

REPORT OF
ANALYTICAL EVALUATION PROGRAM
STANDARD REFERENCE WATER SAMPLES NOS. 62 and 63

December 1977

FISHMAN

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 51 laboratories for Standard Reference Water Samples Nos. 62 and 63 distributed on October 8, 1977.

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

PREPARATION OF SAMPLES

Approximately 300 gallons of each sample was collected. Sample No. 63 was acidified to a pH of about 1.5 with nitric acid and then the minor elements were added. Thymol was added to all the samples and each sample was then filtered through a 0.45- μ 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 - NO. 62

Silica (SiO ₂)	Iodide (I) - insufficient data
Calcium (Ca)	Nitrite (NO ₂ -N)
Magnesium (Mg)	Nitrate (NO ₃ -N)
Sodium (Na)	Phosphorus (P)
Potassium (K)	Dissolved Solids (residue)
Bicarbonate (HCO ₃)	Specific Conductance
Sulfate (SO ₄)	pH
Chloride (Cl)	Boron (B)
Fluoride (F)	Strontium (Sr)
Bromide (Br)	Vanadium (V)

DETERMINATIONS - NO. 63

Aluminum (Al)	Chromium, total (Cr)	Nickel (Ni)
Iron (Fe)	Cobalt (Co)	Selenium (Se)
Manganese (Mn)	Copper (Cu)	Silver (Ag)
Arsenic (As)	Lead (Pb)	Strontium (Sr)
Barium (Ba)	Lithium (Li)	Zinc (Zn)
Beryllium (Be)	Mercury (Hg)	Antimony (Sb)
Cadmium (Cd)	Molybdenum (Mo)	

STATISTICAL EVALUATION

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

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

REPORTED VALUES

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

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

PARTICIPATING LABORATORIES

U.S. Geological Survey

ARIZONA, Yuma: Linville
CALIFORNIA, Menlo Park: Brown
CALIFORNIA, Menlo Park: Barnes
COLORADO, Denver: McAvoy 004
COLORADO, Denver: Taylor
COLORADO, Denver: Thatcher
FLORIDA, Ocala: Kirkland
GEORGIA, Doraville: Leifeste 014
NEW HAMPSHIRE, Concord: Cotton
WASHINGTON, Tacoma: Ebbert

Other

ALABAMA, University: Geological Survey of Alabama, Lloyd
ALABAMA, University: Geological Survey of Alabama, Malatino
ARKANSAS, Little Rock: Ark. Dept. Pollution Cont. & Ecol.
CALIFORNIA, Davis: Radiobiology Lab, U.C.D.
CALIFORNIA, Oakland: East Bay Municipal Utility District
CALIFORNIA, La Verne: Metropolitan Water Dist.
COLORADO, Denver: Denver Water Department
COLORADO, Ft. Collins: Colo. State University, Analytical Chem. Facility
FLORIDA, Tampa: Hills County Environmental Prot. Comm.
FLORIDA, W. Palm Beach: Central & So. Fla. Flood Cont. Dist.
GEORGIA, Athens: Department of Horticulture
GEORGIA, Athens: Soil Testings & Plant Analysis Lab.
GEORGIA, Atlanta: Department of Natural Resources
GEORGIA, Atlanta: Environmental Protection Division
KANSAS, Lawrence: Kansas Geological Survey
KANSAS, Topeka: Environmental Laboratories
MASSACHUSETTS, Wellesley Hills: Dept. of Public Works

Other--continued

MISSOURI, Jefferson City: DEQ, Laboratory Services
MONTANA, Butte: Montana Bureau of Mines & Geology
NEVADA, Reno: Bureau of Labs & Research
NEVADA, Reno: Desert Res. Inst. Ctr. for Water Resources
NEW MEXICO, Gallup: Soil, Water & Materials Testing Lab.
NEW YORK, Hauppauge: Suffolk Environmental Control
NEW YORK, Oakdale: Suffolk County Water Authority
NORTH DAKOTA, Bismarck: North Dakota State Labs
OHIO, Dayton: Miami Conservancy District
OKLAHOMA, Oklahoma City: Oklahoma State Health Department
PENNSYLVANIA, West Chester: Chester County Health Dept.
PENNSYLVANIA, Harrisburg: Pa. Dept. of Environmental Res.
PENNSYLVANIA, Pittsburgh: Pa. Dept. of Environmental Res.
SOUTH CAROLINA, Columbia: So. Carolina Water Resources Com.
SOUTH DAKOTA, Brookings: Water Quality Laboratory
TENNESSEE, Chattanooga: TVA
TENNESSEE, Knoxville: Dept. of Civil Engineering
VIRGINIA, Manassas: Occoquan Watershed Monitoring Lab.
WASHINGTON, Olympia: Department of Ecology
WEST VIRGINIA, Morgantown: Geological Survey
WISCONSIN, Delafield: Department of Natural Resources
WYOMING, Laramie: Wyoming Department of Agriculture
BRAZIL, Belo Horizonte: C'ia De Pesquisa de Recursos Minerais
PUERTO RICO, San Juan: Department of Natural Resources

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR SI02
11-77	1	12	14.8	MOLYBDOSILICATE, APHA STD METH, 14ED
11-77	2	9.4	10.1	EMISSION-PLASMA
11-77	4	12	14.8	TECHNICON AUTOANALYZER, MOLYBDOSILICATE BLUE
11-77	5	11	5.2	MOLYBDOSILICATE, APHA STD METH, 14ED
11-77	6			NOT DETERMINED
11-77	7	10	4.4	TECHNICON AUTOANALYZER, MOLYBDOSILICATE BLUE
11-77	8			NOT DETERMINED
11-77	10	11	5.2	ATOMIC ABS-DIRECT
11-77	11	10	4.4	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
11-77	12	10	4.4	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
11-77	13	11	5.2	EMISSION-PLASMA
11-77	14	11	5.2	TECHNICON AUTOANALYZER, MOLYBDOSILICATE BLUE
11-77	15	10	4.4	MOLYBDOSILICATE, APHA STD METH, 14ED
11-77	16	12	14.8	MOLYBDOSILICATE, APHA STD METH, 14ED
11-77	17			NOT DETERMINED
11-77	18	8.0	23.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	19	11	5.2	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
10-77	20	7.5	28.3	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
11-77	21			NOT DETERMINED
11-77	22			NOT DETERMINED
11-77	23			NOT DETERMINED
11-77	24	11	5.2	ATOMIC ABS-DIRECT
11-77	25			NOT DETERMINED
11-77	26			NOT DETERMINED
11-77	27	11	5.2	HETEROPOLY BLUE, APHA STD METH, 14ED
11-77	28	11	5.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	29	10	4.4	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
10-77	30			NOT DETERMINED
11-77	31			NOT DETERMINED
11-77	32			NOT DETERMINED
11-77	34			NOT DETERMINED
11-77	36			NOT DETERMINED
11-77	37			NOT DETERMINED
11-77	38			NOT DETERMINED
11-77	39	11	5.2	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
11-77	40			NOT DETERMINED
11-77	41	9.6	8.2	TECHNICON AUTOANALYZER, MOLYBDOSILICATE BLUE
11-77	43			NOT DETERMINED
11-77	44	10	4.4	ATOMIC ABS-DIRECT
11-77	45	10	4.4	HETEROPOLY BLUE, APHA STD METH, 14ED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR SI02
11-77	46			NOT DETERMINED
11-77	47	9.0	13.9	MOLYBDSILICATE, APHA STD METH, 14ED
11-77	48	9.8	6.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	49			NOT DETERMINED
11-77	50			NOT DETERMINED
11-77	52			NOT DETERMINED
11-77	53	12	14.8	MOLYBDATE BLUE, USGS TWRI BK5 CH A1
11-77	54	19	81.7	REJECT ATOMIC ABS-DIRECT
11-77	55	12	14.8	ATOMIC ABS-DIRECT
11-77	56			NOT DETERMINED

TOTAL RANGE	7.5	-	19						
MEAN		10.4555		AVERAGE DEVIATION	0.9350				SAMPLE 62
STANDARD DEVIATION		1.1637		95 PCT.CONF.INTVL OF MEAN	10.4555 +0R-	0.4604			SI02

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR CA
11-77	1	26	1.3	OTHER
11-77	2	27	2.5	EMISSION-PLASMA
11-77	4	26	1.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	5	27	2.5	ATOMIC ABS-DIRECT
11-77	6	28	6.3	EMISSION-FLAME
11-77	7			NOT DETERMINED
11-77	8	25	5.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	10	26	1.3	ATOMIC ABS-DIRECT
11-77	11	27	2.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	12	26	1.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	13	28	6.3	EMISSION-PLASMA
11-77	14	28	6.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	15	26	1.3	ATOMIC ABS-DIRECT
11-77	16	27	2.5	EDTA TITRIMETRIC, APHA STD METH, 14ED
11-77	17			NOT DETERMINED
11-77	18	27	2.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	19	26	1.3	EDTA TITRIMETRIC, APHA STD METH, 14ED
10-77	20	27	2.5	COMPLEXOMETRIC, USGS TWRI BK5 CH A1
11-77	21	29	10.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	22	34	29.0	ATOMIC ABS-DIRECT
11-77	23			NOT DETERMINED
11-77	24	26	1.3	ATOMIC ABS-DIRECT
11-77	25	23	12.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	26	26	1.3	ATOMIC ABS-DIRECT
11-77	27	26	1.3	ATOMIC ABS-DIRECT
11-77	28	25	5.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	29	28	6.3	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
10-77	30			NOT DETERMINED
11-77	31			NOT DETERMINED
11-77	32	24	8.9	ATOMIC ABS-DIRECT
11-77	34	27	2.5	ATOMIC ABS-DIRECT
11-77	36	29	10.1	ATOMIC ABS-DIRECT
11-77	37	18	31.7	ATOMIC ABS-DIRECT
11-77	38	21	20.3	ATOMIC ABS-DIRECT
11-77	39	26	1.3	EDTA TITRIMETRIC, APHA STD METH, 14ED
11-77	40	29	10.1	ATOMIC ABS-DIRECT
11-77	41	25	5.1	ATOMIC ABS-DIRECT
11-77	43	18	31.7	ATOMIC ABS-DIRECT
11-77	44	28	6.3	EDTA TITRIMETRIC, APHA STD METH, 14ED
11-77	45	30	13.9	EDTA TITRIMETRIC, APHA STD METH, 14ED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHODS FOR	CA
11-77	46	24	8.9		ATOMIC ABS-DIRECT	
11-77	47	26	1.3		COMPLEXOMETRIC, USGS TWRI BK5 CH A1	
11-77	48	34	29.0		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	49	53	101.1	REJECT	ATOMIC ABS-DIRECT	
11-77	50	26	1.3		ATOMIC ABS-DIRECT	
11-77	52	25	5.1		EMISSION-FLAME	
11-77	53	24	8.9		ATOMIC ABS-DIRECT	
11-77	54	26	1.3		ATOMIC ABS-DIRECT	
11-77	55	29	10.1		EDTA TITRIMETRIC, APHA STD METH, 14ED	
11-77	56				NOT DETERMINED	

TOTAL RANGE	18	-	53				SAMPLE 62
MEAN		26.3486		AVERAGE DEVIATION	1.9708		
STANDARD DEVIATION		3.0070		95 PCT.CONF.INTVL OF MEAN	26.3486 +0R-	0.9235	CA

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	MG
11-77	1	8.0	15.9	OTHER	
11-77	2	7.1	2.9	EMISSION-PLASMA	
11-77	4	6.7	2.9	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	5	6.9	0.0	ATOMIC ABS-DIRECT	
11-77	6	6.0	13.1	ATOMIC ABS-DIRECT	
11-77	7	7.0	1.4	ATOMIC ABS-DIRECT	
11-77	8	6.3	8.7	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	10	8.0	15.9	ATOMIC ABS-DIRECT	
11-77	11	8.8	27.5	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	12	6.6	4.4	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	13	7.0	1.4	EMISSION-PLASMA	
11-77	14	6.7	2.9	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	15	7.0	1.4	ATOMIC ABS-DIRECT	
11-77	16	7.0	1.4	CALCULATION,	USGS TWRI BKS CH A1
11-77	17			NOT DETERMINED	
11-77	18	6.6	4.4	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	19	9.3	34.7	REJECT	TITRIMETRIC-EDTA, ASTM METHOD B, D1126-67
10-77	20	6.9	0.0	CALCULATION,	USGS TWRI BKS CH A1
11-77	21	6.8	1.5	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	22	6.7	2.9	ATOMIC ABS-DIRECT	
11-77	23			NOT DETERMINED	
11-77	24	6.6	4.4	ATOMIC ABS-DIRECT	
11-77	25	6.0	13.1	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	26	6.8	1.5	ATOMIC ABS-DIRECT	
11-77	27	6.7	2.9	ATOMIC ABS-DIRECT	
11-77	28	6.7	2.9	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	29	6.5	5.8	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
10-77	30			NOT DETERMINED	
11-77	31			NOT DETERMINED	
11-77	32	6.8	1.5	ATOMIC ABS-DIRECT	
11-77	34	7.0	1.4	ATOMIC ABS-DIRECT	
11-77	36	6.2	10.2	ATOMIC ABS-DIRECT	
11-77	37	6.0	13.1	ATOMIC ABS-DIRECT	
11-77	38	6.8	1.5	ATOMIC ABS-DIRECT	
11-77	39	8.5	23.1	CALCULATION,	USGS TWRI BKS CH A1
11-77	40	0.7	89.9	REJECT	ATOMIC ABS-DIRECT
11-77	41	6.3	8.7	ATOMIC ABS-DIRECT	
11-77	43	6.5	5.8	ATOMIC ABS-DIRECT	
11-77	44	6.1	11.6	TITRIMETRIC-EDTA,	ASTM METHOD B, D1126-67
11-77	45	12	73.9	REJECT	TITRIMETRIC-EDTA, ASTM METHOD B, D1126-67

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	MG
11-77	46	6.5	5.8	ATOMIC ABS-DIRECT	
11-77	47	7.0	1.4	CALCULATION, USGS TWRI BKS CH A1	
11-77	48	7.0	1.4	ATOMIC ABS-DIRECT, USGS TWRI BKS CH A1	
11-77	49	13.0000	88.3	REJECT	
11-77	50	8.0	15.9	ATOMIC ABS-DIRECT	
11-77	52	6.7	2.9	ATOMIC ABS-DIRECT	
11-77	53	8.5	23.1	ATOMIC ABS-DIRECT	
11-77	54	7.0	1.4	ATOMIC ABS-DIRECT	
11-77	55	6.7	2.9	TITRIMETRIC-EDTA, ASTM METHOD B, D1126-67	
11-77	56			NOT DETERMINED	

TOTAL RANGE	0.7	-	13			
MEAN		6.9024	AVERAGE DEVIATION	0.4567		SAMPLE 62
STANDARD DEVIATION		0.6676	95 PCT.CONF.INTVL OF MEAN	6.9024 +OR-	0.2107	MG

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHODS FOR	NA
11-77	1	240	988.3	REJECT	EMISSION-FLAME	
11-77	2	23	4.3		EMISSION-PLASMA	
11-77	4	23	4.3		ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	5	22	0.2		ATOMIC ABS-DIRECT	
11-77	6	23	4.3		EMISSION-FLAME	
11-77	7	21	4.8		ATOMIC ABS-DIRECT	
11-77	8	23	4.3		ATOMIC ABS-DIRECT	
11-77	10	23	4.3		EMISSION-FLAME	
11-77	11	22	0.2		ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	12	22	0.2		ATOMIC ABS-DIRECT	
11-77	13	21	4.8		EMISSION-PLASMA	
11-77	14	22	0.2		ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	15	21	4.8		EMISSION-FLAME	
11-77	16	21	4.8		ATOMIC ABS-DIRECT	
11-77	17	22	0.2		EMISSION-FLAME	
11-77	18	22	0.2		EMISSION-FLAME	
11-77	19	21	4.8		ATOMIC ABS-DIRECT	
10-77	20	21	4.8		EMISSION-FLAME	
11-77	21	22	0.2		ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	22	100	353.5	REJECT	ATOMIC ABS-DIRECT	
11-77	23				NOT DETERMINED	
11-77	24	21	4.8		ATOMIC ABS-DIRECT	
11-77	25	15	32.0	REJECT	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	26	23	4.3		ATOMIC ABS-DIRECT	
11-77	27	22	0.2		ATOMIC ABS-DIRECT	
11-77	28	24	8.8		ATOMIC ABS-DIRECT	
11-77	29	21	4.8		ATOMIC ABS-DIRECT	
10-77	30				NOT DETERMINED	
11-77	31				NOT DETERMINED	
11-77	32	22	0.2		ATOMIC ABS-DIRECT	
11-77	34	22	0.2		ATOMIC ABS-DIRECT	
11-77	36	30	36.0	REJECT	ATOMIC ABS-DIRECT	
11-77	37	21	4.8		ATOMIC ABS-DIRECT	
11-77	38				NOT DETERMINED	
11-77	39	22	0.2		EMISSION-FLAME	
11-77	40	22	0.2		ATOMIC ABS-DIRECT	
11-77	41	20	9.3		ATOMIC ABS-DIRECT	
11-77	43	23	4.3		EMISSION-FLAME	
11-77	44	18	18.4	REJECT	EMISSION-FLAME	
11-77	45	21	4.8		ATOMIC ABS-DIRECT	

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHODS FOR	NA
11-77	46	21	4.8		ATOMIC ABS-DIRECT	
11-77	47	23	4.3		ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	48	25	13.4		ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	49	21	4.8		ATOMIC ABS-DIRECT	
11-77	50	37	67.8	REJECT	ATOMIC ABS-DIRECT	
11-77	52	22	0.2		ATOMIC ABS-DIRECT	
11-77	53	24	8.8		EMISSION-FLAME	
11-77	54	29	31.5	REJECT	ATOMIC ABS-DIRECT	
11-77	55	23	4.3		ATOMIC ABS-DIRECT	
11-77	56				NOT DETERMINED	

TOTAL RANGE	15	1 - 240				SAMPLE 62
MEAN		22.0524	AVERAGE DEVIATION	0.8088		
STANDARD DEVIATION		1.0641	95 PCT.CONF.INTVL OF MEAN	22.0524 +OR-	0.3489	NA

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	K
11-77	1	46	982.4	REJECT	EMISSION-FLAME
11-77	2			NOT DETERMINED	
11-77	4	5.0	17.6		
11-77	5	4.1	3.5		USGS TWRI BK5 CH A1
11-77	6	4.0	5.9		ATOMIC ABS-DIRECT
11-77	7	2.3	45.9	REJECT	ATOMIC ABS-DIRECT
11-77	8	6.4	50.6	REJECT	ATOMIC ABS-DIRECT
11-77	10	5.0	17.6		EMISSION-FLAME
11-77	11	4.2	1.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	12	4.3	1.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	13	4.5	5.9		EMISSION-PLASMA
11-77	14	4.4	3.5		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	15	5.0	17.6		EMISSION-FLAME
11-77	16	4.2	1.2		ATOMIC ABS-DIRECT
11-77	17	3.8	10.6		EMISSION-FLAME
11-77	18	4.3	1.2		EMISSION-FLAME
11-77	19	4.6	8.2		ATOMIC ABS-DIRECT
10-77	20	5.5	29.4		EMISSION-FLAME
11-77	21	4.3	1.2		ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1
11-77	22	4.2	1.2		ATOMIC ABS-DIRECT
11-77	23			NOT DETERMINED	
11-77	24	4.3	1.2		ATOMIC ABS-DIRECT
11-77	25	3.8	10.6		ATOMIC ABS-DIRECT
11-77	26	4.2	1.2		ATOMIC ABS-DIRECT
11-77	27	4.4	3.5		ATOMIC ABS-DIRECT
11-77	28	4.0	5.9		ATOMIC ABS-DIRECT
11-77	29	4.2	1.2		ATOMIC ABS-DIRECT
10-77	30			NOT DETERMINED	
11-77	31			NOT DETERMINED	
11-77	32			NOT DETERMINED	
11-77	34	4.5	5.9		ATOMIC ABS-DIRECT
11-77	36	3.8	10.6		ATOMIC ABS-DIRECT
11-77	37			NOT DETERMINED	
11-77	38			NOT DETERMINED	
11-77	39	3.6	15.3		EMISSION-FLAME
11-77	40	4.5	5.9		ATOMIC ABS-DIRECT
11-77	41	4.0	5.9		ATOMIC ABS-DIRECT
11-77	43	4.3	1.2		EMISSION-FLAME
11-77	44	3.9	8.2		EMISSION-FLAME
11-77	45	3.5	17.6		ATOMIC ABS-DIRECT

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	K
11-77	46	3.5	17.6	ATOMIC ABS-DIRECT	
11-77	47	5.0	17.6	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	48	4.2	1.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	49	4.3	1.2	ATOMIC ABS-DIRECT	
11-77	50	3.5	17.6	ATOMIC ABS-DIRECT	
11-77	52	4.2	1.2	ATOMIC ABS-DIRECT	
11-77	53	4.4	3.5	EMISSION-FLAME	
11-77	54	2.6	38.8	REJECT ATOMIC ABS-DIRECT	
11-77	55	4.0	5.9	ATOMIC ABS-DIRECT	
11-77	56			NOT DETERMINED	

TOTAL RANGE	2.3	-	46				
MEAN		4.2500	AVERAGE DEVIATION	0.3211			SAMPLE 62
STANDARD DEVIATION		0.4452	95 PCT.CONF.INTVL OF MEAN	4.2500 +OR-	0.1460		K

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR HCO3
11-77	1	68	18.3	INDICATOR, APHA.STD METH, 14ED
11-77	2			NOT DETERMINED
11-77	4	80	3.9	AUTOMATED ELECTROMETRIC TITRATION
11-77	5	88	5.7	INDICATOR, APHA.STD METH, 14ED
11-77	6			NOT DETERMINED
11-77	7	1	98.8	REJECT TECHNICON AUTOANALYZER, METHYL ORANGE
11-77	8			NOT DETERMINED
11-77	10	96	15.4	POTENTIOMETRIC, APHA STD METH, 14ED
11-77	11	92	10.5	POTENTIOMETRIC, APHA STD METH, 14ED
11-77	12			NOT DETERMINED
11-77	13			NOT DETERMINED
11-77	14	79	5.1	AUTOMATED ELECTROMETRIC TITRATION
11-77	15	89	6.9	POTENTIOMETRIC, APHA STD METH, 14ED
11-77	16	95	14.2	INDICATOR, APHA.STD METH, 14ED
11-77	17			NOT DETERMINED
11-77	18	88	5.7	POTENTIOMETRIC, APHA STD METH, 14ED
11-77	19	69	17.1	INDICATOR, APHA.STD METH, 14ED
10-77	20	87	4.5	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
11-77	21	58	30.3	POTENTIOMETRIC, APHA STD METH, 14ED
11-77	22			NOT DETERMINED
11-77	23	88	5.7	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
11-77	24	85	2.1	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
11-77	25	68	18.3	OTHER
11-77	26	100	20.2	OTHER
11-77	27	87	4.5	POTENTIOMETRIC, APHA STD METH, 14ED
11-77	28	72	13.5	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
11-77	29	88	5.7	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
10-77	30	89	6.9	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
11-77	31	69	17.1	INDICATOR, APHA.STD METH, 14ED
11-77	32	89	6.9	POTENTIOMETRIC, APHA STD METH, 14ED
11-77	34	45	45.9	REJECT POTENTIOMETRIC, APHA STD METH, 14ED
11-77	36	93	11.7	TECHNICON AUTOANALYZER, METHYL ORANGE
11-77	37			NOT DETERMINED
11-77	38	77	7.5	POTENTIOMETRIC, APHA STD METH, 14ED
11-77	39	93	11.7	AUTOMATED ELECTROMETRIC TITRATION
11-77	40	91	9.3	INDICATOR, APHA.STD METH, 14ED
11-77	41	87	4.5	POTENTIOMETRIC, APHA STD METH, 14ED
11-77	43	77	7.5	POTENTIOMETRIC, APHA STD METH, 14ED
11-77	44	84	0.9	INDICATOR, APHA.STD METH, 14ED
11-77	45	98	17.8	INDICATOR, APHA.STD METH, 14ED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR HC03
11-77	46	66	20.7	OTHER
11-77	47	88	5.7	INDICATOR, APHA.STD METH, 14ED
11-77	48	29	65.2	REJECT ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
11-77	49			NOT DETERMINED
11-77	50	70	15.9	POTENTIOMETRIC, APHA STD METH, 14ED
11-77	52			NOT DETERMINED
11-77	53	90	8.1	ELECTROMETRIC TITRATION, USGS TWRI BK5 CH A1
11-77	54	82	1.5	AUTOMATED ELECTROMETRIC TITRATION
11-77	55	76	8.7	AUTOMATED ELECTROMETRIC TITRATION
11-77	56			NOT DETERMINED

TOTAL RANGE	1	-	100				
MEAN		83.2220	AVERAGE DEVIATION	8.5618			SAMPLE 62
STANDARD DEVIATION		10.2793	95 PCT.CONF.INTVL OF MEAN	83.2220 +0R-	3.4778		HC03

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR S04
11-77	1	9.7	83.6	REJECT OTHER
11-77	2			NOT DETERMINED
11-77	4	62	4.7	TECHNICON AUTOANALYZER, METHYL THYMOL BLUE
11-77	5	58	2.1	GRAVIMETRIC, APHA STD METH, 14ED
11-77	6	68	14.8	TURBIDIMETRIC
11-77	7	52	12.2	TECHNICON AUTOANALYZER, METHYL THYMOL BLUE
11-77	8	62	4.7	TECHNICON AUTOANALYZER, METHYL THYMOL BLUE
11-77	10			NOT DETERMINED
11-77	11	63	6.4	VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
11-77	12	58	2.1	OTHER
11-77	13			NOT DETERMINED
11-77	14	59	0.4	TECHNICON AUTOANALYZER, METHYL THYMOL BLUE
11-77	15	58	2.1	TURBIDIMETRIC
11-77	16	59	0.4	TURBIDIMETRIC
11-77	17			NOT DETERMINED
11-77	18	66	11.4	OTHER
11-77	19	53	10.5	TURBIDIMETRIC
10-77	20	58	2.1	VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
11-77	21			NOT DETERMINED
11-77	22			NOT DETERMINED
11-77	23			NOT DETERMINED
11-77	24	60	1.3	VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
11-77	25	65	9.8	TURBIDIMETRIC
11-77	26	63	6.4	OTHER
11-77	27	54	8.8	TURBIDIMETRIC
11-77	28	69	16.5	VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
11-77	29	59	0.4	VOLUMETRIC THORIN, USGS TWRI BK5 CH A1
10-77	30			NOT DETERMINED
11-77	31			NOT DETERMINED
11-77	32	62	4.7	TURBIDIMETRIC
11-77	34	110	85.7	REJECT GRAVIMETRIC, APHA STD METH, 14ED
11-77	36	66	11.4	TECHNICON AUTOANALYZER, METHYL THYMOL BLUE
11-77	37			NOT DETERMINED
11-77	38	47	20.6	TURBIDIMETRIC
11-77	39	58	2.1	OTHER
11-77	40	59	0.4	TECHNICON AUTOANALYZER, METHYL THYMOL BLUE
11-77	41	62	4.7	TURBIDIMETRIC
11-77	43	59	0.4	TECHNICON AUTOANALYZER, METHYL THYMOL BLUE
11-77	44	57	3.8	OTHER
11-77	45	66	11.4	TURBIDIMETRIC

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR S04
11-77	46	60	1.3	TURBIDIMETRIC
11-77	47	57	3.8	GRAVIMETRIC, APHA STD METH, 14ED
11-77	48	62	4.7	TURBIDIMETRIC
11-77	49			NOT DETERMINED
11-77	50	50	15.6	TURBIDIMETRIC
11-77	52			NOT DETERMINED
11-77	53	49	17.3	TECHNICON AUTOANALYZER, METHYL THYMOL BLUE
11-77	54	58	2.1	TECHNICON AUTOANALYZER, METHYL THYMOL BLUE
11-77	55	49	17.3	TECHNICON AUTOANALYZER, METHYL THYMOL BLUE
11-77	56	65	9.8	TURBIDIMETRIC

TOTAL RANGE	9.7	-	110					
MEAN		59.2220		AVERAGE DEVIATION	4.0802			SAMPLE 62
STANDARD DEVIATION		5.4148		95 PCT.CONF.INTVL OF MEAN	59.2220 +0R-	1.8320		S04

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR CL
11-77	1	10	9.3	MERCURIC NITRATE, APHA STD METH, 14ED
11-77	2			NOT DETERMINED
11-77	4	7.9	13.7	TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
11-77	5	6.5	29.0	ARGENTOMETRIC, APHA STD METH, 14ED
11-77	6	3.0	67.2	OTHER
11-77	7	8.0	12.6	TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
11-77	8	8.1	11.5	TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
11-77	10	12	31.1	MERCURIC NITRATE, APHA STD METH, 14ED
11-77	11	7.6	16.9	OTHER
11-77	12	7.8	14.8	OTHER
11-77	13			NOT DETERMINED
11-77	14	7.3	20.2	TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
11-77	15	7.8	14.6	MERCURIC NITRATE, APHA STD METH, 14ED
11-77	16	15	63.9	MOHR, USGS TWRI BK5 CH A1
11-77	17	8.4	8.2	MERCURIC NITRATE, APHA STD METH, 14ED
11-77	18	8.2	10.4	ION-SELECTIVE ELECTRODE
11-77	19	9.0	1.6	MERCURIC NITRATE, APHA STD METH, 14ED
10-77	20	17	85.8	MOHR, USGS TWRI BK5 CH A1
11-77	21	8.7	4.9	MERCURIC NITRATE, APHA STD METH, 14ED
11-77	22	8.0	12.6	MOHR, USGS TWRI BK5 CH A1
11-77	23	7.9	13.7	TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
11-77	24	8.4	8.2	MERCURIC NITRATE, APHA STD METH, 14ED
11-77	25	5.0	45.4	ARGENTOMETRIC, APHA STD METH, 14ED
11-77	26	15	63.9	OTHER
11-77	27	11	20.2	ARGENTOMETRIC, APHA STD METH, 14ED
11-77	28	8.6	6.0	MERCURIMETRIC, USGS TWRI BK5 CH A1
11-77	29	7.2	21.3	MERCURIMETRIC, USGS TWRI BK5 CH A1
10-77	30			NOT DETERMINED
11-77	31			NOT DETERMINED
11-77	32	7.0	23.5	MERCURIC NITRATE, APHA STD METH, 14ED
11-77	34	9.2	0.5	MERCURIC NITRATE, APHA STD METH, 14ED
11-77	36	12	31.1	TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
11-77	37			NOT DETERMINED
11-77	38	9.8	7.1	ION-SELECTIVE ELECTRODE
11-77	39	11	20.2	SILVER NITRATE, ASTM METHOD B, D512-67
11-77	40	6.0	34.4	ARGENTOMETRIC, APHA STD METH, 14ED
11-77	41	8.0	12.6	MERCURIC NITRATE, APHA STD METH, 14ED
11-77	43	11	20.2	MERCURIC NITRATE, APHA STD METH, 14ED
11-77	44	11	20.2	ARGENTOMETRIC, APHA STD METH, 14ED
11-77	45	8.0	12.6	MERCURIC NITRATE, APHA STD METH, 14ED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR CL
11-77	46			NOT DETERMINED
11-77	47	9.0	1.6	MOHR, USGS TWRI BK5 CH A1
11-77	48	13	42.1	MERCURIC NITRATE, APHA STD METH, 14ED
11-77	49			NOT DETERMINED
11-77	50	10	9.3	MERCURIC NITRATE, APHA STD METH, 14ED
11-77	52			NOT DETERMINED
11-77	53	11	20.2	MERCURIMETRIC, USGS TWRI BK5 CH A1
11-77	54	8.0	12.6	TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
11-77	55	7.0	23.5	TECHNICON AUTOANALYZER, MERCURIC THIOCYANATE
11-77	56	9.9	8.2	ARGENTOMETRIC, APHA STD METH, 14ED

TOTAL RANGE	3.0	-	17			SAMPLE 62
MEAN		9.1499		AVERAGE DEVIATION	1.9762	
STANDARD DEVIATION		2.6531		95 PCT.CONF.INTVL OF MEAN	9.1499 +OR-	0.8245 CL

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR F
11-77	1	1.4	75.0	REJECT SPADNS, APHA STD METH, 14ED
11-77	2			NOT DETERMINED
11-77	4	0.8	0.0	TECHNICON AUTOANALYZER, ION-SELECTIVE ELECTRODE
11-77	5	0.7	12.5	MANUAL ION-SELECTIVE ELECTRODE
11-77	6	0.9	12.5	MANUAL ION-SELECTIVE ELECTRODE
11-77	7			NOT DETERMINED
11-77	8	0.8	0.0	MANUAL ION-SELECTIVE ELECTRODE
11-77	10			NOT DETERMINED
11-77	11	0.6	25.0	ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
11-77	12	0.8	0.0	MANUAL ION-SELECTIVE ELECTRODE
11-77	13			NOT DETERMINED
11-77	14	0.8	0.0	TECHNICON AUTOANALYZER, ION-SELECTIVE ELECTRODE
11-77	15	0.7	12.5	MANUAL ION-SELECTIVE ELECTRODE
11-77	16	0.8	0.0	MANUAL ION-SELECTIVE ELECTRODE
11-77	17			NOT DETERMINED
11-77	18	0.9	12.5	ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
11-77	19	0.7	12.5	MANUAL ION-SELECTIVE ELECTRODE
10-77	20	0.8	0.0	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
11-77	21	0.8	0.0	MANUAL ION-SELECTIVE ELECTRODE
11-77	22			NOT DETERMINED
11-77	23	0.8	0.0	ZIRCONIUM-ERIOCHROME R, USGS TWRI BK5 CH A1
11-77	24	0.8	0.0	ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
11-77	25	0.8	0.0	ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
11-77	26	0.8	0.0	MANUAL ION-SELECTIVE ELECTRODE
11-77	27	0.9	12.5	MANUAL ION-SELECTIVE ELECTRODE
11-77	28	0.9	12.5	ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
11-77	29	0.9	12.5	ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
10-77	30			NOT DETERMINED
11-77	31			NOT DETERMINED
11-77	32	0.8	0.0	TECHNICON AUTOANALYZER, ALIZIRIN
11-77	34	0.8	0.0	ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
11-77	36	0.8	0.0	MANUAL ION-SELECTIVE ELECTRODE
11-77	37			NOT DETERMINED
11-77	38			NOT DETERMINED
11-77	39	0.4	50.0	REJECT ION-SELECTIVE ELECTRODE, USGS TWRI BK5 CH A1
11-77	40	0.8	0.0	MANUAL ION-SELECTIVE ELECTRODE
11-77	41	0.8	0.0	MANUAL ION-SELECTIVE ELECTRODE
11-77	43			NOT DETERMINED
11-77	44	0.8	0.0	MANUAL ION-SELECTIVE ELECTRODE
11-77	45	0.8	0.0	SPADNS, APHA STD METH, 14ED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	F
11-77	46			NOT DETERMINED	
11-77	47	0.7	12.5	OTHER	
11-77	48			NOT DETERMINED	
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52	0.5	37.5	REJECT	
11-77	53	0.9	12.5	MANUAL ION-SELECTIVE ELECTRODE	
11-77	54	0.8	0.0	SPADNS, APHA STD METH, 14ED	
11-77	55	0.7	12.5	MANUAL ION-SELECTIVE ELECTRODE	
11-77	56	0.9	12.5	TECHNICON AUTOANALYZER, ION-SELECTIVE ELECTRODE	
				MANUAL ION-SELECTIVE ELECTRODE	

TOTAL RANGE	0.4	-	1.4			SAMPLE 62
MEAN		0.8000		AVERAGE DEVIATION	0.0438	
STANDARD DEVIATION		0.0718		95 PCT.CONF.INTVL OF MEAN	0.8000 +OR-	0.0258 F

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR BR
11-77	1			NOT DETERMINED
11-77	2			NOT DETERMINED
11-77	4	0.40	27.3	CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
11-77	5			NOT DETERMINED
11-77	6			NOT DETERMINED
11-77	7			NOT DETERMINED
11-77	8			NOT DETERMINED
11-77	10			NOT DETERMINED
11-77	11			NOT DETERMINED
11-77	12			NOT DETERMINED
11-77	13			NOT DETERMINED
11-77	14	0.30	45.5	CATALYTIC OXIDATION, USGS TWRI BK 5 CH A1
11-77	15			NOT DETERMINED
11-77	16			NOT DETERMINED
11-77	17			NOT DETERMINED
11-77	18	0.50	9.1	OTHER
11-77	19			NOT DETERMINED
10-77	20			NOT DETERMINED
11-77	21			NOT DETERMINED
11-77	22			NOT DETERMINED
11-77	23			NOT DETERMINED
11-77	24			NOT DETERMINED
11-77	25			NOT DETERMINED
11-77	26			NOT DETERMINED
11-77	27	1.0	81.8	OTHER
11-77	28			NOT DETERMINED
11-77	29			NOT DETERMINED
10-77	30			NOT DETERMINED
11-77	31			NOT DETERMINED
11-77	32			NOT DETERMINED
11-77	34			NOT DETERMINED
11-77	36			NOT DETERMINED
11-77	37			NOT DETERMINED
11-77	38			NOT DETERMINED
11-77	39			NOT DETERMINED
11-77	40			NOT DETERMINED
11-77	41			NOT DETERMINED
11-77	43			NOT DETERMINED
11-77	44			NOT DETERMINED
11-77	45			NOT DETERMINED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	BR
11-77	46			NOT DETERMINED	
11-77	47			NOT DETERMINED	
11-77	48			NOT DETERMINED	
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52			NOT DETERMINED	
11-77	53			NOT DETERMINED	
11-77	54			NOT DETERMINED	
11-77	55			NOT DETERMINED	
11-77	56			NOT DETERMINED	

TOTAL RANGE	0.30	-	1.0			SAMPLE 62
MEAN		0.5500	AVERAGE DEVIATION	0.2250		
STANDARD DEVIATION		0.3109	95 PCT.CONF.INTVL OF MEAN	0.5500 +OR-	0.4947	BR

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR NO3-N
11-77	1	0.90	*****	REJECT OTHER
11-77	2			NOT DETERMINED
11-77	4	0.01	63.5	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
11-77	5	0.03	9.5	OTHER
11-77	6	0.0	100.0	OTHER
11-77	7			NOT DETERMINED
11-77	8	0.01	63.5	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
11-77	10			NOT DETERMINED
11-77	11			NOT DETERMINED
11-77	12			NOT DETERMINED
11-77	13			NOT DETERMINED
11-77	14	0.01	63.5	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
11-77	15			NOT DETERMINED
11-77	16	0.01	63.5	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
11-77	17			NOT DETERMINED
11-77	18	2.8	*****	REJECT BRUCINE, APHA STD METH, 14ED
11-77	19	0.48	*****	REJECT OTHER
10-77	20	0.03	9.5	BRUCINE, USGS TWRI, BK5 CH A1
11-77	21	0.06	119.0	BRUCINE, APHA STD METH, 14ED
11-77	22			NOT DETERMINED
11-77	23	0.0	100.0	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
11-77	24	0.04	46.0	BRUCINE, APHA STD METH, 14ED
11-77	25	0.0	100.0	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
11-77	26	0.10	265.1	OTHER
11-77	27	0.02	27.0	BRUCINE, APHA STD METH, 14ED
11-77	28			NOT DETERMINED
11-77	29			NOT DETERMINED
10-77	30	0.0	100.0	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
11-77	31	0.01	63.5	TECHNICON AUTOANALYZER, CADMIUM REDUGTION
11-77	32			NOT DETERMINED
11-77	34	0.0	100.0	BRUCINE, APHA STD METH, 14ED
11-77	36	0.01	63.5	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
11-77	37			NOT DETERMINED
11-77	38			NOT DETERMINED
11-77	39	0.07	155.6	MANUAL, CADMIUM REDUCTION
11-77	40	0.25	812.7	REJECT TECHNICON AUTOANALYZER, CADMIUM REDUCTION
11-77	41			NOT DETERMINED
11-77	43			NOT DETERMINED
11-77	44	0.48	*****	REJECT OTHER
11-77	45	0.09	228.6	BRUCINE, APHA STD METH, 14ED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR N03-N
11-77	46			NOT DETERMINED
11-77	47	0.0	100.0	OTHER
11-77	48	2.3	*****	REJECT MANUAL, CADMIUM REDUCTION
11-77	49			NOT DETERMINED
11-77	50	0.29	958.7	REJECT BRUCINE, APHA STD METH, 14ED
11-77	52			NOT DETERMINED
11-77	53			NOT DETERMINED
11-77	54	0.02	27.0	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
11-77	55	0.04	46.0	TECHNICON AUTOANALYZER, CADMIUM REDUCTION
11-77	56	0.07	155.6	BRUCINE, APHA STD METH, 14ED

TOTAL RANGE	0.0	-	2.8				SAMPLE 62
MEAN		0.0274		AVERAGE DEVIATION	0.0247		
STANDARD DEVIATION		0.0306		95 PCT.CONF.INTVL OF MEAN	0.0274 +OR-	0.0132	N03-N

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR P,TOTAL
11-77	1	0.49	44.0	PHOSPHOMOLYBDATE, USGS TWRI BK5 CH A1
11-77	2			NOT DETERMINED
11-77	4	0.35	2.9	TECHNICON AUTOANALYZER, PHOSPHOMOLYBDATE
11-77	5	0.32	6.0	ASCORBIC ACID, APHA STD METH, 14ED
11-77	6	0.33	3.0	OTHER
11-77	7			NOT DETERMINED
11-77	8	0.35	2.9	TECHNICON AUTOANALYZER, PHOSPHOMOLYBDATE
11-77	10	0.34	0.1	ASCORBIC ACID, APHA STD METH, 14ED
11-77	11			NOT DETERMINED
11-77	12			NOT DETERMINED
11-77	13			NOT DETERMINED
11-77	14	0.33	3.0	TECHNICON AUTOANALYZER, PHOSPHOMOLYBDATE
11-77	15			NOT DETERMINED
11-77	16	0.36	5.8	OTHER
11-77	17	0.31	8.9	ASCORBIC ACID, APHA STD METH, 14ED
11-77	18	0.51	49.9	ASCORBIC ACID, APHA STD METH, 14ED
11-77	19			NOT DETERMINED
10-77	20			NOT DETERMINED
11-77	21	0.34	0.1	ASCORBIC ACID, APHA STD METH, 14ED
11-77	22			NOT DETERMINED
11-77	23	0.32	6.0	TECHNICON AUTOANALYZER, PHOSPHOMOLYBDATE
11-77	24	0.22	35.3	PHOSPHOMOLYBDATE, USGS TWRI BK5 CH A1
11-77	25	0.23	32.4	ASCORBIC ACID, APHA STD METH, 14ED
11-77	26	0.33	3.0	OTHER
11-77	27	0.35	2.9	ASCORBIC ACID, APHA STD METH, 14ED
11-77	28	0.39	14.6	PHOSPHOMOLYBDATE, USGS TWRI BK5 CH A1
11-77	29	0.39	14.6	PHOSPHOMOLYBDATE, USGS TWRI BK5 CH A1
10-77	30	0.39	14.6	TECHNICON AUTOANALYZER, PHOSPHOMOLYBDATE
11-77	31	0.37	8.7	TECHNICON AUTOANALYZER, PHOSPHOMOLYBDATE
11-77	32	0.35	2.9	ASCORBIC ACID, APHA STD METH, 14ED
11-77	34	0.34	0.1	ASCORBIC ACID, APHA STD METH, 14ED
11-77	36	0.34	0.1	TECHNICON AUTOANALYZER, PHOSPHOMOLYBDATE
11-77	37			NOT DETERMINED
11-77	38			NOT DETERMINED
11-77	39			NOT DETERMINED
11-77	40			NOT DETERMINED
11-77	41	0.32	6.0	TECHNICON AUTOANALYZER, PHOSPHOMOLYBDATE
11-77	43	0.30	11.8	TECHNICON AUTOANALYZER, PHOSPHOMOLYBDATE
11-77	44	0.32	6.0	OTHER
11-77	45	0.33	3.0	OTHER

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN
11-77	46	0.25	26.5
11-77	47		
11-77	48		
11-77	49		
11-77	50	0.34	0.1
11-77	52	0.40	17.5
11-77	53	0.31	8.9
11-77	54	0.35	2.9
11-77	55	0.26	23.6
11-77	56	0.34	0.1

METHODS FOR P,TOTAL

OTHER
 NOT DETERMINED
 NOT DETERMINED
 NOT DETERMINED
 PHOSPHOMOLYBDATE, USGS TWRI BK5 CH A1
 ASCORBIC ACID, APHA STD METH, 14ED
 PHOSPHOMOLYBDATE, USGS TWRI BK5 CH A1
 TECHNICON AUTOANALYZER, PHOSPHOMOLYBDATE
 TECHNICON AUTOANALYZER, PHOSPHOMOLYBDATE
 ASCORBIC ACID, APHA STD METH, 14ED

TOTAL RANGE	0.22	-	0.51
MEAN	0.3403	AVERAGE DEVIATION	
STANDARD DEVIATION	0.0579	95 PCT.CONF.INTVL OF MEAN	

SAMPLE 62
 0.0368
 0.3403 +OR- 0.0202 P,TOTAL

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR DSRD180
11-77	1	187	1.4	RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1
11-77	2			NOT DETERMINED
11-77	4	185	0.3	RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1
11-77	5	185	0.3	RESIDUE-FILTERABLE, APHA STD METH, 14ED
11-77	6	175	5.1	RESIDUE-FILTERABLE, APHA STD METH, 14ED
11-77	7			NOT DETERMINED
11-77	8			NOT DETERMINED
11-77	10	211	14.4	RESIDUE-FILTERABLE, APHA STD METH, 14ED
11-77	11	170	7.8	RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1
11-77	12			NOT DETERMINED
11-77	13			NOT DETERMINED
11-77	14	185	0.3	RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1
11-77	15	175	5.1	RESIDUE-FILTERABLE, APHA STD METH, 14ED
11-77	16	193	4.6	OTHER
11-77	17			NOT DETERMINED
11-77	18	194	5.2	RESIDUE-ON-EVAPORATION, ASTM METHOD B, D1888-67
11-77	19	195	5.7	RESIDUE-ON-EVAPORATION, ASTM METHOD B, D1888-67
10-77	20			NOT DETERMINED
11-77	21			NOT DETERMINED
11-77	22			NOT DETERMINED
11-77	23			NOT DETERMINED
11-77	24	193	4.6	RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1
11-77	25	192	4.1	RESIDUE-FILTERABLE, APHA STD METH, 14ED
11-77	26	199	7.9	RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1
11-77	27	188	1.9	RESIDUE-FILTERABLE, APHA STD METH, 14ED
11-77	28	190	3.0	RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1
11-77	29	180	2.4	RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1
10-77	30			NOT DETERMINED
11-77	31	198	7.4	RESIDUE-FILTERABLE, APHA STD METH, 14ED
11-77	32			NOT DETERMINED
11-77	34	190	3.0	RESIDUE-FILTERABLE, APHA STD METH, 14ED
11-77	36	225	22.0	OTHER
11-77	37	198	7.4	RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1
11-77	38	131	29.0	RESIDUE-ON-EVAPORATION, ASTM METHOD B, D1888-67
11-77	39	161	12.7	RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1
11-77	40			NOT DETERMINED
11-77	41	190	3.0	RESIDUE-FILTERABLE, APHA STD METH, 14ED
11-77	43	150	18.7	RESIDUE-FILTERABLE, APHA STD METH, 14ED
11-77	44	198	7.4	RESIDUE-FILTERABLE, APHA STD METH, 14ED
11-77	45	132	28.4	RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN
11-77	46	212	15.0
11-77	47	155	16.0
11-77	48	148	19.8
11-77	49		
11-77	50		
11-77	52	195	5.7
11-77	53	216	17.1
11-77	54	198	7.4
11-77	55	170	7.8
11-77	56	191	3.6

METHODS FOR DSRD180

OTHER
 RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1
 RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1
 NOT DETERMINED
 NOT DETERMINED
 RESIDUE-ON-EVAPORATION, ASTM METHOD B, D1888-67
 RESIDUE-ON-EVAPORATION, USGS TWRI BK5 CH A1
 OTHER
 RESIDUE-FILTERABLE, APHA STD METH. 14ED
 OTHER

TOTAL RANGE	131	-	225				SAMPLE 62
MEAN		184.4269		AVERAGE DEVIATION	16.0985		
STANDARD DEVIATION		21.6105		95 PCT.CONF.INTVL OF MEAN	184.4269 +OR-	7.4153	DSRD180

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR SP.COND
11-77	1	285	5.3	DIRECT READING INSTRUMENT
11-77	2			NOT DETERMINED
11-77	4	298	1.0	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
11-77	5	300	0.4	DIRECT READING INSTRUMENT
11-77	6	310	3.0	DIRECT READING INSTRUMENT
11-77	7	285	5.3	DIRECT READING INSTRUMENT
11-77	8	296	1.7	DIRECT READING INSTRUMENT
11-77	10	271	10.0	DIRECT READING INSTRUMENT
11-77	11	799	165.4	REJECT WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
11-77	12	310	3.0	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
11-77	13			NOT DETERMINED
11-77	14	306	1.6	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
11-77	15	294	2.4	WHEATSTONE BRIDGE
11-77	16	300	0.4	WHEATSTONE BRIDGE
11-77	17	303	0.6	WHEATSTONE BRIDGE
11-77	18	295	2.0	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
11-77	19	335	11.3	DIRECT READING INSTRUMENT
10-77	20	306	1.6	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
11-77	21	280	7.0	DIRECT READING INSTRUMENT
11-77	22	295	2.0	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
11-77	23	300	0.4	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
11-77	24	300	0.4	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
11-77	25	294	2.4	WHEATSTONE BRIDGE
11-77	26	299	0.7	DIRECT READING INSTRUMENT
11-77	27	305	1.3	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
11-77	28	301	0.0	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
11-77	29	297	1.4	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
10-77	30	300	0.4	DIRECT READING INSTRUMENT, USGS TWRI BK5 CH A1
11-77	31	290	3.7	DIRECT READING INSTRUMENT
11-77	32	310	3.0	DIRECT READING INSTRUMENT
11-77	34	289	4.6	WHEATSTONE BRIDGE
11-77	36	313	4.0	DIRECT READING INSTRUMENT
11-77	37	250	17.0	REJECT DIRECT READING INSTRUMENT
11-77	38			NOT DETERMINED
11-77	39	306	1.6	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
11-77	40	310	3.0	DIRECT READING INSTRUMENT
11-77	41	290	3.7	DIRECT READING INSTRUMENT
11-77	43	306	1.6	DIRECT READING INSTRUMENT
11-77	44	300	0.4	WHEATSTONE BRIDGE
11-77	45	328	8.9	DIRECT READING INSTRUMENT

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR SP.COND
11-77	46	284	5.7	DIRECT READING INSTRUMENT
11-77	47			NOT DETERMINED
11-77	48	247	18.0	REJECT DIRECT READING INSTRUMENT
11-77	49			NOT DETERMINED
11-77	50	310	3.0	DIRECT READING INSTRUMENT
11-77	52			NOT DETERMINED
11-77	53	306	1.6	WHEATSTONE BRIDGE, USGS TWRI BK5 CH A1
11-77	54	320	6.3	DIRECT READING INSTRUMENT
11-77	55	310	3.0	DIRECT READING INSTRUMENT
11-77	56	308	2.3	DIRECT READING INSTRUMENT

TOTAL RANGE	247	-	799			SAMPLE 62
MEAN		301.0947	AVERAGE DEVIATION	8.8896		
STANDARD DEVIATION		12.0702	95 PCT.CONF.INTVL OF MEAN	301.0947 +OR-	3.8097	SP.COND

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR PH
11-77	1	8.3	4.4	ELECTROMETRIC
11-77	2			NOT DETERMINED
11-77	4	8.2	3.1	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	5	8.1	1.9	ELECTROMETRIC
11-77	6	8.2	3.1	ELECTROMETRIC
11-77	7	7.7	3.2	ELECTROMETRIC
11-77	8	7.8	1.9	ELECTROMETRIC
11-77	10	7.6	4.4	ELECTROMETRIC
11-77	11	8.0	0.6	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	12			NOT DETERMINED
11-77	13			NOT DETERMINED
11-77	14	8.2	3.1	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	15	7.6	4.4	ELECTROMETRIC
11-77	16	7.7	3.2	ELECTROMETRIC
11-77	17	8.2	3.1	ELECTROMETRIC
11-77	18	8.2	3.1	ELECTROMETRIC
11-77	19	8.2	3.1	ELECTROMETRIC
10-77	20	7.5	5.7	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	21	8.1	1.9	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	22	7.3	8.2	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	23	8.0	0.6	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	24	7.6	4.4	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	25	7.9	0.7	OTHER
11-77	26	8.0	0.6	ELECTROMETRIC
11-77	27	8.3	4.4	ELECTROMETRIC
11-77	28	7.8	1.9	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	29	7.7	3.2	ELECTROMETRIC, USGS TWRI BK5 CH A1
10-77	30	8.1	1.9	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	31	8.3	4.4	ELECTROMETRIC
11-77	32	8.3	4.4	ELECTROMETRIC
11-77	34	8.0	0.6	ELECTROMETRIC
11-77	36	7.8	1.9	ELECTROMETRIC
11-77	37	8.1	1.9	ELECTROMETRIC
11-77	38	7.4	6.9	ELECTROMETRIC
11-77	39	8.3	4.4	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	40	8.2	3.1	ELECTROMETRIC
11-77	41	8.1	1.9	ELECTROMETRIC
11-77	43	77.0	868.3	REJECT ELECTROMETRIC
11-77	44	8.0	0.6	ELECTROMETRIC
11-77	45	7.8	1.9	ELECTROMETRIC

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR PH
11-77	46	8.1	1.9	ELECTROMETRIC
11-77	47	7.7	3.2	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	48	7.7	3.2	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	49			NOT DETERMINED
11-77	50	7.8	1.9	ELECTROMETRIC
11-77	52	6.5	18.3	REJECT ELECTROMETRIC
11-77	53	8.1	1.9	ELECTROMETRIC, USGS TWRI BK5 CH A1
11-77	54	8.0	0.6	ELECTROMETRIC
11-77	55	8.0	0.6	ELECTROMETRIC
11-77	56	7.9	0.7	ELECTROMETRIC

TOTAL RANGE	6.5	-	77		
MEAN		7.9522		AVERAGE DEVIATION	0.2200
STANDARD DEVIATION		0.2619		95 PCT.CONF.INTVL OF MEAN	7.9522 +0R- 0.0795
					SAMPLE 62 PH

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	B
11-77	1			NOT DETERMINED	
11-77	2	10	73.9	EMISSION-PLASMA	
11-77	4	20	47.8	DIANTHRIMIDE, USGS BK5 CH A1	
11-77	5	30	21.7	CARMINE, APHA STD METH, 14ED	
11-77	6			NOT DETERMINED	
11-77	7			NOT DETERMINED	
11-77	8			NOT DETERMINED	
11-77	10			NOT DETERMINED	
11-77	11			NOT DETERMINED	
11-77	12			NOT DETERMINED	
11-77	13	10	73.9	EMISSION-PLASMA	
11-77	14	10	73.9	DIANTHRIMIDE, USGS BK5 CH A1	
11-77	15	90	134.8	CURCUMIN, APHA STD METH, 14ED	
11-77	16	40	4.3	CURCUMIN, APHA STD METH, 14ED	
11-77	17			NOT DETERMINED	
11-77	18			NOT DETERMINED	
11-77	19			NOT DETERMINED	
10-77	20			NOT DETERMINED	
11-77	21			NOT DETERMINED	
11-77	22			NOT DETERMINED	
11-77	23			NOT DETERMINED	
11-77	24	10	73.9	EMISSION-PLASMA	
11-77	25			NOT DETERMINED	
11-77	26			NOT DETERMINED	
11-77	27	50	30.4	CURCUMIN, APHA STD METH, 14ED	
11-77	28			NOT DETERMINED	
11-77	29			NOT DETERMINED	
10-77	30			NOT DETERMINED	
11-77	31			NOT DETERMINED	
11-77	32			NOT DETERMINED	
11-77	34			NOT DETERMINED	
11-77	36			NOT DETERMINED	
11-77	37			NOT DETERMINED	
11-77	38			NOT DETERMINED	
11-77	39	100	160.9	CARMINE, APHA STD METH, 14ED	
11-77	40			NOT DETERMINED	
11-77	41	80	108.7	CURCUMIN, APHA STD METH, 14ED	
11-77	43			NOT DETERMINED	
11-77	44	200	421.7	REJECT CARMINE, APHA STD METH, 14ED	
11-77	45			NOT DETERMINED	

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	B
11-77	46			NOT DETERMINED	
11-77	47			NOT DETERMINED	
11-77	48			NOT DETERMINED	
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52			NOT DETERMINED	
11-77	53	10	73.9	CARMINE, USGS BK5 CH A1	
11-77	54			NOT DETERMINED	
11-77	55			NOT DETERMINED	
11-77	56			NOT DETERMINED	

TOTAL RANGE	10	-	200						SAMPLE 62
MEAN		38.3333		AVERAGE DEVIATION	28.0555				
STANDARD DEVIATION		34.0676		95 PCT.CONF.INTVL OF MEAN	38.3333 +OR-	21.6457			B

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	SR
11-77	1			NOT DETERMINED	
11-77	2	260	7.4	OTHER	
11-77	4			NOT DETERMINED	
11-77	5	270	11.5	ATOMIC ABS-DIRECT	
11-77	6			NOT DETERMINED	
11-77	7			NOT DETERMINED	
11-77	8			NOT DETERMINED	
11-77	10			NOT DETERMINED	
11-77	11	430	77.6	REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	12			NOT DETERMINED	
11-77	13	260	7.4	EMISSION PLASMA	
11-77	14	210	13.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	15	240	0.9	ATOMIC ABS-DIRECT	
11-77	16			NOT DETERMINED	
11-77	17			NOT DETERMINED	
11-77	18	270	11.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	19	150	38.1	ATOMIC ABS-DIRECT	
10-77	20			NOT DETERMINED	
11-77	21	320	32.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	22			NOT DETERMINED	
11-77	23			NOT DETERMINED	
11-77	24	260	7.4	ATOMIC ABS-DIRECT	
11-77	25			NOT DETERMINED	
11-77	26			NOT DETERMINED	
11-77	27	230	5.0	ATOMIC ABS-DIRECT	
11-77	28	270	11.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	29	250	3.2	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
10-77	30			NOT DETERMINED	
11-77	31			NOT DETERMINED	
11-77	32			NOT DETERMINED	
11-77	34			NOT DETERMINED	
11-77	36			NOT DETERMINED	
11-77	37	130	46.3	ATOMIC ABS-DIRECT	
11-77	38			NOT DETERMINED	
11-77	39			NOT DETERMINED	
11-77	40			NOT DETERMINED	
11-77	41			NOT DETERMINED	
11-77	43			NOT DETERMINED	
11-77	44			NOT DETERMINED	
11-77	45			NOT DETERMINED	

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	SR
11-77	46			NOT DETERMINED	
11-77	47			NOT DETERMINED	
11-77	48	270	11.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52			NOT DETERMINED	
11-77	53			NOT DETERMINED	
11-77	54			NOT DETERMINED	
11-77	55			NOT DETERMINED	
11-77	56			NOT DETERMINED	

TOTAL RANGE	130	-	430			SAMPLE 62
MEAN		242.1426	AVERAGE DEVIATION	35.8162		
STANDARD DEVIATION		49.9504	95 PCT.CONF.INTVL OF MEAN	242.1426 +OR-	28.8356	SR

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR V
11-77	1			NOT DETERMINED
11-77	2			NOT DETERMINED
11-77	4	1	70.6	CATALYTIC OXIDATION: USGS TWRI BK5 CH A1
11-77	5			NOT DETERMINED
11-77	6			NOT DETERMINED
11-77	7			NOT DETERMINED
11-77	8			NOT DETERMINED
11-77	10			NOT DETERMINED
11-77	11			NOT DETERMINED
11-77	12			NOT DETERMINED
11-77	13			NOT DETERMINED
11-77	14	4	17.6	CATALYTIC OXIDATION: USGS TWRI BK5 CH A1
11-77	15	5	47.1	ATOMIC ASB-FLAMELESS
11-77	16			NOT DETERMINED
11-77	17			NOT DETERMINED
11-77	18			NOT DETERMINED
11-77	19			NOT DETERMINED
10-77	20			NOT DETERMINED
11-77	21			NOT DETERMINED
11-77	22			NOT DETERMINED
11-77	23			NOT DETERMINED
11-77	24	5	47.1	EMISSION-PLASMA
11-77	25			NOT DETERMINED
11-77	26			NOT DETERMINED
11-77	27	2.	41.2	GALLIC ACID, APHA STD METH, 14ED
11-77	28			NOT DETERMINED
11-77	29			NOT DETERMINED
10-77	30			NOT DETERMINED
11-77	31			NOT DETERMINED
11-77	32			NOT DETERMINED
11-77	34			NOT DETERMINED
11-77	36			NOT DETERMINED
11-77	37			NOT DETERMINED
11-77	38			NOT DETERMINED
11-77	39			NOT DETERMINED
11-77	40			NOT DETERMINED
11-77	41			NOT DETERMINED
11-77	43			NOT DETERMINED
11-77	44			NOT DETERMINED
11-77	45			NOT DETERMINED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	V
11-77	46			NOT DETERMINED	
11-77	47			NOT DETERMINED	
11-77	48			NOT DETERMINED	
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52			NOT DETERMINED	
11-77	53			NOT DETERMINED	
11-77	54			NOT DETERMINED	
11-77	55			NOT DETERMINED	
11-77	56			NOT DETERMINED	

TOTAL RANGE	1	-	5						
MEAN		3.4000		AVERAGE DEVIATION	1.5200				SAMPLE 62
STANDARD DEVIATION		1.8166		95 PCT.CONF.INTVL OF MEAN	3.4000 +OR-	2.2552			V

DETERMINATION	NO. LABS REPORTING	PCT. OF VALUES REJECTED	PCT. OF UNREJECTED VALUES WITHIN		
			95 PCT. CI	X +OR- STD	X +OR- 2STD
SI02	28	4	26	70	93
CA	44	2	47	84	91
MG	45	9	54	73	93
NA	45	16	34	89	97
K	42	10	34	68	97
HCO3	39	8	11	67	97
SO4	38	5	36	64	97
CL	42	0	21	79	90
F	35	9	59	59	97
BR	4	0	100	75	100
NO3-N	30	23	26	78	91
P-TOTAL	34	0	47	79	91
DSRD180	35	0	29	71	94
SP-COND	44	7	24	78	93
PH	46	4	20	75	95
B	13	8	33	75	100
SR	15	7	71	79	93
V	5	0	80	80	100

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR AL
11-77	1			NOT DETERMINED
11-77	2			NOT DETERMINED
11-77	3			NOT DETERMINED
11-77	4	130	2.6	ATOMIC ABS-CHELATION/EXTRACTION: USGS PROVISIONAL
11-77	5	170	27.3	ATOMIC ABS-DIRECT
11-77	6	120	10.1	ATOMIC ABS-FLAMELESS
11-77	8			NOT DETERMINED
11-77	10			NOT DETERMINED
11-77	11			NOT DETERMINED
11-77	12			NOT DETERMINED
11-77	13	10	92.5	EMISSION-PLASMA
11-77	14	90	32.5	ATOMIC ABS-CHELATION/EXTRACTION: USGS PROVISIONAL
11-77	15	130	2.6	ATOMIC ABS-CHELATION/EXTRACTION: APHA STD METH, 14ED
11-77	16	100	25.1	ATOMIC ABS-DIRECT
11-77	17			NOT DETERMINED
11-77	18	160	19.9	ATOMIC ABS-FLAMELESS
11-77	19	130	2.6	ATOMIC ABS-DIRECT
11-77	21			NOT DETERMINED
11-77	22	150	12.4	ATOMIC ABS-DIRECT
11-77	24	170	27.3	ATOMIC ABS-DIRECT
11-77	25			NOT DETERMINED
11-77	26			NOT DETERMINED
11-77	27	150	12.4	ATOMIC ABS-FLAMELESS
11-77	28	130	2.6	ATOMIC ABS-CHELATION/EXTRACTION: USGS PROVISIONAL
11-77	29	140	4.9	ATOMIC ABS-CHELATION/EXTRACTION: USGS PROVISIONAL
11-77	31			NOT DETERMINED
11-77	32	180	34.8	ATOMIC ABS-DIRECT
11-77	34			NOT DETERMINED
11-77	36	160	19.9	OTHER
11-77	37			NOT DETERMINED
11-77	38			NOT DETERMINED
11-77	39			NOT DETERMINED
11-77	40			NOT DETERMINED
11-77	41	200	49.8	ATOMIC ABS-DIRECT
11-77	43			NOT DETERMINED
11-77	44			NOT DETERMINED
11-77	45			NOT DETERMINED
11-77	46			NOT DETERMINED
11-77	47			NOT DETERMINED
11-77	48	40	70.0	OTHER

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	AL
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52	1700	*****	REJECT EMISSION-FLAME	
11-77	53	340	154.7	REJECT ATOMIC ABS-DIRECT	
11-77	54	140	4.9	ATOMIC ABS-CHELATION/EXTRACTION; APHA STD METH; 14ED	
11-77	55	170	27.3	ATOMIC ABS-DIRECT	
11-77	56			NOT DETERMINED	

TOTAL RANGE	10	- 1700				SAMPLE 63
MEAN		133.4998	AVERAGE DEVIATION	32.1499		
STANDARD DEVIATION		45.7999	95 PCT.CONF.INTVL OF MEAN	133.4998 +OR-	21.4347	AL

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHODS FOR FE
11-77	1	280	149.8	REJECT	PHENANTHROLINE, APHA STD METH, 14ED
11-77	2	110	1.9		EMISSION-PLASMA
11-77	3	360	221.1	REJECT	OTHER
11-77	4	140	24.9		TECHNICON AUTOANALYZER, BIPYRIDINE
11-77	5	120	7.0		ATOMIC ABS-DIRECT
11-77	6	140	24.9		ATOMIC ABS-DIRECT
11-77	8	110	1.9		ATOMIC ABS-DIRECT
11-77	10			NOT DETERMINED	
11-77	11	120	7.0		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	12	120	7.0		ATOMIC ABS-DIRECT
11-77	13	90	19.7		EMISSION-PLASMA
11-77	14	120	7.0		TECHNICON AUTOANALYZER, BIPYRIDINE
11-77	15	100	10.4		ATOMIC ABS-DIRECT
11-77	16	90	19.7		ATOMIC ABS-DIRECT
11-77	17	130	16.0		ATOMIC ABS-DIRECT
11-77	18	110	1.9		ATOMIC ABS-FLAMELESS
11-77	19	110	1.9		ATOMIC ABS-DIRECT
11-77	21	100	10.8		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	22	90	19.7		ATOMIC ABS-DIRECT
11-77	24	110	1.9		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	25	140	24.9		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	26	80	28.6		ATOMIC ABS-DIRECT
11-77	27	110	1.9		ATOMIC ABS-DIRECT
11-77	28	120	7.0		BIPYRIDINE: USGS TWRI BK5 CH A1
11-77	29	130	16.0		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	31	130	16.0		ATOMIC ABS-DIRECT
11-77	32	120	7.0		ATOMIC ABS-DIRECT
11-77	34			NOT DETERMINED	
11-77	36	50	55.4		OTHER
11-77	37	140	24.9		ATOMIC ABS-DIRECT
11-77	38			NOT DETERMINED	
11-77	39	200	78.4	REJECT	PHENANTHROLINE, APHA STD METH, 14ED
11-77	40	120	7.0		ATOMIC ABS-DIRECT
11-77	41	100	10.8		ORTHOPHENANTHROLINE: ASTM METHOD A, D1068-74
11-77	43	80	28.6		ATOMIC ABS-DIRECT
11-77	44	130	16.0		ATOMIC ABS-DIRECT
11-77	45	160	42.7		PHENANTHROLINE, APHA STD METH, 14ED
11-77	46	260	131.9	REJECT	OTHER
11-77	47	50	55.4		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	48	120	7.0		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHODS FOR	FE
11-77	49	120	7.0		ATOMIC ABS-DIRECT	
11-77	50	20	82.2	REJECT	ATOMIC ABS-DIRECT	
11-77	52	90	19.7		ATOMIC ABS-FLAMELESS	
11-77	53	110	1.9		ATOMIC ABS-DIRECT	
11-77	54	120	7.0		ATOMIC ABS-DIRECT	
11-77	55	130	16.0		ATOMIC ABS-DIRECT	
11-77	56				NOT DETERMINED	

TOTAL RANGE	20	-	360				SAMPLE 63
MEAN		112.1048		AVERAGE DEVIATION	17.2576		
STANDARD DEVIATION		23.1514		95 PCT.CONF.INTVL OF MEAN	112.1048 +OR-	7.5902	FE

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	MN
11-77	1	0	100.0	REJECT	PERSULFATE, APHA STD METH, 14ED
11-77	2	260	2.3		EMISSION-PLASMA
11-77	3	220	13.4		NEUTRON ACTIVATION
11-77	4	260	2.3		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	5	260	2.3		ATOMIC ABS-DIRECT
11-77	6	230	9.5		ATOMIC ABS-DIRECT
11-77	8	250	1.6		ATOMIC ABS-DIRECT
11-77	10			NOT DETERMINED	
11-77	11	260	2.3		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	12	260	2.3		ATOMIC ABS-DIRECT
11-77	13	230	9.5		EMISSION-PLASMA
11-77	14	250	1.6		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	15	240	5.5		ATOMIC ABS-DIRECT
11-77	16	240	5.5		ATOMIC ABS-DIRECT
11-77	17			NOT DETERMINED	
11-77	18	240	5.5		ATOMIC ABS-FLAMELESS
11-77	19	230	9.5		ATOMIC ABS-DIRECT
11-77	21	230	9.5		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	22	210	17.4		ATOMIC ABS-DIRECT
11-77	24	260	2.3		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	25	240	5.5		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	26	270	6.3		ATOMIC ABS-DIRECT
11-77	27	260	2.3		ATOMIC ABS-DIRECT
11-77	28	300	18.1		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	29	310	22.0		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	31	260	2.3		ATOMIC ABS-DIRECT
11-77	32	250	1.6		ATOMIC ABS-DIRECT
11-77	34	260	2.3		ATOMIC ABS-DIRECT
11-77	36	50	80.3	REJECT	OTHER
11-77	37	250	1.6		ATOMIC ABS-DIRECT
11-77	38	270	6.3		ATOMIC ABS-DIRECT
11-77	39	280	10.2		ATOMIC ABS-DIRECT
11-77	40	270	6.3		ATOMIC ABS-DIRECT
11-77	41	270	6.3		ATOMIC ABS-DIRECT
11-77	43	280	10.2		ATOMIC ABS-DIRECT
11-77	44			NOT DETERMINED	
11-77	45	200	21.3		ATOMIC ABS-DIRECT
11-77	46	260	2.3		ATOMIC ABS-DIRECT
11-77	47	280	10.2		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	48	340	33.8	REJECT	ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN		METHODS FOR	MN
11-77	49	260	2.3		ATOMIC ABS-DIRECT	
11-77	50	150	41.0	REJECT	ATOMIC ABS-DIRECT	
11-77	52	270	6.3		ATOMIC ABS-FLAMELESS	
11-77	53	240	5.5		ATOMIC ABS-DIRECT	
11-77	54	260	2.3		ATOMIC ABS-DIRECT	
11-77	55	240	5.5		ATOMIC ABS-DIRECT	
11-77	56				NOT DETERMINED	

TOTAL RANGE	0	-	340				SAMPLE 63
MEAN		254.1002		AVERAGE DEVIATION	16.9100		
STANDARD DEVIATION		22.0904		95 PCT.CONF.INTVL OF MEAN	254.1002 +OR-	7.1489	MN

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR AS
11-77	1			NOT DETERMINED
11-77	2			NOT DETERMINED
11-77	3	42	14.2	NEUTRON ACTIVATION
11-77	4	46	25.1	ATOMIC ABS-HYDRIDE(ZINC): USGS PROVISIONAL
11-77	5	33	10.3	ATOMIC ABS-HYDRIDE(SODIUM BOROHYDRIDE)
11-77	6	47	27.8	ATOMIC ABS-HYDRIDE(SODIUM BOROHYDRIDE)
11-77	8			NOT DETERMINED
11-77	10	36	2.1	SILVER DIETHYLDITHIOCARBAMATE, APHA STD METH, 14ED
11-77	11			NOT DETERMINED
11-77	12			NOT DETERMINED
11-77	13			NOT DETERMINED
11-77	14	23	37.5	ATOMIC ABS-HYDRIDE(ZINC), APHA STD METH, 14ED
11-77	15	55	49.5	ATOMIC ABS-FLAMELESS
11-77	16	40	8.7	ATOMIC ABS-FLAMELESS
11-77	17	46	25.1	ATOMIC ABS-FLAMELESS
11-77	18			NOT DETERMINED
11-77	19			NOT DETERMINED
11-77	21			NOT DETERMINED
11-77	22			NOT DETERMINED
11-77	24	41	11.5	ATOMIC ABS-HYDRIDE(ZINC): USGS PROVISIONAL
11-77	25			NOT DETERMINED
11-77	26	41	11.5	ATOMIC ABS-HYDRIDE(SODIUM BOROHYDRIDE)
11-77	27	40	8.7	SILVER DIETHYLDITHIOCARBAMATE, APHA STD METH, 14ED
11-77	28	45	22.3	SILVER DIETHYLDITHIOCARBAMATE-REVISION: USGS PROVISIONAL
11-77	29	40	8.7	SILVER DIETHYLDITHIOCARBAMATE-REVISION: USGS PROVISIONAL
11-77	31			NOT DETERMINED
11-77	32	40	8.7	ATOMIC ABS-FLAMELESS
11-77	34			NOT DETERMINED
11-77	36	34	7.6	OTHER
11-77	37	48	30.5	ATOMIC ABS-HYDRIDE(SODIUM BOROHYDRIDE)
11-77	38			NOT DETERMINED
11-77	39			NOT DETERMINED
11-77	40	3	91.8	ATOMIC ABS-FLAMELESS
11-77	41	3	91.8	ATOMIC ABS-HYDRIDE(ZINC), APHA STD METH, 14ED
11-77	43	39	6.0	ATOMIC ABS-HYDRIDE(ZINC), APHA STD METH, 14ED
11-77	44	460	*****	REJECT ATOMIC ABS-FLAMELESS
11-77	45			NOT DETERMINED
11-77	46			NOT DETERMINED
11-77	47			NOT DETERMINED
11-77	48			NOT DETERMINED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	AS
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52	110	199.1	REJECT	ATOMIC ABS-FLAMELESS
11-77	53	32	13.0		ATOMIC ABS-HYDRIDE (SODIUM BOROHYDRIDE)
11-77	54	23	37.5		SILVER DIETHYLDITHIOCARBAMATE, ALPHA STD METH. 14ED
11-77	55	49	33.2		ATOMIC ABS-HYDRIDE (SODIUM BOROHYDRIDE)
11-77	56			NOT DETERMINED	

TOTAL RANGE	3	- 460				SAMPLE 63
MEAN		36.7824	AVERAGE DEVIATION	9.3271		
STANDARD DEVIATION		13.0835	95 PCT.CONF.INTVL OF MEAN	36.7824 +0R-	5.6581	AS

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	BA
11-77	1			NOT DETERMINED	
11-77	2	290	0.2	EMISSION PLASMA	
11-77	3	200	30.9	NEUTRON ACTIVATION	
11-77	4	400	38.1	ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1	
11-77	5	290	0.2	ATOMIC ABS-FLAMELESS	
11-77	6	290	0.2	ATOMIC ABS-FLAMELESS	
11-77	8			NOT DETERMINED	
11-77	10			NOT DETERMINED	
11-77	11			NOT DETERMINED	
11-77	12			NOT DETERMINED	
11-77	13			NOT DETERMINED	
11-77	14	300	3.6	ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1	
11-77	15	350	20.9	ATOMIC ABS-DIRECT	
11-77	16	300	3.6	ATOMIC ABS-DIRECT	
11-77	17			NOT DETERMINED	
11-77	18			NOT DETERMINED	
11-77	19	100	65.5	ATOMIC ABS-DIRECT	
11-77	21			NOT DETERMINED	
11-77	22			NOT DETERMINED	
11-77	24	350	20.9	ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1	
11-77	25			NOT DETERMINED	
11-77	26			NOT DETERMINED	
11-77	27	250	13.7	ATOMIC ABS-DIRECT	
11-77	28	290	0.2	ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1	
11-77	29	300	3.6	ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1	
11-77	31			NOT DETERMINED	
11-77	32	290	0.2	ATOMIC ABS-DIRECT	
11-77	34			NOT DETERMINED	
11-77	36	500	72.7	ATOMIC ABS-DIRECT	
11-77	37			NOT DETERMINED	
11-77	38			NOT DETERMINED	
11-77	39			NOT DETERMINED	
11-77	40	300	3.6	ATOMIC ABS-DIRECT	
11-77	41	300	3.6	ATOMIC ABS-DIRECT	
11-77	43			NOT DETERMINED	
11-77	44	320	10.5	ATOMIC ABS-DIRECT	
11-77	45			NOT DETERMINED	
11-77	46			NOT DETERMINED	
11-77	47			NOT DETERMINED	
11-77	48			NOT DETERMINED	

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	BA
11-77	49	310	7.1	ATOMIC ABS-DIRECT	
11-77	50			NOT DETERMINED	
11-77	52			NOT DETERMINED	
11-77	53	70	75.8	ATOMIC ABS-DIRECT	
11-77	54	310	7.1	ATOMIC ABS-DIRECT	
11-77	55	260	10.2	ATOMIC ABS-DIRECT	
11-77	56			NOT DETERMINED	

TOTAL RANGE	70	-	500				SAMPLE 63
MEAN		289.5439		AVERAGE DEVIATION	51.6122		
STANDARD DEVIATION		87.4765		95 PCT.CONF.INTVL OF MEAN	289.5439 +OR-	38.7921	BA

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR BE
11-77	1			NOT DETERMINED
11-77	2	18	3.4	EMISSION-PLASMA
11-77	3			NOT DETERMINED
11-77	4	20	7.3	ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	5	10	46.3	REJECT ATOMIC ABS-FLAMELESS
11-77	6	19	2.0	ATOMIC ABS-FLAMELESS
11-77	8			NOT DETERMINED
11-77	10			NOT DETERMINED
11-77	11			NOT DETERMINED
11-77	12			NOT DETERMINED
11-77	13			NOT DETERMINED
11-77	14	30	61.0	REJECT ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	15	42	125.4	REJECT ATOMIC ABS-CHELATION/EXTRACTION, APHA STD METH, 14ED
11-77	16			NOT DETERMINED
11-77	17			NOT DETERMINED
11-77	18			NOT DETERMINED
11-77	19			NOT DETERMINED
11-77	21			NOT DETERMINED
11-77	22			NOT DETERMINED
11-77	24	18	3.4	EMISSION-PLASMA
11-77	25			NOT DETERMINED
11-77	26			NOT DETERMINED
11-77	27	20	7.3	ATOMIC ABS-DIRECT
11-77	28	20	7.3	ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	29	20	7.3	ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	31			NOT DETERMINED
11-77	32			NOT DETERMINED
11-77	34			NOT DETERMINED
11-77	36			NOT DETERMINED
11-77	37			NOT DETERMINED
11-77	38			NOT DETERMINED
11-77	39			NOT DETERMINED
11-77	40			NOT DETERMINED
11-77	41	20	7.3	ATOMIC ABS-DIRECT
11-77	43			NOT DETERMINED
11-77	44			NOT DETERMINED
11-77	45			NOT DETERMINED
11-77	46			NOT DETERMINED
11-77	47			NOT DETERMINED
11-77	48			NOT DETERMINED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	BE
11-77	49	16	14.1	ATOMIC ABS-DIRECT	
11-77	50			NOT DETERMINED	
11-77	52			NOT DETERMINED	
11-77	53			NOT DETERMINED	
11-77	54	14	24.9	ATOMIC ABS-CHELATION/EXTRACTION, APHA STD METH, 14ED	
11-77	55	20	7.3	ATOMIC ABS-DIRECT	
11-77	56			NOT DETERMINED	

TOTAL RANGE	10	-	42			SAMPLE 63
MEAN		18.6363	AVERAGE DEVIATION	1.5537		
STANDARD DEVIATION		2.0136	95 PCT.CONF.INTVL OF MEAN	18.6363 +OR-	1.3527	BE

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	CD
11-77	1			NOT DETERMINED	
11-77	2	16	5.9	EMISSION-PLASMA	
11-77	3	18	19.1	OTHER	
11-77	4	13	14.0	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1	
11-77	5	14	7.4	ATOMIC ABS-FLAMELESS	
11-77	6	18	19.1	ATOMIC ABS-FLAMELESS	
11-77	8	15	0.8	ATOMIC ABS-DIRECT	
11-77	10	19	25.7	ATOMIC ABS-FLAMELESS	
11-77	11	14	7.4	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1	
11-77	12	17	12.5	ATOMIC ABS-DIRECT	
11-77	13	8	47.1	EMISSION-PLASMA	
11-77	14	17	12.5	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1	
11-77	15	10	33.8	ATOMIC ABS-DIRECT	
11-77	16	15	0.8	ATOMIC ABS-DIRECT	
11-77	17			NOT DETERMINED	
11-77	18	13	14.0	ATOMIC ABS-FLAMELESS	
11-77	19	13	14.0	ATOMIC ABS-DIRECT	
11-77	21			NOT DETERMINED	
11-77	22	16	5.9	ATOMIC ABS-DIRECT	
11-77	24	16	5.9	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1	
11-77	25	21	38.9	ATOMIC ABS-DIRECT	
11-77	26	20	32.3	ATOMIC ABS-FLAMELESS	
11-77	27	16	5.9	ATOMIC ABS-DIRECT	
11-77	28	13	14.0	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1	
11-77	29	14	7.4	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1	
11-77	31	15	0.8	ATOMIC ABS-CHELATION/EXTRACTION: EPA	
11-77	32	11	27.2	ATOMIC ABS-FLAMELESS	
11-77	34			NOT DETERMINED	
11-77	36	14	7.4	OTHER	
11-77	37			NOT DETERMINED	
11-77	38	7	53.7	ATOMIC ABS-FLAMELESS	
11-77	39			NOT DETERMINED	
11-77	40	12	20.6	ATOMIC ABS-FLAMELESS	
11-77	41	16	5.9	ATOMIC ABS-CHELATION/EXTRACTION: EPA	
11-77	43	17	12.5	ATOMIC ABS-DIRECT	
11-77	44	20	32.3	ATOMIC ABS-DIRECT	
11-77	45			NOT DETERMINED	
11-77	46	18	19.1	ATOMIC ABS-CHELATION/EXTRACTION: EPA	
11-77	47			NOT DETERMINED	
11-77	48	18	19.1	ANODIC STRIPPING VOLTAMMETRY	

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	CD
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52	15	0.8	ATOMIC ABS-FLAMELESS	
11-77	53	33	118.3	REJECT ATOMIC ABS-CHELATION/EXTRACTION, EPA	
11-77	54	15	0.8	ATOMIC ABS-CHELATION/EXTRACTION, APHA STD METH, 14ED	
11-77	55	15	0.8	ATOMIC ABS-DIRECT	
11-77	56			NOT DETERMINED	

TOTAL RANGE	7	1 - 33				SAMPLE 63
MEAN		15.1142	AVERAGE DEVIATION	2.3526		
STANDARD DEVIATION		3.1508	95 PCT.CONF.INTVL OF MEAN	15.1142 +OR- 1.0811		CD

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR CR TOT
11-77	1			NOT DETERMINED
11-77	2			NOT DETERMINED
11-77	3	12	48.5	NEUTRON ACTIVATION
11-77	4	10	23.7	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	5	6	25.8	ATOMIC ABS-FLAMELESS
11-77	6	6	25.8	ATOMIC ABS-FLAMELESS
11-77	8	6	25.8	ATOMIC ABS-DIRECT
11-77	10	13	60.8	ATOMIC ABS-FLAMELESS
11-77	11			NOT DETERMINED
11-77	12			NOT DETERMINED
11-77	13	1	87.6	EMISSION-PLASMA
11-77	14	5	38.1	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	15	8	1.0	ATOMIC ABS-FLAMELESS
11-77	16	10	23.7	ATOMIC ABS-DIRECT
11-77	17			NOT DETERMINED
11-77	18	2	75.3	ATOMIC ABS-FLAMELESS
11-77	19	6	25.8	ATOMIC ABS-DIRECT
11-77	21			NOT DETERMINED
11-77	22	27	234.0	REJECT ATOMIC ABS-DIRECT
11-77	24	7	13.4	PERMANGANATE-AZIDE: USGS TWRI BK5 CH A1
11-77	25	17	110.3	ATOMIC ABS-DIRECT
11-77	26	13	60.8	ATOMIC ABS-FLAMELESS
11-77	27			NOT DETERMINED
11-77	28	7	13.4	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	29	5	38.1	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	31	6	25.8	ATOMIC ABS-DIRECT
11-77	32	5	38.1	ATOMIC ABS-FLAMELESS
11-77	34			NOT DETERMINED
11-77	36	18	122.7	OTHER
11-77	37			NOT DETERMINED
11-77	38			NOT DETERMINED
11-77	39			NOT DETERMINED
11-77	40	10	23.7	ATOMIC ABS-DIRECT
11-77	41			NOT DETERMINED
11-77	43			NOT DETERMINED
11-77	44			NOT DETERMINED
11-77	45			NOT DETERMINED
11-77	46			NOT DETERMINED
11-77	47			NOT DETERMINED
11-77	48			NOT DETERMINED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR CR TOT
11-77	49			NOT DETERMINED
11-77	50			NOT DETERMINED
11-77	52	7	13.4	ATOMIC ABS-FLAMELESS
11-77	53	8	1.0	ATOMIC ABS-CHELATION/EXTRACTION, EPA
11-77	54			NOT DETERMINED
11-77	55	6	25.8	ATOMIC ABS-DIRECT
11-77	56			NOT DETERMINED

TOTAL RANGE	1	-	27					SAMPLE 63
MEAN		8.0833		AVERAGE DEVIATION	3.1944			
STANDARD DEVIATION		4.1590		95 PCT.CONF.INTVL OF MEAN	8.0833 +OR-	1.7565		CR TOT

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	CO
11-77	1			NOT DETERMINED	
11-77	2			NOT DETERMINED	
11-77	3	14	11.6	NEUTRON ACTIVATION	
11-77	4	10	36.8	ATOMIC ABS-CHELATION/EXTRACTION:	USGS TWRI BK5 CH A1
11-77	5	35	121.1	ATOMIC ABS-FLAMELESS	
11-77	6			NOT DETERMINED	
11-77	8			NOT DETERMINED	
11-77	10			NOT DETERMINED	
11-77	11			NOT DETERMINED	
11-77	12	20	26.3	OTHER	
11-77	13	1	93.7	EMISSION-PLASMA	
11-77	14	17	7.4	ATOMIC ABS-CHELATION/EXTRACTION:	USGS TWRI BK5 CH A1
11-77	15	14	11.6	ATOMIC ABS-FLAMELESS	
11-77	16			NOT DETERMINED	
11-77	17			NOT DETERMINED	
11-77	18	8	49.5	ATOMIC ABS-FLAMELESS	
11-77	19			NOT DETERMINED	
11-77	21			NOT DETERMINED	
11-77	22			NOT DETERMINED	
11-77	24	14	11.6	ATOMIC ABS-CHELATION/EXTRACTION:	USGS TWRI BK5 CH A1
11-77	25			NOT DETERMINED	
11-77	26			NOT DETERMINED	
11-77	27	20	26.3	OTHER	
11-77	28	12	24.2	ATOMIC ABS-CHELATION/EXTRACTION:	USGS TWRI BK5 CH A1
11-77	29	12	24.2	ATOMIC ABS-CHELATION/EXTRACTION:	USGS TWRI BK5 CH A1
11-77	31			NOT DETERMINED	
11-77	32			NOT DETERMINED	
11-77	34			NOT DETERMINED	
11-77	36			NOT DETERMINED	
11-77	37			NOT DETERMINED	
11-77	38	15	5.3	ATOMIC ABS-FLAMELESS	
11-77	39			NOT DETERMINED	
11-77	40			NOT DETERMINED	
11-77	41	14	11.6	ATOMIC ABS-CHELATION/EXTRACTION:	EPA
11-77	43			NOT DETERMINED	
11-77	44			NOT DETERMINED	
11-77	45			NOT DETERMINED	
11-77	46	25	57.9	ATOMIC ABS-CHELATION/EXTRACTION:	EPA
11-77	47			NOT DETERMINED	
11-77	48			NOT DETERMINED	

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	CO
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52			NOT DETERMINED	
11-77	53	24	51.6	OTHER	
11-77	54	14	11.6	ATOMIC ABS-FLAMELESS	
11-77	55	16	1.1	ATOMIC ABS-FLAMELESS	
11-77	56			NOT DETERMINED	

TOTAL RANGE	1	1 - 35				SAMPLE 63
MEAN		15.8333	AVERAGE DEVIATION	5.1296		
STANDARD DEVIATION		7.3424	95 PCT.CONF.INTVL OF MEAN	15.8333 +OR-	3.6516	CO

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	CU
11-77	1	40	33.9	OTHER	
11-77	2	70	15.7	EMISSION-PLASMA	
11-77	3	60	0.8	NEUTRON ACTIVATION	
11-77	4	40	33.9	ATOMIC ABS-DIRECT:	USGS TWRI BK5 CH A1
11-77	5	60	0.8	ATOMIC ABS-DIRECT	
11-77	6	60	0.8	ATOMIC ABS-DIRECT	
11-77	8	70	15.7	ATOMIC ABS-DIRECT	
11-77	10	50	17.4	ATOMIC ABS-DIRECT	
11-77	11	60	0.8	ATOMIC ABS-DIRECT:	USGS TWRI BK5 CH A1
11-77	12	60	0.8	ATOMIC ABS-DIRECT	
11-77	13	70	15.7	EMISSION-PLASMA	
11-77	14	70	15.7	ATOMIC ABS-DIRECT:	USGS TWRI BK5 CH A1
11-77	15	40	33.9	ATOMIC ABS-DIRECT	
11-77	16	50	17.4	ATOMIC ABS-DIRECT	
11-77	17	70	15.7	ATOMIC ABS-DIRECT	
11-77	18	60	0.8	ATOMIC ABS-FLAMELESS	
11-77	19	60	0.8	ATOMIC ABS-CHELATION/EXTRACTION:	USGS TWRI BK5 CH A1
11-77	21	60	0.8	ATOMIC ABS-DIRECT:	USGS TWRI BK5 CH A1
11-77	22	60	0.8	ATOMIC ABS-DIRECT	
11-77	24	60	0.8	ATOMIC ABS-DIRECT	
11-77	25	60	0.8	ATOMIC ABS-DIRECT:	USGS TWRI BK5 CH A1
11-77	26	80	32.2	ATOMIC ABS-FLAMELESS	
11-77	27	70	15.7	ATOMIC ABS-DIRECT	
11-77	28	70	15.7	ATOMIC ABS-DIRECT:	USGS TWRI BK5 CH A1
11-77	29	70	15.7	ATOMIC ABS-DIRECT:	USGS TWRI BK5 CH A1
11-77	31	60	0.8	ATOMIC ABS-DIRECT	
11-77	32	70	15.7	ATOMIC ABS-DIRECT	
11-77	34	20	66.9	REJECT	ATOMIC ABS-DIRECT
11-77	36	60	0.8	OTHER	
11-77	37	60	0.8	ATOMIC ABS-DIRECT	
11-77	38	40	33.9	ATOMIC ABS-FLAMELESS	
11-77	39			NOT DETERMINED	
11-77	40	70	15.7	ATOMIC ABS-DIRECT	
11-77	41	60	0.8	ATOMIC ABS-DIRECT	
11-77	43	50	17.4	ATOMIC ABS-DIRECT	
11-77	44			NOT DETERMINED	
11-77	45			NOT DETERMINED	
11-77	46	100	65.3	REJECT	OTHER
11-77	47	50	17.4	ATOMIC ABS-DIRECT:	USGS TWRI BK5 CH A1
11-77	48	70	15.7	ATOMIC ABS-DIRECT:	USGS TWRI BK5 CH A1

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	CU
11-77	49	60	0.8	ATOMIC ABS-DIRECT	
11-77	50			NOT DETERMINED	
11-77	52	70	15.7	ATOMIC ABS-FLAMELESS	
11-77	53	60	0.8	ATOMIC ABS-DIRECT	
11-77	54	60	0.8	ATOMIC ABS-DIRECT	
11-77	55	60	0.8	ATOMIC ABS-DIRECT	
11-77	56	280	362.8	REJECT	ATOMIC ABS-DIRECT

TOTAL RANGE 20
 MEAN
 STANDARD DEVIATION

- 280
 60.4998
 9.5943

AVERAGE DEVIATION
 95 PCT.CONF.INTVL OF MEAN

6.6749
 60.4998 +OR- 3.0658

SAMPLE 63

CU

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR PB
11-77	1			NOT DETERMINED
11-77	2			NOT DETERMINED
11-77	3			NOT DETERMINED
11-77	4	2	60.3	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	5	6	19.2	ATOMIC ABS-FLAMELESS
11-77	6	0	100.0	ATOMIC ABS-FLAMELESS
11-77	8	12	138.4	OTHER
11-77	10	4	20.5	ATOMIC ABS-FLAMELESS
11-77	11	4	20.5	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	12			NOT DETERMINED
11-77	13	2	60.3	EMISSION-PLASMA
11-77	14	2	60.3	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	15	4	20.5	ATOMIC ABS-FLAMELESS
11-77	16	40	694.7	REJECT <u>ATOMIC ABS-DIRECT</u>
11-77	17			NOT DETERMINED
11-77	18	1	80.1	ATOMIC ABS-FLAMELESS
11-77	19	0	100.0	ATOMIC ABS-CHELATION/EXTRACTION: EPA
11-77	21			NOT DETERMINED
11-77	22	8	58.9	<u>ATOMIC ABS-DIRECT</u>
11-77	24	5	0.7	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	25	4	20.5	ATOMIC ABS-FLAMELESS
11-77	26	7	39.1	ATOMIC ABS-FLAMELESS
11-77	27	6	19.2	ATOMIC ABS-FLAMELESS
11-77	28	4	20.5	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	29	6	19.2	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	31	8	58.9	ATOMIC ABS-CHELATION/EXTRACTION: EPA
11-77	32	2	60.3	ATOMIC ABS-FLAMELESS
11-77	34			NOT DETERMINED
11-77	36	8	58.9	OTHER
11-77	37			NOT DETERMINED
11-77	38	2	60.3	ATOMIC ABS-FLAMELESS
11-77	39			NOT DETERMINED
11-77	40	2	60.3	ATOMIC ABS-FLAMELESS
11-77	41			NOT DETERMINED
11-77	43	5	0.7	ATOMIC ABS-CHELATION/EXTRACTION: APHA STD METH, 14ED
11-77	44	12	138.4	<u>ATOMIC ABS-DIRECT</u>
11-77	45			NOT DETERMINED
11-77	46	8	58.9	ATOMIC ABS-CHELATION/EXTRACTION: EPA
11-77	47			NOT DETERMINED
11-77	48	6	19.2	ANODIC STRIPPING VOLTAMMETRY

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	PB
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52	8	58.9	ATOMIC ABS-FLAMELESS	
11-77	53	1	80.1	ATOMIC ABS-CHELATION/EXTRACTION, EPA	
11-77	54			NOT DETERMINED	
11-77	55	12	138.4	ATOMIC ABS-DIRECT	
11-77	56			NOT DETERMINED	

TOTAL RANGE	0	-	40			SAMPLE 63
MEAN		5.0333		AVERAGE DEVIATION	2.7711	
STANDARD DEVIATION		3.4289		95 PCT.CONF.INTVL OF MEAN	5.0333 +OR- 1.2802	PB

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	LI
11-77	1			NOT DETERMINED	
11-77	2	220	1.0	EMISSION PLASMA	
11-77	3			NOT DETERMINED	
11-77	4	220	1.0	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	5	220	1.0	ATOMIC ABS-DIRECT	
11-77	6			NOT DETERMINED	
11-77	8			NOT DETERMINED	
11-77	10	150	31.1	REJECT EMISSION-FLAME	
11-77	11			NOT DETERMINED	
11-77	12	220	1.0	ATOMIC ABS-DIRECT	
11-77	13			NOT DETERMINED	
11-77	14	220	1.0	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	15			NOT DETERMINED	
11-77	16			NOT DETERMINED	
11-77	17			NOT DETERMINED	
11-77	18	210	3.6	ATOMIC ABS-FLAMELESS	
11-77	19	200	8.2	ATOMIC ABS-DIRECT	
11-77	21			NOT DETERMINED	
11-77	22			NOT DETERMINED	
11-77	24	220	1.0	ATOMIC ABS-DIRECT	
11-77	25			NOT DETERMINED	
11-77	26			NOT DETERMINED	
11-77	27	210	3.6	ATOMIC ABS-DIRECT	
11-77	28	230	5.6	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	29	230	5.6	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1
11-77	31	220	1.0	ATOMIC ABS-DIRECT	
11-77	32			NOT DETERMINED	
11-77	34	210	3.6	ATOMIC ABS-DIRECT	
11-77	36			NOT DETERMINED	
11-77	37			NOT DETERMINED	
11-77	38			NOT DETERMINED	
11-77	39			NOT DETERMINED	
11-77	40	240	10.2	ATOMIC ABS-DIRECT	
11-77	41	230	5.6	ATOMIC ABS-DIRECT	
11-77	43			NOT DETERMINED	
11-77	44			NOT DETERMINED	
11-77	45			NOT DETERMINED	
11-77	46			NOT DETERMINED	
11-77	47			NOT DETERMINED	
11-77	48	220	1.0	ATOMIC ABS-DIRECT,	USGS TWRI BK5 CH A1

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	LI
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52			NOT DETERMINED	
11-77	53	200	8.2	ATOMIC ABS-DIRECT	
11-77	54	20	90.8	REJECT ATOMIC ABS-DIRECT	
11-77	55	200	8.2	ATOMIC ABS-DIRECT	
11-77	56			NOT DETERMINED	

TOTAL RANGE	20	-	240			SAMPLE 63
MEAN		217.7775	AVERAGE DEVIATION	8.5186		
STANDARD DEVIATION		11.1437	95 PCT.CONF.INTVL OF MEAN	217.7775 +0R-	5.5421	LI

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR HG
11-77	1			NOT DETERMINED
11-77	2			NOT DETERMINED
11-77	3			NOT DETERMINED
11-77	4	3.9	8.3	ATOMIC ABS-FLAMELESS: TECHNICON AUTOANALYZER, USGS PROV.
11-77	5	4.2	1.2	ATOMIC ABS-FLAMELESS, APHA STD METH, 14ED
11-77	6	4.6	8.2	ATOMIC ABS-FLAMELESS: EPA
11-77	8			NOT DETERMINED
11-77	10	1.1	74.1	ATOMIC ABS-FLAMELESS, APHA STD METH, 14ED
11-77	11			NOT DETERMINED
11-77	12	3.8	10.6	ATOMIC ABS-FLAMELESS: EPA
11-77	13			NOT DETERMINED
11-77	14	7.4	74.0	ATOMIC ABS-FLAMELESS: TECHNICON AUTOANALYZER, USGS PROV.
11-77	15	3.5	17.7	ATOMIC ABS-FLAMELESS, APHA STD METH, 14ED
11-77	16	4.0	5.9	OTHER
11-77	17	5.9	38.8	ATOMIC ABS-FLAMELESS: EPA
11-77	18			NOT DETERMINED
11-77	19			NOT DETERMINED
11-77	21			NOT DETERMINED
11-77	22			NOT DETERMINED
11-77	24			NOT DETERMINED
11-77	25	2.4	43.6	ATOMIC ABS-FLAMELESS: EPA
11-77	26	2.2	48.3	ATOMIC ABS-FLAMELESS: EPA
11-77	27	3.8	10.6	ATOMIC ABS-FLAMELESS: EPA
11-77	28	5.2	22.3	ATOMIC ABS-FLAMELESS: USGS PROVISIONAL
11-77	29	5.2	22.3	ATOMIC ABS-FLAMELESS: USGS PROVISIONAL
11-77	31			NOT DETERMINED
11-77	32	4.0	5.9	ATOMIC ABS-FLAMELESS: EPA
11-77	34			NOT DETERMINED
11-77	36	3.3	22.4	ATOMIC ABS-FLAMELESS: EPA
11-77	37	6.3	48.2	ATOMIC ABS-FLAMELESS: ASTM METHOD A, D3223-73
11-77	38			NOT DETERMINED
11-77	39			NOT DETERMINED
11-77	40	5.3	24.6	ATOMIC ABS-FLAMELESS: EPA
11-77	41	4.4	3.5	ATOMIC ABS-FLAMELESS: EPA
11-77	43			NOT DETERMINED
11-77	44	35	723.1	REJECT ATOMIC ABS-FLAMELESS, APHA STD METH, 14ED
11-77	45			NOT DETERMINED
11-77	46			NOT DETERMINED
11-77	47			NOT DETERMINED
11-77	48			NOT DETERMINED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	HG
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52			NOT DETERMINED	
11-77	53	5.1	19.9	ATOMIC ABS-FLAMELESS: EPA	
11-77	54	4.0	5.9	ATOMIC ABS-FLAMELESS, APHA STD METH, 14ED	
11-77	55	4.0	5.9	ATOMIC ABS-FLAMELESS: EPA	
11-77	56	4.2	1.2	ATOMIC ABS-FLAMELESS, APHA STD METH, 14ED	

TOTAL RANGE	1.1	-	35			SAMPLE 63
MEAN		4.2522	AVERAGE DEVIATION	0.9679		
STANDARD DEVIATION		1.3554	95 PCT.CONF.INTVL OF MEAN	4.2522 +OR-	0.5862	HG

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	MO
11-77	1			NOT DETERMINED	
11-77	2	22	14.7	EMISSION-PLASMA	
11-77	3	29	12.4	NEUTRON ACTIVATION	
11-77	4	22	14.7	ATOMIC ABS-CHELATION/EXTRACTION:	USGS PROVISIONAL
11-77	5	23	10.9	ATOMIC ABS-FLAMELESS	
11-77	6			NOT DETERMINED	
11-77	8			NOT DETERMINED	
11-77	10			NOT DETERMINED	
11-77	11			NOT DETERMINED	
11-77	12			NOT DETERMINED	
11-77	13	75	190.7	REJECT EMISSION-PLASMA	
11-77	14	21	18.6	ATOMIC ABS-CHELATION/EXTRACTION:	USGS PROVISIONAL
11-77	15	24	7.0	ATOMIC ABS-FLAMELESS	
11-77	16			NOT DETERMINED	
11-77	17			NOT DETERMINED	
11-77	18			NOT DETERMINED	
11-77	19			NOT DETERMINED	
11-77	21			NOT DETERMINED	
11-77	22			NOT DETERMINED	
11-77	24	35	35.7	OTHER	
11-77	25			NOT DETERMINED	
11-77	26			NOT DETERMINED	
11-77	27			NOT DETERMINED	
11-77	28	28	8.5	ATOMIC ABS-CHELATION/EXTRACTION:	USGS PROVISIONAL
11-77	29	30	16.3	ATOMIC ABS-CHELATION/EXTRACTION:	USGS PROVISIONAL
11-77	31			NOT DETERMINED	
11-77	32			NOT DETERMINED	
11-77	34			NOT DETERMINED	
11-77	36			NOT DETERMINED	
11-77	37			NOT DETERMINED	
11-77	38			NOT DETERMINED	
11-77	39			NOT DETERMINED	
11-77	40			NOT DETERMINED	
11-77	41			NOT DETERMINED	
11-77	43			NOT DETERMINED	
11-77	44			NOT DETERMINED	
11-77	45			NOT DETERMINED	
11-77	46			NOT DETERMINED	
11-77	47			NOT DETERMINED	
11-77	48			NOT DETERMINED	

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	MO
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52			NOT DETERMINED	
11-77	53			NOT DETERMINED	
11-77	54			NOT DETERMINED	
11-77	55	24	7.0	ATOMIC ABS-FLAMELESS	
11-77	56			NOT DETERMINED	

TOTAL RANGE	21	-	75					SAMPLE 63
MEAN		25.8000		AVERAGE DEVIATION	3.7600			
STANDARD DEVIATION		4.5166		95 PCT.CONF.INTVL OF MEAN	25.8000 +OR-	3.2308		MO

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR NI
11-77	1			NOT DETERMINED
11-77	2			NOT DETERMINED
11-77	3			NOT DETERMINED
11-77	4	4	63.1	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	5	4	63.1	ATOMIC ABS-FLAMELESS
11-77	6	0	100.0	ATOMIC ABS-FLAMELESS
11-77	8			NOT DETERMINED
11-77	10			NOT DETERMINED
11-77	11			NOT DETERMINED
11-77	12			NOT DETERMINED
11-77	13	30	176.5	EMISSION-PLASMA
11-77	14	10	7.8	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	15	10	7.8	ATOMIC ABS-DIRECT
11-77	16			NOT DETERMINED
11-77	17			NOT DETERMINED
11-77	18	11	1.4	ATOMIC ABS-FLAMELESS
11-77	19			NOT DETERMINED
11-77	21			NOT DETERMINED
11-77	22	11	1.4	ATOMIC ABS-DIRECT
11-77	24	7	35.5	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	25	14	29.0	ATOMIC ABS-DIRECT
11-77	26			NOT DETERMINED
11-77	27	10	7.8	ATOMIC ABS-DIRECT
11-77	28	5	53.9	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	29	8	26.3	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	31			NOT DETERMINED
11-77	32			NOT DETERMINED
11-77	34			NOT DETERMINED
11-77	36	12	10.6	OTHER
11-77	37			NOT DETERMINED
11-77	38	4	53.1	ATOMIC ABS-FLAMELESS
11-77	39			NOT DETERMINED
11-77	40	30	176.5	ATOMIC ABS-DIRECT
11-77	41			NOT DETERMINED
11-77	43			NOT DETERMINED
11-77	44			NOT DETERMINED
11-77	45			NOT DETERMINED
11-77	46	18	65.9	ATOMIC ABS-CHELATION/EXTRACTION: EPA
11-77	47			NOT DETERMINED
11-77	48			NOT DETERMINED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	NI
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52	9	17.1	ATOMIC ABS-FLAMELESS	
11-77	53	80	637.3	REJECT ATOMIC ABS-DIRECT	
11-77	54	10	7.8	ATOMIC ABS-DIRECT	
11-77	55	10	7.8	ATOMIC ABS-DIRECT	
11-77	56			NOT DETERMINED	

TOTAL RANGE	0	-	80			SAMPLE 63
MEAN		10.8500	AVERAGE DEVIATION	5.0050		
STANDARD DEVIATION		7.6727	95 PCT.CONF.INTVL OF MEAN	10.8500 +OR-	3.5909	NI

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR SE
11-77	1			NOT DETERMINED
11-77	2			NOT DETERMINED
11-77	3	2	17.6	OTHER
11-77	4	0	100.0	ATOMIC ABS-HYDRIDE (SODIUM BOROHYDRIDE)
11-77	5	1	58.8	ATOMIC ABS-HYDRIDE (SODIUM BOROHYDRIDE)
11-77	6	6	147.1	ATOMIC ABS-FLAMELESS
11-77	8			NOT DETERMINED
11-77	10			NOT DETERMINED
11-77	11			NOT DETERMINED
11-77	12			NOT DETERMINED
11-77	13			NOT DETERMINED
11-77	14	2	17.6	ATOMIC ABS-HYDRIDE (STANNOUS CHLORIDE): USGS PROVISIONAL
11-77	15	5	105.9	ATOMIC ABS-FLAMELESS
11-77	16	2	17.6	ATOMIC ABS-FLAMELESS
11-77	17			NOT DETERMINED
11-77	18			NOT DETERMINED
11-77	19			NOT DETERMINED
11-77	21			NOT DETERMINED
11-77	22			NOT DETERMINED
11-77	24	2	17.6	ATOMIC ABS-HYDRIDE (STANNOUS CHLORIDE): USGS PROVISIONAL
11-77	25			NOT DETERMINED
11-77	26			NOT DETERMINED
11-77	27			NOT DETERMINED
11-77	28	2	17.6	ATOMIC ABS-HYDRIDE (STANNOUS CHLORIDE): USGS PROVISIONAL
11-77	29	2	17.6	ATOMIC ABS-HYDRIDE (STANNOUS CHLORIDE): USGS PROVISIONAL
11-77	31			NOT DETERMINED
11-77	32	4	64.7	ATOMIC ABS-FLAMELESS
11-77	34			NOT DETERMINED
11-77	36	2	17.6	OTHER
11-77	37			NOT DETERMINED
11-77	38			NOT DETERMINED
11-77	39			NOT DETERMINED
11-77	40			NOT DETERMINED
11-77	41	2	17.6	ATOMIC ABS-HYDRIDE (STANNOUS CHLORIDE): USGS PROVISIONAL
11-77	43			NOT DETERMINED
11-77	44	2	17.6	ATOMIC ABS-FLAMELESS
11-77	45			NOT DETERMINED
11-77	46			NOT DETERMINED
11-77	47			NOT DETERMINED
11-77	48			NOT DETERMINED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	SE
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52	40	*****	REJECT ATOMIC ABS-FLAMELESS	
11-77	53			NOT DETERMINED	
11-77	54			NOT DETERMINED	
11-77	55			NOT DETERMINED	
11-77	56			NOT DETERMINED	

TOTAL RANGE	0	-	40				SAMPLE 63
MEAN		2.4286		AVERAGE DEVIATION	1.1020		
STANDARD DEVIATION		1.5549		95 PCT.CONF.INTVL OF MEAN	2.4286 +OR-	0.8976	SE

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR AG
11-77	1			NOT DETERMINED
11-77	2			NOT DETERMINED
11-77	3	9	10.4	NEUTRON ACTIVATION
11-77	4	5	50.2	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	5	8	20.3	ATOMIC ABS-FLAMELESS
11-77	6	10	0.4	ATOMIC ABS-DIRECT
11-77	8	10	0.4	ATOMIC ABS-DIRECT
11-77	10	8	20.3	ATOMIC ABS-FLAMELESS
11-77	11			NOT DETERMINED
11-77	12			NOT DETERMINED
11-77	13			NOT DETERMINED
11-77	14	10	0.4	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	15	9	10.4	ATOMIC ABS-DIRECT
11-77	16	10	0.4	ATOMIC ABS-DIRECT
11-77	17			NOT DETERMINED
11-77	18	4	60.2	ATOMIC ABS-FLAMELESS
11-77	19	8	20.3	ATOMIC ABS-DIRECT
11-77	21			NOT DETERMINED
11-77	22			NOT DETERMINED
11-77	24	18	79.3	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	25			NOT DETERMINED
11-77	26	6	40.2	ATOMIC ABS-DIRECT
11-77	27	20	99.2	ATOMIC ABS-DIRECT
11-77	28	7	30.3	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	29	8	20.3	ATOMIC ABS-CHELATION/EXTRACTION: USGS TWRI BK5 CH A1
11-77	31			NOT DETERMINED
11-77	32	9	10.4	ATOMIC ABS-FLAMELESS
11-77	34			NOT DETERMINED
11-77	36	10	0.4	OTHER
11-77	37			NOT DETERMINED
11-77	38			NOT DETERMINED
11-77	39			NOT DETERMINED
11-77	40	11	9.5	ATOMIC ABS-FLAMELESS
11-77	41	10	0.4	ATOMIC ABS-DIRECT
11-77	43			NOT DETERMINED
11-77	44	12	19.5	ATOMIC ABS-FLAMELESS
11-77	45			NOT DETERMINED
11-77	46			NOT DETERMINED
11-77	47			NOT DETERMINED
11-77	48			NOT DETERMINED

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	AG
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52	22	119.1	ATOMIC ABS-FLAMELESS	
11-77	53	7	30.3	ATOMIC ABS-DIRECT	
11-77	54			NOT DETERMINED	
11-77	55	10	0.4	ATOMIC ABS-DIRECT	
11-77	56			NOT DETERMINED	

TOTAL RANGE	4	-	22			SAMPLE 63
MEAN		10.0417	AVERAGE DEVIATION	2.7326		
STANDARD DEVIATION		4.3085	95 PCT.CONF.INTVL OF MEAN	10.0417 +OR-	1.8196	AG

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	SR
11-77	1			NOT DETERMINED	
11-77	2	220	1.1	EMISSION PLASMA	
11-77	3			NOT DETERMINED	
11-77	4	260	19.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	5	230	5.7	ATOMIC ABS-DIRECT	
11-77	6			NOT DETERMINED	
11-77	8			NOT DETERMINED	
11-77	10			NOT DETERMINED	
11-77	11	430	97.6	REJECT ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	12			NOT DETERMINED	
11-77	13	230	5.7	EMISSION PLASMA	
11-77	14	190	12.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	15	220	1.1	ATOMIC ABS-DIRECT	
11-77	16			NOT DETERMINED	
11-77	17			NOT DETERMINED	
11-77	18	300	37.8	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	19	210	3.5	ATOMIC ABS-DIRECT	
11-77	21	260	19.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	22			NOT DETERMINED	
11-77	24	220	1.1	ATOMIC ABS-DIRECT	
11-77	25			NOT DETERMINED	
11-77	26			NOT DETERMINED	
11-77	27	210	3.5	ATOMIC ABS-DIRECT	
11-77	28	210	3.5	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	29	230	5.7	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	
11-77	31			NOT DETERMINED	
11-77	32			NOT DETERMINED	
11-77	34			NOT DETERMINED	
11-77	36			NOT DETERMINED	
11-77	37	150	31.1	ATOMIC ABS-DIRECT	
11-77	38			NOT DETERMINED	
11-77	39			NOT DETERMINED	
11-77	40			NOT DETERMINED	
11-77	41			NOT DETERMINED	
11-77	43			NOT DETERMINED	
11-77	44			NOT DETERMINED	
11-77	45			NOT DETERMINED	
11-77	46			NOT DETERMINED	
11-77	47			NOT DETERMINED	
11-77	48	220	1.1	ATOMIC ABS-DIRECT, USGS TWRI BK5 CH A1	

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	SR
11-77	49	220	1.1	ATOMIC ABS-DIRECT	
11-77	50			NOT DETERMINED	
11-77	52			NOT DETERMINED	
11-77	53	120	44.9	ATOMIC ABS-DIRECT	
11-77	54			NOT DETERMINED	
11-77	55			NOT DETERMINED	
11-77	56			NOT DETERMINED	

TOTAL RANGE 120
 MEAN
 STANDARD DEVIATION

- 430
 217.6468
 40.2382

AVERAGE DEVIATION
 95 PCT.CONF.INTVL OF MEAN

25.3979
 217.6468 +OR- 20.6895

SAMPLE 63
 SR

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	ZN
11-77	1	430	103.7	REJECT	OTHER
11-77	2	210	0.5		EMISSION-PLASMA
11-77	3	750	255.4	REJECT	NEUTRON ACTIVATION
11-77	4	210	0.5		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	5	220	4.2		ATOMIC ABS-DIRECT
11-77	6	200	5.2		ATOMIC ABS-DIRECT
11-77	8	200	5.2		ATOMIC ABS-DIRECT
11-77	10	200	5.2		ATOMIC ABS-DIRECT
11-77	11	250	18.5		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	12	220	4.2		ATOMIC ABS-DIRECT
11-77	13	200	5.2		EMISSION-PLASMA
11-77	14	200	5.2		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	15	210	0.5		ATOMIC ABS-DIRECT
11-77	16	200	5.2		ATOMIC ABS-DIRECT
11-77	17	220	4.2		ATOMIC ABS-DIRECT
11-77	18	240	13.7		ATOMIC ABS-DIRECT
11-77	19	240	13.7		ATOMIC ABS-DIRECT
11-77	21	200	5.2		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	22	200	5.2		ATOMIC ABS-DIRECT
11-77	24	210	0.5		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	25	190	10.0		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	26	230	9.0		ATOMIC ABS-DIRECT
11-77	27	200	5.2		ATOMIC ABS-DIRECT
11-77	28	220	4.2		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	29	220	4.2		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	31	220	4.2		ATOMIC ABS-DIRECT
11-77	32	200	5.2		ATOMIC ABS-DIRECT
11-77	34	200	5.2		ATOMIC ABS-DIRECT
11-77	36	110	47.9	REJECT	OTHER
11-77	37	210	0.5		ATOMIC ABS-DIRECT
11-77	38				NOT DETERMINED
11-77	39				NOT DETERMINED
11-77	40	230	9.0		ATOMIC ABS-DIRECT
11-77	41	200	5.2		ATOMIC ABS-DIRECT
11-77	43	170	19.5		ATOMIC ABS-DIRECT
11-77	44				NOT DETERMINED
11-77	45				NOT DETERMINED
11-77	46	220	4.2		ATOMIC ABS-DIRECT
11-77	47	200	5.2		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1
11-77	48	220	4.2		ATOMIC ABS-DIRECT: USGS TWRI BK5 CH A1

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	ZN
11-77	49	210	0.5	ATOMIC ABS-DIRECT	
11-77	50			NOT DETERMINED	
11-77	52	210	0.5	ATOMIC ABS-DIRECT	
11-77	53	230	9.0	ATOMIC ABS-DIRECT	
11-77	54	220	4.2	ATOMIC ABS-DIRECT	
11-77	55	190	10.0	ATOMIC ABS-DIRECT	
11-77	56			NOT DETERMINED	

TOTAL RANGE	110	-	750			SAMPLE 63
MEAN		211.0506	AVERAGE DEVIATION	12.3264		
STANDARD DEVIATION		15.7324	95 PCT.CONF.INTVL OF MEAN	211.0506 +OR-	5.1579	ZN

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	SB
11-77	1			NOT DETERMINED	
11-77	2			NOT DETERMINED	
11-77	3	3	71.4	NEUTRON ACTIVATION	
11-77	4	2	14.3	ATOMIC ABS-HYDRIDE (SODIUM BORDHYDRIDE)	
11-77	5			NOT DETERMINED	
11-77	6			NOT DETERMINED	
11-77	8			NOT DETERMINED	
11-77	10			NOT DETERMINED	
11-77	11			NOT DETERMINED	
11-77	12			NOT DETERMINED	
11-77	13			NOT DETERMINED	
11-77	14	1	42.9	ATOMIC ABS-HYDRIDE (SODIUM BORDHYDRIDE)	
11-77	15	1	42.9	ATOMIC ABS-FLAMELESS	
11-77	16			NOT DETERMINED	
11-77	17			NOT DETERMINED	
11-77	18			NOT DETERMINED	
11-77	19			NOT DETERMINED	
11-77	21			NOT DETERMINED	
11-77	22			NOT DETERMINED	
11-77	24			NOT DETERMINED	
11-77	25			NOT DETERMINED	
11-77	26			NOT DETERMINED	
11-77	27			NOT DETERMINED	
11-77	28			NOT DETERMINED	
11-77	29			NOT DETERMINED	
11-77	31			NOT DETERMINED	
11-77	32			NOT DETERMINED	
11-77	34			NOT DETERMINED	
11-77	36			NOT DETERMINED	
11-77	37			NOT DETERMINED	
11-77	38			NOT DETERMINED	
11-77	39			NOT DETERMINED	
11-77	40			NOT DETERMINED	
11-77	41			NOT DETERMINED	
11-77	43			NOT DETERMINED	
11-77	44			NOT DETERMINED	
11-77	45			NOT DETERMINED	
11-77	46			NOT DETERMINED	
11-77	47			NOT DETERMINED	
11-77	48			NOT DETERMINED	

DATE MO-YR	CODE	REPORTED VALUE	PCT.DEV. FROM MEAN	METHODS FOR	SB
11-77	49			NOT DETERMINED	
11-77	50			NOT DETERMINED	
11-77	52			NOT DETERMINED	
11-77	53			NOT DETERMINED	
11-77	54			NOT DETERMINED	
11-77	55			NOT DETERMINED	
11-77	56			NOT DETERMINED	

TOTAL RANGE 1
 MEAN
 STANDARD DEVIATION

- 3
 1.7500
 0.9574

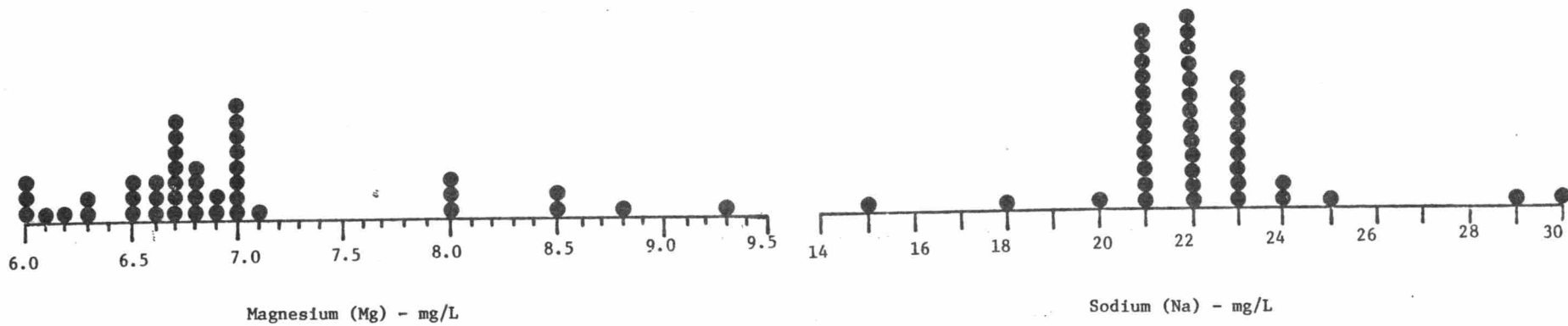
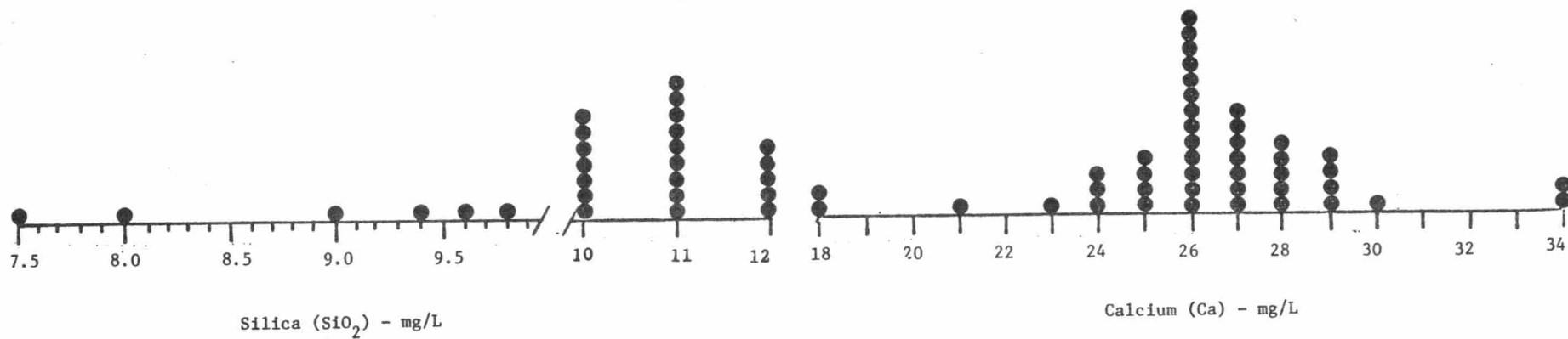
AVERAGE DEVIATION
 95 PCT.CONF.INTVL OF MEAN

0.7500
 1.7500 +OR- 1.5233

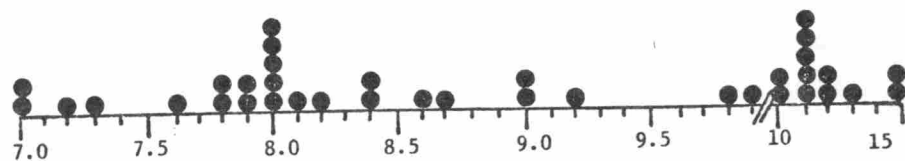
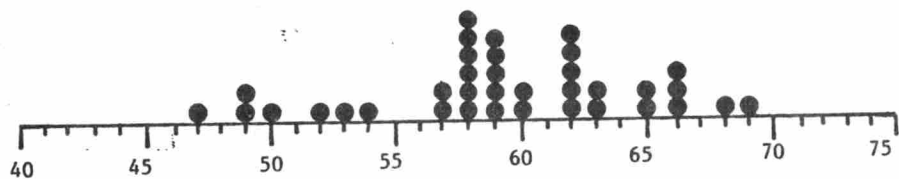
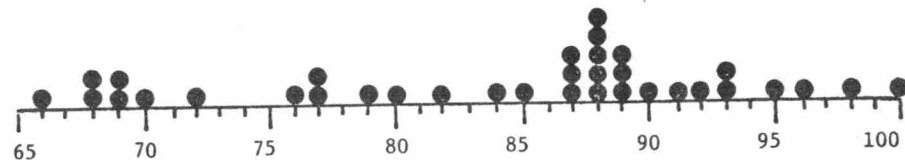
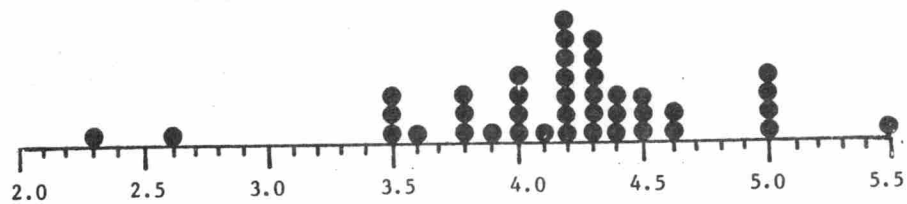
SAMPLE 63

SB

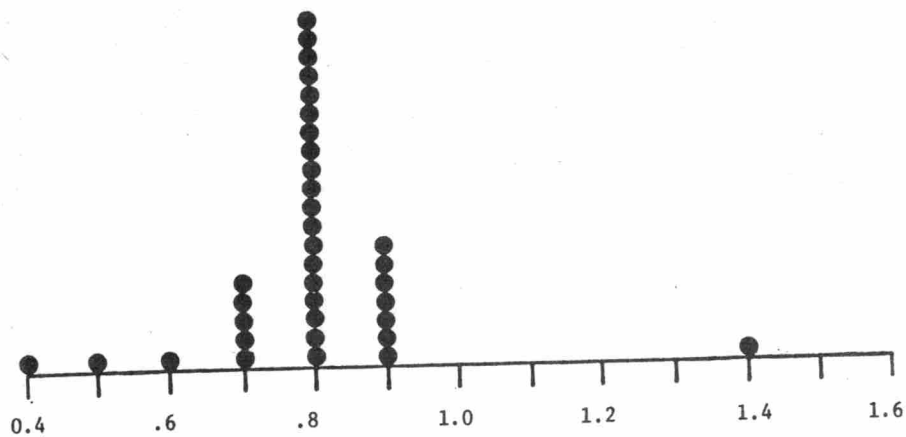
DETERMINATION	NO. LABS REPORTING	PCT. OF VALUES REJECTED	PCT. OF UNREJECTED VALUES WITHIN		
			95 PCT. C1	X +OR- STD	X +OR- 2STD
AL	22	9	45	80	90
FE	43	12	18	76	92
MN	43	9	41	69	92
AS	25	8	52	78	91
BA	22	0	64	77	86
BE	14	21	27	82	91
CD	36	3	31	77	94
CR TOT	25	4	21	75	92
CO	18	0	44	72	89
CU	43	7	48	78	88
PB	31	3	37	77	90
LI	20	10	44	61	100
HG	24	4	48	74	91
MO	11	9	50	80	90
NI	21	5	55	85	90
SE	15	7	64	71	93
AG	24	0	46	79	92
SR	18	6	65	71	88
ZN	41	7	18	76	95
SB	4	0	100	75	100



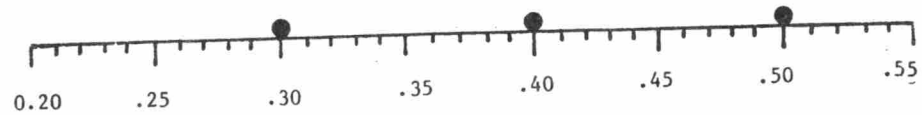
Sample No. 62



Sample No. 62



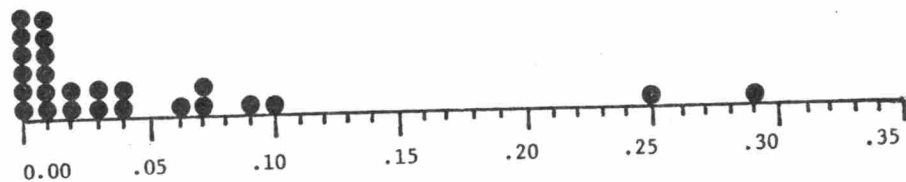
Fluoride (F) - mg/L



Bromide (Br) - mg/L

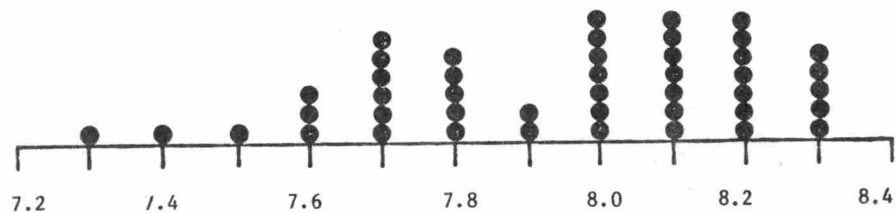
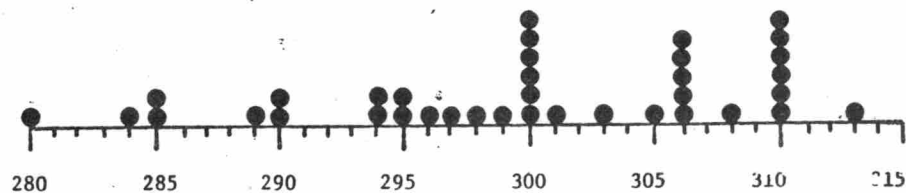
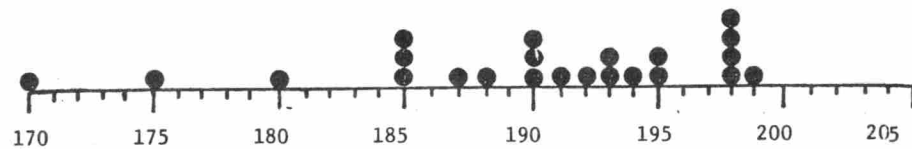
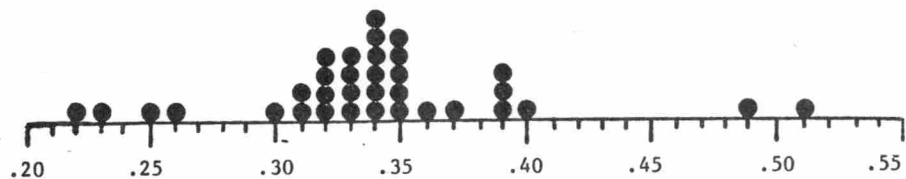


Iodide (I) - mg/L

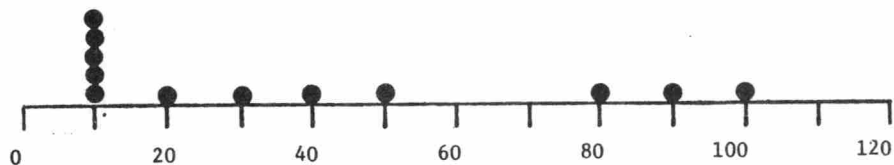


Nitrate (NO₃-N) - mg/L

Sample No. 62



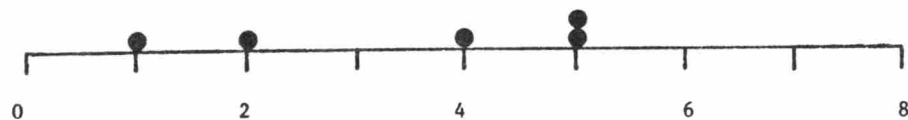
Sample No. 62



Boron (B) - $\mu\text{g/L}$

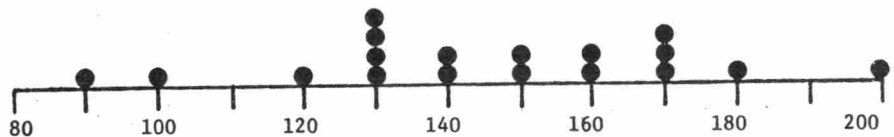


Strontium (Sr) - $\mu\text{g/L}$

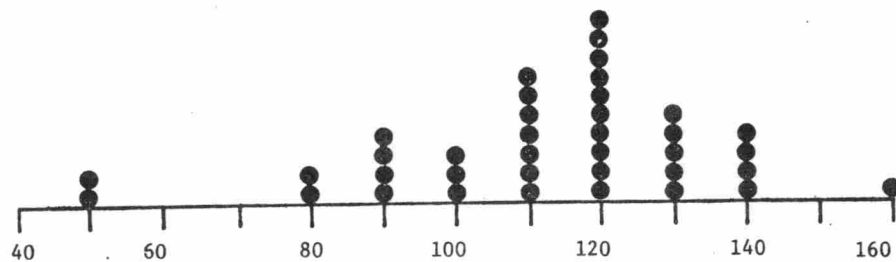


Vanadium (V) - $\mu\text{g/L}$

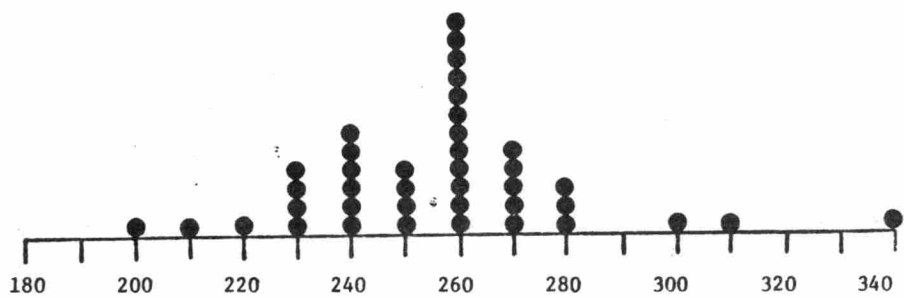
Sample No. 62



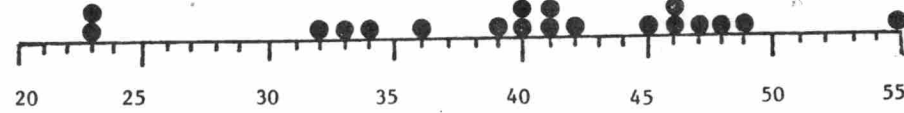
Aluminum (Al) - µg/L



Iron (Fe) - µg/L

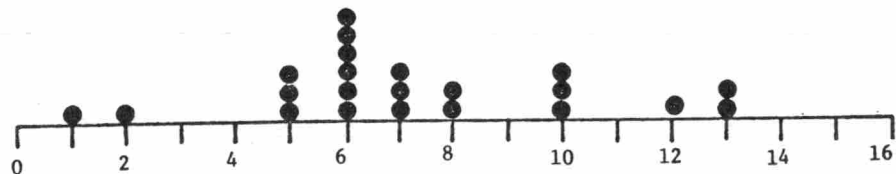
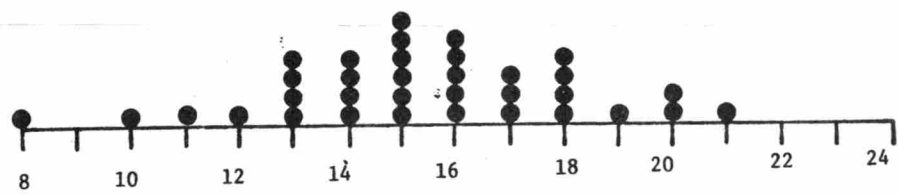
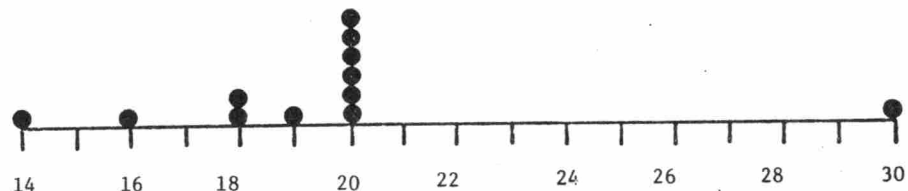
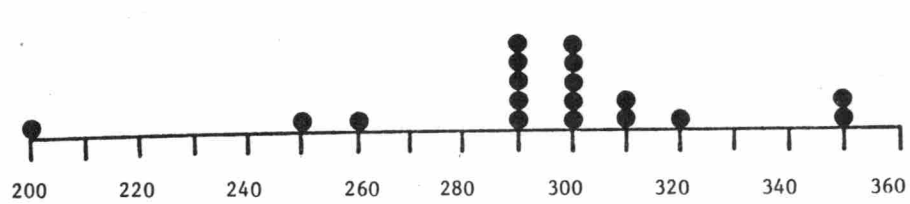


Manganese (Mn) - µg/L

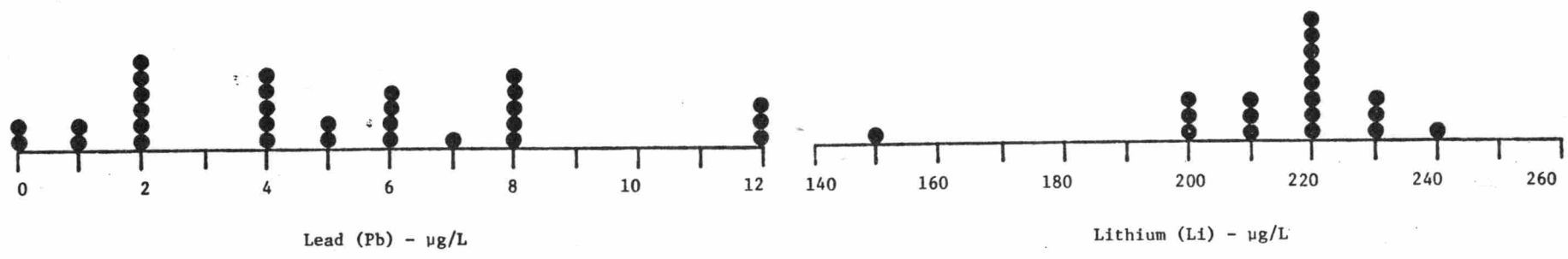
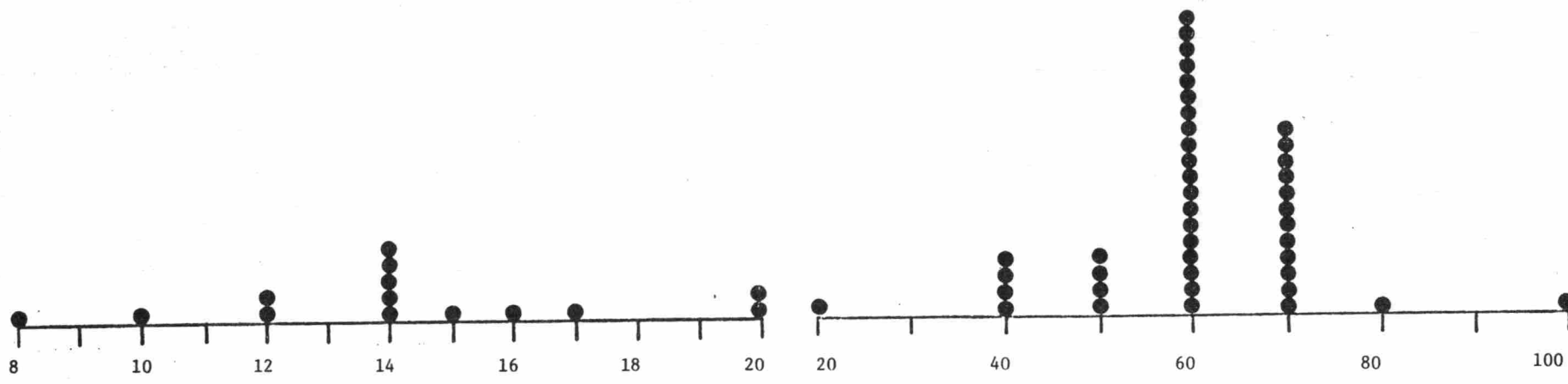


Arsenic (As) - µg/L

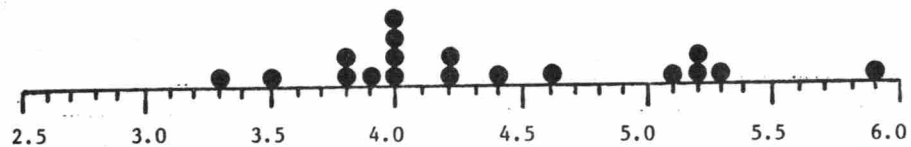
Sample No. 63



Sample No. 63



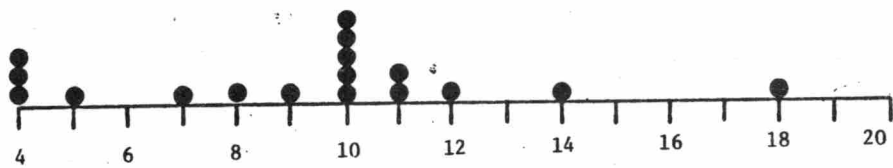
Sample No. 63



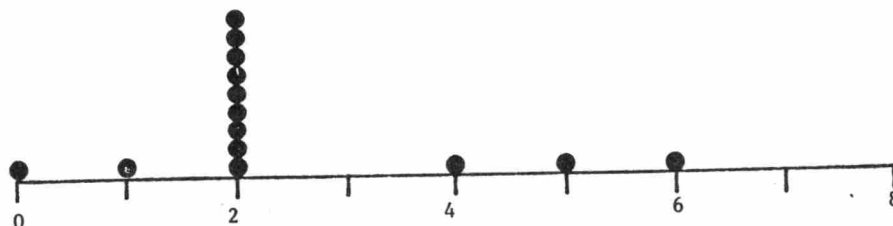
Mercury (Hg) - µg/L



Molybdenum (Mo) - µg/L

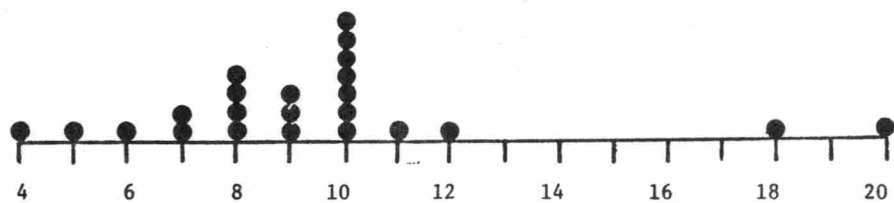


Nickel (Ni) - µg/L

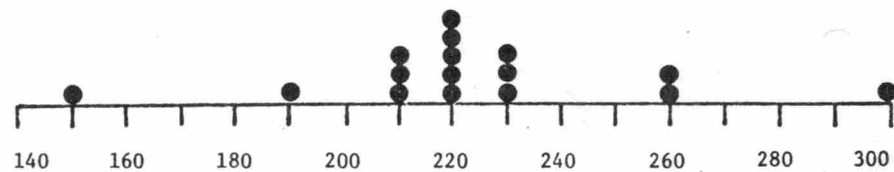


Selenium (Se) - µg/L

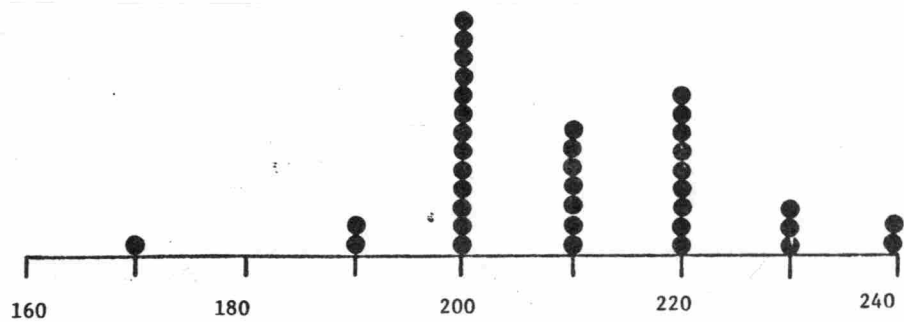
Sample No. 63



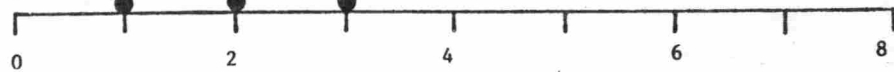
Silver (Ag) - µg/L



Strontium (Sr) - µg/L



Zinc (Zn) - µg/L



Antimony (Sb) - µg/L

Sample No. 63