

REPORT OF  
ANALYTICAL EVALUATION PROGRAM  
STANDARD REFERENCE WATER SAMPLES NUMBERS 36 AND 37

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

July 1972

## S T A N D A R D   R E F E R E N C E   W A T E R   S A M P L E S   N U M B E R S   3 6   A N D   3 7

### 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 34 laboratories for Standard Reference Water Samples numbers 36 and 37 distributed on May 30, 1972.

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 pre-assigned 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- $\mu\text{m}$  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 ( $\text{SiO}_2$ )	Fluoride (F)
Calcium (Ca)	Nitrate (as N)
Magnesium (Mg)	Boron (B)*
Sodium (Na)	Specific conductance ( $\mu\text{mhos}/\text{cm}$ at 25°C)
Potassium (K)	pH
Bicarbonate ( $\text{HCO}_3$ )	Strontium (Sr)
Carbonate ( $\text{CO}_3$ )	Arsenic (As)*
Sulfate ( $\text{SO}_4$ )	
Chloride (Cl)	

\*Determined on Sample No. 36 only.

#### PARTICIPATING LABORATORIES

##### U.S. Geological Survey

ALABAMA, Tuscaloosa	NEW YORK, Albany
ALASKA, Anchorage	NORTH CAROLINA, Raleigh
ARKANSAS, Little Rock	OHIO, Columbus
CALIFORNIA, Menlo Park	OKLAHOMA, Oklahoma City
DISTRICT COLUMBIA, Washington	PUERTO RICO, San Juan
FLORIDA, Miami	TEXAS, Austin
FLORIDA, Ocala	TEXAS, Fort Worth
HAWAII, Honolulu	UTAH, Salt Lake City
LOUISIANA, Baton Rouge	VIRGINIA, Charlottesville

##### Other

- ALABAMA, Tuscaloosa: State Geological Survey
- ARIZONA, Tucson: University of Arizona, Agri. Science
- COLORADO, Denver: Board of Water Commissioners, WQ Lab
- GEORGIA, Athens: State University College of Agriculture
- GEORGIA, Atlanta: State Water-Quality Control Board
- KANSAS, Lawrence: State Geological Survey
- KANSAS, Topeka: State Department of Health
- MONTANA, Butte: State Bureau of Mines and Geology
- NEW ZEALAND, Petone: Department of Sci. & Indus. Research
- NORTH DAKOTA, Bismarck: State Water Conservation Commission
- PENNSYLVANIA, West Chester: County Health Department
- SOUTH CAROLINA, Columbia: State Pollution Control Authority
- SOUTH DAKOTA, Brookings: State University, WQ Laboratory
- TENNESSEE, Chattanooga: Tennessee Valley Authority
- WASHINGTON, Olympia: State Department of Ecology
- WYOMING, Laramie: State Department of Agriculture

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

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	5.0	10.4	TECHNICON AUTOANALYZER, MOLYBDOSILICATE
6-72	2	2.9	35.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	3	5.6	23.7	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	4	3.0	33.7	MOLYBDOSILICATE, APHA STD METH, 13ED, 1971
7-72	5	4.7	3.8	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	6	4.9	8.2	TECHNICON AUTOANALYZER, MOLYBDOSILICATE
7-72	7	4.4	2.6	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	8	4.8	6.0	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	9	4.7	3.8	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	10			NOT DETERMINED
6-72	11	4.2	7.2	HETEROPOLY BLUE, APHA STD METH, 13ED, 1971
6-72	12			NOT DETERMINED
6-72	13	5.0	10.4	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	15	5.0	10.4	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	16	4.8	6.0	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	17	4.4	2.8	TECHNICON AUTOANALYZER, MOLYBDOSILICATE
7-72	18	5.5	21.5	OTHER
7-72	19	3.9	13.9	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	20	5.0	10.4	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	21	3.5	22.7	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	22	3.8	16.1	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	23	4.6	1.6	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	26			NOT DETERMINED
7-72	27	4.3	5.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	28	4.3	5.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	29	4.3	5.0	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	30	4.9	8.2	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	31	4.6	1.6	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	4.5	0.6	MOLYBDOSILICATE, APHA STD METH, 13ED, 1971
6-72	34	5.2	14.9	MOLYBDOSILICATE, APHA STD METH, 13ED, 1971
6-72	35			NOT DETERMINED
6-72	36	4.9	8.2	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	37	4.6	1.6	TECHNICON AUTOANALYZER, AMINONAPHTHOLSULFONIC ACID

TOTAL RANGE 2.9000 - 5.6000  
 MEAN 4.5276 AVERAGE DEVIATION  
 STANDARD DEVIATION 0.6363 95 PCT.CONF.INTVL OF MEAN

0.4711 SAMPLE 36  
 4.5276 +OR- 0.2420 SiO2

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	69	11.7	
6-72	2	59	4.5	
6-72	3	120	94.3	REJECT
6-72	4	58	6.1	
7-72	5	63	2.0	
6-72	6	62	0.4	
7-72	7	61	1.2	
6-72	8	58	6.1	
7-72	9	58	6.1	
7-72	10	60	2.8	
6-72	11	64	3.6	
6-72	12	62	0.4	
6-72	13	62	0.4	
6-72	15	63	2.0	
6-72	16	64	3.6	
6-72	17	60	2.8	
7-72	18	55	10.9	
7-72	19	63	2.0	
7-72	20	62	0.4	
7-72	21	64	3.6	
7-72	22	64	3.6	
7-72	23	61	1.2	
6-72	26	60	2.8	
7-72	27	64	3.6	
7-72	28	62	0.4	
7-72	29	62	0.4	
7-72	30	66	6.9	
6-72	31	63	2.0	
7-72	32			NOT DETERMINED
6-72	33	62	0.4	COMPLEXOMETRIC, USGS TWRI BK5 CH A1
6-72	34	62	0.4	EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
6-72	35	57	7.7	OTHER
5-72	36	62	0.4	COMPLEXOMETRIC, USGS TWRI BK5 CH A1
7-72	37	64	3.6	COMPLEXOMETRIC, USGS TWRI BK5 CH A1

TOTAL RANGE      55.0000 - 120.0000  
 MEAN              61.7498      AVERAGE DEVIATION  
 STANDARD DEVIATION      2.7591      95 PCT.CONF.INTVL OF MEAN

2.0157  
 61.7498 +OR-      0.9901

SAMPLE 36

CA

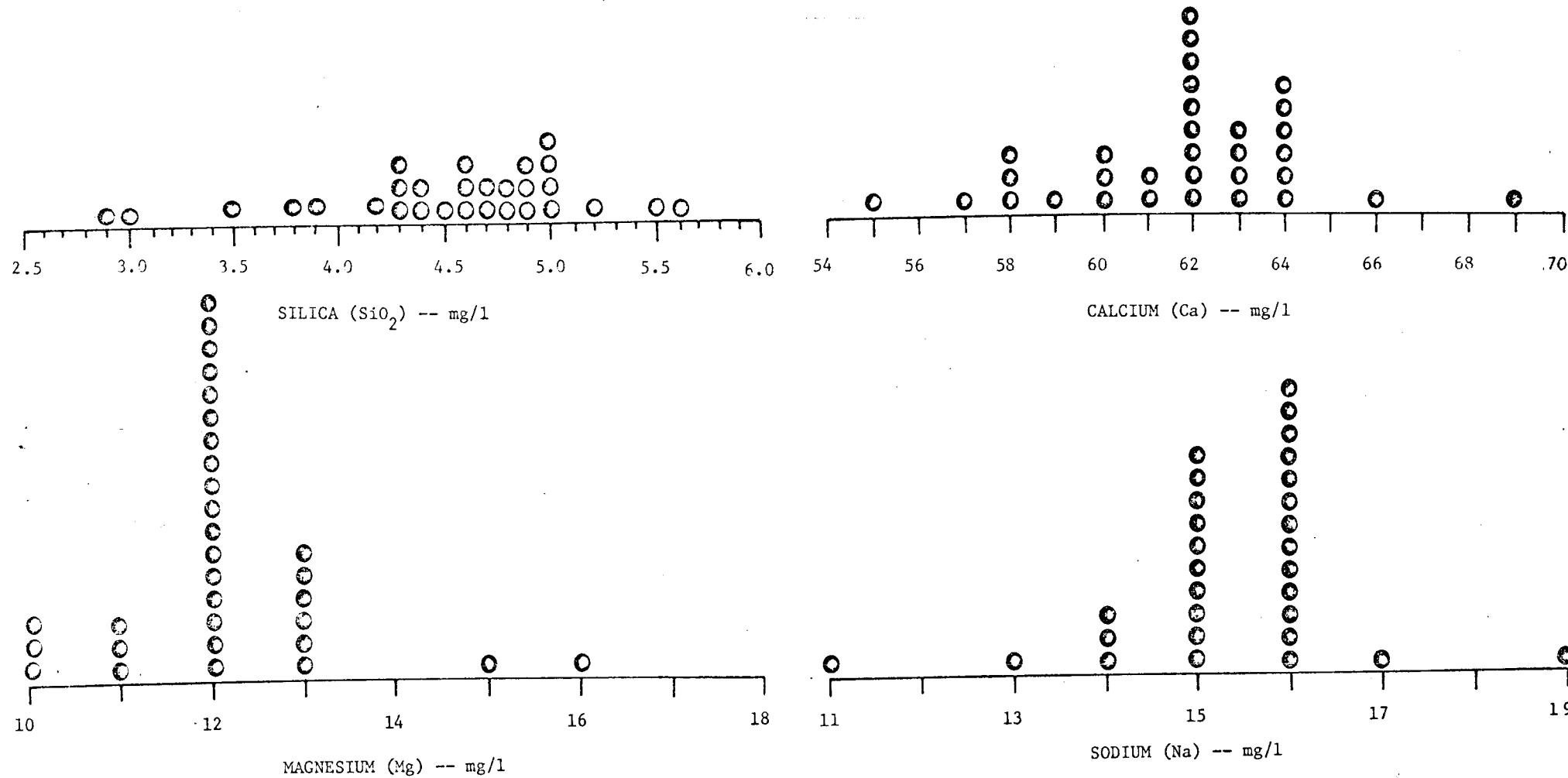
3

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	12 2	0.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	2	2.3 2	80.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	3	24 2	101.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	4	13 2	9.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	5	12 2	0.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	6	12 2	0.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	7	(16) 1	34.5	REJECT CALCULATION, USGS TWRI BKS CH A1
6-72	8	15 2	26.1	REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	9	13 2	9.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	10	11 2	7.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	11	12 +	0.9	CALCULATION, USGS TWRI BKS CH A1
6-72	12	12 2	0.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	13	12 2	0.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	15	12 1	0.9	CALCULATION, USGS TWRI BKS CH A1
6-72	16	12 2	0.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	17	12 2	0.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	18	10 v	15.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	19	12 +	0.9	CALCULATION, USGS TWRI BKS CH A1
7-72	20	13 +	9.3	CALCULATION, USGS TWRI BKS CH A1
7-72	21	12 2	0.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	22	12 1	0.9	CALCULATION, USGS TWRI BKS CH A1
7-72	23	12 2	0.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	26	11 2	7.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	27	11 1	7.5	CALCULATION, USGS TWRI BKS CH A1
7-72	28	12 2	0.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	29	12 2	0.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	30	13 2	9.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	31	12 1	0.9	CALCULATION, USGS TWRI BKS CH A1
7-72	32			NOT DETERMINED
6-72	33	13 1	9.3	CALCULATION, USGS TWRI BKS CH A1
6-72	34	10 +	15.9	CALCULATION, USGS TWRI BKS CH A1
6-72	35	10 20	15.9	OTHER
6-72	36	13 1	9.3	CALCULATION, USGS TWRI BKS CH A1
7-72	37	12 2	0.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1

TOTAL RANGE 2.3000 - 24.0000 SAMPLE 36  
 MEAN 11.8965  
 STANDARD DEVIATION 0.8596 AVERAGE DEVIATION 0.5779  
   95 PCT.CONF.INTVL OF MEAN 11.8965 +OR- 0.3269 MG

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	15	2.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	2	16	4.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	3	14	8.8	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
6-72	4	13	15.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	5	15	2.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	6	15	2.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	7	16	4.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	8	14	8.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	9	15	2.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	10	15	2.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	11	28	82.3	REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	12	16	4.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	13	15	2.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	15	15	2.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	16	16	4.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	17	15	4.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	18	19	23.7	REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	19	16	4.2	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
7-72	20	15	2.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	21	16	4.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	22			NOT DETERMINED
7-72	23	16	4.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	26	17	10.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	27	16	4.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	28	16	4.2	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
7-72	29	15	2.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	30	14	8.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	31	16	4.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	16	4.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	34	11	28.4	REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	35			NOT DETERMINED
6-72	36	16	4.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	37	15	2.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1

TOTAL RANGE 11.0000 - 28.0000 SAMPLE 36  
 MEAN 15.3570 AVERAGE DEVIATION 0.7143  
 STANDARD DEVIATION 0.8698 95 PCT.CONF.INTVL OF MEAN 15.3570 +OR- 0.3373 NA



SAMPLE NO. 36

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	9.1	29.4	REJECT
6-72	2	8.1	15.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	3	6.7	4.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	4	6.8	3.3	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
7-72	5	7.1	1.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	6	6.8	3.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	7	7.1	1.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	8	7.7	9.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	9	7.4	5.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	10	6.3	10.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	11	6.5	7.6	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	12	7.4	5.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	13	6.4	9.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	15	7.0	0.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	16	6.5	7.6	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	17	7.1	1.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	18	7.7	9.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	19	6.5	7.6	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
7-72	20	7.3	3.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	21	7.2	2.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	22			NOT DETERMINED
7-72	23	8.4	19.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	26	7.1	1.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	27	6.4	9.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	28	7.2	2.4	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
7-72	29	6.4	9.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	30	6.8	3.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	31	6.3	10.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	7.2	2.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	34			NOT DETERMINED
6-72	35	3.6	48.8	REJECT OTHER
6-72	36	7.4	5.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	37	7.1	1.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1

TOTAL RANGE      3.6000 - 9.1000  
 MEAN              7.0310      AVERAGE DEVIATION  
 STANDARD DEVIATION      0.5306      95 PCT.CONF.INTVL OF MEAN

0.4140  
 7.0310 +OR- 0.2018

SAMPLE 36

K

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	44	5.8	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	2	48	2.8	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	3	48	2.8	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	4	44	5.8	POTENTIOMETRIC, APHA STD METH, 13ED, 1971
7-72	5	48	2.8	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	6	51	9.2	FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS
7-72	7	47	0.6	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	8	46	1.5	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	9	47	0.6	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	10	42	10.1	INDICATOR, APHA STD METH, 13ED, 1971
6-72	11	98	109.9	INDICATOR, APHA STD METH, 13ED, 1971
6-72	12	46	1.5	OTHER
6-72	13	50	7.1	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	15	45	3.6	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	16	46	1.5	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	17	48	2.8	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	18	78	67.0	POTENTIOMETRIC, APHA STD METH, 13ED, 1971
7-72	19	50	7.1	FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS
7-72	20	49	4.9	INDICATOR, APHA STD METH, 13ED, 1971
7-72	21	46	1.5	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	22	50	7.1	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	23	48	2.8	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	26	46	1.5	POTENTIOMETRIC, APHA STD METH, 13ED, 1971
7-72	27	48	2.8	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	28	37	20.8	POTENTIOMETRIC, APHA STD METH, 13ED, 1971
7-72	29	48	2.8	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	30	48	2.8	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	31	48	2.8	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	32	40	14.3	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	33	46	1.5	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	34	40	14.3	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	35			INDICATOR, APHA STD METH, 13ED, 1971
6-72	36	46	1.5	NOT DETERMINED
7-72	37	48	2.8	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
				ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1

TOTAL RANGE      37.0000 - 98.0000  
 MEAN            46.6998      AVERAGE DEVIATION  
 STANDARD DEVIATION    2.6672      95 PCT.CONF.INTVL OF MEAN

SAMPLE 36  
 2.0067  
 46.6998 +OR- 0.9958      HC03

8  
DATE  
MO-YR      CODE

		REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	64 2	7.4	TURBIDIMETRIC, APHA STD METH, 13ED, 1971
6-72	2			NOT DETERMINED
6-72	3	60 4	0.7	GRAVIMETRIC, APHA STD METH, 13ED, 1971
6-72	4	61 1	2.4	THORIN, USGS TWRI BK5 CH A1
7-72	5	61 1	2.4	THORIN, USGS TWRI BK5 CH A1
6-72	6	68 20	14.2	OTHER
7-72	7	58 1	2.6	THORIN, USGS TWRI BK5 CH A1
6-72	8	62 1	4.1	THORIN, USGS TWRI BK5 CH A1
7-72	9	59 1	1.0	THORIN, USGS TWRI BK5 CH A1
7-72	10	60 4	0.7	GRAVIMETRIC, APHA STD METH, 13ED, 1971
6-72	11	55 2	7.7	TURBIDIMETRIC, APHA STD METH, 13ED, 1971
6-72	12	50 20	16.1	OTHER
6-72	13	55 1	7.7	THORIN, USGS TWRI BK5 CH A1
6-72	15	61 1	2.4	THORIN, USGS TWRI BK5 CH A1
6-72	16	64 1	7.4	THORIN, USGS TWRI BK5 CH A1
6-72	17	60 1	0.7	THORIN, USGS TWRI BK5 CH A1
7-72	18	66 20	10.8	OTHER
7-72	19	60 3	0.7	FISHER TITRALIZER, THORIN, USGS
7-72	20	75 1	25.9	REJECT
7-72	21	60 1	0.7	THORIN, USGS TWRI BK5 CH A1
7-72	22	61 1	2.4	THORIN, USGS TWRI BK5 CH A1
7-72	23	57 1	4.3	THORIN, USGS TWRI BK5 CH A1
6-72	26	59 2	1.0	THORIN, USGS TWRI BK5 CH A1
7-72	27	52 20	12.7	TURBIDIMETRIC, APHA STD METH, 13ED, 1971
7-72	28	60 4	0.7	OTHER
7-72	29	59 1	1.0	GRAVIMETRIC, APHA STD METH, 13ED, 1971
7-72	30	60 1	0.7	THORIN, USGS TWRI BK5 CH A1
6-72	31	62 1	4.1	THORIN, USGS TWRI BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	60 4	0.7	GRAVIMETRIC, APHA STD METH, 13ED, 1971
6-72	34	50 2	16.1	TURBIDIMETRIC, APHA STD METH, 13ED, 1971
6-72	35			NOT DETERMINED
6-72	36	61 1	2.4	THORIN, USGS TWRI BK5 CH A1
7-72	37	62 5	4.1	TECHNICON AUTOANALYZER, TURBIDIMETRIC-BARIUM CHLORIDE

TOTAL RANGE      50.0000 - 75.0000  
 MEAN              59.5665      AVERAGE DEVIATION  
 STANDARD DEVIATION      4.0402      95 PCT.CONF.INTVL OF MEAN

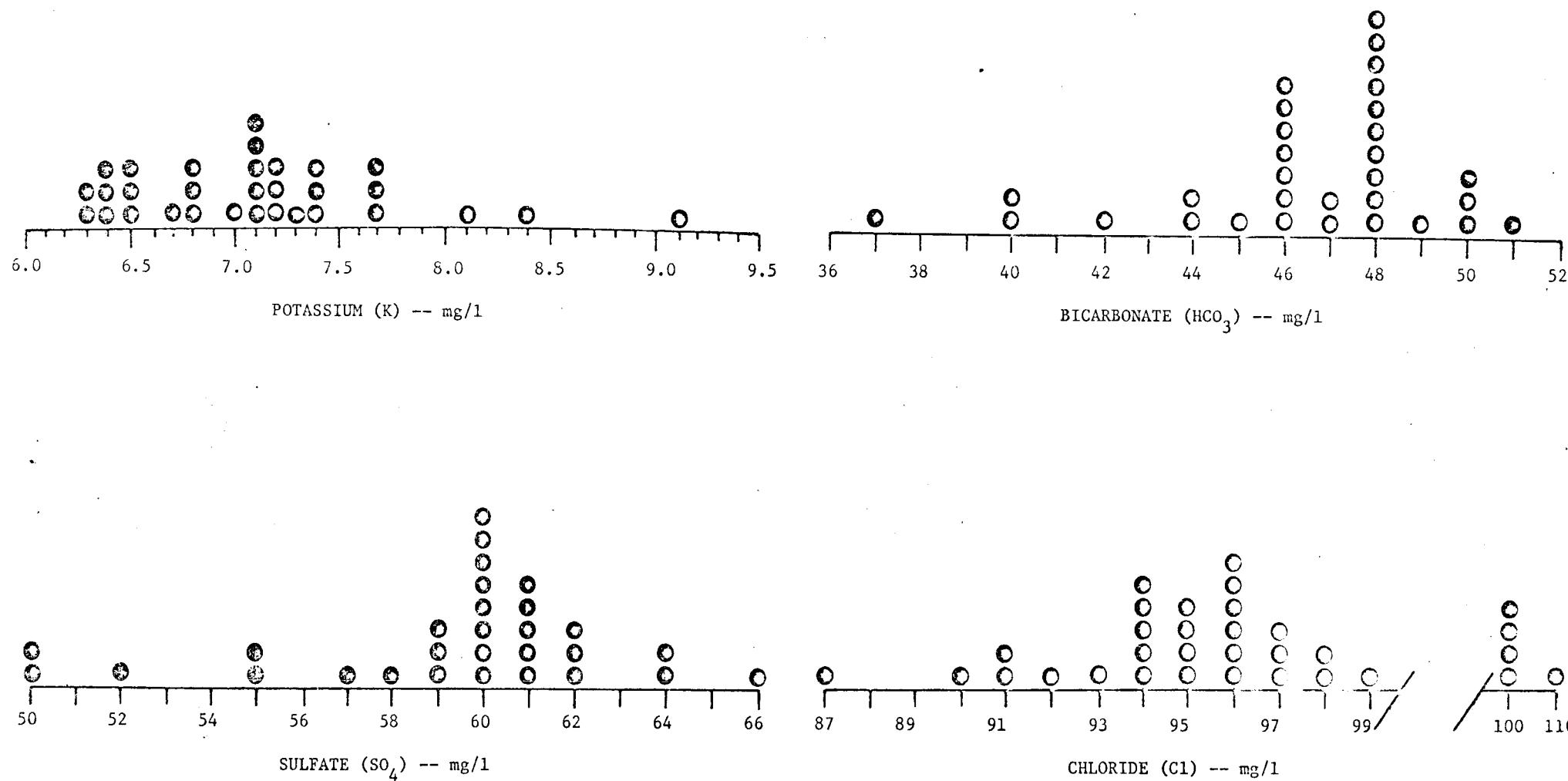
SAMPLE 36  
 2.7778  
 59.5665 +OR- 1.5084      S04

9

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	96 <del>3</del>	0.7	✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971
6-72	2	90 <del>2</del>	5.6	✓ MERCURIOMETRIC, USGS TWRI BK5 CH A1
6-72	3	87 <del>3</del>	8.8	✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971
6-72	4	98 <del>3</del>	2.8	✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971
7-72	5	98 <del>1</del>	2.8	MOHR, USGS TWRI BK5 CH A1
6-72	6	96 <del>4</del>	0.7	TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
7-72	7	94 <del>2</del>	1.4	✓ MERCURIOMETRIC, USGS TWRI BK5 CH A1
6-72	8	100 <del>1</del>	4.9	MOHR, USGS TWRI BK5 CH A1
7-72	9	91 <del>1</del>	4.6	MOHR, USGS TWRI BK5 CH A1
7-72	10	93 <del>3</del>	2.5	✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971
6-72	11	94 <del>3</del>	1.4	✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971
6-72	12			NOT DETERMINED
6-72	13	94 <del>1</del>	1.4	MOHR, USGS TWRI BK5 CH A1
6-72	15	95 <del>1</del>	0.4	MOHR, USGS TWRI BK5 CH A1
6-72	16	96 <del>2</del>	0.7	✓ MERCURIOMETRIC, USGS TWRI BK5 CH A1
6-72	17	96 <del>2</del>	0.7	✓ MERCURIOMETRIC, USGS TWRI BK5 CH A1
7-72	18	100 <del>20</del>	4.9	OTHER
7-72	19	96 <del>20</del>	0.7	OTHER
7-72	20	100 <del>1</del>	4.9	MOHR, USGS TWRI BK5 CH A1
7-72	21	99 <del>1</del>	3.8	MOHR, USGS TWRI BK5 CH A1
7-72	22	97 <del>1</del>	1.7	MOHR, USGS TWRI BK5 CH A1
7-72	23	96 <del>2</del>	0.7	✓ MERCURIOMETRIC, USGS TWRI BK5 CH A1
6-72	26	97 <del>3</del>	1.7	✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971
7-72	27	95 <del>3</del>	0.4	✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971
7-72	28	110 <del>20</del>	15.4	REJECT OTHER
7-72	29	94 <del>1</del>	1.4	MOHR, USGS TWRI BK5 CH A1
7-72	30	100 <del>2</del>	4.9	✓ MERCURIOMETRIC, USGS TWRI BK5 CH A1
6-72	31	97 <del>1</del>	1.7	MOHR, USGS TWRI BK5 CH A1
7-72	32	92 <del>1</del>	3.5	MOHR, USGS TWRI BK5 CH A1
6-72	33	95 <del>1</del>	0.4	MOHR, USGS TWRI BK5 CH A1
6-72	34	91 <del>3</del>	4.6	✓ MERCURIC NITRATE, APHA STD METH, 13ED, 1971
6-72	35			NOT DETERMINED
6-72	36	94 <del>1</del>	1.4	MOHR, USGS TWRI BK5 CH A1
7-72	37	95 <del>4</del>	0.4	TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE

TOTAL RANGE 87.0000 - 110.0000  
 MEAN 95.3546 AVERAGE DEVIATION 2.3434  
 STANDARD DEVIATION 3.0935 95 PCT.CONF.INTVL OF MEAN 95.3546 +OR- 1.1346 CL

8 94.4 ± 3.38  
 12 94.25 ± 3.08  
 13 94.7 ± 3.35  
 SAMPLE 36



SAMPLE NO. 36

10

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	1.0 20	7.4	OTHER
6-72	2	0.8 2	14.0	ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
6-72	3	0.9 4	3.3	SPADNS, APHA STD METH, 13ED, 1971
6-72	4	0.2 3	78.5	REJECT
7-72	5	0.8 1	14.0	ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
6-72	6	1.0 1	7.4	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
7-72	7	1.1 1	18.2	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
6-72	8	1.0 5	7.4	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
7-72	9	1.0 5	7.4	SPADNS, USGS
7-72	10			SPADNS, USGS
6-72	11	1.0 4	7.4	NOT DETERMINED
6-72	12			SPADNS, APHA STD METH, 13ED, 1971
6-72	13	1.0 2	7.4	NOT DETERMINED
6-72	15	1.0 1	7.4	ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
6-72	16	1.0 1	7.4	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
6-72	17	1.0 1	7.4	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
7-72	18	0.4 3	57.0	REJECT
7-72	19			ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
7-72	20	0.8 2	14.0	NOT DETERMINED
7-72	21	0.7 5	24.8	ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
7-72	22	0.9 2	3.3	SPADNS, USGS
7-72	23	0.9 1	3.3	ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
6-72	26	1.0 6	7.4	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
7-72	27	0.6 2	35.5	TECHNICON AUTOANALYZER, SPADNS WITH DISTILLATION
7-72	28	0.9 3	3.3	ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
7-72	29	1.6 2	71.9	ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
7-72	30	1.0 1	7.4	REJECT
6-72	31	1.0 1	7.4	ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
7-72	32			ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
6-72	33	1.0 3	7.4	NOT DETERMINED
6-72	34	0.7 4	24.8	ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
6-72	35			SPADNS, APHA STD METH, 13ED, 1971
6-72	36	1.0 1	7.4	NOT DETERMINED
7-72	37	1.1 7	18.2	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
				TECHNICON AUTOANALYZER, ZIRCONIUM-XYLENOL ORANGE

TOTAL RANGE 0.2000 - 1.6000  
 MEAN 0.9308 AVERAGE DEVIATION  
 STANDARD DEVIATION 0.1258 95 PCT.CONF.INTVL OF MEAN

0.1006  
 0.9308 +OR- 0.0508

SAMPLE 36

6.85 ± .21  
 6.85 ± .14

1.8  
 1.4  
 1.8  
 1.9  
 1.6  
 1.9  
 1.6  
 1.0  
 0.2

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN.	METHOD
6-72	1	3.15	5.7	TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION
6-72	2			NOT DETERMINED
6-72	3	0.82	72.7	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
6-72	4	2.920	1.1	OTHER
7-72	5	2.51	14.7	BRUCINE, USGS TWRI, BK5 CH A1
6-72	6	2.94	1.1	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
7-72	7	8.91	203.5	REJECT
6-72	8	3.81	29.6	BRUCINE, USGS TWRI, BK5 CH A1
7-72	9	1.92	35.2	BRUCINE, USGS TWRI, BK5 CH A1
7-72	10	3.43	16.0	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
6-72	11	5.43	84.2	BRUCINE, APHA STD METH, 13ED, 1971
6-72	12			BRUCINE, APHA STD METH, 13ED, 1971
6-72	13	3.21	9.1	NOT DETERMINED
6-72	15	2.51	14.7	BRUCINE, USGS TWRI, BK5 CH A1
6-72	16	2.52	14.7	BRUCINE, USGS TWRI, BK5 CH A1
6-72	17	3.06	2.3	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
7-72	18	2.96	1.1	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
7-72	19	3.22	9.1	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
7-72	20	2.62	11.3	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
7-72	21	2.31	21.6	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
7-72	22	3.13	5.7	BRUCINE, USGS TWRI, BK5 CH A1
7-72	23	2.91	1.1	BRUCINE, APHA STD METH, 13ED, 1971
6-72	26	2.96	1.1	BRUCINE, USGS TWRI, BK5 CH A1
7-72	27	3.13	5.7	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
7-72	28	10.20	241.0	BRUCINE, APHA STD METH, 13ED, 1971
7-72	29	1.71	42.0	REJECT
7-72	30	3.21	9.1	OTHER
6-72	31	3.31	12.5	BRUCINE, USGS TWRI, BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	2.32	21.6	BRUCINE, USGS TWRI, BK5 CH A1
6-72	34	5.03	70.5	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
6-72	35	34.120	*****	BRUCINE, APHA STD METH, 13ED, 1971
6-72	36	2.81	4.5	REJECT
7-72	37	2.95	1.1	OTHER
				BRUCINE, USGS TWRI, BK5 CH A1
				TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION

TOTAL RANGE 0.8000 - 34.0000  
 MEAN 2.9321 AVERAGE DEVIATION  
 STANDARD DEVIATION 0.8692 95 PCT.CONF.INTVL OF MEAN

SAMPLE 36  
 0.5439  
 2.9321 +OR- 0.3371 N03

13

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1			NOT DETERMINED
6-72	2			NOT DETERMINED
6-72	3	220 4	14.8	CARMINE, APHA STD METH, 13ED, 1971
6-72	4	300 3	16.2	CURCUMIN, APHA STD METH, 13ED, 1971
7-72	5			NOT DETERMINED
6-72	6			NOT DETERMINED
7-72	7	350 2	35.6	CARMINE, USGS BK5 CH A1
6-72	8	350 1	35.6	DIANTHRIIMIDE, USGS BK5 CH A1
7-72	9			NOT DETERMINED
7-72	10			NOT DETERMINED
6-72	11			NOT DETERMINED
6-72	12			NOT DETERMINED
6-72	13	250 1	3.1	DIANTHRIIMIDE, USGS BK5 CH A1
6-72	15			NOT DETERMINED
6-72	16			NOT DETERMINED
6-72	17	1500 2	481.1	REJECT CARMINE, USGS BK5 CH A1
7-72	18			NOT DETERMINED
7-72	19	140 2	45.8	CARMINE, USGS BK5 CH A1
7-72	20	230 3	10.9	CURCUMIN, APHA STD METH, 13ED, 1971
7-72	21	270 1	4.6	DIANTHRIIMIDE, USGS BK5 CH A1
7-72	22			NOT DETERMINED
7-72	23	240 1	7.0	DIANTHRIIMIDE, USGS BK5 CH A1
6-72	26			NOT DETERMINED
7-72	27	120 4	53.5	CARMINE, APHA STD METH, 13ED, 1971
7-72	28			NOT DETERMINED
7-72	29	370 1	43.3	DIANTHRIIMIDE, USGS BK5 CH A1
7-72	30			NOT DETERMINED
6-72	31	280 1	8.5	DIANTHRIIMIDE, USGS BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	320 3	24.0	CURCUMIN, APHA STD METH, 13ED, 1971
6-72	34			NOT DETERMINED
6-72	35	190 20	26.4	OTHER
6-72	36	200 2	22.5	CARMINE, USGS BK5 CH A1
7-72	37	300 3	16.2	CURCUMIN, APHA STD METH, 13ED, 1971

TOTAL RANGE 120.0000 - 1500.0000 SAMPLE 36  
 MEAN 258.1248  
 STANDARD DEVIATION 73.5044 AVERAGE DEVIATION 59.3749  
                   95 PCT.CONF.INTVL OF MEAN 258.1248 +OR- 39.1594    8

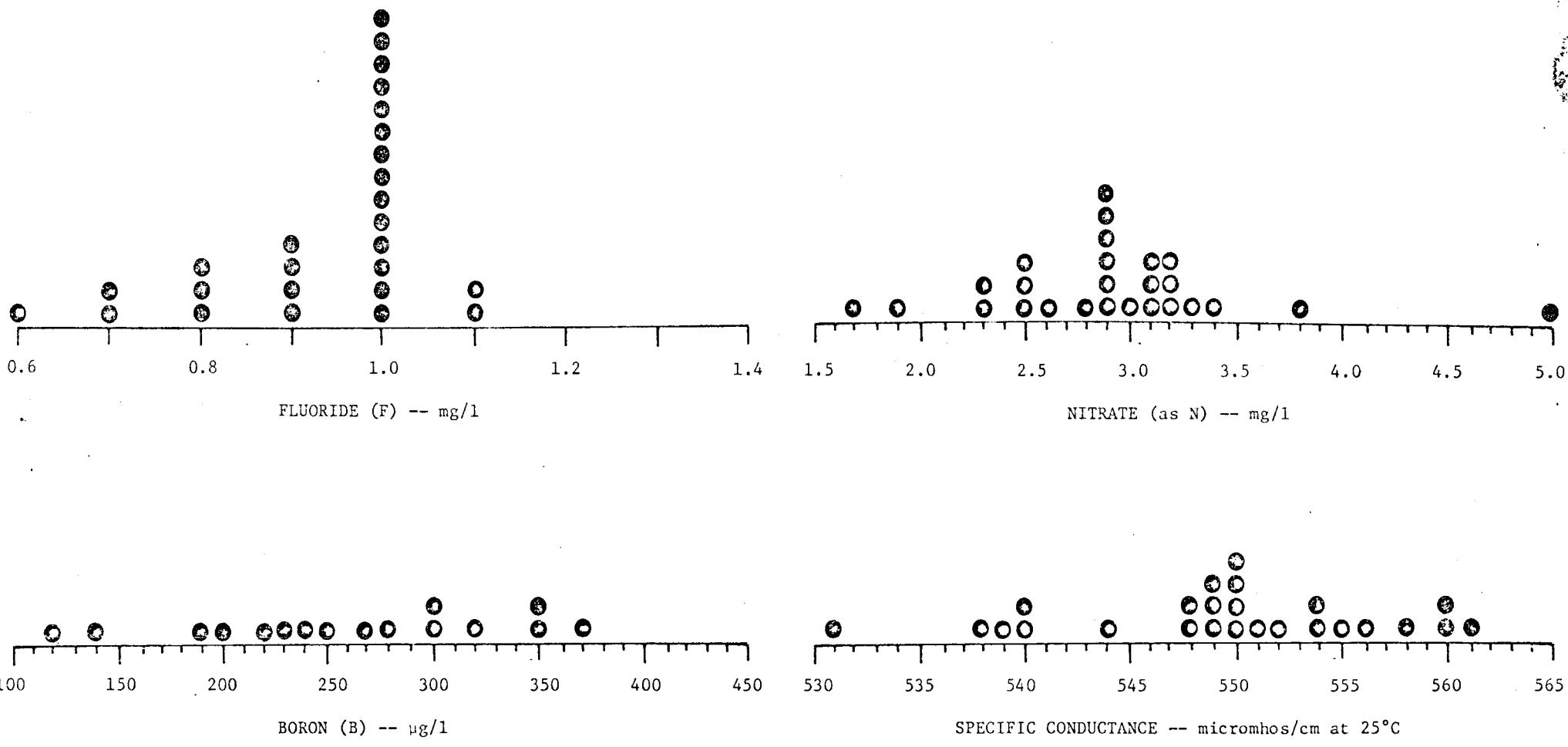
288 ± 39  
 4

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	560	0.6	OTHER
6-72	2	551	1.0	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
6-72	3	554	0.5	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	4	531	4.6	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	5	550	1.2	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
6-72	6	558	0.2	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	7	539	3.2	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	8	585	5.1	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	9	544	2.3	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	10	433	22.2	REJECT
6-72	11	570	2.4	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
6-72	12	598	7.4	WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
6-72	13	560	0.6	WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
6-72	15	549	1.4	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	16	554	0.5	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	17	550	1.2	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	18	600	7.8	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	19	552	0.8	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	20	540	3.0	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	21	538	3.3	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	22	556	0.1	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	23	549	1.4	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	26	555	0.3	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	27	540	3.0	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	28			NOT DETERMINED
7-72	29	561	0.8	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	30	549	1.4	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
6-72	31	485	12.9	REJECT
7-72	32	548	1.6	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
6-72	33	550	1.2	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	34	610	9.6	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	35			NOT DETERMINED
6-72	36	548	1.6	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	37	550	1.2	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1

TOTAL RANGE      433.0000 - 610.0000  
 MEAN            556.6301      AVERAGE DEVIATION  
 STANDARD DEVIATION    18.6297      95 PCT.CONF.INTVL OF MEAN

12.8188  
 556.6301 +OR-      6.9557      SP.COND

SAMPLE 36



SAMPLE NO. 36

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	7.7	0.1	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
6-72	2	7.2	6.4	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
6-72	3	7.8	1.4	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	4	8.0	4.0	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
7-72	5	7.7	0.1	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	6	7.5	2.5	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	7	7.5	2.5	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	8	7.5	2.5	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	9	7.8	1.4	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	10	6.1	20.7	REJECT
6-72	11	7.7	0.1	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
6-72	12	7.8	1.4	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
6-72	13	7.9	2.7	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	15	7.5	2.5	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	16	7.8	1.4	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	17	7.7	0.1	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	18	7.0	9.0	REJECT
7-72	19	7.8	1.4	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
7-72	20	7.6	1.2	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	21	7.8	1.4	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
7-72	22	7.7	0.1	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	23	7.8	1.4	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	25	7.8	1.4	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
7-72	27	7.8	1.4	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	28	8.0	4.0	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	29	7.4	3.6	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	30	7.7	0.1	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	31	7.4	3.9	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	32	7.7	0.1	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	33	7.7	0.1	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	34	7.7	0.1	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	35	6.9	10.3	REJECT
6-72	36	7.7	0.1	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
7-72	37	7.8	1.4	INSTRUMENT, USGS TWRI BK5 CH A1
INSTRUMENT, USGS TWRI BK5 CH A1				INSTRUMENT, USGS TWRI BK5 CH A1

TOTAL RANGE 6.1000 - 8.0000  
MEAN 7.6935 AVERAGE DEVIATION  
STANDARD DEVIATION 0.1750 95 PCT.CONF.INTVL OF MEAN

SAMPLE 36  
0.1257  
7.6935 +OR- 0.0642 PH

2

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1			NOT DETERMINED
6-72	2	160	13.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	3	180	2.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	4	200	8.1	OTHER
7-72	5			NOT DETERMINED
6-72	6	170	8.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	7	220	18.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	8			NOT DETERMINED
7-72	9	180	2.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	10			NOT DETERMINED
6-72	11			NOT DETERMINED
6-72	12			NOT DETERMINED
6-72	13	150	18.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	15			NOT DETERMINED
6-72	16	200	8.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	17			NOT DETERMINED
7-72	18			NOT DETERMINED
7-72	19			NOT DETERMINED
7-72	20	70	62.2	REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	21	180	2.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	22			NOT DETERMINED
7-72	23	200	8.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	26			NOT DETERMINED
7-72	27	150	18.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	28	10	94.6	REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	29	160	13.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	30			NOT DETERMINED
6-72	31	170	8.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	200	8.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	34			NOT DETERMINED
6-72	35			NOT DETERMINED
6-72	36	250	35.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	37	190	2.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1

TOTAL RANGE      10.0000 - 250.0000      SAMPLE 36  
 MEAN      184.9998      AVERAGE DEVIATION      20.6249  
 STANDARD DEVIATION      26.5832      95 PCT.CONF.INTVL OF MEAN      184.9998 +OR- 14.1622      SR

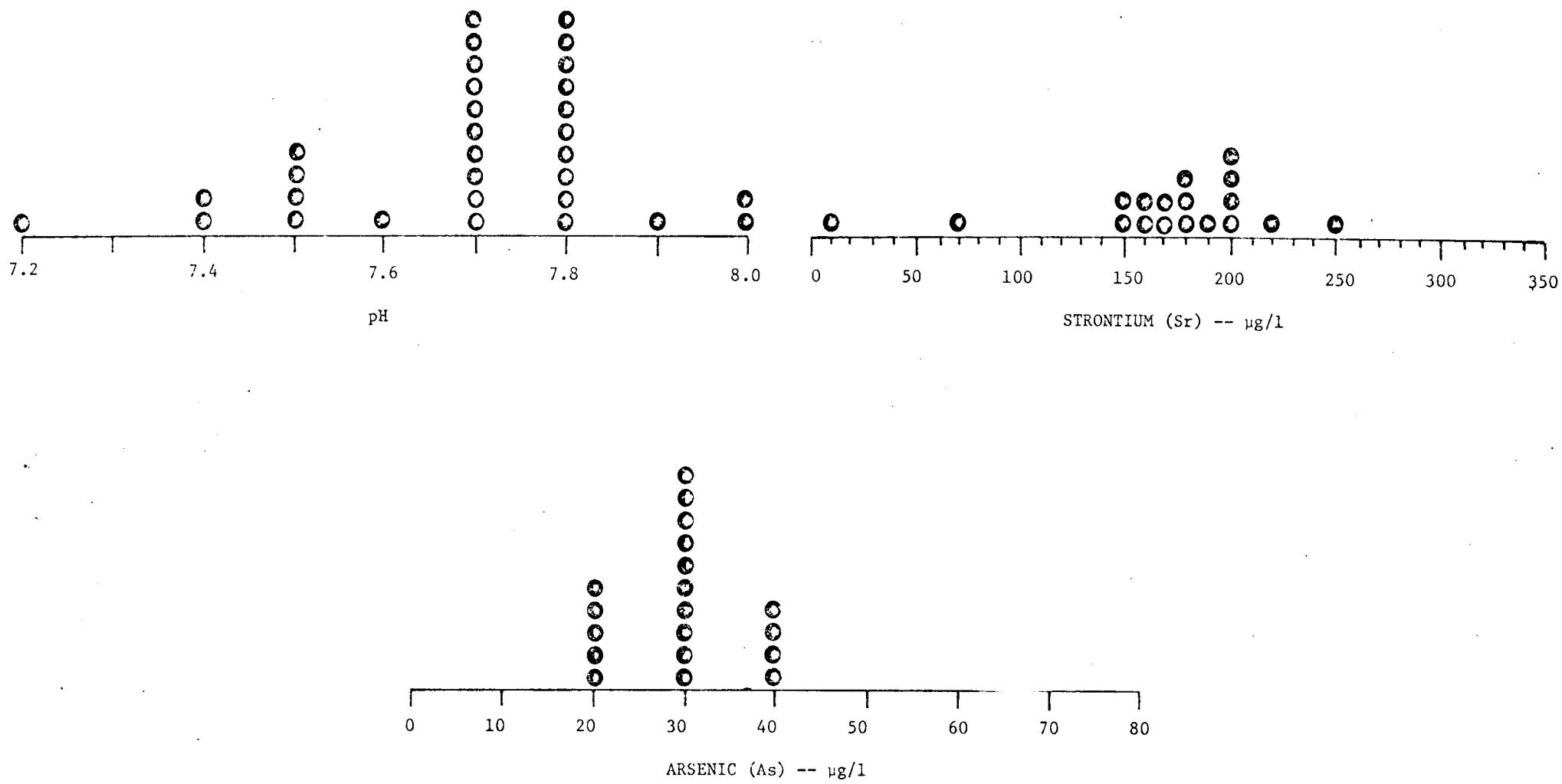
32

DATE MO-YR	CODE	REPORTED VALUE	PCT. DEV. FROM MEAN	METHOD
6-72	1	34.1	1.8	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
6-72	2			NOT DETERMINED
6-72	3			NOT DETERMINED
6-72	4	36.20	1.8	OTHER
7-72	5			NOT DETERMINED
6-72	6	40.1	35.7	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
7-72	7	30.1	1.8	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
6-72	8	30.1	1.8	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
7-72	9	40.1	35.7	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
7-72	10			NOT DETERMINED
6-72	11			NOT DETERMINED
6-72	12			NOT DETERMINED
6-72	13	40.1	35.7	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
6-72	15	20.1	22.1	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
6-72	16	30.1	1.8	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
6-72	17	30.1	1.8	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
7-72	18	20.3	32.1	SILVER DIETHYLDITHIOCARBAMATE, APHA STD METH, 13ED, 1971
7-72	19			NOT DETERMINED
7-72	20			NOT DETERMINED
7-72	21	30.1	1.8	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
7-72	22			NOT DETERMINED
7-72	23	20.1	32.1	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
6-72	26	30.3	1.8	SILVER DIETHYLDITHIOCARBAMATE, APHA STD METH, 13ED, 1971
7-72	27	30.1	1.8	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
7-72	28			NOT DETERMINED
7-72	29	20.1	32.1	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
7-72	30			NOT DETERMINED
6-72	31	20.1	32.1	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1
7-72	32			NOT DETERMINED
6-72	33	30.3	1.8	SILVER DIETHYLDITHIOCARBAMATE, APHA STD METH, 13ED, 1971
6-72	34			NOT DETERMINED
6-72	35			NOT DETERMINED
6-72	36			NOT DETERMINED
7-72	37	40.1	35.7	SILVER DIETHYLDITHIOCARBAMATE, USGS TWRI BK5, CH A1

TOTAL RANGE 20.0000 - 40.0000  
 MEAN 29.4735 AVERAGE DEVIATION 4.9862  
 STANDARD DEVIATION 7.0564 95 PCT.CONF.INTVL OF MEAN 29.4735 +OR- 3.3983

SAMPLE 36

AS



SAMPLE NO. 36

DETERMINATION	NO. LABS REPORTING	PCT. OF VALUES REJECTED	PCT. OF UNREJECTED VALUES WITHIN			
			95 PCT. CI	X +OR- STD	X +OR- 2STD	
S102	29	0	38	76	93	
CA	33	3	34	78	94	
MG	34	12	59	59	90	
NA	31	10	3	32	96	
K	31	6	31	59	93	
HClO <sub>3</sub>	33	9	30	70	93	
S04	31	3	53	70	90	
CL	34	3	32	68	97	
F	29	10	15	89	96	
N0 <sub>3</sub>	21	10	54	62	89	
F	17	6	38	69	100	
SP.COND	32	6	47	80	90	
PH	34	9	32	68	97	
SR	18	11	25	75	94	
AS	19	0	53	53	100	

SAMPLE NO. 36

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	7.0	3.0	TECHNICON AUTOANALYZER, MOLYBOSILICATE
6-72	2	4.5	33.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	3	7.6	11.9	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	4	4.0	41.1	MOLYBOSILICATE, APHA STD METH, 13ED, 1971
7-72	5	6.8	0.1	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	6	7.4	8.9	TECHNICON AUTOANALYZER, MOLYBOSILICATE
7-72	7	6.7	1.4	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	8	6.8	0.1	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	9	6.9	1.6	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	10			NOT DETERMINED
6-72	11	6.8	0.1	HETEROPOLY BLUE, APHA STD METH, 13ED, 1971
6-72	12			NOT DETERMINED
6-72	13	7.2	6.0	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	15	6.9	1.6	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	16	6.9	1.6	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	17	6.8	0.1	TECHNICON AUTOANALYZER, MOLYBOSILICATE
7-72	18	9.2	35.4	OTHER
7-72	19	6.3	7.3	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	20	7.6	11.9	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	21	5.1	24.9	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	22	6.0	11.7	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	23	7.0	3.0	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	26			NOT DETERMINED
7-72	27	7.1	4.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	28	6.0	11.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	29	6.7	1.4	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	30	7.3	7.5	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
6-72	31	6.9	1.6	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	6.7	1.4	MOLYBOSILICATE, APHA STD METH, 13ED, 1971
6-72	34	9.0	32.5	MOLYBOSILICATE, APHA STD METH, 13ED, 1971
6-72	35			NOT DETERMINED
6-72	36	7.2	6.0	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
7-72	37	6.6	2.8	TECHNICON AUTOANALYZER, AMINONAPHTHOLSULFONIC ACID

TOTAL RANGE      4.0000 - 9.2000      SAMPLE 37  
 MEAN      6.7931      AVERAGE DEVIATION      0.6435  
 STANDARD DEVIATION      1.0461      95 PCT.CONF.INTVL OF MEAN      6.7931 +OR- 0.3978      S102

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	13.2	1.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	2	10.2	24.0	REJECT
6-72	3	14.2	6.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	4	13.2	1.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	5	14.2	6.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	6	13.2	1.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	7	13.1	1.2	COMPLEXOMETRIC, USGS TWRI BK5 CH A1
6-72	8	13.2	1.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	9	12.2	8.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	10	12.2	8.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	11	14.3	6.4	EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
6-72	12	13.2	1.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	13	14.2	6.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	15	13.1	1.2	COMPLEXOMETRIC, USGS TWRI BK5 CH A1
6-72	16	14.2	6.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	17	13.2	1.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	18	12.2	8.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	19	14.2	6.4	EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
7-72	20	13.2	1.2	EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
7-72	21	13.1	1.2	COMPLEXOMETRIC, USGS TWRI BK5 CH A1
7-72	22	11.1	16.4	COMPLEXOMETRIC, USGS TWRI BK5 CH A1
7-72	23	13.2	1.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	26	13.2	1.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	27	13.1	1.2	COMPLEXOMETRIC, USGS TWRI BK5 CH A1
7-72	28	13.2	1.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	29	13.1	1.2	COMPLEXOMETRIC, USGS TWRI BK5 CH A1
7-72	30	14.2	6.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	31	13.1	1.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	12.1	8.8	COMPLEXOMETRIC, USGS TWRI BK5 CH A1
6-72	34	13.5	1.2	EDTA TITRIMETRIC, APHA STD METH, 13ED, 1971
6-72	35	15.0	14.0	OTHER
6-72	36	14.1	6.4	COMPLEXOMETRIC, USGS TWRI BK5 CH A1
7-72	37	14.1	6.4	COMPLEXOMETRIC, USGS TWRI BK5 CH A1

TOTAL RANGE 10.0000 - 15.0000 SAMPLE 37  
 MEAN 13.1561 AVERAGE DEVIATION 0.5898  
 STANDARD DEVIATION 0.8076 95 PCT.CONF.INTVL OF MEAN 13.1561 +OR- 0.2898 CA

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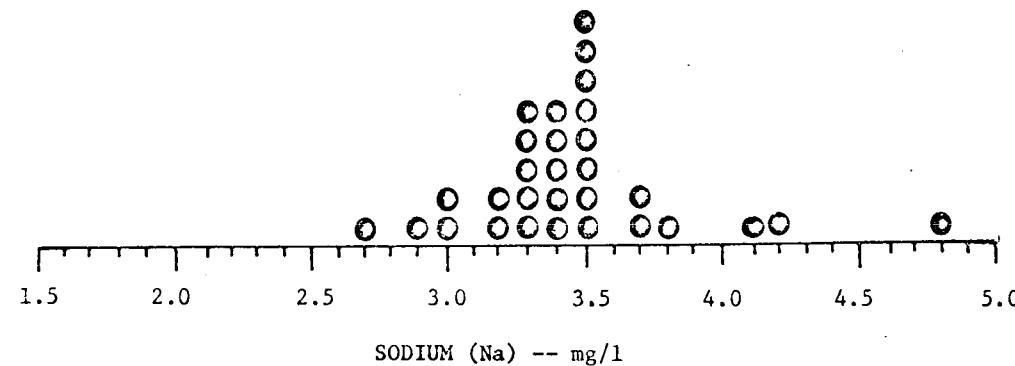
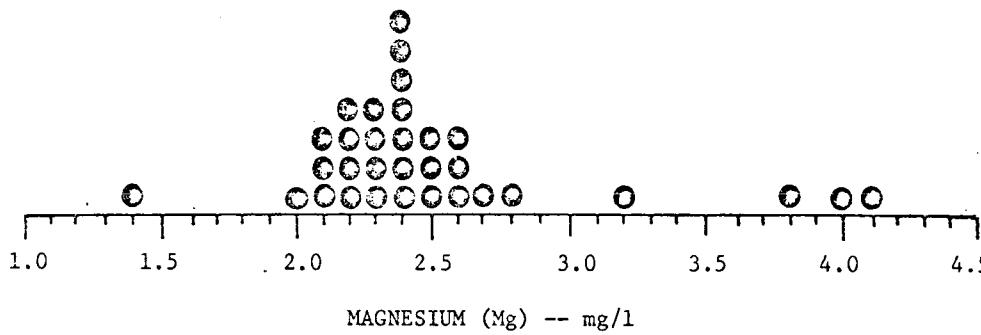
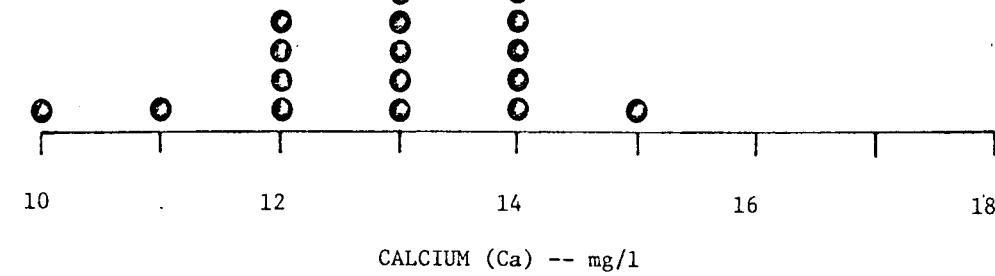
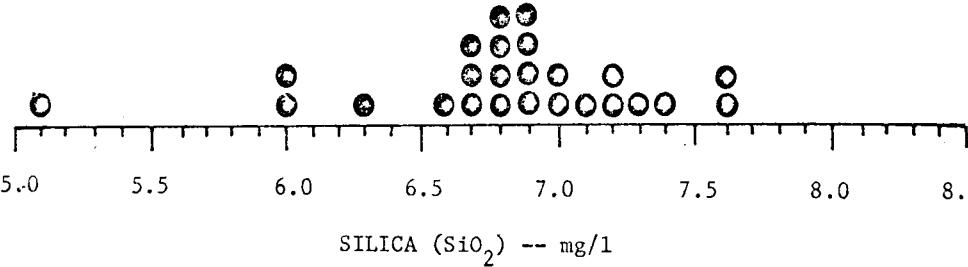
DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	2.62	3.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	2	13.2	417.4	REJECT
6-72	3	2.22	12.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	4	2.51	0.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	5	2.32	8.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	6	2.22	12.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	7	2.51	0.5	CALCULATION, USGS TWRI BKS CH A1
6-72	8	2.42	4.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	9	2.42	4.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	10	2.22	12.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	11	1.4	44.3	CALCULATION, USGS TWRI BKS CH A1
6-72	12	2.32	8.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	13	2.32	8.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	15	2.31	8.5	CALCULATION, USGS TWRI BKS CH A1
6-72	16	2.72	7.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	17	2.42	4.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	18	2.12	16.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	19	2.41	4.5	CALCULATION, USGS TWRI BKS CH A1
7-72	20	4.0	59.2	CALCULATION, USGS TWRI BKS CH A1
7-72	21	2.52	0.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	22	3.81	51.2	CALCULATION, USGS TWRI BKS CH A1
7-72	23	2.62	3.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	26	2.22	12.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	27	2.11	16.4	CALCULATION, USGS TWRI BKS CH A1
7-72	28	2.42	4.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	29	2.82	11.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	30	2.62	3.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	31	2.42	4.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	3.21	27.4	CALCULATION, USGS TWRI BKS CH A1
6-72	34	4.1	63.2	CALCULATION, USGS TWRI BKS CH A1
6-72	35	2.0	20.4	OTHER
6-72	36	2.41	4.5	CALCULATION, USGS TWRI BKS CH A1
7-72	37	2.12	16.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1

TOTAL RANGE 1.4000 - 13.0000 SAMPLE 37  
 MEAN 2.5125 AVERAGE DEVIATION 0.3617  
 STANDARD DEVIATION 0.5587 95 PCT.CONF.INTVL OF MEAN 2.5125 +OR- 0.2005 MG

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DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	3.3	3.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	2	2.9	15.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	3	2.7	20.9	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
6-72	4	4.8	40.6	REJECT
7-72	5	3.3	3.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	6	3.5	2.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	7	3.2	6.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	8	3.3	3.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	9	3.4	0.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	10	3.5	2.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	11	7.5	119.7	REJECT
6-72	12	3.8	11.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	13	3.5	2.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	15	3.3	3.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	16	4.1	20.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	17	3.4	0.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	18	4.2	23.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	19	3.4	0.4	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
7-72	20	3.5	2.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	21	3.5	2.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	22			NOT DETERMINED
7-72	23	3.7	8.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	26	3.5	2.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	27	3.4	0.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	28	3.5	2.5	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
7-72	29	3.4	0.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	30	3.2	6.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	31	3.0	12.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	3.7	8.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	34	3.0	12.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	35			NOT DETERMINED
6-72	36	3.5	2.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	37	3.3	3.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1

TOTAL RANGE 2.7000 - 7.5000 SAMPLE 37  
 MEAN 3.4138 AVERAGE DEVIATION 0.2152  
 STANDARD DEVIATION 0.3125 95 PCT.CONF.INTVL OF MEAN 3.4138 +OR- 0.1188 NA



SAMPLE NO. 37

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	1.2	38.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	2	0.8	7.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	3	0.7	19.3	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
6-72	4	1.0	15.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	5	0.8	7.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	6	0.9	3.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	7	0.8	7.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	8	0.9	3.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	9	0.9	3.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	10	0.8	7.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	11	0.8	7.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	12	0.9	3.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	13	0.8	7.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	15	0.9	3.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	16	0.6	30.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	17	0.9	3.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	18	1.0	15.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	19	0.8	7.8	FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
7-72	20	0.8	7.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	21	0.9	3.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	22			NOT DETERMINED
7-72	23	1.0	15.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	26	0.9	3.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	27	0.8	7.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	28	2.1	142.0	REJECT FLAME PHOTOMETRIC, APHA STD METH, 13ED, 1971
7-72	29	1.0	15.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	30	0.8	7.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	31	0.8	7.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	0.9	3.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	34	0.6	30.9	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	35	1.1	26.8	OTHER
6-72	36	1.0	15.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	37	0.8	7.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1

TOTAL RANGE 0.6000 - 2.1000  
 MEAN 0.8677 AVERAGE DEVIATION  
 STANDARD DEVIATION 0.1275 95 PCT.CONF.INTVL OF MEAN

0.0978  
 0.8677 +OR- 0.0468

SAMPLE 37  
 K

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	30	4.1	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	2	31	0.9	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	3	33	5.5	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	4	30	4.1	POTENTIOMETRIC, APHA STD METH, 13ED, 1971
7-72	5	31	0.9	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	6	32	2.3	FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS
7-72	7	31	0.9	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	8	31	0.9	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	9	31	0.9	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	10	32	2.3	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	11	31	82.2	INDICATOR, APHA STD METH, 13ED, 1971
6-72	12	34	8.7	INDICATOR, APHA STD METH, 13ED, 1971
6-72	13	35	11.9	OTHER
6-72	15	30	4.1	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	16	34	8.7	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	17	30	4.1	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	18	50	59.8	POTENTIOMETRIC, APHA STD METH, 13ED, 1971
7-72	19	33	5.5	FISHER TITRALIZER, ELECTROMETRIC TITRATION, USGS
7-72	20	34	8.7	INDICATOR, APHA STD METH, 13ED, 1971
7-72	21	30	4.1	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	22	32	2.3	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	23	32	2.3	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	26	32	2.3	POTENTIOMETRIC, APHA STD METH, 13ED, 1971
7-72	27	33	5.5	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	28	26	16.9	POTENTIOMETRIC, APHA STD METH, 13ED, 1971
7-72	29	32	2.3	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	30	32	2.3	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	31	32	2.3	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
7-72	32	26	16.9	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	33	31	0.9	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	34	26	16.9	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
6-72	35			INDICATOR, APHA STD METH, 13ED, 1971
6-72	36	32	2.3	NOT DETERMINED
7-72	37	32	2.3	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
				ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1

TOTAL RANGE 26.0000 - 57.0000  
 MEAN 31.2901 AVERAGE DEVIATION  
 STANDARD DEVIATION 2.1786 95 PCT.CONF.INTVL OF MEAN

1.5526  
 31.2901 +OR- 0.7990

SAMPLE 37

HC03

8

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	22.2	8.7	TURBIDIMETRIC, APHA STD METH, 13ED, 1971
6-72	2			NOT DETERMINED
6-72	3	19.4 ✓	6.1	GRAVIMETRIC, APHA STD METH, 13ED, 1971
6-72	4	23.1	13.6	THORIN, USGS TWRI BK5 CH A1
7-72	5	21.1	3.7	THORIN, USGS TWRI BK5 CH A1
6-72	6	23.20	13.6	OTHR
7-72	7	21.1	3.7	THORIN, USGS TWRI BK5 CH A1
6-72	8	21.1	3.7	THORIN, USGS TWRI BK5 CH A1
7-72	9	21.1	3.7	THORIN, USGS TWRI BK5 CH A1
7-72	10	21.4 ✓	3.7	GRAVIMETRIC, APHA STD METH, 13ED, 1971
6-72	11	12.7	40.7	TURBIDIMETRIC, APHA STD METH, 13ED, 1971
6-72	12	15.20	25.9	OTHER
6-72	13	18.1	11.1	THORIN, USGS TWRI BK5 CH A1
6-72	15	21.1	3.7	THORIN, USGS TWRI BK5 CH A1
6-72	16	24.1	18.6	THORIN, USGS TWRI BK5 CH A1
6-72	17	21.1	3.7	THORIN, USGS TWRI BK5 CH A1
7-72	18	17.20	16.0	OTHER
7-72	19	20.3	1.2	FISHER TITRALIZER, THORIN, USGS
7-72	20	18.1	91.1	THORIN, USGS TWRI BK5 CH A1
7-72	21	20.1	1.2	THORIN, USGS TWRI BK5 CH A1
7-72	22	21.1	3.7	THORIN, USGS TWRI BK5 CH A1
7-72	23	20.1	1.2	THORIN, USGS TWRI BK5 CH A1
6-72	26	20.2	1.2	TURBIDIMETRIC, APHA STD METH, 13ED, 1971
7-72	27	21.20	3.7	OTHER
7-72	28	22.4 ✓	8.7	GRAVIMETRIC, APHA STD METH, 13ED, 1971
7-72	29	20.1	1.2	THORIN, USGS TWRI BK5 CH A1
7-72	30	21.1	3.7	THORIN, USGS TWRI BK5 CH A1
6-72	31	21.1	3.7	THORIN, USGS TWRI BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	17.4 ✓	16.0	GRAVIMETRIC, APHA STD METH, 13ED, 1971
6-72	34	14.2	30.8	TURBIDIMETRIC, APHA STD METH, 13ED, 1971
6-72	35			NOT DETERMINED
6-72	36	22.1	8.7	THORIN, USGS TWRI BK5 CH A1
7-72	37	20.5	1.2	TECHNICON AUTOANALYZER, TURBIDIMETRIC-BARIUM CHLORIDE

TOTAL RANGE 1.8000 - 24.0000  
 MEAN 20.2412  
 STANDARD DEVIATION 2.2306

AVERAGE DEVIATION  
 95 PCT.CONF.INTVL OF MEAN

1.5791  
 20.2412 +OR- 0.8483

SAMPLE 37  
 SO4

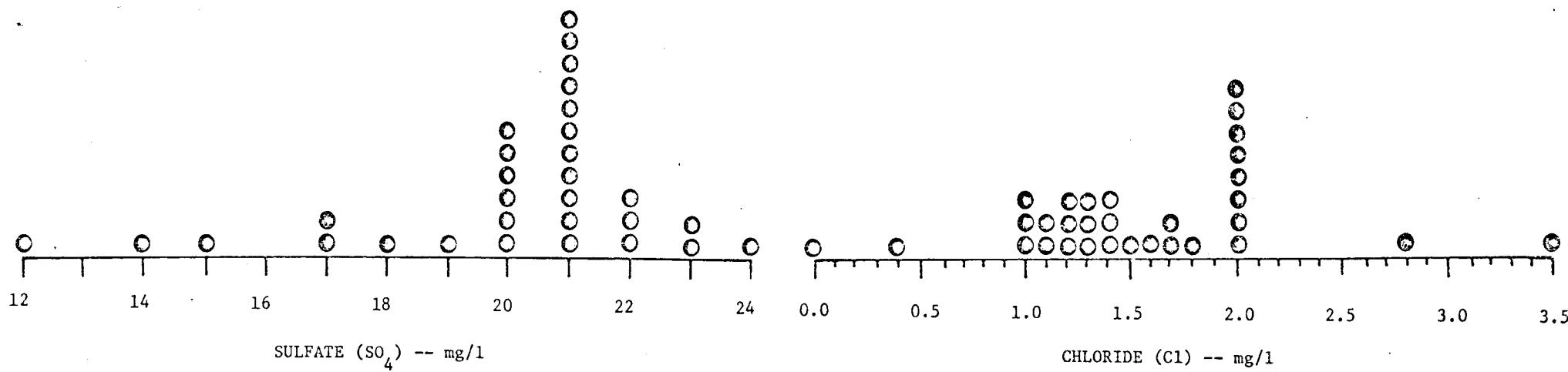
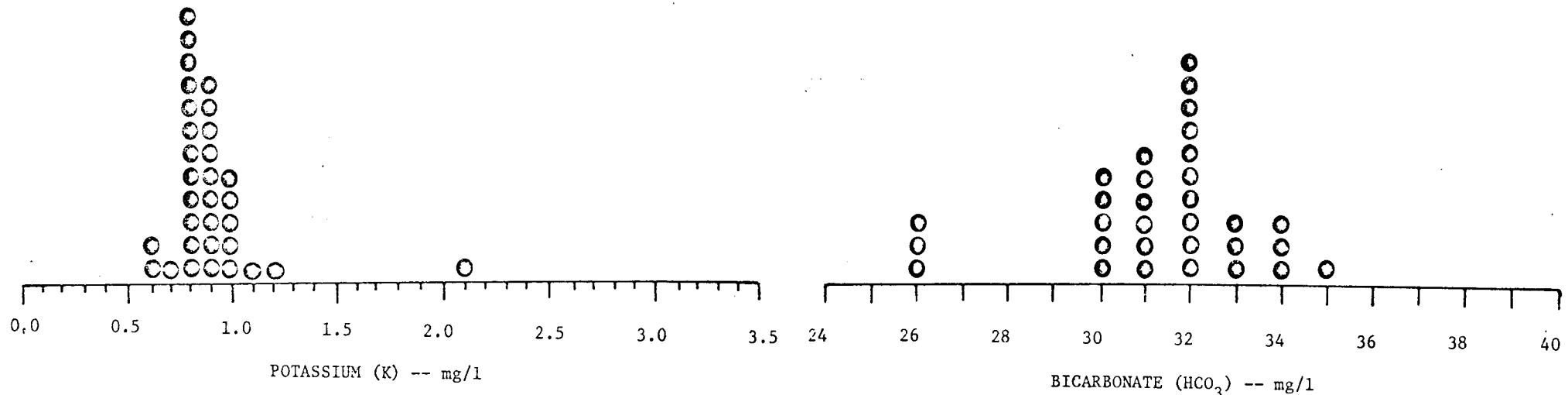
9

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	2.4 3	35.1	MERCURIC NITRATE, APHA STD METH, 13ED, 1971
6-72	2	3.5 2	136.5	MERCURIOMETRIC, USGS TWRI BK5 CH A1
6-72	3	1.7 3	14.9	MERCURIC NITRATE, APHA STD METH, 13ED, 1971
6-72	4	2.6 3	35.1	MERCURIC NITRATE, APHA STD METH, 13ED, 1971
7-72	5	2.0 1	35.1	MOHR, USGS TWRI BK5 CH A1
6-72	6	2.8 4	89.2	TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
7-72	7	1.6 2	32.4	MERCURIOMETRIC, USGS TWRI BK5 CH A1
6-72	8	1.6 1	8.1	MOHR, USGS TWRI BK5 CH A1
7-72	9	1.2 1	18.9	MOHR, USGS TWRI BK5 CH A1
7-72	10	1.0 3	32.4	MERCURIC NITRATE, APHA STD METH, 13ED, 1971
6-72	11	1.8 3	21.6	MERCURIC NITRATE, APHA STD METH, 13ED, 1971
6-72	12			NOT DETERMINED
6-72	13	1.2 1	18.9	OTHER
6-72	15	1.1 1	25.7	MOHR, USGS TWRI BK5 CH A1
6-72	16	1.1 2	25.7	MERCURIOMETRIC, USGS TWRI BK5 CH A1
6-72	17	1.5 2	1.4	MERCURIOMETRIC, USGS TWRI BK5 CH A1
7-72	18	2.0 20	35.1	OTHER
7-72	19	0.0 20	100.0	OTHER
7-72	20	0.0 1	440.5	REJECT
7-72	21	2.0 1	35.1	MOHR, USGS TWRI BK5 CH A1
7-72	22	1.2 2	18.9	MERCURIOMETRIC, USGS TWRI BK5 CH A1
7-72	23	1.7 2	14.9	MERCURIOMETRIC, USGS TWRI BK5 CH A1
6-72	26	1.4 3	5.4	MERCURIC NITRATE, APHA STD METH, 13ED, 1971
7-72	27	1.4 3	5.4	MERCURIC NITRATE, APHA STD METH, 13ED, 1971
7-72	28	0.4 20	73.0	OTHER
7-72	29	1.3 1	12.2	MOHR, USGS TWRI BK5 CH A1
7-72	30	1.3 2	12.2	MERCURIOMETRIC, USGS TWRI BK5 CH A1
6-72	31	1.4 1	5.4	MOHR, USGS TWRI BK5 CH A1
7-72	32	1.0 1	32.4	MOHR, USGS TWRI BK5 CH A1
6-72	33	2.0 1	35.1	MOHR, USGS TWRI BK5 CH A1
6-72	34	2.6 3	35.1	MERCURIC NITRATE, APHA STD METH, 13ED, 1971
6-72	35			NOT DETERMINED
6-72	36	2.0 1	35.1	MOHR, USGS TWRI BK5 CH A1
7-72	37	1.3 4	12.2	TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE

TOTAL RANGE 0.0 - 8.0000  
 MEAN 1.4800 AVERAGE DEVIATION  
 STANDARD DEVIATION 0.5511 95 PCT.CONF.INTVL OF MEAN

0.4253  
 1.4800 +OR- 0.2058

SAMPLE 37  
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SAMPLE NO. 37

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DATE MD-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	0.4 20	58.1	OTHER
6-72	2	0.9 2	5.8	-ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
6-72	3	1.0 4	4.7	SPADNS, APHA STD METH, 13ED, 1971
6-72	4	1.0 3	4.7	-ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
7-72	5	1.0 1	4.7	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
6-72	6	1.1 1	15.1	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
7-72	7	1.1 1	15.1	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
6-72	8	1.0 5	4.7	SPADNS, USGS
7-72	9	1.0 5	4.7	SPADNS, USGS
7-72	10			NOT DETERMINED
6-72	11	1.0 4	4.7	SPADNS, APHA STD METH, 13ED, 1971
6-72	12			NOT DETERMINED
6-72	13	1.0 2	4.7	-ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
6-72	15	1.0 1	4.7	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
6-72	16	1.1 1	15.1	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
6-72	17	1.0 1	4.7	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
7-72	18	0.4 3	58.1	-ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
7-72	19			NOT DETERMINED
7-72	20	0.9 2	5.8	-ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
7-72	21	0.8 5	16.3	SPADNS, USGS
7-72	22	10	946.5	REJECT -ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
7-72	23	1.0 1	4.7	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
6-72	26	1.1 6	15.1	-TECHNICON AUTOANALYZER, SPADNS WITH DISTILLATION
7-72	27	0.6 2	37.2	-ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
7-72	28	1.0 3	4.7	-ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
7-72	29	1.7 2	77.9	REJECT -ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
7-72	30	1.1 1	15.1	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
6-72	31	1.1 1	15.1	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	1.0 3	4.7	-ION-SELECTIVE ELECTRODE, APHA STD METH, 13ED, 1971
6-72	34	0.8 4	16.3	SPADNS, APHA STD METH, 13ED, 1971
6-72	35			NOT DETERMINED
6-72	36	1.1 1	15.1	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
7-72	37	1.3 1	36.0	-TECHNICON AUTOANALYZER, ZIRCONIUM-XYLENOL ORANGE

TOTAL RANGE 0.4000 - 10.0000 SAMPLE 37  
 MEAN 0.9556 AVERAGE DEVIATION 0.1399  
 STANDARD DEVIATION 0.2044 95 PCT.CONF.INTVL OF MEAN 0.9556 ±OR- 0.0809 F

.85 ± .23

8

18

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	3.0 5	575.0	REJECT TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION
6-72	2			NOT DETERMINED
6-72	3	0.1 2	15.6	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
6-72	4	0.1 20	15.6	OTHER
7-72	5	0.0 1	100.0	BRUCINE, USGS TWRI, BK5 CH A1
6-72	6	0.2 6	68.8	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
7-72	7	0.0 1	100.0	BRUCINE, USGS TWRI, BK5 CH A1
6-72	8	0.1 1	15.6	BRUCINE, USGS TWRI, BK5 CH A1
7-72	9	0.1 2	15.6	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
7-72	10	0.0 3	100.0	BRUCINE, APHA STD METH, 13ED, 1971
6-72	11	0.2 3	68.8	BRUCINE, APHA STD METH, 13ED, 1971
6-72	12			NOT DETERMINED
6-72	13	0.1 1	15.6	BRUCINE, USGS TWRI, BK5 CH A1
6-72	15	0.1 1	15.6	BRUCINE, USGS TWRI, BK5 CH A1
6-72	16	0.1 2	15.6	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
6-72	17	0.1 6	15.6	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
7-72	18	0.2 6	68.8	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
7-72	19	0.1 6	15.6	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
7-72	20	0.1 2	15.6	PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
7-72	21	0.1 1	15.6	BRUCINE, USGS TWRI, BK5 CH A1
7-72	22	0.1 3	15.6	BRUCINE, APHA STD METH, 13ED, 1971
7-72	23	1.0 1	743.8	BRUCINE, USGS TWRI, BK5 CH A1
6-72	26	0.1 6	15.6	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
7-72	27	0.1 3	15.6	BRUCINE, APHA STD METH, 13ED, 1971
7-72	28	0.5 20	321.9	REJECT OTHER
7-72	29	0.1 40	15.6	BRUCINE, USGS TWRI, BK5 CH A1
7-72	30	0.1 1	15.6	BRUCINE, USGS TWRI, BK5 CH A1
6-72	31	0.2 1	68.8	BRUCINE, USGS TWRI, BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	0.4 2	237.5	REJECT PHENOLDISULFONIC ACID, APHA STD METH, 13ED, 1971
6-72	34	0.3 3	153.1	BRUCINE, APHA STD METH, 13ED, 1971
6-72	35	0.2 00	68.8	OTHER
6-72	36	0.1 1	15.6	BRUCINE, USGS TWRI, BK5 CH A1
7-72	37	0.2 5	68.8	TECHNICON AUTOANALYZER, HYDRAZINE REDUCTION

TOTAL RANGE 0.0 - 1.0000 SAMPLE 37  
 MEAN 0.1185 AVERAGE DEVIATION 0.0497  
 STANDARD DEVIATION 0.0681 95 PCT.CONF.INTVL OF MEAN 0.1185 +OR- 0.0270 NOS

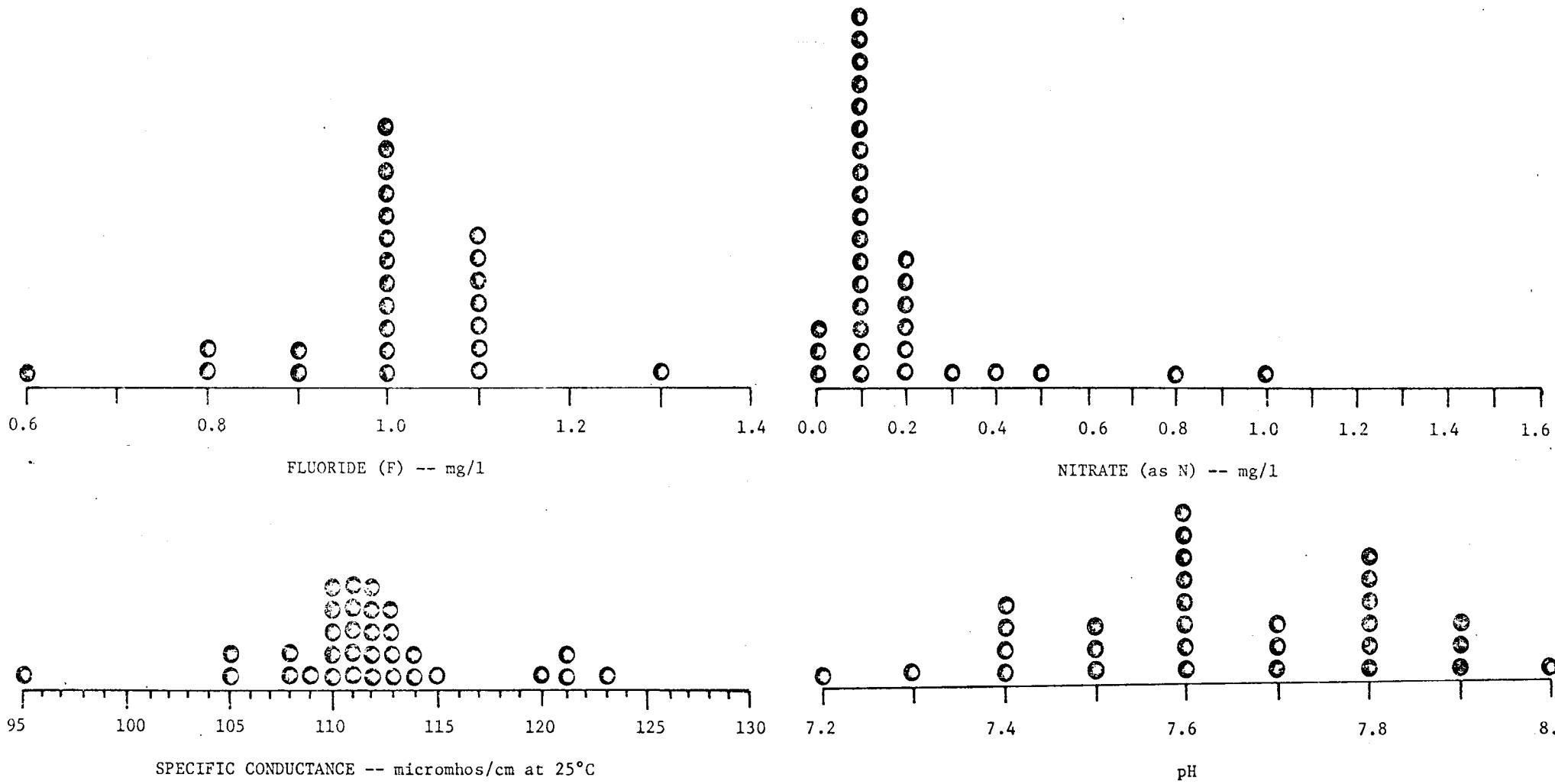
DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	120	6.9	OTHER
6-72	2	111	1.1	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
6-72	3	112	0.2	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	4	115	2.4	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	5	110	2.0	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
6-72	6	113	0.7	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	7	109	2.9	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	8	113	0.7	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	9	111	1.1	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	10	95	15.4	REJECT
6-72	11	123	9.6	WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
6-72	12	121	7.8	WHEATSTONE BRIDGE, APHA STD METH, 13ED, 1971
6-72	13	113	0.7	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	15	111	1.1	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	16	114	1.6	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	17	112	0.2	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	18	112	0.2	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	19	112	0.2	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	20	110	2.0	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	21	108	3.8	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	22	113	0.7	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	23	121	7.8	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	26	110	2.0	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	27	108	3.8	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	28			NOT DETERMINED
7-72	29	114	1.6	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	30	112	0.2	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
6-72	31	105	6.5	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
7-72	32	110	2.0	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	33	110	2.0	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	34	105	6.5	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
6-72	35			NOT DETERMINED
6-72	36	111	1.1	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
7-72	37	111	1.1	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1

TOTAL RANGE      95.0000 - 123.0000      SAMPLE 37  
 MEAN            112.2578      AVERAGE DEVIATION      2.9136  
 STANDARD DEVIATION    4.2029      95 PCT.CONF.INTVL OF MEAN      112.2578 +OR- 1.5414      SP.COND

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1	7.4	2.3	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
6-72	2	7.1	6.3	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
6-72	3	7.8	3.0	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	4	8.0	5.6	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
7-72	5	7.6	0.3	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	6	7.6	0.3	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	7	7.3	3.6	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	8	7.6	0.3	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	9	7.5	1.0	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	10	5.1	32.7	REJECT
6-72	11	7.9	4.3	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
6-72	12	7.8	3.0	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
6-72	13	7.8	3.0	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	15	7.4	2.3	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	16	7.5	0.3	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	17	7.6	0.3	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	18	6.8	10.2	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
7-72	19	7.5	1.0	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	20	7.9	4.3	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
7-72	21	7.7	1.6	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	22	7.5	1.0	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	23	7.4	2.3	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	26	7.8	3.0	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
7-72	27	7.6	0.3	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	28	7.8	3.0	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	29	7.1	6.3	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	30	7.7	1.6	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	31	7.4	2.3	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	32	7.9	4.3	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	33	7.6	0.3	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	34	7.0	3.0	INSTRUMENT, USGS TWRI BK5 CH A1
6-72	35	7.2	5.0	GLASS ELECTRODE, APHA STD METH, 13ED, 1971
6-72	36	7.6	0.3	INSTRUMENT, USGS TWRI BK5 CH A1
7-72	37	7.7	1.6	INSTRUMENT, USGS TWRI BK5 CH A1

TOTAL RANGE      5.1000 - 8.0000  
 MEAN            7.5757      AVERAGE DEVIATION  
 STANDARD DEVIATION    0.2658      95 PCT.CONF.INTVL OF MEAN

SAMPLE 37  
 0.2006      7.5757 +OR-      0.0939      PH



SAMPLE NO. 37

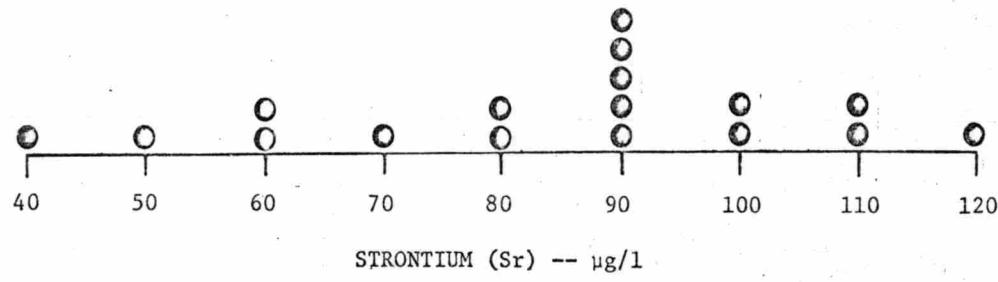
DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHOD
6-72	1			NOT DETERMINED
6-72	2	040	50.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	3	120	50.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	4	50	37.5	OTHER
7-72	5			NOT DETERMINED
6-72	6	90	12.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	7	110	37.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	8			NOT DETERMINED
7-72	9	80	0.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	10			NOT DETERMINED
6-72	11			NOT DETERMINED
6-72	12			NOT DETERMINED
6-72	13	60	25.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	15			NOT DETERMINED
6-72	16	110	37.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	17			NOT DETERMINED
7-72	18			NOT DETERMINED
7-72	19			NOT DETERMINED
7-72	20	10	87.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	21	040	12.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	22			NOT DETERMINED
7-72	23	100	25.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	26			NOT DETERMINED
7-72	27	70	12.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	28	60	25.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	29	80	0.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	30			NOT DETERMINED
6-72	31	90	12.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	32			NOT DETERMINED
6-72	33	100	25.0	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
6-72	34			NOT DETERMINED
6-72	35			NOT DETERMINED
6-72	36	040	12.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
7-72	37	90	12.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1

TOTAL RANGE 10.0000 - 120.0000  
 MEAN 79.9998 AVERAGE DEVIATION  
 STANDARD DEVIATION 27.6533 95 PCT.CONF.INTVL OF MEAN

21.1111  
 79.9998 +OR- 13.7529

SAMPLE 37

SR



SAMPLE NO. 37

DETERMINATION	NO. LABS REPORTING	PCT. OF VALUES REJECTED	PCT. OF UNREJECTED VALUES WITHIN			
			95 PCT. CI	X + OR - STD	X + OR - 2STD	
SiO <sub>2</sub>	29	0	52	83	86	
Ca	33	3	53	53	94	
Mg	33	3	44	84	91	
Na	31	6	62	76	90	
K	32	3	29	68	90	
HCO <sub>3</sub>	33	6	52	77	90	
SO <sub>4</sub>	31	6	59	72	93	
CL	32	6	27	90	93	
F	29	7	52	85	93	
N0 <sub>3</sub>	31	13	63	63	96	
SP.COND	32	3	45	74	90	
PH	34	3	33	73	97	
SR	18	0	44	67	94	

SAMPLE NO. 37