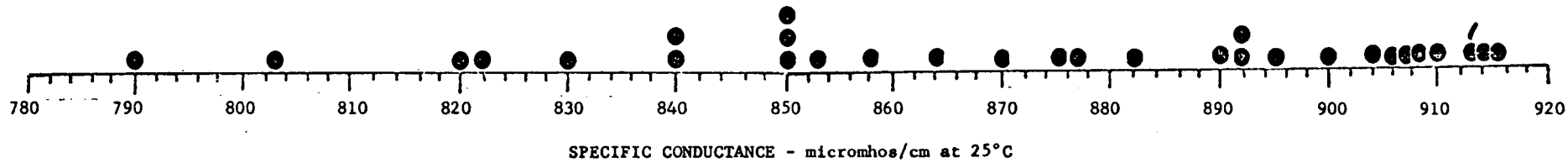
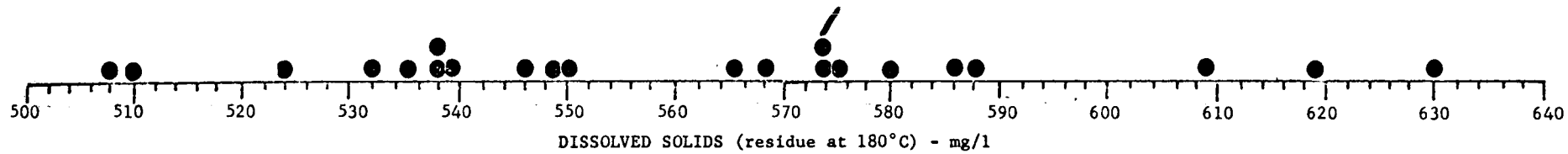
| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 895               | 2.4                   | WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1                |
| 10-74         | 3    | 820               | 6.2                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971          |
| 10-74         | 4    | 892               | 2.0                   | WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1                |
| 10-74         | 5    |                   |                       | NOT DETERMINED  |
| 10-74         | 6    | 864               | 1.2                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971          |
| 10-74         | 7    | 670               | 23.4                  | REJECT WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971   |
| 10-74         | 8    | 913               | 4.4                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1        |
| 10-74         | 9    | 870               | 0.5                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971          |
| 10-74         | 11   | 906               | 3.6                   | WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1                |
| 10-74         | 12   | 803               | 8.2                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1        |
| 10-74         | 13   | 877               | 0.3                   | WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1                |
| 10-74         | 14   | 858               | 1.9                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1        |
| 10-74         | 15   | 850               | 2.8                   | OTHER   |
| 10-74         | 16   | 907               | 3.7                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1        |
| 10-74         | 17   | 822               | 6.0                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971          |
| 10-74         | 18   | 900               | 2.9                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971          |
| 10-74         | 20   | 853               | 2.4                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1        |
| 10-74         | 21   | 910               | 4.1                   | WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1                |
| 10-74         | 22   | 914               | 4.5                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1        |
| 10-74         | 23   | 940               | 7.5                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1        |
| 11-74         | 25   | 850               | 2.8                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971          |
| 10-74         | 26   |                   |                       | NOT DETERMINED  |
| 10-74         | 27   | 882               | 0.9                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1        |
| 10-74         | 28   | 830               | 5.1                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971          |
| 10-74         | 29   | 840               | 3.9                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1        |
| 9-74          | 30   | 790               | 9.7                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1        |
| 10-74         | 31   | 908               | 3.8                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1        |
| 10-74         | 32   | 850               | 2.8                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971          |
| 10-74         | 33   | 915               | 4.6                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971          |
| 10-74         | 34   |                   |                       | NOT DETERMINED  |
| 10-74         | 35   | 890               | 1.8                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971          |
| 10-74         | 36   | 875               | 0.1                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971          |
| 11-74         | 37   | 921               | 5.3                   | WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971          |
| 10-74         | 38   | 904               | 3.4                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1        |
| 10-74         | 39   | 710               | 18.8                  | REJECT DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1 |
| 10-74         | 40   |                   |                       | NOT DETERMINED  |
| 10-74         | 41   | 892               | 2.0                   | WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1                |
| 10-74         | 42   | 840               | 3.9                   | DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1        |

TOTAL RANGE 670 - 940  
MEAN 874.4028  
STANDARD DEVIATION 37.4285

AVERAGE DEVIATION 31.3559  
95 PCT.CONF.INTVL OF MEAN 874.4028 +OR- 13.4315

SAMPLE 47

31.3559  
874.4028 +OR- 13.4315 SP.COND



SAMPLE NO. 47

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD  |
|---------------|------|-------------------|-----------------------|---|
| 10-74         | 2    | 7.8               | 0.5                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 3    | 7.8               | 0.5                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 4    | 7.7               | 0.7                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 5    | 7.5               | 3.3                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 6    | 7.7               | 0.7                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 7    | 7.8               | 0.5                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 8    | 7.5               | 3.3                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 9    | 7.8               | 0.5                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 11   | 7.8               | 0.5                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 12   | 8.0               | 3.1                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 13   | 7.8               | 0.5                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 14   | 7.9               | 1.8                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 15   | 7.9               | 1.8                   | OTHER   |
| 10-74         | 16   | 7.9               | 1.8                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 17   | 7.6               | 2.0                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 18   | 7.0               | 9.8                   | REJECT GLASS ELECTRODE, APHA STD METH, 13ED, 1971 |
| 10-74         | 20   |                   |                       | NOT DETERMINED                                    |
| 10-74         | 21   | 7.7               | 0.7                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 22   | 7.6               | 2.0                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 23   | 7.8               | 0.5                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 11-74         | 25   | 7.6               | 2.0                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 26   |                   |                       | NOT DETERMINED                                    |
| 10-74         | 27   | 7.7               | 0.7                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 28   | 8.0               | 3.1                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 29   | 7.9               | 1.8                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 9-74          | 30   | 7.8               | 0.5                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 31   | 7.9               | 1.8                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 32   | 7.5               | 3.3                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 33   | 7.7               | 0.7                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 34   | 7.8               | 0.5                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 35   | 7.3               | 5.9                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 36   | 7.7               | 0.7                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 11-74         | 37   | 7.9               | 1.8                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 38   | 7.9               | 1.8                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |
| 10-74         | 39   | 7.9               | 1.8                   | GLASS ELECTRODE, APHA STD METH, 13ED, 1971        |
| 10-74         | 40   |                   |                       | NOT DETERMINED                                    |
| 10-74         | 41   | 7.2               | 7.2                   | REJECT INSTRUMENT, USGS TWRI BK5 CH A1            |
| 10-74         | 42   | 7.8               | 0.5                   | INSTRUMENT, USGS TWRI BK5 CH A1                   |

TOTAL RANGE 7.0  
MEAN 7.7576  
STANDARD DEVIATION 0.1582

- 8.0  
AVERAGE DEVIATION  
95 PCT.CONF.INTVL OF MEAN

0.1242  
7.7576 +OR- 0.0559 PH

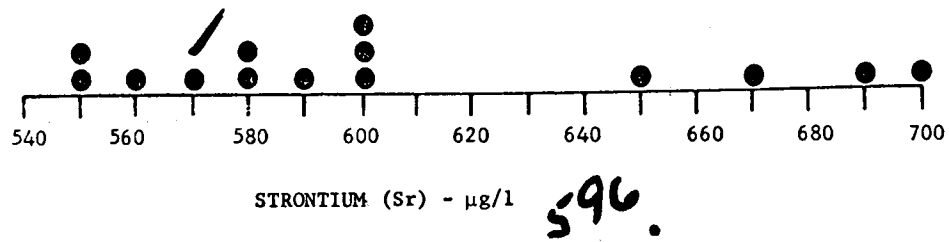
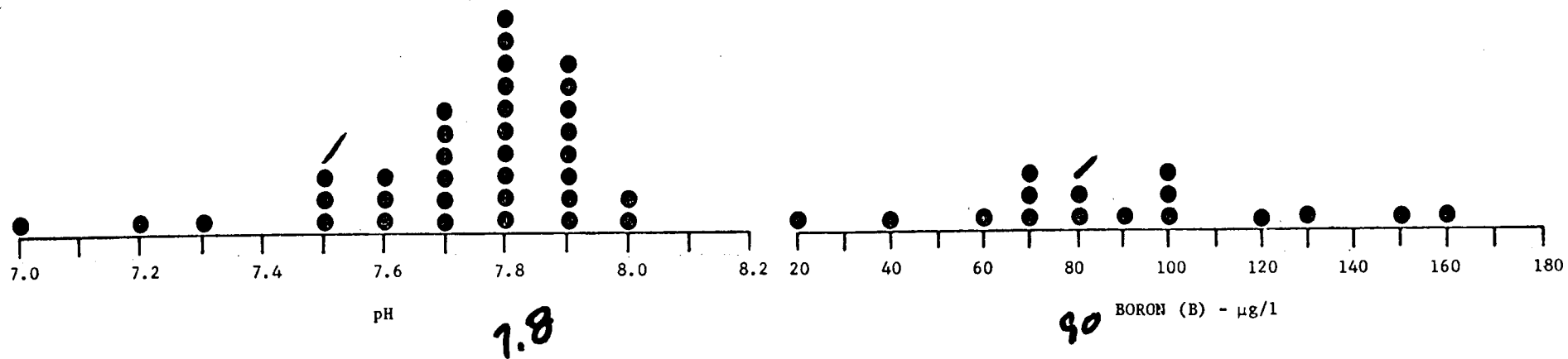
SAMPLE 47



| DATE<br>MO-YR      | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN     | METHOD                              |
|--------------------|------|-------------------|---------------------------|-------------------------------------|
| 10-74              | 2    | 70                | 22.2                      | DIANTHRIMIDE, USGS BK5 CH A1        |
| 10-74              | 3    |                   |                           | NOT DETERMINED                      |
| 10-74              | 4    | 100               | 11.1                      | CARMINE, USGS BK5 CH A1             |
| 10-74              | 5    | 60                | 33.3                      | OTHER                               |
| 10-74              | 6    |                   |                           | NOT DETERMINED                      |
| 10-74              | 7    |                   |                           | NOT DETERMINED                      |
| 10-74              | 8    | 80                | 11.1                      | CARMINE, USGS BK5 CH A1             |
| 10-74              | 9    | 120               | 33.3                      | CARMINE, APHA STD METH, 13ED, 1971  |
| 10-74              | 11   | 40                | 55.6                      | CARMINE, USGS BK5 CH A1             |
| 10-74              | 12   |                   |                           | NOT DETERMINED                      |
| 10-74              | 13   | 100               | 11.1                      | CARMINE, APHA STD METH, 13ED, 1971  |
| 10-74              | 14   |                   |                           | NOT DETERMINED                      |
| 10-74              | 15   | 130               | 44.4                      | CURCUMIN, APHA STD METH, 13ED, 1971 |
| 10-74              | 16   | 70                | 22.2                      | DIANTHRIMIDE, USGS BK5 CH A1        |
| 10-74              | 17   |                   |                           | NOT DETERMINED                      |
| 10-74              | 18   |                   |                           | NOT DETERMINED                      |
| 10-74              | 20   |                   |                           | NOT DETERMINED                      |
| 10-74              | 21   | 70                | 22.2                      | DIANTHRIMIDE, USGS BK5 CH A1        |
| 10-74              | 22   |                   |                           | NOT DETERMINED                      |
| 10-74              | 23   |                   |                           | NOT DETERMINED                      |
| 11-74              | 25   |                   |                           | NOT DETERMINED                      |
| 10-74              | 26   |                   |                           | NOT DETERMINED                      |
| 10-74              | 27   | 80                | 11.1                      | OTHER                               |
| 10-74              | 28   |                   |                           | NOT DETERMINED                      |
| 10-74              | 29   |                   |                           | NOT DETERMINED                      |
| 9-74               | 30   |                   |                           | NOT DETERMINED                      |
| 10-74              | 31   |                   |                           | NOT DETERMINED                      |
| 10-74              | 32   | 20                | 77.8                      | OTHER                               |
| 10-74              | 33   | 150               | 66.7                      | CURCUMIN, APHA STD METH, 13ED, 1971 |
| 10-74              | 34   |                   |                           | NOT DETERMINED                      |
| 10-74              | 35   | 160               | 77.8                      | DIANTHRIMIDE, USGS BK5 CH A1        |
| 10-74              | 36   | 100               | 11.1                      | CARMINE, APHA STD METH, 13ED, 1971  |
| 11-74              | 37   |                   |                           | NOT DETERMINED                      |
| 10-74              | 38   | 90                | 0.0                       | DIANTHRIMIDE, USGS BK5 CH A1        |
| 10-74              | 39   |                   |                           | NOT DETERMINED                      |
| 10-74              | 40   |                   |                           | NOT DETERMINED                      |
| 10-74              | 41   |                   |                           | NOT DETERMINED                      |
| 10-74              | 42   |                   |                           | NOT DETERMINED                      |
| TOTAL RANGE        |      | 20                | - 160                     |                                     |
| MEAN               |      | 89.9998           | AVERAGE DEVIATION         | 28.7500                             |
| STANDARD DEVIATION |      | 37.4165           | 95 PCT.CONF.INTVL OF MEAN | 89.9998 +OR- 19.9337                |
|                    |      |                   |                           | SAMPLE 47                           |
|                    |      |                   |                           | 8                                   |

| DATE<br>MO-YR | CODE | REPORTED<br>VALUE | PCT.DEV.<br>FROM MEAN | METHOD                                 |
|---------------|------|-------------------|-----------------------|--|
| 10-74         | 2    | 600               | 0.7                   | OTHER                                  |
| 10-74         | 3    |                   |                       | NOT DETERMINED                         |
| 10-74         | 4    | 560               | 6.0                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1 |
| 10-74         | 5    | 4100              | 587.9                 | REJECT OTHER                           |
| 10-74         | 6    |                   |                       | NOT DETERMINED                         |
| 10-74         | 7    | 690               | 15.8                  | OTHER                                  |
| 10-74         | 8    | 570               | 4.4                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1 |
| 10-74         | 9    |                   |                       | NOT DETERMINED                         |
| 10-74         | 11   |                   |                       | NOT DETERMINED                         |
| 10-74         | 12   | 590               | 1.0                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1 |
| 10-74         | 13   | 600               | 0.7                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1 |
| 10-74         | 14   |                   |                       | NOT DETERMINED                         |
| 10-74         | 15   |                   |                       | NOT DETERMINED                         |
| 10-74         | 16   | 670               | 12.4                  | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1 |
| 10-74         | 17   |                   |                       | NOT DETERMINED                         |
| 10-74         | 18   |                   |                       | NOT DETERMINED                         |
| 10-74         | 20   |                   |                       | NOT DETERMINED                         |
| 10-74         | 21   | 650               | 9.1                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1 |
| 10-74         | 22   | 580               | 2.7                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1 |
| 10-74         | 23   |                   |                       | NOT DETERMINED                         |
| 11-74         | 25   |                   |                       | NOT DETERMINED                         |
| 10-74         | 26   | 580               | 2.7                   | OTHER                                  |
| 10-74         | 27   | 600               | 0.7                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1 |
| 10-74         | 28   | 550               | 7.7                   | OTHER                                  |
| 10-74         | 29   |                   |                       | NOT DETERMINED                         |
| 9-74          | 30   |                   |                       | NOT DETERMINED                         |
| 10-74         | 31   |                   |                       | NOT DETERMINED                         |
| 10-74         | 32   |                   |                       | NOT DETERMINED                         |
| 10-74         | 33   | 450               | 24.5                  | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1 |
| 10-74         | 34   |                   |                       | NOT DETERMINED                         |
| 10-74         | 35   |                   |                       | NOT DETERMINED                         |
| 10-74         | 36   | 700               | 17.5                  | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1 |
| 11-74         | 37   |                   |                       | NOT DETERMINED                         |
| 10-74         | 38   | 550               | 7.7                   | ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1 |
| 10-74         | 39   |                   |                       | NOT DETERMINED                         |
| 10-74         | 40   |                   |                       | NOT DETERMINED                         |
| 10-74         | 41   |                   |                       | NOT DETERMINED                         |
| 10-74         | 42   |                   |                       | NOT DETERMINED                         |

|                    |     |          |                           |               |         |           |
|--------------------|-----|----------|---------------------------|---------------|---------|-----------|
| TOTAL RANGE        | 450 | - 4100   |                           |               |         | SAMPLE 47 |
| MEAN               |     | 595.9976 | AVERAGE DEVIATION         | 45.0665       |         |           |
| STANDARD DEVIATION |     | 63.3358  | 95 PCT.CONF.INTVL OF MEAN | 595.9976 +OR- | 35.0777 | SR        |



SAMPLE NO. 47