REPORT OF

ANALYTICAL EVALUATION PROGRAM

STANDARD REFERENCE WATER SAMPLES NUMBERS 40 AND 43

U.S. GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

Lakewood, Colorado

September 1973

STANDARD REFERENCE WATER SAMPLES NUMBERS 40 AND 43

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 46 laboratories for Standard Reference Water Samples numbers 40 and 43 distributed on July 20, 1973.

The "Instructions for Analysis and Reporting Results" specified only that the pH and/or alkalinity determinations be performed first. No other required order of performing the determinations, nor restriction on methods and equipment was given. This program operates as a quality-control tool to enable each laboratory to detect deficiencies. Participating laboratories are identified in this report 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 μm 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_2)
Calcium (Ca)
Magnesium (Mg)
Sodium (Na)
Potassium (K)
Bicarbonate (HCO_3)
Carbonate (CO_3)
Sulfate (SO_4)
Chloride (Cl)
Fluoride (F)
Bromide (Br)
Iodide (I)
Nitrate (as N)
Specific conductance (μmhos/cm at 25°C)
pH
Boron (B)
Arsenic (As)*
Strontium (Sr)

*Determined on Sample No. 43 only.

STATISTICAL EVALUATION

A statistical analysis of the data has established the most reliable estimate of the true value for each of the various determinations reported. Mathematical calculations are the same as those used previously.

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 ($\bar{X} \pm$ STD), and within two standard deviations ($\bar{X} \pm 2$ STD) are also given.

PARTICIPATING LABORATORIES

U.S. Geological Survey

ALABAMA, University
ALASKA, Anchorage
ARIZONA, Yuma
ARKANSAS, Little Rock
CALIFORNIA, Menlo Park
DISTRICT COLUMBIA, Washington
FLORIDA, Miami
FLORIDA, Ocala
FLORIDA, Tampa
LOUISIANA, Baton Rouge
NEVADA, Carson City
NEW YORK, Albany
OHIO, Columbus
PUERTO RICO, Ft. Buchanan
TEXAS, Austin
TEXAS, Fort Worth
TEXAS, Houston
UTAH, Salt Lake City
VIRGINIA, Richmond

Other

ALABAMA, University: Geological Survey of Alabama
ARIZONA, Tucson: University of Arizona
ARKANSAS, Little Rock: Department of Pollution Control and Ecology
COLORADO, Denver: Denver Water Board
COLORADO, Golden: Colorado School of Mines, Chemistry Department
DELAWARE, Newark: University of Delaware
FLORIDA, West Palm Beach: C & S Florida Flood Control District
GEORGIA, Athens: Soil Testing and Plant Analysis Laboratory
GEORGIA, Atlanta: Department of Natural Resources
KANSAS, Lawrence: Kansas Geological Survey
MISSOURI, Columbia: University of Missouri, Prof. Koirtyohann
MISSOURI, Jefferson City: Missouri Clean Water Commission
MISSOURI, Rolla: Missouri Geological Survey and Water Resources
MISSOURI, St. Louis: Metro St. Louis Sewer District

Other.--Continued

MONTANA, Butte: Montana Bureau of Mines and Geology
NEW MEXICO, Gallup: Bureau of Indian Affairs
NEW ZEALAND, Petone: Chemistry Division, DSIR
NORTH DAKOTA, Bismarck: North Dakota State Laboratories
OHIO, Dayton: The Miami Conservancy District
OKLAHOMA, Oklahoma City: Oklahoma Water Resources Board
PENNSYLVANIA, West Chester: Chester Co. Health Department
SOUTH CAROLINA, Columbia: Pollution Control Authority
SOUTH DAKOTA, Brookings: State WQ Laboratory
TENNESSEE, Chattanooga: Tennessee Valley Authority
VIRGINIA, Richmond: State Consolidated Laboratories
WASHINGTON, Olympia: Department of Ecology
WYOMING, Laramie: Department of Agriculture

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	4.0	28.7		OTHER
8-73	3				NOT DETERMINED
8-73	4	4.6	18.0		HETEROPOLY BLUE, APHA STD METH, 13ED, 1971
8-73	5				NOT DETERMINED
8-73	6	5.6	0.2		TECHNICON AUTOANALYZER, AMINONAPHTHOLSULFONIC ACID
8-73	7	7.5	33.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	8	5.0	10.9		TECHNICON AUTOANALYZER, MOLYBDOSILICATE
8-73	9	5.7	1.6		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	10	5.3	5.5		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	11				NOT DETERMINED
8-73	12				NOT DETERMINED
8-73	13				NOT DETERMINED
8-73	14				NOT DETERMINED
8-73	15	5.5	2.0		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	7.0	24.8		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	18				NOT DETERMINED
8-73	19				NOT DETERMINED
8-73	20	3.6	35.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	21				NOT DETERMINED
8-73	22	5.3	5.5		MOLYBDOSILICATE, APHA STD METH, 13ED, 1971
8-73	23	5.4	3.8		HETEROPOLY BLUE, APHA STD METH, 13ED, 1971
8-73	24	5.5	2.0		HETEROPOLY BLUE, APHA STD METH, 13ED, 1971
8-73	25	5.6	0.2		TECHNICON AUTOANALYZER, MOLYBDOSILICATE
8-73	26				NOT DETERMINED
8-73	27				NOT DETERMINED
8-73	28				NOT DETERMINED
8-73	29	5.6	0.2		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31				NOT DETERMINED
8-73	32	6.2	10.5		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	33	5.4	3.8		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	34	5.7	1.6		OTHER
8-73	35	5.9	5.1		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	36	5.7	1.6		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	37				NOT DETERMINED
8-73	39	5.8	3.4		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	40	2.4	57.2		OTHER
8-73	41	6.5	15.8		OTHER
8-73	42	5.7	1.6		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	43	11	96.0	REJECT	HETEROPOLY BLUE, APHA STD METH, 13ED, 1971
8-73	44	8.2	46.1		MOLYBDOSILICATE, 1972 ASTM PT23 D859-68
8-73	45	6.6	17.6		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	46	6.2	10.5		HETEROPOLY BLUE, APHA STD METH, 13ED, 1971
8-73	47				NOT DETERMINED

TOTAL RANGE 2.4 - 11

MEAN 5.6111 AVERAGE DEVIATION 0.7226 SAMPLE 40

STANDARD DEVIATION 1.1345 95 PCT.CONF.INTVL OF MEAN 5.6111 +OR- 0.4489 SIO2

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	26	1.5		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	3	27	2.3		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	4	26	1.5		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	5	27	2.3		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	6	26	1.5		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	7	25	5.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	8	26	1.5		OTHER
8-73	9	27	2.3		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	10	27	2.3		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	11	25	5.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	12	4.5	83.0	REJECT	COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	13				NOT DETERMINED
8-73	14	30	13.6		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	15	26	1.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	26	1.5		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	18	27	2.3		OTHER
8-73	19	16	39.4	REJECT	OTHER
8-73	20	25	5.3		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	21	18	31.8	REJECT	OTHER
8-73	22	26	1.5		OTHER
8-73	23	26	1.5		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	24	26	1.5		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	25	20	24.3	REJECT	OTHER
8-73	26	25	5.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	27	24	9.1		OTHER
8-73	28	26	1.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	29	27	2.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31	27	2.3		ATOMIC ABS-DIRECT, 1972 ASTM PT23 D2576-70
8-73	32	28	6.0		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	33	28	6.0		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	34	26	1.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	35	25	5.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	36	26	1.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	37	25	5.3		ATOMIC ABS-DIRECT, 1972 ASTM PT23 D2576-70
8-73	39	28	6.0		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	40	28	6.0		OTHER
8-73	41	28	6.0		OTHER
8-73	42	26	1.5		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	43	24	9.1		ATOMIC ABS-DIRECT, 1972 ASTM PT23 D2576-70
8-73	44	29	9.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	45	27	2.3		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	46				NOT DETERMINED
8-73	47	26	1.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1

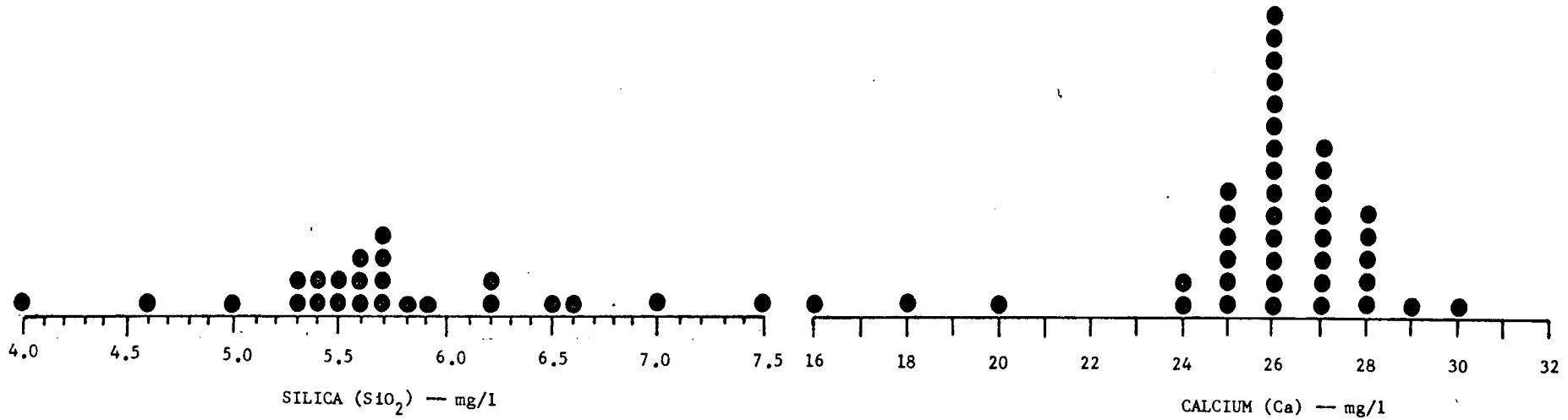
TOTAL RANGE	4.5 - 30				SAMPLE 40
MEAN	26.4052	AVERAGE DEVIATION	1.0226		
STANDARD DEVIATION	1.3008	95 PCT.CONF.INTVL OF MEAN	26.4052 +OR-	0.4322	CA

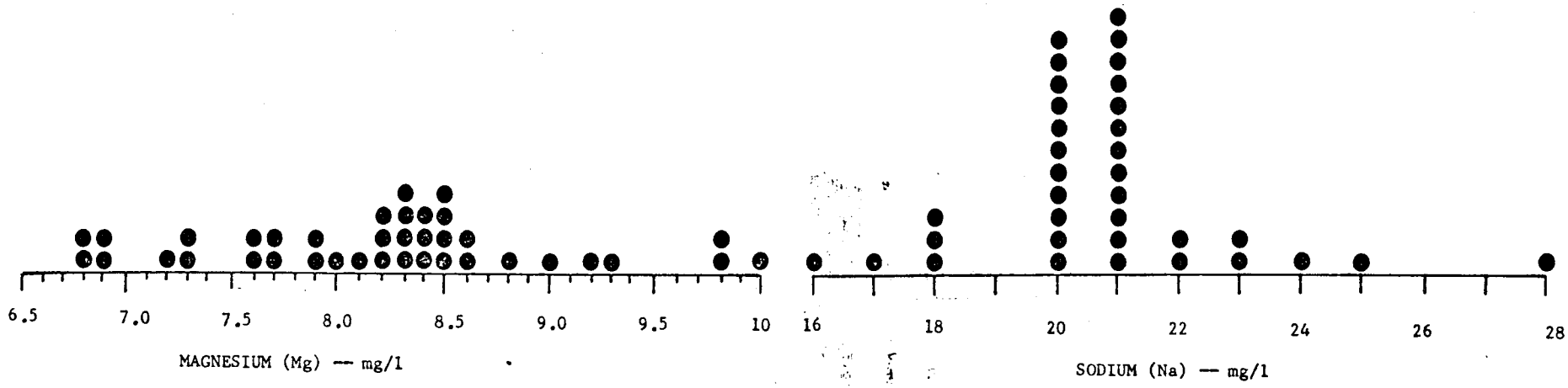
DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	9.0	7.8		CALCULATION, USGS TWRI BKS CH A1
8-73	3	11	31.8		CALCULATION, USGS TWRI BKS CH A1
8-73	4	8.3	0.5		OTHER
8-73	5	8.5	1.9		CALCULATION, USGS TWRI BKS CH A1
8-73	6	8.3	0.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	7	8.4	0.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	8	8.0	4.1		OTHER
8-73	9	8.2	1.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	10	6.9	17.3		CALCULATION, USGS TWRI BKS CH A1
8-73	11	7.6	8.9		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	12	6.8	18.5		CALCULATION, USGS TWRI BKS CH A1
8-73	13				NOT DETERMINED
8-73	14	11	31.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	15	8.8	5.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	8.5	1.9		CALCULATION, USGS TWRI BKS CH A1
8-73	18	7.9	5.3		CALCULATION, USGS TWRI BKS CH A1
8-73	19	9.8	17.4		OTHER
8-73	20	9.3	11.4		CALCULATION, USGS TWRI BKS CH A1
8-73	21	6.8	18.5		OTHER
8-73	22	6.9	17.3		OTHER
8-73	23	8.6	3.1		CALCULATION, USGS TWRI BKS CH A1
8-73	24	7.7	7.7		CALCULATION, USGS TWRI BKS CH A1
8-73	25	8.4	0.7		OTHER
8-73	26	7.9	5.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	27	10	19.8		OTHER
8-73	28	8.6	3.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	29	8.2	1.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31	8.3	0.5		ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971
8-73	32	8.2	1.7		CALCULATION, USGS TWRI BKS CH A1
8-73	33	9.2	10.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	34	8.4	0.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	35	8.1	2.9		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	36	8.5	1.9		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	37	7.3	12.5		ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971
8-73	39	7.2	13.7		CALCULATION, USGS TWRI BKS CH A1
8-73	40	7.3	12.5		OTHER
8-73	41	8.3	0.5		OTHER
8-73	42	8.5	1.9		CALCULATION, USGS TWRI BKS CH A1
8-73	43	9.8	17.4		ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971
8-73	44	7.6	8.9		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	45	7.7	7.7		CALCULATION, USGS TWRI BKS CH A1
8-73	46				NOT DETERMINED
8-73	47	90	978.5	REJECT	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1

TOTAL RANGE	6.8 - 90				SAMPLE 40
MEAN	8.3450	AVERAGE DEVIATION	0.7045		
STANDARD DEVIATION	0.9951	95 PCT.CONF.INTVL OF MEAN	8.3450 +OR-	0.3180	MG

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	28	36.4	REJECT	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	3	17	17.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	4	21	2.3		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	5	18	12.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	6	20	2.6		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	7	21	2.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	8	20	2.6		OTHER
8-73	9	20	2.6		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	10				NOT DETERMINED
8-73	11	20	2.6		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	12				NOT DETERMINED
8-73	13				NOT DETERMINED
8-73	14	23	12.0		FLAME PHOTOMETRIC, 1972 ASTM PT23 D1428-64(1971)
8-73	15	20	2.6		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	21	2.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	18				NOT DETERMINED
8-73	19	240	*****	REJECT	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	20	20	2.6		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	21	2.8	86.4	REJECT	FLAME PHOTOMETRIC, 1972 ASTM PT23 D1428-64(1971)
8-73	22	16	21.6		OTHER
8-73	23	20	2.6		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	24				NOT DETERMINED
8-73	25	22	7.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	26	22	7.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	27	18	12.3		OTHER
8-73	28	20	2.6		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	29	25	21.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31	21	2.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	32	21	2.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	33	20	2.6		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	34	21	2.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	35	21	2.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	36	20	2.6		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	37	23	12.0		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	39	20	2.6		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	40	21	2.3		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	41	21	2.3		OTHER
8-73	42	21	2.3		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	43	21	2.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	44	18	12.3		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	45	24	16.9		OTHER
8-73	46				NOT DETERMINED
8-73	47	21	2.3		OTHER

TOTAL RANGE	2.8 - 240					SAMPLE 40
MEAN	20.5322	AVERAGE DEVIATION	1.2599			
STANDARD DEVIATION	1.7886	95 PCT.CONF.INTVL OF MEAN	20.5322 +OR-	0.6227		NA


4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
SILICA (SiO_2) — mg/l
16
18
20
22
24
26
28
30
32
CALCIUM (Ca) — mg/l


6.5
7.0
7.5
8.0
8.5
9.0
9.5
10
MAGNESIUM (Mg) — mg/l
16
18
20
22
24
26
28
SODIUM (Na) — mg/l

SAMPLE NO. 40

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	3.7	71.8	REJECT	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	3	1.8	16.4		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	4	2.1	2.5		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	5	2.0	7.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	6	2.1	2.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	7	2.2	2.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	8	3.0	39.3		OTHER
8-73	9	1.8	16.4		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	10				NOT DETERMINED
8-73	11	2.3	6.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	12				NOT DETERMINED
8-73	13				NOT DETERMINED
8-73	14	2.0	7.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	15	2.7	25.4		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	2.3	6.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	18				NOT DETERMINED
8-73	19	3.6	67.2	REJECT	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	20	2.0	7.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	21	24	*****	REJECT	FLAME PHOTOMETRIC, 1972 ASTM PT23 D1428-64(1971)
8-73	22	2.2	2.2		OTHER
8-73	23	1.7	21.0		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	24				NOT DETERMINED
8-73	25	1.8	16.4		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	26	2.3	6.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	27	0.0	100.0	REJECT	OTHER
8-73	28	2.6	20.8		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	29	2.5	16.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31	2.1	2.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	32	2.6	20.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	33	1.9	11.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	34	2.1	2.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	35	2.4	11.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	36	2.1	2.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	37	2.2	2.2		OTHER
8-73	39	1.9	11.8		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	40	1.6	25.7		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	41	2.2	2.2		OTHER
8-73	42	1.7	21.0		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	43	2.4	11.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	44	2.3	6.8		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	45				NOT DETERMINED
8-73	46				NOT DETERMINED
8-73	47	2.0	7.1		OTHER

TOTAL RANGE 0.0 - 24 SAMPLE 40

MEAN 2.1531 AVERAGE DEVIATION 0.2439

STANDARD DEVIATION 0.3152 95 PCT.CONF.INTVL OF MEAN 2.1531 +OR- 0.1131 K

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1	74	2.1		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	2	75	3.5		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	3	76	4.9		INDICATOR, APHA STD METH, 13ED, 1971
8-73	4	63	13.1		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	5	62	14.5		INDICATOR, APHA STD METH, 13ED, 1971
8-73	6	75	3.5		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	7	75	3.5		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	8	69	4.8		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	9	75	3.5		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	10	74	2.1		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	11	61	15.8		INDICATOR, APHA STD METH, 13ED, 1971
8-73	12	113	55.9	REJECT	POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	13	74	2.1		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	14				NOT DETERMINED
8-73	15	75	3.5		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	16	72	0.7		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	17	80	10.4		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	18	76	4.9		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	19	53	26.9	REJECT	POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	20	70	3.4		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	21				NOT DETERMINED
8-73	22	69	4.8		INDICATOR, APHA STD METH, 13ED, 1971
8-73	23	76	4.9		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	24	61	15.8		INDICATOR, APHA STD METH, 13ED, 1971
8-73	25				NOT DETERMINED
8-73	26	76	4.9		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	27				NOT DETERMINED
8-73	28	72	0.7		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	29	77	6.2		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	30	74	2.1		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	31	74	2.1		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	32	76	4.9		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	33	78	7.6		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	34	79	9.0		FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS
8-73	35	72	0.7		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	36	70	3.4		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	37	74	2.1		OTHER
8-73	39	75	3.5		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	40	73	0.7		INDICATOR, APHA STD METH, 13ED, 1971
8-73	41	65	10.3		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	42	76	4.9		FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS
8-73	43	78	7.6		INDICATOR, APHA STD METH, 13ED, 1971
8-73	44	46	36.5	REJECT	POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	45	76	4.9		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	46	57	21.4		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	47				NOT DETERMINED

SAMPLE 40

TOTAL RANGE	46	- 113			
MEAN	72.4734	AVERAGE DEVIATION	4.1663		
STANDARD DEVIATION	5.4907	95 PCT.CONF.INTVL OF MEAN	72.4734 +OR-	1.8001	HCO3

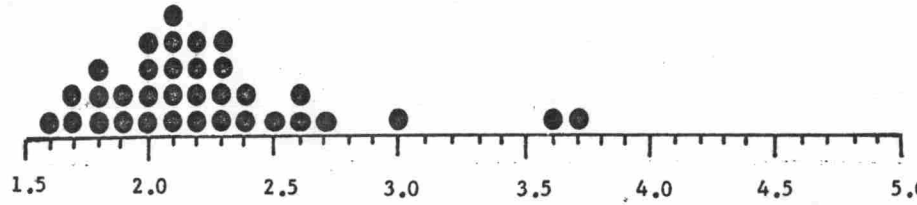
DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
8-73	1	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	2	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	3	0		INDICATOR, APHA STD METH, 13ED, 1971
8-73	4	0		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	5	0		INDICATOR, APHA STD METH, 13ED, 1971
8-73	6	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	7	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	8	0		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	9	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	10	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	11	0		INDICATOR, APHA STD METH, 13ED, 1971
8-73	12	6		REJECT POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	13	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
	14			NOT DETERMINED
8-73	15	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	16	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	17	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	18	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	19	0		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	20	2		REJECT ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
	21			NOT DETERMINED
8-73	22	4		REJECT INDICATOR, APHA STD METH, 13ED, 1971
8-73	23	0		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	24	0		INDICATOR, APHA STD METH, 13ED, 1971
	25			NOT DETERMINED
8-73	26	0		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
	27			NOT DETERMINED
8-73	28	0		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	29	1		REJECT ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	30	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	31	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	32	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	33	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	34	0		FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS
8-73	35	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	36	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	37	0		OTHER
8-73	39	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	40	0		INDICATOR, APHA STD METH, 13ED, 1971
8-73	41	4		REJECT ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	42	0		FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS
8-73	43	0		INDICATOR, APHA STD METH, 13ED, 1971
8-73	44	0		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
7-73	45	0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
	46			NOT DETERMINED
	47			NOT DETERMINED

TOTAL RANGE 0 - 6 SAMPLE 40
MEAN 0 CO_3

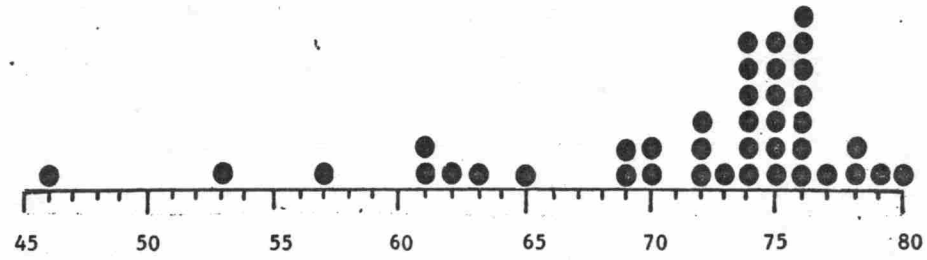
DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	64	35.3	REJECT	VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	3	52	10.0		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	4	48	1.5		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	5	52	10.0		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	6	47	0.6		TECHNICON AUTOANALYZER, TURBIDIMETRIC-BARIUM CHLORIDE
8-73	7	47	0.6		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	8	50	5.7		OTHER
8-73	9	49	3.6		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	10	48	1.5		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	11	46	2.7		GRAVIMETRIC, APHA STD METH, 13ED, 1971
8-73	12	41	13.3		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	13				NOT DETERMINED
8-73	14	0.0	100.0	REJECT	OTHER
8-73	15	47	0.6		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	46	2.7		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	18				NOT DETERMINED
8-73	19	37	21.8		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	20	43	9.1		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	21	7.0	85.2	REJECT	TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	22	47	0.6		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	23	59	24.8		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	24	53	12.1		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	25				NOT DETERMINED
8-73	26	42	11.2		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	27				NOT DETERMINED
8-73	28	38	19.7		GRAVIMETRIC, APHA STD METH, 13ED, 1971
8-73	29	46	2.7		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31	46	2.7		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	32	46	2.7		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	33	48	1.5		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	34	47	0.6		OTHER
8-73	35	46	2.7		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	36	46	2.7		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	37				NOT DETERMINED
8-73	39	47	0.6		GRAVIMETRIC, APHA STD METH, 13ED, 1971
8-73	40	53	12.1		GRAVIMETRIC, APHA STD METH, 13ED, 1971
8-73	41	48	1.5		OTHER
8-73	42	52	10.0		FISHER TITRALIZER, THORIN, USGS
8-73	43	47	0.6		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	44	50	5.7		GRAVIMETRIC, 1972 ASTM PT23 D516-68
8-73	45	50	5.7		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	46	44	7.0		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	47				NOT DETERMINED

TOTAL RANGE 0.0 - 64 SAMPLE 40

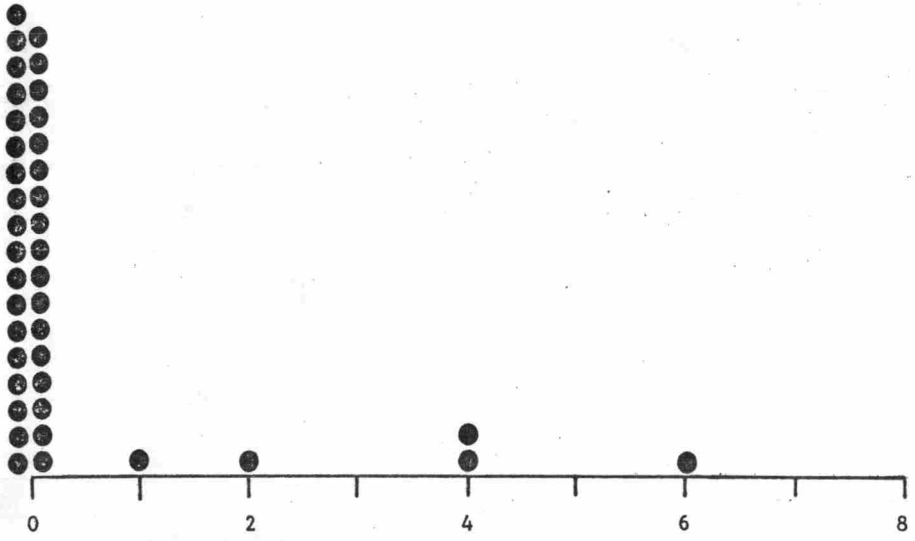
MEAN	47.2939	AVERAGE DEVIATION	2.9342
STANDARD DEVIATION	4.2535	95 PCT.CONF.INTVL OF MEAN	47.2939 +OR- 1.4808 SO4



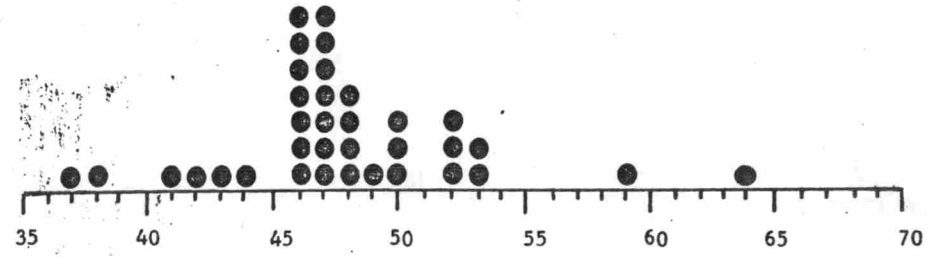
POTASSIUM (K) -- mg/1



BICARBONATE (HCO_3) -- mg/1



CARBONATE (CO_3) -- mg/1



SULFATE (SO_4) -- mg/1

SAMPLE NO. 40

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1	26	1.0		MOHR, USGS TWRI BK5 CH A1
8-73	2	26	1.0		MOHR, USGS TWRI BK5 CH A1
8-73	3	29	10.5		SILVER NITRATE, 1972 ASTM PT23 D512-67
8-73	4	26	1.0		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	5	30	14.3		MERCURIMETRIC, 1972 ASTM PT23 D512-67
8-73	6	25	4.8		TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
8-73	7	25	4.8		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	8	26	1.0		OTHER
8-73	9	27	2.8		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	10	25	4.8		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	11	22	16.2		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	12	2.8	89.3	REJECT	MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	13				NOT DETERMINED
8-73	14				NOT DETERMINED
8-73	15	26	1.0		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	26	1.0		MOHR, USGS TWRI BK5 CH A1
8-73	18	26	1.0		MOHR, USGS TWRI BK5 CH A1
8-73	19	27	2.8		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	20	26	1.0		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	21	26	1.0		SILVER NITRATE, 1972 ASTM PT23 D512-67
8-73	22	26	1.0		OTHER
8-73	23	6.0	77.1	REJECT	MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	24	25	4.8		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	25	24	8.6		TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
8-73	26	27	2.8		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	27	14	46.7	REJECT	OTHER
8-73	28	24	8.6		OTHER
8-73	29	24	8.6		MOHR, USGS TWRI BK5 CH A1
8-73	30	30	14.3		MOHR, USGS TWRI BK5 CH A1
8-73	31	26	1.0		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	32	26	1.0		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	33	28	6.6		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	34	26	1.0		OTHER
8-73	35	27	2.8		MOHR, USGS TWRI BK5 CH A1
8-73	36	26	1.0		MOHR, USGS TWRI BK5 CH A1
8-73	37	31	18.1		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	39	27	2.8		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	40	28	6.6		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	41	26	1.0		MOHR, USGS TWRI BK5 CH A1
8-73	42	27	2.8		OTHER
8-73	43	26	1.0		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	44	26	1.0		TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
8-73	45	25	4.8		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	46	25	4.8		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	47				NOT DETERMINED

TOTAL RANGE	2.8 - 31				SAMPLE 40
MEAN	26.2562	AVERAGE DEVIATION	1.1755		
STANDARD DEVIATION	1.7125	95 PCT.CONF.INTVL OF MEAN	26.2562 +OR-	0.5542	CL

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	0.7	9.5		OTHER
8-73	3	0.6	6.2		ION-SELECTIVE ELECTRODE, 1972 ASTM PT23 D1179-72
8-73	4	0.0	100.0	REJECT	SPADNS, APHA STD METH, 13ED, 1971
8-73	5	0.5	21.8		SPADNS, APHA STD METH, 13ED, 1971
8-73	6	0.8	25.1		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	7	0.7	9.5		ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
8-73	8	0.6	6.2		OTHER
8-73	9	0.5	21.8		ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
8-73	10	0.6	6.2		ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
8-73	11	0.6	6.2		ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	12	0.6	6.2		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	13				NOT DETERMINED
8-73	14				NOT DETERMINED
8-73	15	0.7	9.5		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	0.6	6.2		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	18				NOT DETERMINED
8-73	19	0.6	6.2		ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	20	0.6	6.2		ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
8-73	21	1.5	134.6	REJECT	ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	22	0.6	6.2		OTHER
8-73	23	1.5	134.6	REJECT	ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	24				NOT DETERMINED
8-73	25				NOT DETERMINED
8-73	26	0.6	6.2		TECHNICON AUTOANALYZER, SPADNS WITH DISTILLATION
8-73	27				NOT DETERMINED
8-73	28	0.9	40.8		ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	29	0.6	6.2		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31	0.8	25.1		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	32	0.6	6.2		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	33	0.6	6.2		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	34	0.7	9.5		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	35	0.7	9.5		SPADNS, USGS
8-73	36	0.7	9.5		SPADNS, USGS
8-73	37	0.6	6.2		ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	39	0.6	6.2		SPADNS, APHA STD METH, 13ED, 1971
8-73	40	0.6	6.2		ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	41	0.7	9.5		SPADNS, APHA STD METH, 13ED, 1971
8-73	42	0.6	6.2		ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
8-73	43	0.8	25.1		SPADNS, APHA STD METH, 13ED, 1971
8-73	44	0.5	21.8		ION-SELECTIVE ELECTRODE, 1972 ASTM PT23 D1179-72
8-73	45	0.6	6.2		ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
8-73	46	0.6	6.2		SPADNS, APHA STD METH, 13ED, 1971
8-73	47				NOT DETERMINED

TOTAL RANGE 0.0 - 1.5 SAMPLE 40

MEAN 0.6394 AVERAGE DEVIATION 0.0707

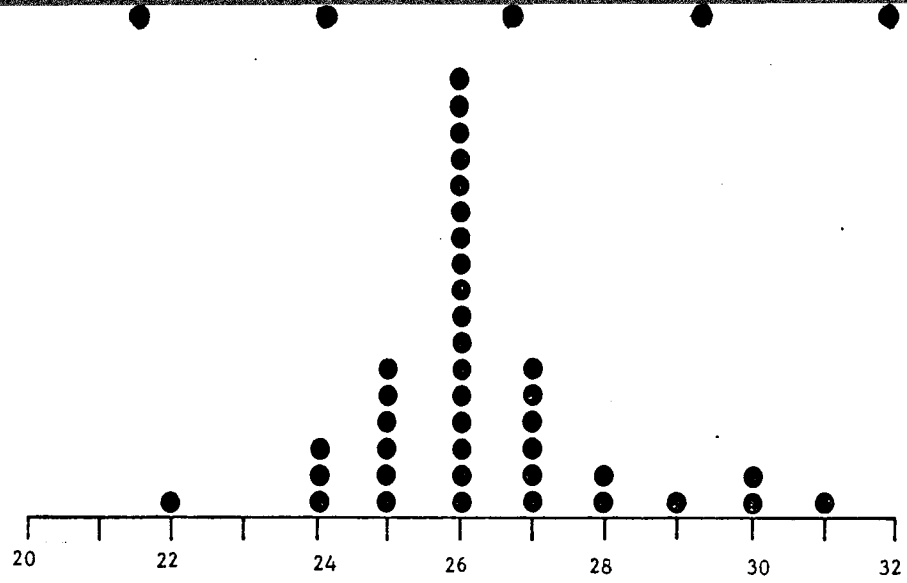
STANDARD DEVIATION 0.0899 95 PCT.CONF.INTVL OF MEAN 0.6394 +OR- 0.0318 F

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
8-73	4	0.32	19.6	OTHER
8-73	7	0.0	100.0	CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
8-73	9	0.098	75.7	CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
8-73	29	0.90	123.5	CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
8-73	32	0.40	0.7	CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
8-73	34	0.10	75.2	CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
8-73	35	1.20	198.0	CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
8-73	40	0.20	50.3	OTHER

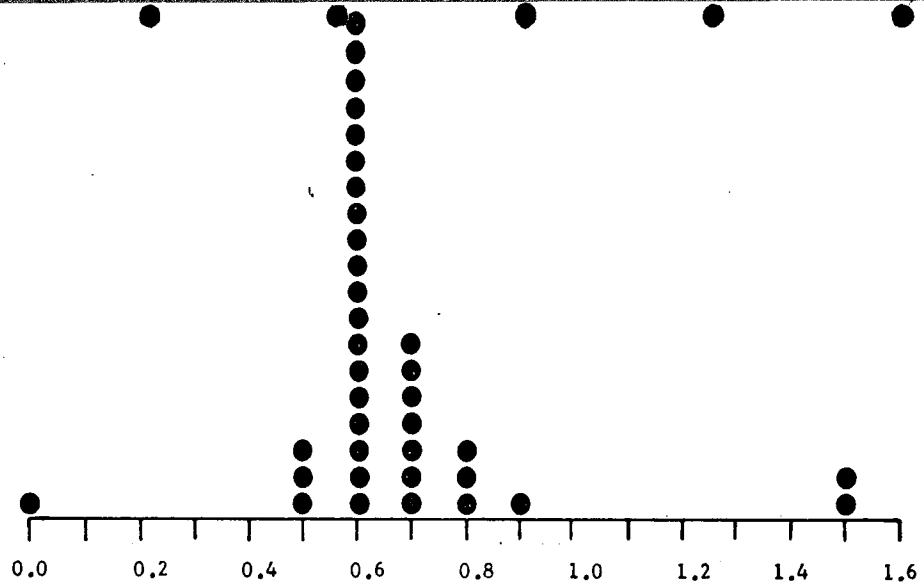
TOTAL RANGE	0.0	-	1.20				SAMPLE 40
MEAN		0.4027	AVERAGE DEVIATION		0.3236		
STANDARD DEVIATION		0.4271	95 PCT.CONF.INTVL OF MEAN		0.4027 +OR-	0.3571	BR

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	4	0.038	111.1		OTHER
8-73	7	0.0	100.0		OTHER
8-73	9	0.030	66.7		CERIC-ARSENIOUS OXIDATION, USGS TWRI BK5 CH A1
8-73	29	0.30	*****	REJECT	CERIC-ARSENIOUS OXIDATION, USGS TWRI BK5 CH A1
8-73	32	0.0	100.0		OTHER
8-73	34	0.040	122.2		CERIC-ARSENIOUS OXIDATION, USGS TWRI BK5 CH A1
8-73	35	0.0	100.0		CERIC-ARSENIOUS OXIDATION, USGS TWRI BK5 CH A1
8-73	40			NOT DETERMINED	

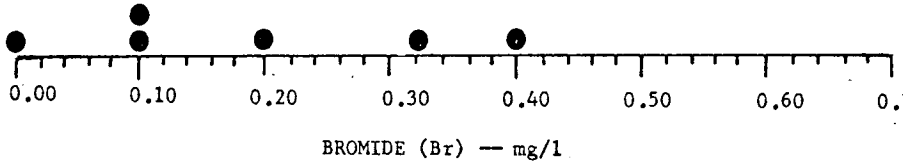
TOTAL RANGE	0.0	-	0.30				SAMPLE 40
MEAN	0.0180	AVERAGE DEVIATION	0.0180				
STANDARD DEVIATION	0.0200	95 PCT.CONF.INTVL OF MEAN	0.0180	+OR-	0.0210	I	



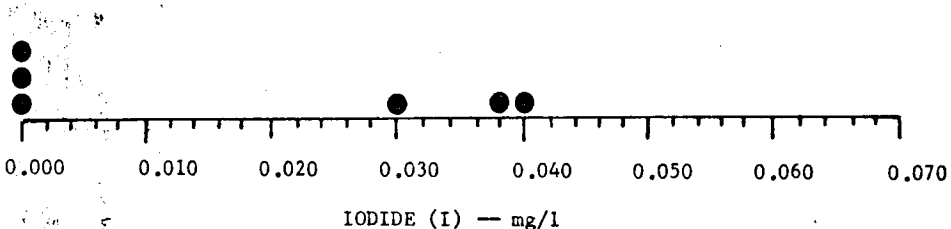
CHLORIDE (Cl) — mg/l



FLUORIDE (F) — mg/l



BROMIDE (Br) — mg/l



IODIDE (I) — mg/l

SAMPLE NO. 40

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1	0.2	5.1		TECHNICON AUTOANALYZER, CADMIUM REDUCTION
8-73	2				NOT DETERMINED
8-73	3	0.2	5.1		PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	4	0.7	267.8	REJECT	BRUCINE, APHA STD METH, 13ED, 1971
8-73	5	0.2	5.1		BRUCINE, APHA STD METH, 13ED, 1971
8-73	6	0.2	5.1		TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION
8-73	7	0.2	5.1		BRUCINE, USGS TWRI, BK5 CH A1
8-73	8	0.2	5.1		TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION
8-73	9	0.2	5.1		BRUCINE, USGS TWRI, BK5 CH A1
8-73	10	0.2	5.1		BRUCINE, USGS TWRI, BK5 CH A1
8-73	11	0.2	5.1		BRUCINE, APHA STD METH, 13ED, 1971
8-73	12	0.2	5.1		BRUCINE, USGS TWRI, BK5 CH A1
8-73	13				NOT DETERMINED
8-73	14				NOT DETERMINED
8-73	15	0.2	5.1		BRUCINE, USGS TWRI, BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	0.2	5.1		BRUCINE, USGS TWRI, BK5 CH A1
8-73	18				NOT DETERMINED
8-73	19	0.2	5.1		BRUCINE, APHA STD METH, 13ED, 1971
8-73	20	0.1	47.5		BRUCINE, USGS TWRI, BK5 CH A1
8-73	21	0.1	47.5		TECHNICON AUTOANALYZER, CADMIUM REDUCTION
8-73	22	0.6	215.3	REJECT	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	23	0.2	5.1		TECHNICON AUTOANALYZER, CADMIUM REDUCTION
8-73	24	0.2	5.1		OTHER
8-73	25	0.2	5.1		TECHNICON AUTOANALYZER, CADMIUM REDUCTION
8-73	26	0.2	5.1		OTHER
8-73	27	1.6	740.7	REJECT	OTHER
8-73	28	86	*****	REJECT	OTHER
8-73	29	0.3	57.6		BRUCINE, USGS TWRI, BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31				NOT DETERMINED
8-73	32	0.2	5.1		BRUCINE, USGS TWRI, BK5 CH A1
8-73	33	0.2	5.1		PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	34	0.1	47.5		TECHNICON AUTOANALYZER, CADMIUM REDUCTION
8-73	35	0.2	5.1		BRUCINE, USGS TWRI, BK5 CH A1
8-73	36	0.2	5.1		PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	37				NOT DETERMINED
8-73	39	0.1	47.5		PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	40	0.6	215.3	REJECT	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	41	0.2	5.1		OTHER
8-73	42	0.6	215.3	REJECT	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	43	0.2	5.1		BRUCINE, APHA STD METH, 13ED, 1971
8-73	44	0.1	47.5		TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION
8-73	45	0.2	5.1		BRUCINE, USGS TWRI, BK5 CH A1
8-73	46	0.3	57.6		TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION
8-73	47				NOT DETERMINED

TOTAL RANGE 0.1 - 86

SAMPLE 40

MEAN	0.1903	AVERAGE DEVIATION	0.0291
STANDARD DEVIATION	0.0473	95 PCT.CONF.INTVL OF MEAN	0.1903 +OR- 0.0173 NO3-N

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1	312	0.7		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	2	313	1.0		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	3	310	0.0		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	4	312	0.7		WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	5	300	3.2		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	6	307	0.9		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	7	312	0.7		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	8	320	3.3		OTHER
8-73	9	317	2.3		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	10	326	5.2		OTHER
8-73	11	286	7.7		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	12	330	6.5		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	13	313	1.0		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	14				NOT DETERMINED
8-73	15	315	1.7		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	16	307	0.9		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	17	309	0.3		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	18	315	1.7		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	19	300	3.2		WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	20	305	1.6		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	21	303	2.2		WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	22				NOT DETERMINED
8-73	23	270	12.9	REJECT	WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	24	290	6.4		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	25				NOT DETERMINED
8-73	26	300	3.2		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	27	270	12.9	REJECT	WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	28				NOT DETERMINED
8-73	29	311	0.4		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	30	310	0.0		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	31	310	0.0		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	32	310	0.0		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	33	302	2.5		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	34	314	1.3		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	35	313	1.0		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	36	306	1.2		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	37	370	19.4	REJECT	WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	39	313	1.0		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	40	320	3.3		WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	41	310	0.0		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	42	316	2.0		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	43	306	1.2		WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	44	295	4.8		OTHER
8-73	45	310	0.0		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	46	327	5.5		WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	47				NOT DETERMINED

TOTAL RANGE 270 - 370 SAMPLE 40

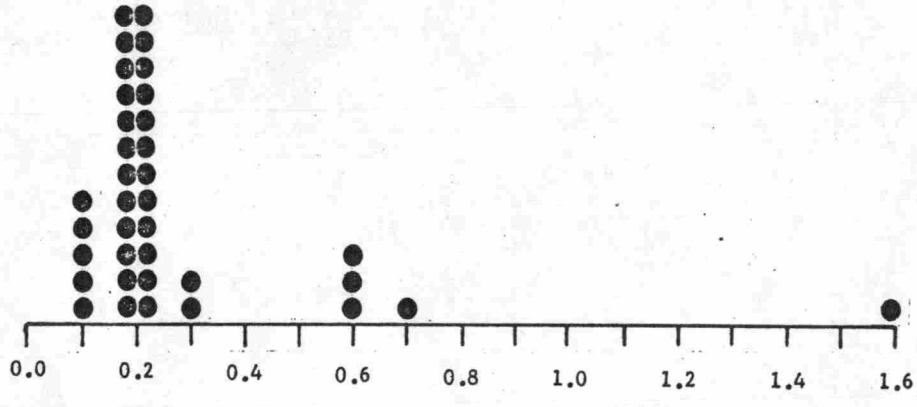
MEAN 309.8657 AVERAGE DEVIATION 6.4300

STANDARD DEVIATION 9.0559 95 PCT.CONF.INTVL OF MEAN 309.8657 +OR- 2.9690 SP.COND

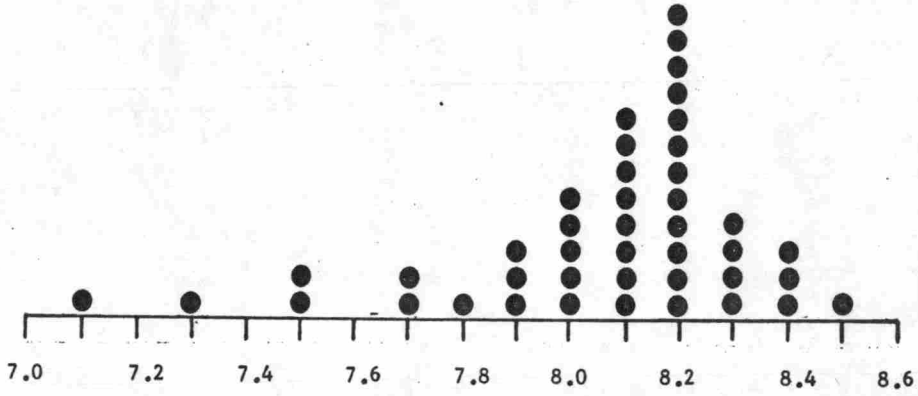
DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1	8.1	0.0		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	2	8.0	1.2		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	3	8.2	1.3		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	4	7.7	4.9		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	5	8.2	1.3		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	6	8.3	2.5		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	7	8.2	1.3		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	8	7.5	7.4		OTHER
8-73	9	8.0	1.2		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	10	7.8	3.7		OTHER
8-73	11	7.5	7.4		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	12	8.4	3.7		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	13	8.2	1.3		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	14				NOT DETERMINED
8-73	15	8.1	0.0		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	16	8.2	1.3		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	17	8.2	1.3		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	18	8.3	2.5		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	19	8.1	0.0		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	20	8.4	3.7		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	21	7.9	2.4		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	22	8.2	1.3		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	23	7.9	2.4		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	24	7.3	9.8	REJECT	INSTRUMENT, USGS TWRI BK5 CH A1
8-73	25				NOT DETERMINED
8-73	26	8.2	1.3		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	27	8.2	1.3		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	28	8.1	0.0		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	29	8.2	1.3		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	30	8.3	2.5		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	31	8.0	1.2		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	32	8.1	0.0		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	33	7.1	12.3	REJECT	INSTRUMENT, USGS TWRI BK5 CH A1
8-73	34	8.0	1.2		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	35	7.7	4.9		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	36	7.9	2.4		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	37	8.4	3.7		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	39	8.1	0.0		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	40	8.3	2.5		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	41	8.5	5.0		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	42	8.1	0.0		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	43	8.0	1.2		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	44	8.2	1.3		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	45	8.1	0.0		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	46	8.2	1.3		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	47				NOT DETERMINED

TOTAL RANGE 7.1 - 8.5 SAMPLE 40

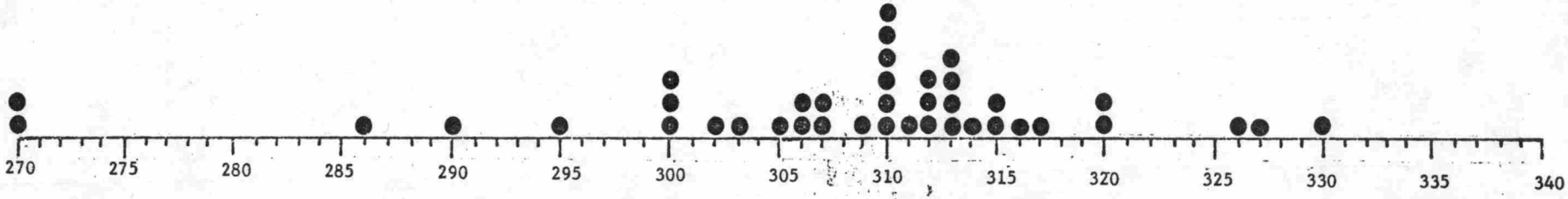
MEAN	8.0975	AVERAGE DEVIATION	0.1643		
STANDARD DEVIATION	0.2242	95 PCT.CONF.INTVL OF MEAN	8.0975 +OR-	0.0707	PH



NITRATE (as N) — mg/l



pH



SPECIFIC CONDUCTANCE — micromhos/cm at 25°C

SAMPLE NO. 40

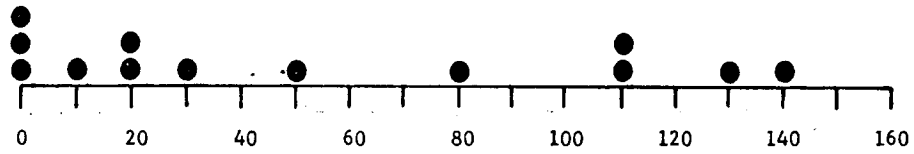
DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2				NOT DETERMINED
8-73	3				NOT DETERMINED
8-73	4	130	152.8		CURCUMIN, APHA STD METH, 13ED, 1971
8-73	5				NOT DETERMINED
8-73	6	20	61.1		CURCUMIN, APHA STD METH, 13ED, 1971
8-73	7				NOT DETERMINED
8-73	8				NOT DETERMINED
8-73	9	30	41.7		DIANTHRIMIDE, USGS BK5 CH A1
8-73	10				NOT DETERMINED
8-73	11				NOT DETERMINED
8-73	12	80	55.6		CARMINE, USGS BK5 CH A1
8-73	13				NOT DETERMINED
8-73	14				NOT DETERMINED
8-73	15				NOT DETERMINED
8-73	16				NOT DETERMINED
8-73	17				NOT DETERMINED
8-73	18				NOT DETERMINED
8-73	19				NOT DETERMINED
8-73	20				NOT DETERMINED
8-73	21	0	100.0		OTHER
8-73	22				NOT DETERMINED
8-73	23				NOT DETERMINED
8-73	24				NOT DETERMINED
8-73	25				NOT DETERMINED
8-73	26				NOT DETERMINED
8-73	27	10	80.6		CARMINE, 1972 ASTM PT23 D3082-72T
8-73	28				NOT DETERMINED
8-73	29	20	61.1		DIANTHRIMIDE, USGS BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31				NOT DETERMINED
8-73	32	110	113.9		CARMINE, USGS BK5 CH A1
8-73	33				NOT DETERMINED
8-73	34	50	2.8		DIANTHRIMIDE, USGS BK5 CH A1
8-73	35	0	100.0		DIANTHRIMIDE, USGS BK5 CH A1
8-73	36	0	100.0		DIANTHRIMIDE, USGS BK5 CH A1
8-73	37				NOT DETERMINED
8-73	39	20	61.1		CARMINE, APHA STD METH, 13ED, 1971
8-73	40	140	172.2		CARMINE, APHA STD METH, 13ED, 1971
8-73	41				NOT DETERMINED
8-73	42	650	*****	REJECT	CARMINE, USGS BK5 CH A1
8-73	43	110	113.9		CURCUMIN, APHA STD METH, 13ED, 1971
8-73	44				NOT DETERMINED
8-73	45				NOT DETERMINED
8-73	46				NOT DETERMINED
8-73	47				NOT DETERMINED

SAMPLE 40

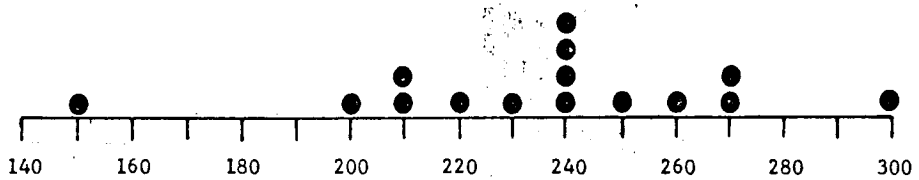
TOTAL RANGE	0 - 650				
MEAN	51.4284	AVERAGE DEVIATION	44.6938		
STANDARD DEVIATION	51.7177	95 PCT.CONF.INTVL OF MEAN	51.4284 +OR-	29.8558	B

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2				NOT DETERMINED
8-73	3				NOT DETERMINED
8-73	4	100	57.5	REJECT	OTHER
8-73	5	150	36.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	6	270	14.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	7	220	6.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	8	270	14.7		OTHER
8-73	9	230	2.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	10				NOT DETERMINED
8-73	11				NOT DETERMINED
8-73	12				NOT DETERMINED
8-73	13				NOT DETERMINED
8-73	14				NOT DETERMINED
8-73	15				NOT DETERMINED
8-73	16				NOT DETERMINED
8-73	17				NOT DETERMINED
8-73	18				NOT DETERMINED
8-73	19				NOT DETERMINED
8-73	20	210	10.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	21	0	100.0	REJECT	OTHER
8-73	22				NOT DETERMINED
8-73	23				NOT DETERMINED
8-73	24				NOT DETERMINED
8-73	25				NOT DETERMINED
8-73	26				NOT DETERMINED
8-73	27	200	15.0		OTHER
8-73	28	250	6.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	29	240	2.0		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31				NOT DETERMINED
8-73	32	240	2.0		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	33				NOT DETERMINED
8-73	34	260	10.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	35				NOT DETERMINED
8-73	36	240	2.0		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	37				NOT DETERMINED
8-73	39	210	10.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	40				NOT DETERMINED
8-73	41	300	27.5		OTHER
8-73	42				NOT DETERMINED
8-73	43				NOT DETERMINED
8-73	44				NOT DETERMINED
8-73	45				NOT DETERMINED
8-73	46				NOT DETERMINED
8-73	47	240	2.0		OTHER

TOTAL RANGE	0 - 300			SAMPLE 40
MEAN	235.3331	AVERAGE DEVIATION	25.5999	
STANDARD DEVIATION	35.4292	95 PCT.CONF.INTVL OF MEAN	235.3331 +OR- 19.6220	SR



BORON (B) — µg/l



STRONTIUM (Sr) — µg/l

SAMPLE NO. 40

DETERMINATION	NO.LABS REPORTING	PCT. OF VALUES REJECTED	PCT. OF UNREJECTED VALUES WITHIN 95 PCT. CI	X +OR- STD	X +OR- 2STD
SIO2	28	4	56	78	93
CA	41	10	38	59	97
MG	41	2	43	70	95
NA	37	8	68	74	94
K	36	11	28	66	97
HCO3	41	7	26	74	92
SO4	37	8	53	68	91
CL	42	7	44	74	90
F	36	8	0	79	97
NO3-N	37	16	77	77	94
SP.COND	41	7	34	71	92
PH	43	5	20	78	95
B	15	7	21	71	100
SR	17	12	47	87	93
BR	8	0	63	75	100
I	7	14	83	67	100

SAMPLE 40

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	7.0	23.4		OTHER
8-73	3				NOT DETERMINED
8-73	4	7.6	16.8		HETEROPOLY BLUE, APHA STD METH, 13ED, 1971
8-73	5				NOT DETERMINED
8-73	6	8.9	2.6		TECHNICON AUTOANALYZER, AMINONAPHTHOLSULFONIC ACID
8-73	7	12	31.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	8	8.1	11.3		TECHNICON AUTOANALYZER, MOLYBDOSILICATE
8-73	9	9.4	2.9		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	10	8.4	8.1		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	11				NOT DETERMINED
8-73	12				NOT DETERMINED
8-73	13				NOT DETERMINED
8-73	14				NOT DETERMINED
8-73	15	8.8	3.7		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	11	20.4		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	18				NOT DETERMINED
8-73	19				NOT DETERMINED
8-73	20	7.3	20.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	21				NOT DETERMINED
8-73	22	8.6	5.9		MOLYBDOSILICATE, APHA STD METH, 13ED, 1971
8-73	23	8.0	12.4		HETEROPOLY BLUE, APHA STD METH, 13ED, 1971
8-73	24	11	20.4		HETEROPOLY BLUE, APHA STD METH, 13ED, 1971
8-73	25	9.2	0.7		TECHNICON AUTOANALYZER, MOLYBDOSILICATE
8-73	26				NOT DETERMINED
8-73	27				NOT DETERMINED
8-73	28				NOT DETERMINED
8-73	29	9.2	0.7		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31				NOT DETERMINED
8-73	32	9.9	8.4		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	33	8.9	2.6		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	34	9.4	2.9		OTHER
8-73	35	9.1	0.4		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	36	8.9	2.6		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	37				NOT DETERMINED
8-73	39	8.9	2.6		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	40	2.4	73.7	REJECT	OTHER
8-73	41	11	20.4		OTHER
8-73	42	8.7	4.8		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	43	17	86.1	REJECT	HETEROPOLY BLUE, APHA STD METH, 13ED, 1971
8-73	44	14	53.2	REJECT	MOLYBDOSILICATE, 1972 ASTM PT23 D859-68
8-73	45	9.7	6.2		MOLYBDATE BLUE, USGS TWRI BK5 CH A1
8-73	46	9.4	2.9		HETEROPOLY BLUE, APHA STD METH, 13ED, 1971
8-73	47				NOT DETERMINED

SAMPLE 43

TOTAL RANGE	2.4 - 17				
MEAN	9.1360	AVERAGE DEVIATION	0.8563		
STANDARD DEVIATION	1.1860	95 PCT.CONF.INTVL OF MEAN	9.1360 +OR-	0.4896	SIO2

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	3.8	2.3		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	3	4.0	7.6		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	4	3.2	13.9		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	5	4.0	7.6		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	6	3.6	3.1		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	7	8.0	115.3	REJECT	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	8	4.0	7.6		OTHER
8-73	9	4.0	7.6		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	10	4.8	29.2		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	11	3.7	0.4		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	12	41	*****	REJECT	COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	13				NOT DETERMINED
8-73	14	5.7	53.4		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	15	3.8	2.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	4.0	7.6		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	18	4.1	10.3		OTHER
8-73	19	0.4	89.2	REJECT	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	20	3.8	2.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	21	1.2	67.7		OTHER
8-73	22	2.6	30.0		OTHER
8-73	23	3.2	13.9		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	24	4.0	7.6		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	25	2.8	24.6		OTHER
8-73	26	3.4	8.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	27	3.4	8.5		OTHER
8-73	28	3.4	8.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	29	4.0	7.6		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31	4.0	7.6		ATOMIC ABS-DIRECT, 1972 ASTM PT23 D2576-70
8-73	32	4.0	7.6		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	33	4.2	13.0		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	34	3.7	0.4		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	35	3.5	5.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	36	3.6	3.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	37	1.4	62.3		ATOMIC ABS-DIRECT, 1972 ASTM PT23 D2576-70
8-73	39	4.2	13.0		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	40	6.0	61.5		OTHER
8-73	41	3.9	5.0		OTHER
8-73	42	4.0	7.6		EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
8-73	43	3.2	13.9		ATOMIC ABS-DIRECT, 1972 ASTM PT23 D2576-70
8-73	44	3.0	19.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	45	4.2	13.0		COMPLEXOMETRIC, USGS TWRI BK5 CH A1
8-73	46				NOT DETERMINED
8-73	47	3.8	2.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1

TOTAL RANGE 0.4 - 41 SAMPLE 43

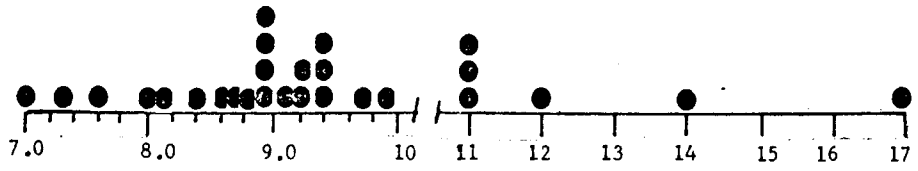
MEAN	3.7158	AVERAGE DEVIATION	0.5554		
STANDARD DEVIATION	0.8623	95 PCT.CONF.INTVL OF MEAN	3.7158 +OR-	0.2827	CA

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	0.6	31.7		CALCULATION, USGS TWRI BKS CH A1
8-73	3	0.2	56.1		CALCULATION, USGS TWRI BKS CH A1
8-73	4	1.0	119.5		OTHER
8-73	5	2.4	426.8	REJECT	CALCULATION, USGS TWRI BKS CH A1
8-73	6	0.4	12.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	7	0.4	12.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	8	0.4	12.2		OTHER
8-73	9	0.5	9.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	10	0.2	56.1		CALCULATION, USGS TWRI BKS CH A1
8-73	11	0.6	31.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	12	62	*****	REJECT	CALCULATION, USGS TWRI BKS CH A1
8-73	13				NOT DETERMINED
8-73	14	7.0	*****	REJECT	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	15	0.6	31.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	0.2	56.1		CALCULATION, USGS TWRI BKS CH A1
8-73	18	0.2	56.1		CALCULATION, USGS TWRI BKS CH A1
8-73	19	0.5	9.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	20	0.4	12.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	21	1.0	119.5		OTHER
8-73	22	0.6	31.7		OTHER
8-73	23	1.4	207.3	REJECT	CALCULATION, USGS TWRI BKS CH A1
8-73	24	0.0	100.0		CALCULATION, USGS TWRI BKS CH A1
8-73	25	0.4	12.2		OTHER
8-73	26	0.4	12.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	27	0.0	100.0		OTHER
8-73	28	0.4	12.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	29	0.5	9.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31	0.5	9.8		ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971
8-73	32	0.4	12.2		CALCULATION, USGS TWRI BKS CH A1
8-73	33	1.1	141.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	34	0.4	12.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	35	0.6	31.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	36	0.5	9.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	37	0.4	12.2		ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971
8-73	39	0.6	31.7		CALCULATION, USGS TWRI BKS CH A1
8-73	40	0.0	100.0		OTHER
8-73	41	0.5	9.8		OTHER
8-73	42	0.5	9.8		CALCULATION, USGS TWRI BKS CH A1
8-73	43	0.5	9.8		ATOMIC ABS-DIRECT, APHA STD METH, 13ED, 1971
8-73	44	0.5	9.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	45	0.4	12.2		CALCULATION, USGS TWRI BKS CH A1
8-73	46				NOT DETERMINED
8-73	47	5.0	997.6	REJECT	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1

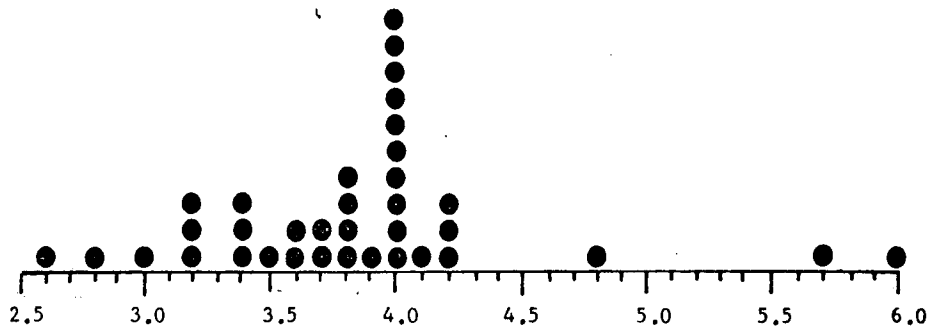
TOTAL RANGE	0.0 - 62				SAMPLE 43
MEAN	0.4556	AVERAGE DEVIATION	0.1667		
STANDARD DEVIATION	0.2431	95 PCT.CONF.INTVL OF MEAN	0.4556 +OR-	0.0823	MG

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	220	1.1		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	3	170	21.9		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	4	220	1.1		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	5	200	8.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	6	220	1.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	7	230	5.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	8	200	8.1		OTHER
8-73	9	220	1.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	10				NOT DETERMINED
8-73	11	200	8.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	12				NOT DETERMINED
8-73	13				NOT DETERMINED
8-73	14	230	5.7		FLAME PHOTOMETRIC, 1972 ASTM PT23 D1428-64(1971)
8-73	15	220	1.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	220	1.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	18				NOT DETERMINED
8-73	19	18	91.7	REJECT	OTHER
8-73	20	200	8.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	21	230	5.7		FLAME PHOTOMETRIC, 1972 ASTM PT23 D1428-64(1971)
8-73	22	170	21.9		OTHER
8-73	23	180	17.3		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	24				NOT DETERMINED
8-73	25	240	10.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	26	240	10.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	27	150	31.1	REJECT	OTHER
8-73	28	210	3.5		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	29	230	5.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31	220	1.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	32	220	1.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	33	220	1.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	34	230	5.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	35	230	5.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	36	220	1.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	37	210	3.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	39	220	1.1		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	40	220	1.1		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	41	230	5.7		OTHER
8-73	42	220	1.1		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	43	250	14.9		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	44	20	90.8	REJECT	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	45	240	10.3		OTHER
8-73	46				NOT DETERMINED
8-73	47	220	1.1		OTHER

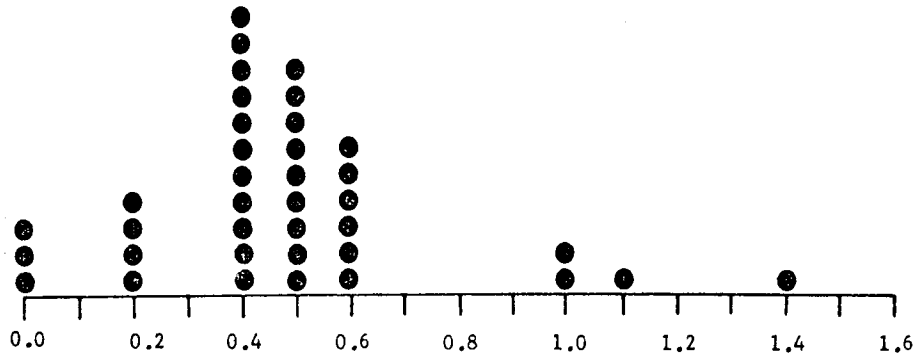
TOTAL RANGE	18 - 250				SAMPLE 43
MEAN	217.6452	AVERAGE DEVIATION	12.8728		
STANDARD DEVIATION	18.2671	95 PCT.CONF.INTVL OF MEAN	217.6452 +OR-	6.3596	NA



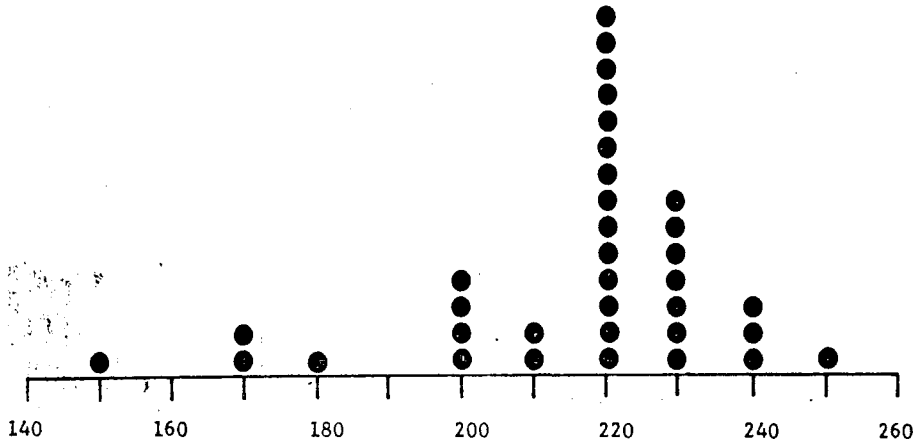
SILICA (SiO_2) — mg/l



CALCIUM (Ca) — mg/l



MAGNESIUM (Mg) — mg/l



SODIUM (Na) — mg/l

SAMPLE NO. 43

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	28	7.4		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	3	20	23.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	4	21	19.4		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	5	25	4.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	6	24	7.9		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	7	26	0.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	8	34	30.5		OTHER
8-73	9	21	19.4		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	10				NOT DETERMINED
8-73	11	28	7.4		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	12				NOT DETERMINED
8-73	13				NOT DETERMINED
8-73	14	23	11.7		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	15	32	22.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	28	7.4		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	18				NOT DETERMINED
8-73	19	49	88.0	REJECT	OTHER
8-73	20	10	61.6	REJECT	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	21	15	42.4		FLAME PHOTOMETRIC, 1972 ASTM PT23 D1428-64(1971)
8-73	22	25	4.1		OTHER
8-73	23	32	22.8		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	24				NOT DETERMINED
8-73	25	22	15.6		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	26	26	0.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	27	49	88.0	REJECT	OTHER
8-73	28	36	38.1		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	29	27	3.6		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31	27	3.6		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	32	31	19.0		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	33	32	22.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	34	24	7.9		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	35	28	7.4		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	36	26	0.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	37	25	4.1		OTHER
8-73	39	30	15.1		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	40	23	11.7		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	41	26	0.2		OTHER
8-73	42	22	15.6		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	43	25	4.1		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	44	25	4.1		FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
8-73	45				NOT DETERMINED
8-73	46				NOT DETERMINED
8-73	47	23	11.7		OTHER

TOTAL RANGE 10 - 49 SAMPLE 43

MEAN	26.0604	AVERAGE DEVIATION	3.2855		
STANDARD DEVIATION	4.3656	95 PCT.CONF.INTVL OF MEAN	26.0604 +OR-	1.5427	K

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1	44	3.0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	2	45	5.4		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	3	49	14.8		INDICATOR, APHA STD METH, 13ED, 1971
8-73	4	37	13.3		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	5	38	11.0		INDICATOR, APHA STD METH, 13ED, 1971
8-73	6	44	3.0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	7	44	3.0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	8	40	6.3		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	9	44	3.0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	10	42	1.6		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	11	35	18.0		INDICATOR, APHA STD METH, 13ED, 1971
8-73	12	73	71.0	REJECT	POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	13	44	3.0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	14			NOT DETERMINED	
8-73	15	44	3.0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	16	41	4.0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	17	48	12.4		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	18	44	3.0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	19	31	27.4		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	20	42	1.6		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	21			NOT DETERMINED	
8-73	22	46	7.7		INDICATOR, APHA STD METH, 13ED, 1971
8-73	23	40	6.3		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	24	36	15.7		INDICATOR, APHA STD METH, 13ED, 1971
8-73	25			NOT DETERMINED	
8-73	26	44	3.0		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	27			NOT DETERMINED	
8-73	28	44	3.0		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	29	46	7.7		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	30	46	7.7		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	31	44	3.0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	32	45	5.4		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	33	46	7.7		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	34	49	14.8		FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS
8-73	35	44	3.0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	36	42	1.6		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	37	45	5.4		OTHER
8-73	39	44	3.0		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	40	42	1.6		INDICATOR, APHA STD METH, 13ED, 1971
8-73	41	43	0.7		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	42	44	3.0		FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS
8-73	43	54	26.5		INDICATOR, APHA STD METH, 13ED, 1971
8-73	44	32	25.1		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	45	45	5.4		ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
8-73	46	31	27.4		POTENTIOMETRIC, APHA STD METH, 13ED, 1971
8-73	47			NOT DETERMINED	

TOTAL RANGE 31 - 73 SAMPLE 43

MEAN 42.6998 AVERAGE DEVIATION 3.4401

STANDARD DEVIATION 4.7728 95 PCT.CONF.INTVL OF MEAN 42.6998 +OR- 1.5251 HCO3

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	160	13.0		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	3	130	8.2		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	4	130	8.2		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	5	250	76.6	REJECT	TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	6	160	13.0		TECHNICON AUTOANALYZER, TURBIDIMETRIC-BARIUM CHLORIDE
8-73	7	140	1.1		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	8	150	6.0		OTHER
8-73	9	150	6.0		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	10	140	1.1		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	11	140	1.1		GRAVIMETRIC, APHA STD METH, 13ED, 1971
8-73	12	140	1.1		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	13				NOT DETERMINED
8-73	14	80	43.5	REJECT	OTHER
8-73	15	140	1.1		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	140	1.1		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	18				NOT DETERMINED
8-73	19	90	36.4	REJECT	TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	20	140	1.1		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	21	7.0	95.1	REJECT	TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	22	150	6.0		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	23	210	48.3	REJECT	TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	24	160	13.0		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	25				NOT DETERMINED
8-73	26	130	8.2		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	27				NOT DETERMINED
8-73	28	130	8.2		GRAVIMETRIC, APHA STD METH, 13ED, 1971
8-73	29	140	1.1		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31	130	8.2		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	32	130	8.2		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	33	140	1.1		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	34	140	1.1		OTHER
8-73	35	140	1.1		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	36	140	1.1		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	37				NOT DETERMINED
8-73	39	120	15.2		GRAVIMETRIC, APHA STD METH, 13ED, 1971
8-73	40	140	1.1		GRAVIMETRIC, APHA STD METH, 13ED, 1971
8-73	41	140	1.1		OTHER
8-73	42	150	6.0		FISHER TITRALIZER, THORIN, USGS
8-73	43	150	6.0		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	44	150	6.0		GRAVIMETRIC, 1972 ASTM PT23 D516-68
8-73	45	150	6.0		VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
8-73	46	140	1.1		TURBIDIMETRIC, APHA STD METH, 13ED, 1971
8-73	47				NOT DETERMINED

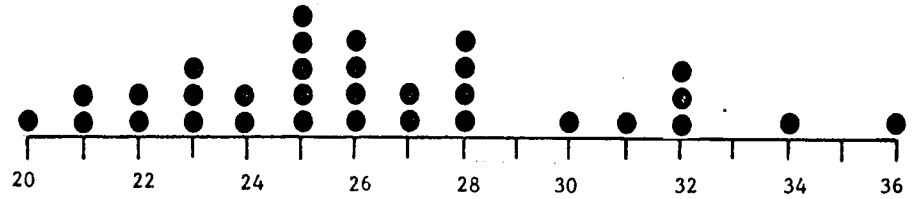
TOTAL RANGE 7.0 - 250 SAMPLE 43

MEAN 141.5620 AVERAGE DEVIATION 7.1483

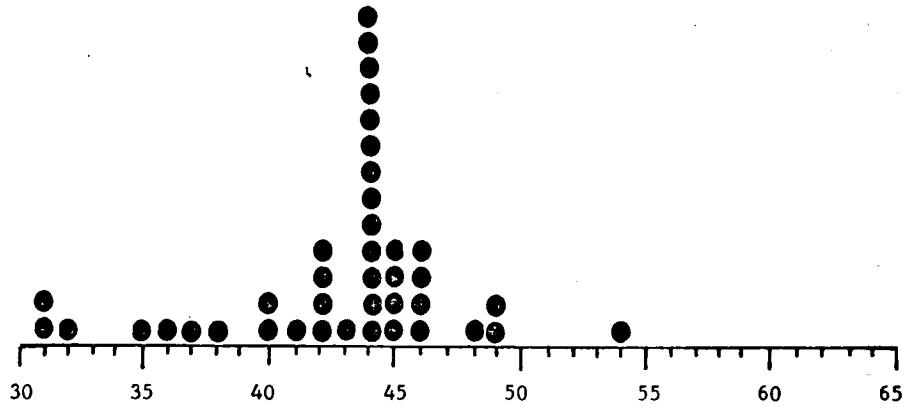
STANDARD DEVIATION 9.5409 95 PCT.CONF.INTVL OF MEAN 141.5620 +OR- 3.4238 SO4

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1	220	2.8		MOHR, USGS TWRI BK5 CH A1
8-73	2	220	2.8		MOHR, USGS TWRI BK5 CH A1
8-73	3	210	1.9		SILVER NITRATE, 1972 ASTM PT23 D512-67
8-73	4	210	1.9		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	5	210	1.9		MERCURIMETRIC, 1972 ASTM PT23 D512-67
8-73	6	210	1.9		TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
8-73	7	210	1.9		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	8	260	21.4	REJECT	OTHER
8-73	9	220	2.8		MOHR, USGS TWRI BK5 CH A1
8-73	10	210	1.9		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	11	210	1.9		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	12	220	2.8		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	13				NOT DETERMINED
8-73	14				NOT DETERMINED
8-73	15	210	1.9		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	210	1.9		MOHR, USGS TWRI BK5 CH A1
8-73	18	220	2.8		MOHR, USGS TWRI BK5 CH A1
8-73	19	220	2.8		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	20	200	6.6		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	21	220	2.8		SILVER NITRATE, 1972 ASTM PT23 D512-67
8-73	22	210	1.9		OTHER
8-73	23	43	79.9	REJECT	MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	24	220	2.8		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	25	210	1.9		TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
8-73	26	210	1.9		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	27	110	48.6	REJECT	OTHER
8-73	28	230	7.4		OTHER
8-73	29	210	1.9		MOHR, USGS TWRI BK5 CH A1
8-73	30	220	2.8		MOHR, USGS TWRI BK5 CH A1
8-73	31	210	1.9		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	32	210	1.9		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	33	220	2.8		MERCURIMETRIC, USGS TWRI BK5 CH A1
8-73	34	220	2.8		OTHER
8-73	35	220	2.8		MOHR, USGS TWRI BK5 CH A1
8-73	36	210	1.9		MOHR, USGS TWRI BK5 CH A1
8-73	37	230	7.4		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	39	220	2.8		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	40	220	2.8		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	41	220	2.8		MOHR, USGS TWRI BK5 CH A1
8-73	42	200	6.6		OTHER
8-73	43	210	1.9		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	44	200	6.6		TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
8-73	45	220	2.8		MOHR, USGS TWRI BK5 CH A1
8-73	46	200	6.6		MERCURIC NITRATE, APHA STD METH, 13ED, 1971
8-73	47				NOT DETERMINED

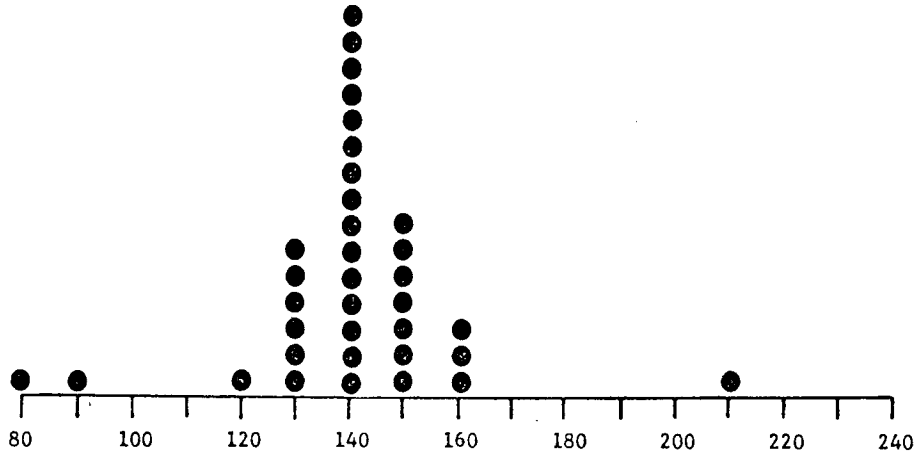
TOTAL RANGE	43 - 260				SAMPLE 43
MEAN	214.1004	AVERAGE DEVIATION	6.4693		
STANDARD DEVIATION	7.5107	95 PCT.CONF.INTVL OF MEAN	214.1004 +OR-	2.4306	CL



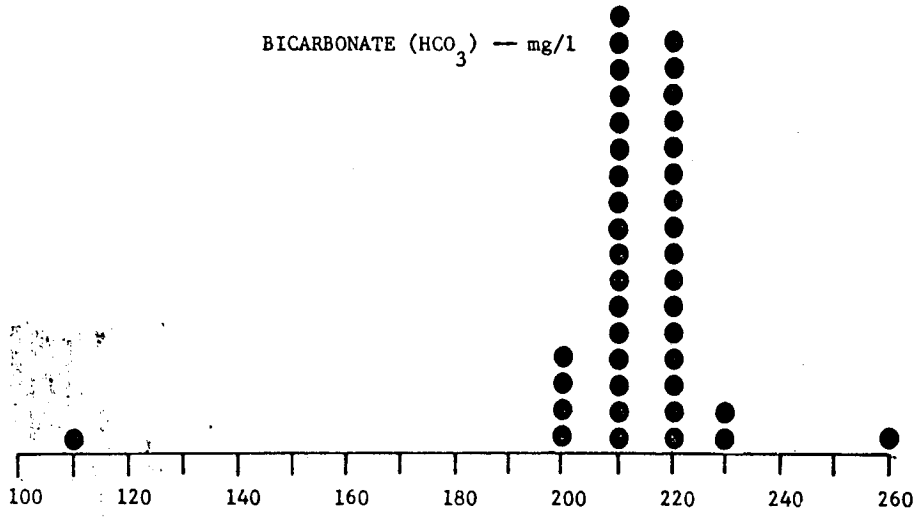
POTASSIUM (K) — mg/1



BICARBONATE (HCO_3) — mg/1



SULFATE (SO_4) — mg/1



CHLORIDE (Cl) — mg/1

SAMPLE NO. 43

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2	3.7	2.0		OTHER
8-73	3	4.0	5.9		ION-SELECTIVE ELECTRODE, 1972 ASTM PT23 D1179-72
8-73	4	0.8	78.8	REJECT	SPADNS, APHA STD METH, 13ED, 1971
8-73	5	2.2	41.7	REJECT	SPADNS, APHA STD METH, 13ED, 1971
8-73	6	4.0	5.9		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	7	3.6	4.7		ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
8-73	8	3.5	7.3		OTHER
8-73	9	3.2	15.3		ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
8-73	10	4.0	5.9		ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
8-73	11	4.0	5.9		ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	12	3.9	3.3		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	13				NOT DETERMINED
8-73	14				NOT DETERMINED
8-73	15	4.1	8.6		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	3.6	4.7		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	18				NOT DETERMINED
8-73	19	4.0	5.9		ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	20	3.6	4.7		ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
8-73	21	10	164.8	REJECT	ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	22	1.6	57.6	REJECT	OTHER
8-73	23	4.5	19.2		ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	24				NOT DETERMINED
8-73	25				NOT DETERMINED
8-73	26	4.1	8.6		TECHNICON AUTOANALYZER, SPADNS WITH DISTILLATION
8-73	27				NOT DETERMINED
8-73	28	3.1	17.9		ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	29	3.5	7.3		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31	3.9	3.3		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	32	4.2	11.2		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	33	3.4	10.0		ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	34	2.6	31.2	REJECT	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
8-73	35	3.8	0.6		SPADNS, USGS
8-73	36	3.8	0.6		SPADNS, USGS
8-73	37	4.2	11.2		ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	39	3.9	3.3		SPADNS, APHA STD METH, 13ED, 1971
8-73	40	3.6	4.7		ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
8-73	41				NOT DETERMINED
8-73	42	3.2	15.3		ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
8-73	43	3.3	12.6		SPADNS, APHA STD METH, 13ED, 1971
8-73	44	3.9	3.3		ION-SELECTIVE ELECTRODE, 1972 ASTM PT23 D1179-72
8-73	45	3.9	3.3		ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
8-73	46	3.8	0.6		SPADNS, APHA STD METH, 13ED, 1971
8-73	47				NOT DETERMINED

TOTAL RANGE	0.8 - 10				SAMPLE 43
MEAN	3.7767	AVERAGE DEVIATION	0.2680		
STANDARD DEVIATION	0.3319	95 PCT.CONF.INTVL OF MEAN	3.7767 +OR-	0.1239	F

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	4	0.043	76.7		OTHER
8-73	7	0.0	100.0		OTHER
8-73	9	0.043	76.7		CERIC-ARSENIOUS OXIDATION, USGS TWRI BK5 CH A1
8-73	29	0.0	100.0		CERIC-ARSENIOUS OXIDATION, USGS TWRI BK5 CH A1
8-73	32	0.0	100.0		OTHER
8-73	34	0.060	146.6		CERIC-ARSENIOUS OXIDATION, USGS TWRI BK5 CH A1
8-73	35	0.20	721.9	REJECT	CERIC-ARSENIOUS OXIDATION, USGS TWRI BK5 CH A1
8-73	40			NOT DETERMINED	

TOTAL RANGE	0.0	-	0.20			SAMPLE 43
MEAN		0.0243	AVERAGE DEVIATION	0.0243		
STANDARD DEVIATION		0.0274	95 PCT.CONF.INTVL OF MEAN	0.0243 +OR-	0.0287	I

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	4	0.41	76.4		OTHER
8-73	7	0.0	100.0		CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
8-73	9	0.38	61.9		CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
8-73	29	1.20	411.3	REJECT	CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
8-73	32	0.30	27.8		CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
8-73	34	0.40	70.4		CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
8-73	35	0.0	100.0		CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
8-73	40	0.15	36.5		OTHER

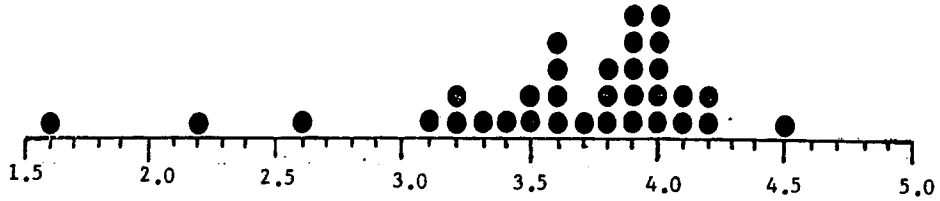
SAMPLE 43

TOTAL RANGE	0.0	- 1.20				
MEAN	0.2347	AVERAGE DEVIATION	0.1586			
STANDARD DEVIATION	0.1836	95 PCT.CONF.INTVL OF MEAN	0.2347 +OR-	0.1699	BR	

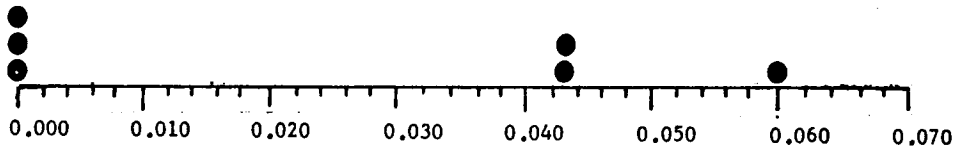
DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1	8.5	0.9		TECHNICON AUTOANALYZER, CADMIUM REDUCTION
8-73	2				NOT DETERMINED
8-73	3	0.3	96.4	REJECT	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	4	7.8	7.4		BRUCINE, APHA STD METH, 13ED, 1971
8-73	5	14	66.2		BRUCINE, APHA STD METH, 13ED, 1971
8-73	6	8.0	5.0		TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION
8-73	7	9.1	8.1		BRUCINE, USGS TWRI, BK5 CH A1
8-73	8	8.4	0.3		TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION
8-73	9	9.4	11.6		BRUCINE, USGS TWRI, BK5 CH A1
8-73	10	23	173.1	REJECT	BRUCINE, USGS TWRI, BK5 CH A1
8-73	11	8.6	2.1		BRUCINE, APHA STD METH, 13ED, 1971
8-73	12	9.0	6.9		BRUCINE, USGS TWRI, BK5 CH A1
8-73	13				NOT DETERMINED
8-73	14				NOT DETERMINED
8-73	15	9.1	8.1		BRUCINE, USGS TWRI, BK5 CH A1
8-73	16				NOT DETERMINED
8-73	17	6.8	19.3		BRUCINE, USGS TWRI, BK5 CH A1
8-73	18				NOT DETERMINED
8-73	19	5.0	40.6		BRUCINE, APHA STD METH, 13ED, 1971
8-73	20	8.4	0.3		BRUCINE, USGS TWRI, BK5 CH A1
8-73	21	3.3	60.8		TECHNICON AUTOANALYZER, CADMIUM REDUCTION
8-73	22	33	291.8	REJECT	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	23	7.7	8.6		TECHNICON AUTOANALYZER, CADMIUM REDUCTION
8-73	24	13	54.4		OTHER
8-73	25	8.5	0.9		TECHNICON AUTOANALYZER, CADMIUM REDUCTION
8-73	26	10	18.7		OTHER
8-73	27	9.1	8.1		OTHER
8-73	28	59	600.6	REJECT	OTHER
8-73	29	9.5	12.8		BRUCINE, USGS TWRI, BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31				NOT DETERMINED
8-73	32	7.7	8.6		BRUCINE, USGS TWRI, BK5 CH A1
8-73	33	7.6	9.8		PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	34	8.2	2.6		TECHNICON AUTOANALYZER, CADMIUM REDUCTION
8-73	35	8.1	3.8		BRUCINE, USGS TWRI, BK5 CH A1
8-73	36	7.7	8.6		PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	37				NOT DETERMINED
8-73	39	7.9	6.2		PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	40	8.7	3.3		PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	41	9.0	6.9		OTHER
8-73	42	33	291.8	REJECT	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
8-73	43	9.8	16.4		BRUCINE, APHA STD METH, 13ED, 1971
8-73	44	7.5	10.9		TECHNICON AUTOANALYZER, CADMIUM REDUCTION
8-73	45	4.6	45.4		BRUCINE, USGS TWRI, BK5 CH A1
8-73	46	9.5	12.8		TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION
8-73	47				NOT DETERMINED

TOTAL RANGE 0.3 - 59 SAMPLE 43

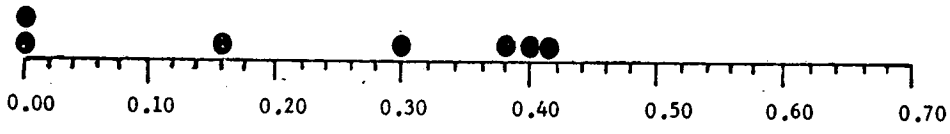
MEAN	8.4219	AVERAGE DEVIATION	1.2531		
STANDARD DEVIATION	1.9771	95 PCT.CONF.INTVL OF MEAN	8.4219 +OR-	0.7095	NO3-N



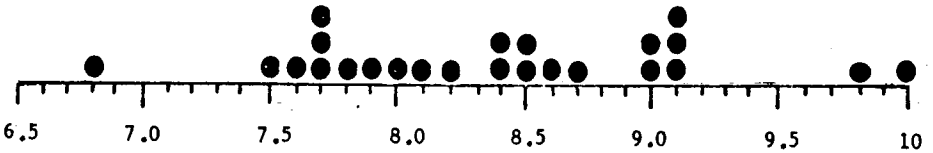
FLUORIDE (F) — mg/l



IODIDE (I) — mg/l



BROMIDE (Br) — mg/l



NITRATE(as N) — mg/l

SAMPLE NO. 43

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1	1180	1.2		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	2	1200	3.0		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	3	1150	1.3		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	4	1210	3.8		WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	5	1020	12.5		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	6	1190	2.1		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	7	1190	2.1		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	8	1100	5.6		OTHER
8-73	9	1210	3.8		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	10	1220	4.7		OTHER
8-73	11	1110	4.8		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	12	1230	5.5		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	13	121	89.6	REJECT	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	14			NOT DETERMINED	
8-73	15	1180	1.2		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	16	1180	1.2		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	17	1190	2.1		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	18	1190	2.1		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	19	1020	12.5		WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	20	1180	1.2		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	21	1120	3.9		WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	22			NOT DETERMINED	
8-73	23	1100	5.6		WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	24	1200	3.0		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	25			NOT DETERMINED	
8-73	26	1120	3.9		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	27	106	90.9	REJECT	WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	28			NOT DETERMINED	
8-73	29	1210	3.8		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	30	1210	3.8		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	31	1180	1.2		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	32	1200	3.0		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	33	1180	1.2		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	34	1200	3.0		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	35	1180	1.2		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	36	1170	0.4		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	37	1400	20.1	REJECT	WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	39	1190	2.1		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	40	0	100.0	REJECT	WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	41	1190	2.1		DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
8-73	42	1210	3.8		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	43	1080	7.3		WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	44	1100	5.6		OTHER
8-73	45	1170	0.4		WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
8-73	46	8330	614.7	REJECT	WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
8-73	47			NOT DETERMINED	

TOTAL RANGE 0 - 8330 SAMPLE 43
MEAN 1165.5518 AVERAGE DEVIATION 40.8658
STANDARD DEVIATION 52.6140 95 PCT.CONF.INTVL OF MEAN 1165.5518 +OR- 17.8011 SP.COND

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1	7.7	0.1		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	2	7.7	0.1		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	3	7.8	1.4		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	4	7.4	3.8		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	5	8.1	5.3		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	6	7.8	1.4		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	7	7.7	0.1		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	8	7.2	6.4		OTHER
8-73	9	7.5	2.5		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	10	7.3	5.1		OTHER
8-73	11	7.1	7.7		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	12	7.9	2.7		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	13	7.8	1.4		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	14				NOT DETERMINED
8-73	15	7.6	1.2		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	16	7.6	1.2		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	17	8.0	4.0		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	18	7.7	0.1		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	19	7.6	1.2		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	20	8.0	4.0		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	21	7.8	1.4		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	22	7.6	1.2		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	23				NOT DETERMINED
8-73	24	7.4	3.8		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	25				NOT DETERMINED
8-73	26	7.7	0.1		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	27	8.1	5.3		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	28	7.9	2.7		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	29	7.6	1.2		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	30	7.4	3.8		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	31	7.5	2.5		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	32	7.7	0.1		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	33	6.4	16.8	REJECT	INSTRUMENT, USGS TWRI BK5 CH A1
8-73	34	8.1	5.3		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	35	7.5	2.5		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	36	7.6	1.2		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	37	7.9	2.7		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	39	7.7	0.1		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	40	7.9	2.7		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	41	7.9	2.7		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	42	7.8	1.4		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	43	7.5	2.5		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	44	8.1	5.3		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	45	7.7	0.1		INSTRUMENT, USGS TWRI BK5 CH A1
8-73	46	7.6	1.2		GLASS ELECTRODE, APHA STD METH, 13ED, 1971
8-73	47				NOT DETERMINED

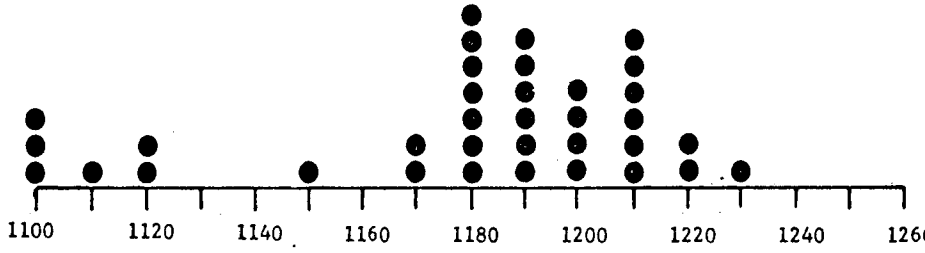
TOTAL RANGE	6.4 - 8.1					SAMPLE 43
MEAN	7.6951	AVERAGE DEVIATION	0.1862			
STANDARD DEVIATION	0.2418	95 PCT.CONF.INTVL OF MEAN	7.6951 +OR-	0.0763	PH	

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2				NOT DETERMINED
8-73	3				NOT DETERMINED
8-73	4	470	13.3		CURCUMIN, APHA STD METH, 13ED, 1971
8-73	5				NOT DETERMINED
8-73	6	540	30.1		CURCUMIN, APHA STD METH, 13ED, 1971
8-73	7				NOT DETERMINED
8-73	8				NOT DETERMINED
8-73	9	520	25.3		DIANTHRIMIDE, USGS BK5 CH A1
8-73	10				NOT DETERMINED
8-73	11				NOT DETERMINED
8-73	12	100	75.9		CARMINE, USGS BK5 CH A1
8-73	13				NOT DETERMINED
8-73	14				NOT DETERMINED
8-73	15				NOT DETERMINED
8-73	16				NOT DETERMINED
8-73	17				NOT DETERMINED
8-73	18				NOT DETFRMINED
8-73	19				NOT DETERMINED
8-73	20				NOT DETERMINED
8-73	21	20	95.2		OTHER
8-73	22				NOT DETERMINED
8-73	23				NOT DETERMINED
8-73	24				NOT DETERMINED
8-73	25				NOT DETERMINED
8-73	26				NOT DETERMINED
8-73	27	350	15.7		CARMINE, 1972 ASTM PT23 D3082-72T
8-73	28				NOT DETERMINED
8-73	29	520	25.3		DIANTHRIMIDE, USGS BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31				NOT DETERMINED
8-73	32	520	25.3		CARMINE, USGS BK5 CH A1
8-73	33				NOT DETERMINED
8-73	34	490	18.1		DIANTHRIMIDE, USGS BK5 CH A1
8-73	35	400	3.6		DIANTHRIMIDE, USGS BK5 CH A1
8-73	36	420	1.2		DIANTHRIMIDE, USGS BK5 CH A1
8-73	37				NOT DETERMINED
8-73	39	290	30.1		CARMINE, APHA STD METH, 13ED, 1971
8-73	40	700	68.7		CARMINE, APHA STD METH, 13ED, 1971
8-73	41				NOT DETERMINED
8-73	42	1200	189.2	REJECT	CARMINE, USGS BK5 CH A1
8-73	43	470	13.3		CURCUMIN, APHA STD METH, 13ED, 1971
8-73	44				NOT DETERMINED
8-73	45				NOT DETERMINED
8-73	46				NOT DETERMINED
8-73	47				NOT DETERMINED

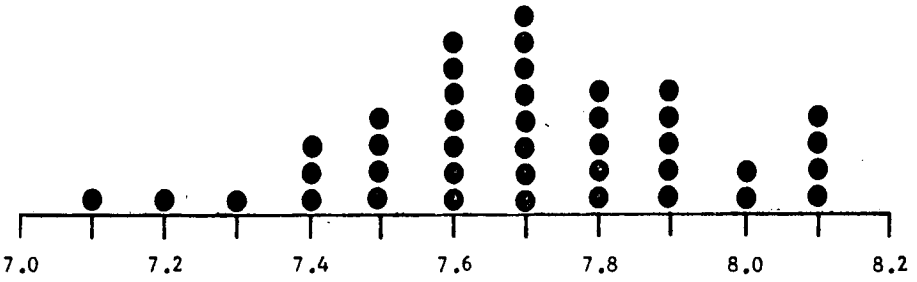
TOTAL RANGE 20 - 1200 SAMPLE 43

MEAN 414.9988 AVERAGE DEVIATION 130.7145

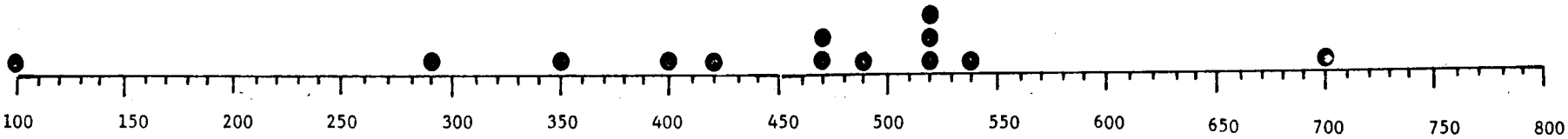
STANDARD DEVIATION 179.0894 95 PCT.CONF.INTVL OF MEAN 414.9988 +OR- 103.3855 8



SPECIFIC CONDUCTANCE — micromhos/cm at 25° C



pH



BORON (B) — µg/l

SAMPLE NO. 43

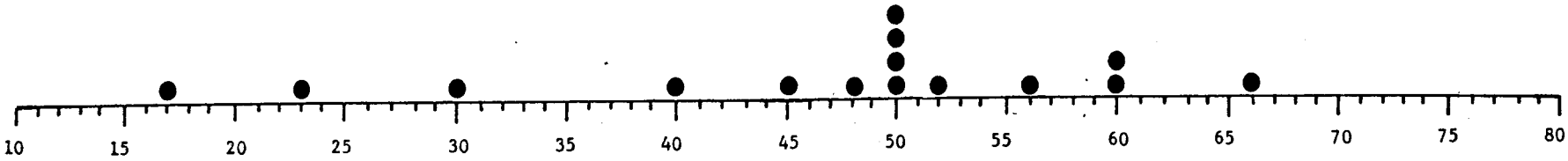
DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2				NOT DETERMINED
8-73	3				NOT DETERMINED
8-73	4	23	47.2		SILVER DIETHYLDITHIOCARBAMATE: APHA STD METH, 13ED
8-73	5				NOT DETERMINED
8-73	6	30	31.1		SILVER DIETHYLDITHIOCARBAMATE: USGS TWRI BK5 CH A1
8-73	7	60	37.7		SILVER DIETHYLDITHIOCARBAMATE-REVISION: USGS PROVISIONAL
8-73	8	50	14.8		OTHER
8-73	9	50	14.8		SILVER DIETHYLDITHIOCARBAMATE-REVISION: USGS PROVISIONAL
8-73	10				NOT DETERMINED
8-73	11				NOT DETERMINED
8-73	12				NOT DETERMINED
8-73	13				NOT DETERMINED
8-73	14				NOT DETERMINED
8-73	15	66	51.5		SILVER DIETHYLDITHIOCARBAMATE-REVISION: USGS PROVISIONAL
8-73	16				NOT DETERMINED
8-73	17				NOT DETERMINED
8-73	18				NOT DETERMINED
8-73	19	56	28.6		SILVER DIETHYLDITHIOCARBAMATE: APHA STD METH, 13ED
8-73	20	48	10.2		SILVER DIETHYLDITHIOCARBAMATE: USGS TWRI BK5 CH A1
8-73	21	0	100.0		ATOMIC ABS: USGS PROVISIONAL
8-73	22				NOT DETERMINED
8-73	23				NOT DETERMINED
8-73	24				NOT DETERMINED
8-73	25				NOT DETERMINED
8-73	26	17	61.0		SILVER DIETHYLDITHIOCARBAMATE: APHA STD METH, 13ED
8-73	27				NOT DETERMINED
8-73	28				NOT DETERMINED
8-73	29				NOT DETERMINED
8-73	30				NOT DETERMINED
8-73	31				NOT DETERMINED
8-73	32	52	19.4		SILVER DIETHYLDITHIOCARBAMATE: USGS TWRI BK5 CH A1
8-73	33				NOT DETERMINED
8-73	34	45	3.3		SILVER DIETHYLDITHIOCARBAMATE-REVISION: USGS PROVISIONAL
8-73	35	50	14.8		SILVER DIETHYLDITHIOCARBAMATE-REVISION: USGS PROVISIONAL
8-73	36				NOT DETERMINED
8-73	37				NOT DETERMINED
8-73	39	40	8.2		SILVER DIETHYLDITHIOCARBAMATE: USGS TWRI BK5 CH A1
8-73	40	290	565.7	REJECT	SILVER DIETHYLDITHIOCARBAMATE: APHA STD METH, 13ED
8-73	41	60	37.7		OTHER
8-73	42				NOT DETERMINED
8-73	43				NOT DETERMINED
8-73	44	50	14.8		SILVER DIETHYLDITHIOCARBAMATE-REVISION: USGS PROVISIONAL
8-73	45				NOT DETERMINED
8-73	46				NOT DETERMINED
8-73	47				NOT DETERMINED

TOTAL RANGE	0 - 290				SAMPLE 43
MEAN	43.5623	AVERAGE DEVIATION	13.4766		
STANDARD DEVIATION	17.6634	95 PCT.CONF.INTVL OF MEAN	43.5623 +OR-	9.4102	AS

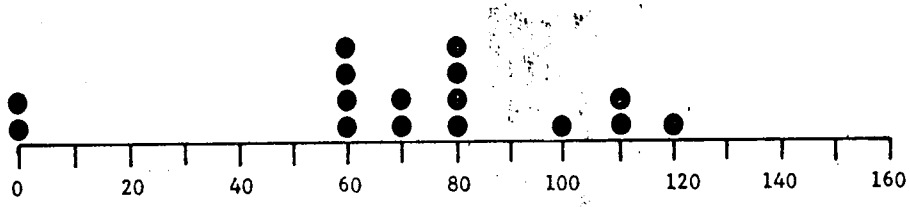
DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHOD
8-73	1				NOT DETERMINED
8-73	2				NOT DETERMINED
8-73	3				NOT DETERMINED
8-73	4	0	100.0		OTHER
8-73	5	340	377.2	REJECT	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	6	110	54.4		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	7	70	1.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	8	110	54.4		OTHER
8-73	9	60	15.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	10				NOT DETERMINED
8-73	11				NOT DETERMINED
8-73	12				NOT DETERMINED
8-73	13				NOT DETERMINED
8-73	14				NOT DETERMINED
8-73	15				NOT DETERMINED
8-73	16				NOT DETERMINED
8-73	17				NOT DETERMINED
8-73	18				NOT DETERMINED
8-73	19				NOT DETERMINED
8-73	20	60	15.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	21	0	100.0		OTHER
8-73	22				NOT DETERMINED
8-73	23				NOT DETERMINED
8-73	24				NOT DETERMINED
8-73	25				NOT DETERMINED
8-73	26				NOT DETERMINED
8-73	27	120	68.4		OTHER
8-73	28	60	15.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	29	80	12.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	30				NOT DETERMINED
8-73	31				NOT DETERMINED
8-73	32	80	12.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	33				NOT DETERMINED
8-73	34	80	12.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	35				NOT DETERMINED
8-73	36	80	12.3		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	37				NOT DETERMINED
8-73	39	60	15.8		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
8-73	40				NOT DETERMINED
8-73	41	100	40.4		OTHER
8-73	42				NOT DETERMINED
8-73	43				NOT DETERMINED
8-73	44				NOT DETERMINED
8-73	45				NOT DETERMINED
8-73	46				NOT DETERMINED
8-73	47	70	1.8		OTHER

SAMPLE 43

TOTAL RANGE	0 - 340				
MEAN	71.2498	AVERAGE DEVIATION	23.7499		
STANDARD DEVIATION	33.8378	95 PCT.CONF.INTVL OF MEAN	71.2498 +OR-	18.0271	SR



ARSENIC (As) — µg/l



STRONTIUM (Sr) — µg/l

SAMPLE NO. 43

DETERMINATION	NO.LABS REPORTING	PCT. OF VALUES REJECTED	PCT. OF UNREJECTED VALUES WITHIN 95 PCT. CI	X +OR- STD	X +OR- 2STD
SIO2	28	11	48	72	96
CA	41	7	26	82	89
MG	41	12	56	72	92
NA	37	8	41	79	91
K	36	8	33	70	94
HCO3	41	2	45	75	90
SO4	37	14	47	69	97
CL	42	7	0	85	95
F	35	14	30	73	93
NO3-N	37	14	50	84	91
SP.COND	41	12	28	75	94
PH	42	2	20	71	95
B	15	7	43	79	93
AS	17	6	50	75	94
SR	17	6	63	69	88
BR	8	13	57	71	100
I	7	14	83	83	100

SAMPLE 43