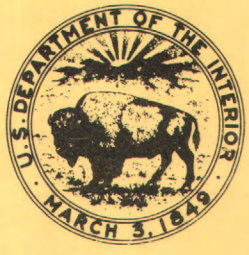
STATISTICAL SUMMARIES OF SURFACE-WATER-QUALITY DATA FOR SELECTED SITES IN OKLAHOMA, THROUGH THE 1975 WATER YEAR

U. S. GEOLOGICAL SURVEY

Open-File Report 79-219

Prepared in cooperation with the
OKLAHOMA WATER RESOURCES BOARD



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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By J. K. Kurklin

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Oklahoma City, Oklahoma
May, 1979

UNITED STATES
DEPARTMENT OF THE INTERIOR
CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY
H. W. Menard, Director

ILLUSTRATIONS

TABLES

FACTORS FOR CONVERTING INCH-POUND UNITS TO SI UNITS

Inch-Pound	Multiply by	Metric
acre-ft (acre-foot)	1233	m^3 (cubic meter)
ft^3/s (cubic foot per second)	0.02832	m^3/s (cubic meter per second)
ft (foot)	0.3048	m (meter)
in. (inch)	25.4	mm (millimeter)
mi (mile)	1.609	km (kilometer)
mi^2	2.590	km^2 (square kilometer)

temperature, degrees Celsius (°C) = 0.556 (°F-32)

STATISTICAL SUMMARIES OF SURFACE-WATER-QUALITY DATA FOR SELECTED SITES IN OKLAHOMA, THROUGH THE 1975 WATER YEAR

by Joanne K. Kurklin

ABSTRACT

Statistical summaries of surface-water-quality data for 47 streams in Oklahoma have been compiled. Data for the period of record through the 1975 water year at each site were used to develop regression equations for specific conductance-constituent relationships for calcium, magnesium, sodium, sodium plus potassium, bicarbonate, sulfate, chloride, silica, and dissolved solids. Minimum, mean, and maximum values for selected constituents were tabulated for the period of record through the 1975 water year and for individual water years.

INTRODUCTION

The basic mission of the U.S. Geological Survey, Water Resources Division, is the collection and interpretation of hydrologic data which are used by Federal, regional, state and city agencies in the development and management of water resources. To function efficiently and effectively, the Survey must anticipate data needs and provide agencies with applicable information. Ongoing sampling programs for the collection of water-quality data must be continually reviewed and revised to ensure that data pertinent to existing needs are being collected. A review and compilation of data for selected sampling sites on streams in Oklahoma was undertaken to provide information to program managers.

Records of chemical quality, water temperature, and sediment concentration have been collected in Oklahoma since the 1940's. The Geological Survey published these records in an annual series of Water-Supply Papers entitled "Quality of Surface Waters of the United States". Data were also published on a State-boundary basis for water years 1964 through 1974. Beginning with the 1975 water year, the chemical-quality data along with streamflow and ground-water data are published only on a State-boundary basis.

Purpose and Scope

This report is designed: (1) to present a compilation and summarization of the available chemical-quality data through 1975 for selected sites (table 1) and (2) to provide interested persons and agencies with a reference to aid in reviewing, modifying, or designing chemical-quality sampling programs.

Data for each sampling site are presented in tabular form (table 2). The statistics were computed for the period of record through the 1975 water year. Statistical values for individual water years for each site are provided in tables 3-5.

Tables include: (1) minimum, mean, and maximum values for discharge and selected constituents, (2) standard deviation, skewness, and kurtosis, and (3) regression equations, correlation coefficients, and standard error of estimate for specific conductance-constituent relationships.

Data Selection

This study was limited to the 47 surface-water-quality sampling sites which constituted the existing water-quality program for the 1975 water year (figure 1). Results of the study will be used in analyzing the District water-quality collection program. Water-quality data for the period of record through the 1975 water year (table 1) were utilized in the statistical analysis.

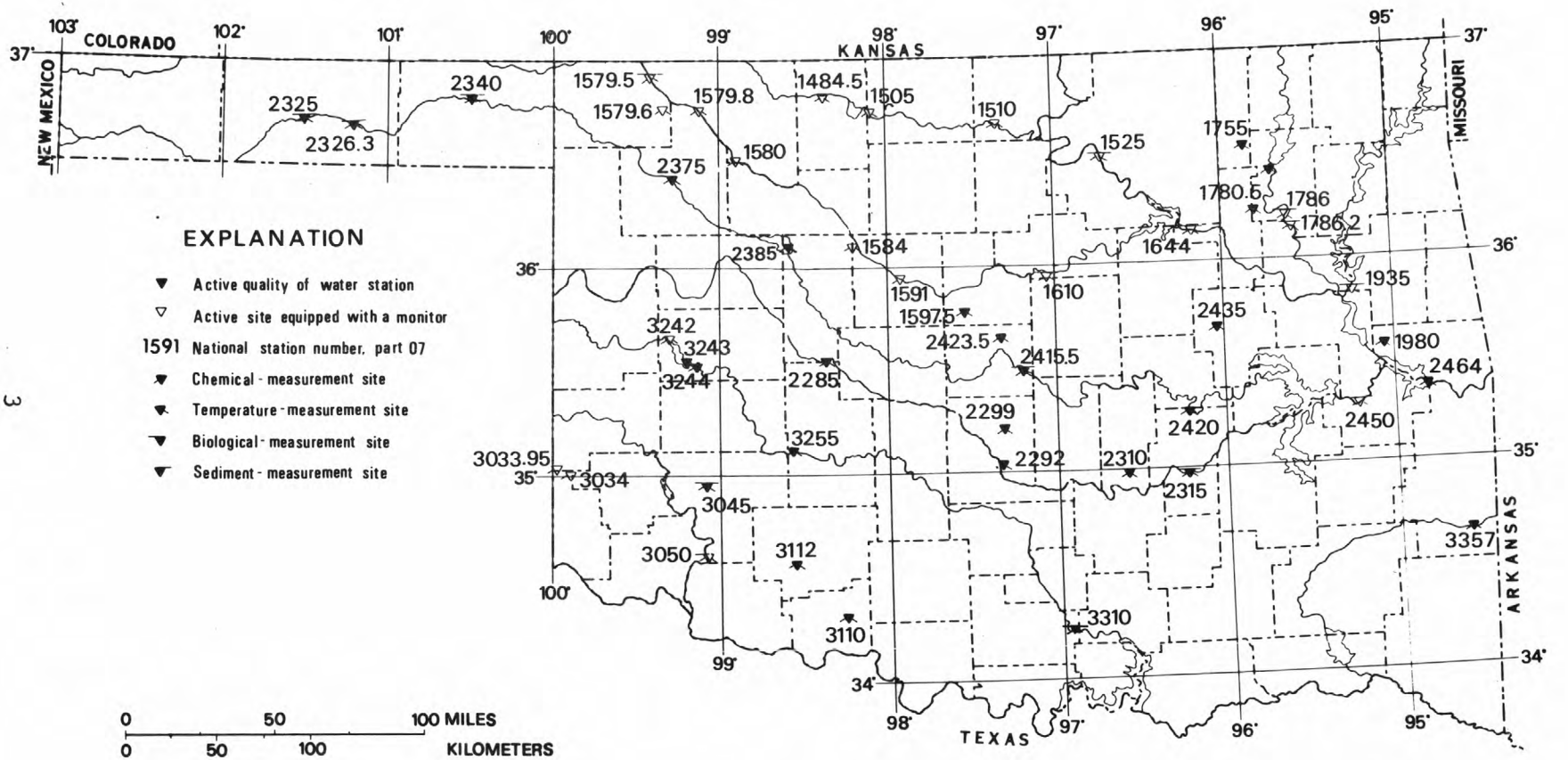

Figure 1. -- Map of Oklahoma showing location of quality of water stations, as of January, 1975.

The most common chemical analysis included calcium, magnesium, sodium, potassium, bicarbonate, carbonate, sulfate, chloride, nitrate, dissolved solids, specific conductance, and pH. Analyses for other constituents are available at many of the 47 sites, but they were not considered in this report.

Although there has been considerable variation in procedures used in sample collection, in frequency of sample collection, and in methodology for analysis of samples, these data are considered to be adequate for the purposes of this report.

Notations and Statistical Terminology

Values in all tables are reported in the units listed below:

Constituent	Unit
Discharge (Q)	cubic feet per second
Instantaneous discharge (Q)	cubic feet per second
Specific conductance (SC)	micromhos per centimeter at 25°C
pH	units
Hardness (HRD)	milligrams per liter
Noncarbonate hardness (NCH)	milligrams per liter
Dissolved calcium (CA)	milligrams per liter
Dissolved magnesium (MG)	milligrams per liter
Dissolved sodium (NA)	milligrams per liter
Dissolved sodium plus potassium (NA+K)	milligrams per liter
Dissolved potassium (K)	milligrams per liter
Bicarbonate (HCO_3)	milligrams per liter
Carbonate (CO_3)	milligrams per liter
Dissolved sulfate (SO_4)	milligrams per liter
Dissolved chloride (Cl)	milligrams per liter
Dissolved silica (SIO_2)	milligrams per liter
Dissolved solids (DS)	milligrams per liter
Dissolved nitrate (NO_3)	milligrams per liter

The number of samples available for the summary for each constituent in table 1 is listed under the column headed "N". Concentration values in all tables are reported to the level of significance required at the time the samples were analysed.

Standard deviation is a measure of the scatter or spread of a series of data (Gupta, 1966, p. 232). If the standard deviation is large, there is a wide range in the data; if it is smaller, there is greater uniformity in the data (Croxton and Cowden, 1939, p. 240).

Skewness and kurtosis are terms used to describe the frequency distribution or frequency curve associated with a set of numbers. If the frequency curve is not symmetrical, it is said to be skewed. Most frequency distributions exhibit skewness (Croxton and Cowden, 1939, p. 234-235). A positive sign indicates skewness to the right and a negative sign, skewness to the left.

Kurtosis indicates the degree to which a curve of a frequency distribution is peaked or flat-topped. For a normal distribution, the value is zero. A value of less than zero indicates a distribution that has shorter tails and squarer shoulders than a normal distribution while a value greater than zero indicates a distribution that has long tails and is more sharply peaked than a normal distribution (Davies, 1960, p. 49).

Coefficient of correlation is a dimensionless quantity; it varies between -1 and +1. The signs $\pm$ are used for positive linear correlation and negative linear correlation respectively. It is a good measure of linear correlation between two variables. A value of near zero means that there is almost no linear correlation between the variables but there may be high non-linear correlation. High correlation coefficient (i.e. near 1 or -1) does not necessarily indicate a direct dependence of the variables (Spiegel, 1961, p. 243).

Standard error of estimate is a measure of the scatter about the regression line (Spiegel, 1961, p.243). Some properties of the standard error of estimate are similar to those of the standard deviation.

References Cited

Croxton, F. E., and Cowden, D. J., 1939, Applied General Statistics: New York, Prentice-Hall, Inc. p. 234-251.

Davies, O. L., 1960, The Design and Analysis of Industrial Statistics: New York, Hafner Publishing Co., p. 49, 591.

Gupta, C. B. 1966, An Introduction To Statistical Methods (4th ed.): Agra-3, Delhi, Ram Prasad and Sons, p. 232, 252-282.

Spiegel, M. R., 1961, Schaum's Outline of Theory and Problems of Statistics: New York, McGraw-Hill, p. 243-252.

Table 1.--Historical Chemical-Quality Sampling Sites and Period of Record

U.S. GEOLOGICAL SURVEY STATION NUMBER AND NAME		PERIOD OF RECORD (WATER YEAR)
07148450	Salt Fork Arkansas River near Ingersoll	1962, 1974-78
07150500	Salt Fork Arkansas River near Jet	1951-63, 1968-78
07151000	Salt Fork Arkansas River at Tonkawa	1948, 1952-63, 1968-78
07152500	Arkansas River at Ralston	1950-63, 1965-78
07157950	Cimarron River near Buffalo	1953, 1961-63, 1968-78
07157960	Buffalo Creek near Lovedale	1974-78
07157980	Cimarron River near Freedom	1953, 1974-78
07158000	Cimarron River near Waynoka	1951-63, 1968-78
07158400	Salt Creek near Okeene	1974-78
07159100	Cimarron River near Dover	1951, 1953, 1974-78
07159750	Cottonwood Creek at Seward	1973-78
07161000	Cimarron River at Perkins	1950, 1953-63, 1965-78
07164400	Arkansas River at Sand Springs Bridge, near Tulsa	1947-77
07175500	Caney River near Ramona	1952-53, 1955-62, 1965-78
07178050	Bird Creek near Catoosa	1965-78
07178600	Verdigris River near Inola	1948-72
07178620	Newt Graham Lock and Dam near Inola	1972-78
07193500	Neosho River below Ft. Gibson Lake near Ft. Gibson	1952-78
07198000	Illinois River near Gore	1948, 1952, 1954-78
07228500	Canadian River at Bridgeport	1949-61, 1964, 1970-78
07229200	Canadian River at Purcell	1952-53, 1957-58, 1960-63, 1974-78

Table 1.--Continued

U.S. GEOLOGICAL SURVEY STATION NUMBER AND NAME		PERIOD OF RECORD (WATER YEAR)
07229900	Lake Thunderbird near Norman	1965-78
07231000	Little River near Sasakwa	1951-78
07231500	Canadian River at Calvin	1950-53, 1960-61, 1965-78
07232500	Beaver River near Guymon	1952-63, 1968-78
07232630	Beaver River near Hooker	1972-73, 1975-78
07234000	Beaver River at Beaver	1952, 1958-59, 1962-63, 1968-78
07237500	North Canadian River at Woodward	1955, 1958-59, 1961-63, 1975-78
07238500	Canton Lake near Canton	1949-50, 1960-64, 1968-78
07241550	North Canadian River near Harrah	1969-78
07242000	North Canadian River near Wetumka	1952, 1954-78
07242350	Deep Fork near Arcadia	1970-78
07243500	Deep Fork near Beggs	1952-78
07245000	Canadian River near Whitefield	1944-64, 1967-78
07246400	Robert S. Kerr Lock and Dam near Sallisaw	1970-78
07303395	Elm Fork North Fork Red River at Salton Crossing	1960-61, 1973-78
07303400	Elm Fork North Fork Red River near Carl	1960-63, 1968-78
07304500	Elk Creek near Hobart	1949-52, 1954-63, 1970-78
07305000	North Fork Red River near Headrick	1951-52, 1954-63, 1968-78
07311000	East Cache Creek near Walters	1947-48, 1951-55, 1958-63, 1970-78
07311200	Blue Beaver Creek near Cache	1965-78

Table 1.--Continued

U.S. GEOLOGICAL SURVEY STATION NUMBER AND NAME	PERIOD OF RECORD (WATER YEAR)
07324200 Washita River near Hammon	1961, 1970-78
07324300 Foss Reservoir near Foss	1963-74, 1975-78
07324400 Washita River near Foss	1947-48, 1950-51, 1956, 1958, 1970-78
07325500 Washita River at Carnegie	1948-78
07331000 Washita River near Durwood	1944-78
07335700 Kiamichi River near Big Cedar	1966-78

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE

ARKANSAS RIVER BASIN

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OK

LOCATION.--LAT 364909, LONG 0982127, IN NW 1/4 SEC. 14, T.27N., R.11W., ALFALFA COUNTY, AT GAGING STATION ON STATE HIGHWAYS 8 AND 58, 2 MI UPSTREAM FROM MEDICINE LODGE RIVER, 2.5 MI NORTHEAST OF INGERSOLL, 17 MI UPSTREAM FROM GREAT SALT PLAINS DAM, AND AT MILE 120.9.

DRAINAGE AREA.--1,140 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1961 TO SEPTEMBER 1962, OCTOBER 1973 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1961 TO SEPTEMBER 1962, OCTOBER 1973 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	77	213	0.80	4490	526	7.31	59.1
INSTAN. DISCHARGE	54	312	0.42	3670	744	3.84	14.2
SPECIFIC CONDUCTANCE	133	1937	551	2730	541	-0.97	-0.05
PH	132	8.0	7.3	8.7	0.28	-0.16	0.23
HARDNESS	130	855	225	1300	234	-1.05	0.59
NONCARBONATE HARDNESS	128	720	143	1160	216	-1.04	0.58
DISS. CALCIUM	126	256	77	432	66.6	-1.07	0.97
DISS. MAGNESIUM	129	52	8.0	112	21.1	-0.14	-0.17
DISS. SODIUM	78	136	12	220	58.7	-0.62	-0.69
DISS. SODIUM+POTASSIUM	56	95	24	155	40.9	-0.30	-1.15
DISS. POTASSIUM	32	6	0	9	1.79	-0.52	2.04
BICARBONATE	130	166	83	301	42.2	0.13	-0.31
CARBONATE	130	0	0	8	1.60	3.82	14.3
DISS. SULFATE	131	714	150	1170	205	-1.16	0.83
DISS. CHLORIDE	130	167	14	340	83.6	-0.08	-0.98
DISS. SILICA	7	18	9.4	25			
DS (RES AT 180 C)	130	1547	401	2250	439	-1.09	0.25
DISS. NITRATE	27	2.6	0.44	6.6	1.25	1.12	2.82

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=49.20 + 0.107 X SC	0.88	10
MG=-10.02 + 0.032 X SC	0.83	3.8
NA=-62.79 + 0.098 X SC	0.93	9.4
NA+K=-21.93 + 0.065 X SC	0.78	13
K=8.567 +(-0.001)SC	0.13	1.2
HCO3=63.27 + 0.053 X SC	0.67	10
SO4=69.78 + 0.333 X SC	0.88	31
CL=-98.52 + 0.138 X SC	0.89	12
SIO2=11.22 + 0.003 X SC	0.15	21
DS=-16.21 + 0.804 X SC	0.98	31

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OK

LOCATION.--LAT 364511, LONG 980744, IN NW 1/4 NE 1/4 SEC. 11. T.26N., R.9W., ALFALFA COUNTY, AT GAGING STATION AT BRIDGE ON COUNTY ROAD, 0.6 MI DOWNSTREAM FROM GREAT SALT PLAINS DAM, 4 MI UPSTREAM FROM WAGON CREEK, 6 MI NORTHEAST OF JET, AND AT MILE 102.7.

DRAINAGE AREA.--3,202 SQ MI, OF WHICH 8 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1953 TO SEPTEMBER 1959, WATER YEARS 1960-61 (PARTIAL-RECORD STATION), OCTOBER 1961 TO SEPTEMBER 1963, JULY 1968 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1954 TO SEPTEMBER 1955, OCTOBER 1957 TO SEPTEMBER 1959, OCTOBER 1961 TO SEPTEMBER 1963, JULY 1968 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	261	423	0.10	8840	978	5.75	41.2
INSTAN. DISCHARGE	245	408	0.30	8660	899	4.97	33.6
SPECIFIC CONDUCTANCE	519	10800	1170	38200	7460	1.70	3.03
PH	441	7.9	6.4	9.8	0.43	-0.68	1.34
HARDNESS	444	740	270	1810	644	15.4	288
NONCARBONATE HARDNESS	444	600	190	5470	364	6.12	71.9
DISS. CALCIUM	280	200	81	493	85.9	1.22	0.98
DISS. MAGNESIUM	280	64	15	204	32.2	1.52	3.08
DISS. SODIUM	288	2200	200	8930	1800	1.81	3.64
DISS. SODIUM+POTASSIUM	56	1300	724	3780	556	2.08	6.36
DISS. POTASSIUM	45	9	5	25	4.70	1.62	2.19
BICARBONATE	445	150	37	264	37.7	0.09	-0.14
CARBONATE	444	1	0	18	1.89	3.76	19.9
DISS. SULFATE	406	490	190	1390	187	2.53	8.27
DISS. CHLORIDE	510	3500	120	13800	2740	1.78	3.38
DISS. SILICA	30	9.0	4.0	17	3.67	0.67	-0.24
DS (RES AT 180 C)	411	5930	1050	27100	4190	2.40	7.56
DISS. NITRATE	184	1.8	0.00	5.3	1.05	0.67	0.32

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=107.89 + 0.008 X SC	0.92	3.3
MG=31.27 + 0.003 X SC	0.83	1.7
NA=-306.90 + 0.237 X SC	0.99	12
NA+K=-227.30 + 0.221 X SC	0.99	16
K=6.036 + 0.000 X SC	0.73	0.7
HCO3=149.38 + 0.000 X SC	0.04	3.1
SO4=248.54 + 0.026 X SC	0.86	8.5
CL=-521.11 + 0.366 X SC	0.99	13
SIO2=10.65 + -0.000 X SC	0.36	1.0
DS=-371.64 + 0.66 X SC	0.99	31

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OK

LOCATION.--LAT 364013, LONG 0971833, IN NW1/4 SE 1/4 SEC. 4, T.25N., R.1W., KAY COUNTY, AT GAGING STATION AT BRIDGE ON U.S. HIGHWAY 77 IN TONKAWA, 4 MI DOWNSTREAM FROM THOMPSON CREEK, 7.8 MI UPSTREAM FROM CHIKASKIA RIVER, AND AT MILE 33.8.

DRAINAGE AREA.--4,528 SQ MI, OF WHICH 8 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: SEPTEMBER 1951 TO SEPTEMBER 1963, JULY 1968 TO SEPTEMBER 1975.
WATER TEMPERATURES: NOVEMBER 1959 TO SEPTEMBER 1963, JULY 1968 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEWNESS	KURTOSIS
DISCHARGE	478	931	0.67	19400	1990	5.84	43.7
INSTAN. DISCHARGE	271	1300	2.6	27700	3330	4.56	25.1
SPECIFIC CONDUCTANCE	768	5100	208	17900	2850	0.85	0.84
PH	653	8.3	6.4	9.3	5.96	25.4	648
HARDNESS	655	430	36	1030	164	0.01	0.57
NONCARBONATE HARDNESS	653	290	0	896	146	0.52	1.02
DISS. CALCIUM	381	120	9.8	304	48.0	0.10	0.43
DISS. MAGNESIUM	374	39	2.8	116	17.9	0.50	1.00
DISS. SODIUM	521	830	24	2600	524	1.06	0.89
DISS. SODIUM+POTASSIUM	97	1400	107	3910	869	0.79	0.10
DISS. POTASSIUM	53	6	2	16	2.20	1.67	5.78
BICARBONATE	649	170	32	374	60.6	0.26	-0.48
CARBONATE	650	1	0	20	3.06	2.60	7.70
DISS. SULFATE	606	280	8.6	650	173	10.5	195
DISS. CHLORIDE	720	1500	29	5960	962	1.11	1.34
DISS. SILICA	36	12	6.5	18	2.66	0.10	-0.20
DS (RES AT 180 C)	593	2770	107	7800	1500	0.84	0.70
DISS. NITRATE	287	2.1	0.00	12	1.67	1.52	4.18

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=63.19 + 0.012 X SC	0.72	3.2
MG=16.18 + 0.004 X SC	0.81	1.0
NA=-127.07 + 0.213 X SC	0.98	9.8
NA+K=-55.52 + 0.214 X SC	0.88	91
K=6.97 + -0.000 X SC	0.08	0.9
HCO3=153.22 + 0.004 X SC	0.19	4.7
SO4=112.95 + 0.037 X SC	0.53	13
CL=-187.52 + 0.324 X SC	0.97	19
SIO2=11.01 + 0.000 X SC	0.04	2.2
DS=19.65 + 0.592 X SC	0.97	34

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07152500 ARKANSAS RIVER AT RALSTON, OK

LOCATION.--LAT 363009, LONG 0964322, IN NW 1/4 SEC. 1, T.23N., R.5E., OSAGE COUNTY, AT GAGING STATION AT BRIDGE ON STATE HIGHWAY 18 AT RALSTON, 2 MI DOWNSTREAM FROM SALT CREEK, 2 MI UPSTREAM FROM GRAYHORSE CREEK, AND AT MILE 594.0.

DRAINAGE AREA.--54,465 SQ MI, OF WHICH 7,615 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: JANUARY 1950 TO SEPTEMBER 1963, MAY 1965 TO SEPTEMBER 1975.
WATER TEMPERATURES: JANUARY 1950 TO SEPTEMBER 1963, MAY 1965 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEWNESS	KURTOSIS
DISCHARGE	1455	7349	17	135700	12400	4.40	25.7
INSTAN. DISCHARGE	229	10241	608	204000	21400	5.28	35.5
SPECIFIC CONDUCTANCE	1670	1712	167	6060	861	0.75	1.18
PH	1474	8.1	6.0	9.9	0.37	-0.48	1.44
HARDNESS	1518	294	73	630	106	0.03	-0.83
NONCARBONATE HARDNESS	1431	148	6	454	76.4	0.25	-0.50
DISS. CALCIUM	920	86	22	194	27.9	-0.06	-0.58
DISS. MAGNESIUM	921	23	3.6	54	9.87	0.04	-0.83
DISS. SODIUM	725	275	11	1090	165	0.94	1.95
DISS. SODIUM+POTASSIUM	791	223	14	1070	141	1.44	4.20
DISS. POTASSIUM	182	7	2	24	2.47	2.57	14.2
BICARBONATE	1444	177	12	396	50.0	0.40	-0.18
CARBONATE	1386	2	0	46	4.44	3.12	15.2
DISS. SULFATE	1583	140	6.2	465	74.0	0.63	0.45
DISS. CHLORIDE	1585	375	15	1700	243	1.26	2.86
DISS. SILICA	170	12	2.4	22	4.10	-0.06	-0.40
DS (RES AT 180 C)	1606	1009	133	3390	501	0.69	0.98
DISS. NITRATE	1268	4.1	0.00	21	2.35	1.10	3.07

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=42.86 + 0.023 X SC	0.75	1.4
MG=7.73 + 0.008 X SC	0.78	0.4
NA=-56.26 + 0.177 X SC	0.99	1.9
NA+K=-50.38 + 0.170 X SC	0.98	2.3
K=4.752 + 0.001 X SC	0.37	0.4
HCO3=132.56 + 0.026 X SC	0.45	2.6
SO4=29.99 + 0.064 X SC	0.76	2.7
CL=-95.92 + 0.274 X SC	0.98	2.5
SIO2=13.67 + -0.000 X SC	0.16	0.8
DS=24.30 + 0.574 X SC	0.98	4.9

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07157950 CIMARRON RIVER NEAR BUFFALO, OK

LOCATION.--LAT 365528, LONG 0992356, IN NW 1/4 SW 1/4 SEC. 7, T.28N., R.20W., HARPER COUNTY, AT BRIDGE ON U.S. HIGHWAY 64, 7 MI DOWNSTREAM FROM GAGING STATION, 14 MI EAST OF BUFFALO, AND AT MILE 289.0.

DRAINAGE AREA.--11,930 SQ MI, OF WHICH 4,813 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1959 TO SEPTEMBER 1963, JULY 1968 TO SEPTEMBER 1975.
WATER TEMPERATURES: JULY 1968 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	151	260	0.0	4480	574	5.04	29.4
INSTAN. DISCHARGE	199	169	0.0	3520	381	6.45	46.6
SPECIFIC CONDUCTANCE	350	9595	360	63300	9480	2.68	8.50
PH	274	8.1	6.9	8.9	0.30	-1.20	2.15
HARDNESS	278	543	140	1600	258	1.72	3.23
NONCARBONATE HARDNESS	278	388	31	1500	265	1.86	3.52
DISS. CALCIUM	127	145	28	480	79.2	2.17	5.56
DISS. MAGNESIUM	123	51	13	111	20.4	0.37	0.39
DISS. SODIUM	211	2193	120	17000	2700	3.00	10.6
DISS. SODIUM+POTASSIUM	48	1676	87	13800	2485	3.45	13.6
DISS. POTASSIUM	38	8	0	12	1.98	-1.34	5.54
BICARBONATE	278	185	68	316	53.5	-0.06	-0.81
CARBONATE	278	1.0	0	16	2.52	2.87	8.66
DISS. SULFATE	320	353	59	1400	208	2.20	6.32
DISS. CHLORIDE	351	3180	140	27000	3855	3.08	11.6
DISS. SILICA	16	16	7.5	21	3.49	-0.87	1.42
DS (RES AT 180 C)	314	6123	512	45600	6815	2.99	10.4
DISS. NITRATE	149	1.9	0.00	9.4	1.74	1.76	3.88

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=85.37 + 0.007 X SC	0.70	7.6
MG=34.93 + 0.002 X SC	0.74	1.8
NA=-460.12 + 0.264 X SC	0.99	26
NA+K=-333.32 + 0.251 X SC	0.99	34
K=7.801 + 0.000 X SC	0.11	0.6
HCO3=201.90 + -0.002 X SC	0.32	4.3
SO4=191.18 + 0.016 X SC	0.79	9.6
CL=-680.13 + 0.404 X SC	0.99	28
SIO2=15.41 + 0.000 X SC	0.14	1.5
DS=-637.14 + 0.693 X SC	0.99	80

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07157960 BUFFALO CREEK NEAR LOVEDALE, OK

LOCATION.--LAT 364608, LONG 0992158, IN NW 1/4 NW 1/4 SEC. 4, T.26N., R.20W., HARPER COUNTY, AT GAGING STATION AT BRIDGE ON STATE HIGHWAY 34, 1.2 MI EAST OF LOVEDALE, 1.3 MI UPSTREAM FROM SLEEPING BEAR CREEK, AND AT MILE 7.6.

DRAINAGE AREA.--408 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1973 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1973 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	0						
INSTAN, DISCHARGE	64	151	0.06	3290	521	4.55	22.8
SPECIFIC CONDUCATNCE	66	2634	427	5100	934	-0.11	1.42
PH	60	7.8	7.1	8.3	0.24	-1.23	2.18
HARDNESS	62	1339	200	2100	466	-1.00	0.49
NONCARBONATE HARDNESS	60	1203	110	1900	430	-1.00	0.58
DISS. CALCIUM	62	354	61	630	130	-0.56	0.12
DISS. MAGNESIUM	66	111	12	160	38.6	-1.25	0.76
DISS. SODIUM	65	138	9.1	490	93.2	2.30	6.74
DISS. SODIUM+POTASSIUM	0						
DISS. POTASSIUM	28	8	5	14	2.11	1.26	1.64
BICARBONATE	64	193	91	280	42.4	-0.51	-0.09
CARBONATE	60	0	0	0	0		
DISS. SULFATE	54	1192	100	1700	367	-1.38	1.75
DISS. CHLORIDE	61	182	9.3	850	136	3.44	15.1
DISS. SILICA	0						
DS (RES AT 180 C)	66	2312	295	4270	850	-0.48	0.84
DISS. NITRATE	20	0.9	0.04	4.8	1.21	2.50	6.15

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=27.88 + 0.125 X SC	0.92	19
MG=19.25 + 0.035 X SC	0.84	7.8
NA=-94.35 + 0.088 X SC	0.89	16
K=8.898 + -0.000 X SC	0.16	1.6
HCO3=123.87 + 0.026 X SC	0.56	14
SO4=4.11 + 0.455 X SC	0.95	55
CL=-149.24 + 0.129 X SC	0.85	28
DS=-69.32 + 0.904 X SC	0.99	38

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07157980 CIMARRON RIVER NEAR FREEDOM, OK

LOCATION.--LAT 364518, LONG 0990658, IN SE 1/4 SE 1/4 SEC. 3, T.26N., R.18W., WOODWARD COUNTY, AT GAGING STATION AT BRIDGE ON STATE HIGHWAY 50, 1 MI SOUTH OF FREEDOM, 1.1 MI UPSTREAM FROM UNNAMED TRIBUTARY, AND AT MILE 272.4.

DRAINAGE AREA.--12,706 SQ MI, OF WHICH 4,813 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1973 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1973 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	0						
INSTAN. DISCHARGE	65	390	10	2700	538	2.91	9.00
SPECIFIC CONDUCTANCE	72	24599	4630	93400	16700	1.58	3.22
PH	73	7.9	7.1	8.5	0.30	-0.87	0.82
HARDNESS	73	980	180	2400	467	1.00	0.99
NONCARBONATE HARDNESS	73	813	53	2100	465	1.04	0.86
DISS. CALCIUM	73	247	40	760	125	1.66	4.13
DISS. MAGNESIUM	73	88	5.3	210	43.7	0.63	0.29
DISS. SODIUM	55	5526	820	27000	4950	2.25	6.11
DISS. SODIUM+POTASSIUM	2	6770	5200	8340			
DISS. POTASSIUM	30	13	8	36	5.65	2.61	8.66
BICARBONATE	73	198	102	303	49.0	-0.10	-0.41
CARBONATE	73	0	0	7	1.05	5.44	30.2
DISS. SULFATE	70	621	110	1500	270	0.61	0.74
DISS. CHLORIDE	72	10184	1300	42000	8160	1.57	2.61
DISS. SILICA	0						
DS (RES AT 180 C)	66	18432	2870	74300	14600	1.51	2.40
DISS. NITRATE	25	2.5	0.58	5.1	1.20	0.13	-0.78

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=106.09 + 0.005 X SC	0.76	17
MG=33.78 + 0.002 X SC	0.85	4.7
NA=-943.75 + 0.283 X SC	0.99	103
NA+K=-742.64 + 0.260 X SC	1.00	0
K=6.281 + 0.000 X SC	0.85	0.9
HCO3=216.39 + -0.000 X SC	0.24	10
SO4=303.04 + 0.012 X SC	0.83	30
CL=-1801.14 + 0.464 X SC	0.99	235
DS=-2708.78 + 0.812 X SC	0.99	357

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07158000 CIMARRON RIVER NEAR WAYNOKA, OK

LOCATION.--LAT 363102, LONG 0985245, NEAR CENTER OF SEC. 35, T.24N., R.16W., WOODS COUNTY, AT GAGING STATION AT BRIDGE ON U.S. HIGHWAY 281, 0.8 MI DOWNSTREAM FROM MAIN CREEK, 5 MI SOUTH OF WAYNOKA, AND AT MILE 247.0.

DRAINAGE AREA.--13,334 SQ MI, OF WHICH 4,830 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1952 TO SEPTEMBER 1963, JULY 1968 TO SEPTEMBER 1975.
WATER TEMPERATURES: JULY 1968 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	293	378	0.02	15200	1200	8.57	91.2
INSTAN. DISCHARGE	222	429	0.00	32500	2330	12.4	167
SPECIFIC CONDUCTANCE	525	25118	654	125000	15100	1.55	4.90
PH	439	8.0	7.0	8.9	.28	-0.68	0.47
HARDNESS	441	1009	180	3440	388	1.21	4.64
NONCARBONATE HARDNESS	438	859	58	3300	393	1.19	4.40
DISS. CALCIUM	278	261	28	892	103	1.11	4.51
DISS. MAGNESIUM	275	92	17	393	46.7	2.10	8.63
DISS. SODIUM	262	6363	142	27000	4280	1.27	2.07
DISS. SODIUM+POTASSIUM	23	5076	1320	13800	2720	0.33	-1.01
DISS. POTASIUM	22	11	9	18	2.01	1.57	4.65
BICARBONATE	439	182	36	610	56.4	1.11	6.84
CARBONATE	438	1.2	0	45	3.97	5.30	40.2
DISS. SULFATE	313	665	110	2120	610	13.2	209
DISS. CHLORIDE	525	9364	104	63200	6770	2.14	9.50
DISS. SILICA	8	11	6.5	14	2.85	-1.10	-0.10
DS (RES AT 180 C)	313	17581	377	54600	10400	1.05	0.82
DISS. NITRATE	52	2.5	0.22	9.7	2.16	1.52	2.17

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=163.26 + 0.004 X SC	0.63	8.7
MG=37.57 + 0.002 X SC	0.79	3.0
NA=-988.69 + 0.282 X SC	0.99	54
NA+K=341.16 + 0.221 X SC	0.93	475
K=9.607 + 0.000 X SC	0.22	1.8
HCO3=195.68 + -0.000 X SC	0.14	5.2
SO4=355.38 + 0.012 X SC	0.26	73
CL=-1684.78 + 0.439 X SC	0.99	76
SIO2=12.77 + -0.000 X SC	0.11	2.1
DS=-1427.53 + 0.717 X SC	0.96	330

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07158400 SALT CREEK NEAR OKEENE, OK

LOCATION.--LAT 360611, LONG 0981136, IN SW 1/4 SEC.20, T.19N., R.9W., KINGFISHER COUNTY, AT GAGING STATION AT BRIDGE ON COUNTY ROAD, 7.0 MI EAST OF OKEENE, 2.2 MI DOWNSTREAM FROM SPRING CREEK, AND AT MILE 2.2.

DRAINAGE AREA.--196 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1973 TO SEPTEMBER 1975. WATER TEMPERATURES: OCTOBER 1973 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	3	174	10	501	283	1.73	
INSTAN. DISCHARGE	63	430	3.6	8400	1390	4.75	23.7
SPECIFIC CONDUCTANCE	74	9820	373	36100	7250	1.47	3.02
PH	74	7.8	7.4	8.4	0.26	-0.15	-0.60
HARDNESS	70	1002	82	2000	475	-0.40	-0.62
NONCARBONATE HARDNESS	70	824	31	1900	443	-0.11	-0.38
DISS. CALCIUM	70	286	24	640	139	-0.18	-0.29
DISS. MAGNESIUM	71	70	5.3	120	34.6	-0.52	-0.93
DISS. SODIUM	59	1916	50	8900	1740	2.13	6.01
DISS. SODIUM+POTASSIUM	0						
DISS. POTASSIUM	29	7	4	16	2.35	2.22	7.32
BICARBONATE	73	218	62	338	77.3	-0.43	-1.04
CARBONATE	73	0	0	0	0		
DISS. SULFATE	71	808	41	1400	383	-0.67	-0.76
DISS. CHLORIDE	69	3134	120	14000	2780	1.92	4.61
DISS. SILICA	1	14					
DS (RES AT 180 C)	68	6768	226	26300	4980	1.68	4.33
DISS. NITRATE	20	4.0	0.18	7.4	2.34	-0.20	-1.25

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=135.47 + 0.015 X SC	0.79	17
MG=35.78 + 0.003 X SC	0.73	4.8
NA=-317.08 + 0.235 X SC	0.99	47
K=4.256 + 0.000 X SC	0.90	0.3
HCO3=184.16 + 0.003 X SC	0.33	14
SO4=486.50 + 0.033 X SC	0.63	59
CL=-697.31 + 0.376 X SC	0.99	75
DS=-200.99 + 0.676 X SC	0.99	125

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07159100 CIMARRON RIVER NEAR DOVER, OK

LOCATION.--LAT 355706, LONG 0975451, IN SW 1/4 NE 1/4 SEC. 14, T.17N., R.7W., KINGFISHER COUNTY, AT GAGING STATION AT BRIDGE ON U.S. HIGHWAY 81, 1 MI DOWNSTREAM FROM TURKEY CREEK, 2 MI SOUTH OF DOVER, 2.5 MI UPSTREAM FROM KINGFISHER CREEK, AND AT MILE 160.6.

DRAINAGE AREA.--15,713 SQ MI, OF WHICH 4,926 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1973 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1973 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEWNESS	KURTOSIS
DISCHARGE	3	3858	76	25500	4710	1.38	
INSTAN. DISCHARGE	72	2353	22	9170	4950	3.49	12.4
SPECIFIC CONDUCTANCE	79	9484	1130	21300	5120	0.69	-0.70
PH	79	7.9	7.0	8.4	0.32	-0.34	-0.22
HARDNESS	77	653	140	1200	272	-0.42	-1.04
NONCARBONATE HARDNESS	77	480	42	1000	235	-0.24	-0.05
DISS. CALCIUM	77	171	43	320	70.4	-0.30	-1.06
DISS. MAGNESIUM	79	55	7.7	91	24.7	-0.54	-0.97
DISS. SODIUM	61	1928	150	5000	1220	0.30	-0.47
DISS. SODIUM+POTASSIUM	5	2531	447	4110	1450	0.50	-0.44
DISS. POTASSIUM	33	8	5	12	1.62	0.67	0.71
BICARBONATE	80	211	90	334	62.0	-0.32	-0.88
CARBONATE	80	0	0	2	0.22	8.94	80.0
DISS. SULFATE	75	467	43	860	215	-0.26	-0.96
DISS. CHLORIDE	78	3012	220	8000	1860	0.29	-0.44
DISS. SILICA	0						
DS (RES AT 180 C)	77	5864	651	14800	3390	0.22	-0.44
DISS. NITRATE	24	3.1	0.70	6.0	1.25	0.22	-0.07

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=60.85 + 0.012 X SC	0.85	9.0
MG=15.84 + 0.004 X SC	0.86	3.1
NA=-206.51 + 0.230 X SC	0.99	31
NA+K=-262.95 + 0.227 X SC	0.99	151
K=5.468 + 0.000 X SC	0.67	0.5
HCO3=139.99 + 0.007 X SC	0.62	12
SO4=162.58 + 0.032 X SC	0.79	32
CL=-353.99 + 0.358 X SC	0.99	47
DS=-244.08 + 0.640 X SC	0.96	222

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07159750 COTTONWOOD CREEK AT SEWARD, OK

LOCATION.--LAT 354743, LONG 0972932, IN SW 1/4 SEC. 2, T.15N., R.3W., LOGAN COUNTY, AT COUNTY ROAD BRIDGE, 0.3 MI WEST OF SEWARD, 7.7 MI SOUTHWEST OF GUTHRIE, AND AT MILE 19.2.

DRAINAGE AREA.--316 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: FEBRUARY 1973 TO SEPTEMBER 1975.
WATER TEMPERATURES: FEBRUARY 1973 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	140	513	14	6520	1000	3.89	17.0
INSTAN. DISCHARGE	46	538	11	8000	1350	4.35	21.5
SPECIFIC CONDUCTANCE	188	970	151	2350	372	0.05	-0.12
PH	159	7.9	7.0	8.6	0.32	-0.29	-0.08
HARDNESS	150	320	60	550	126	-0.06	-1.03
NONCARBONATE HARDNESS	149	110	6	240	53.3	0.24	-0.55
DISS. CALCIUM	131	77	16	130	29.2	-0.06	-0.97
DISS. MAGNESIUM	136	31	4.8	59	13.8	0.12	-1.12
DISS. SODIUM	147	82	13	160	37.2	0.09	-1.06
DISS. SODIUM+POTASSIUM	0						
DISS. POTASSIUM	44	5	3	8	1.03	1.26	1.37
BICARBONATE	154	250	66	421	94.5	0.04	-1.10
CARBONATE	149	1	0	62	6.24	7.66	66.7
DISS. SULFATE	150	150	9.1	260	64.3	-0.12	-1.11
DISS. CHLORIDE	153	93	16	180	44.1	0.18	-1.08
DISS. SILICA	0						
DS (RES AT 180 C)	151	604	97	1030	242	-0.14	-1.14
DISS. NITRATE	78	9.7	2.1	24	5.24	0.83	-0.30

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=7.65 + 0.072 X SC	0.94	2.4
MG=-0.95 + 0.034 X SC	0.94	1.1
NA=-11.29 + 0.097 X SC	0.97	2.1
K=3.827 + 0.000 X SC	0.25	0.5
HCO3=33.24 + 0.230 X SC	0.92	7.9
SO4=-5.54 + 0.16 X SC	0.95	4.3
CL=-15.88 + 0.114 X SC	0.96	2.9
DS=8.10 + 0.625 X SC	0.97	12

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07161000 CIMARRON RIVER AT PERKINS, OK

LOCATION.--LAT 355732, LONG 0970149, IN SW 1/4 SW 1/4 SEC. 7, T.17N., R.3E., PAYNE COUNTY, AT GAGING STATION AT BRIDGE ON U.S. HIGHWAY 177, 1.0 MI SOUTH OF PERKINS, 1.5 MI UPSTREAM FROM DUGOUT CREEK, 4.0 MI DOWNSTREAM FROM WILDHORSE CREEK, AND AT MILE 87.3.

DRAINAGE AREA.--17,852 SQ MI OF WHICH 4,926 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1952 TO SEPTEMBER 1963, JUNE 1965 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1952 TO SEPTEMBER 1963, JUNE 1965 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	1782	1525	1.4	108000	4840	10.5	168
INSTAN. DISCHARGE	204	2512	18	75000	6590	7.76	76.0
SPECIFIC CONDUCTANCE	1974	8016	101	30600	4880	0.82	0.80
PH	1848	8.2	6.8	9.8	0.32	-0.13	2.36
HARDNESS	1860	551	76	1880	231	0.06	-0.36
NONCARBONATE HARDNESS	1775	392	0	1640	204	0.25	-0.01
DISS. CALCIUM	1106	154	24	392	59.4	-0.07	-0.47
DISS. MAGNESIUM	1108	50	4.0	219	24.1	0.38	1.11
DISS. SODIUM	910	1677	66	7590	1100	0.91	1.15
DISS. SODIUM+POTASSIUM	941	1458	58	6950	1060	1.37	2.88
DISS. POTASSIUM	154	8	4	15	2.22	0.68	0.09
BICARBONATE	1778	193	23	408	60.6	0.49	-0.07
CARBONATE	1777	3	0	38	4.85	2.25	6.82
DISS. SULFATE	1916	324	12	851	149	0.06	-0.66
DISS. CHLORIDE	1912	2468	80	11500	1700	1.08	1.64
DISS. SILICA	182	14	1.5	26	5.25	0.01	-0.27
DS (RES AT 180 C)	1917	4869	277	90400	3620	7.44	162
DISS. NITRATE	676	3.9	0.00	32	2.84	2.70	17.0

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=78.18 + 0.009 X SC	0.81	2.0
MG=18.60 + 0.004 X SC	0.82	0.8
NA=-150.20 + 0.218 X SC	0.98	16
NA+K=-157.38 + 0.215 X SC	0.98	12
K=5.351 + 0.000 X SC	0.68	0.3
HCO3=148.45 + 0.006 X SC	0.45	2.4
SO4=134.50 + 0.024 X SC	0.77	4.2
CL=-259.64 + 0.340 X SC	0.98	14
SIO2=15.61 + -0.000 X SC	0.12	
DS=-142.31 + 0.627 X SC	0.84	85

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OK

LOCATION.--LAT 360722, LONG 0960723, IN NW 1/4 SW 1/4 SEC. 14, T.19N., R.11E., TULSA COUNTY, AT BRIDGE ON STATE HIGHWAY 97 IN SAND SPRINGS, 5.1 MI DOWNSTREAM FROM KEYSTONE DAM, AND 10 MI UPSTREAM FROM GAGING STATION AT TULSA.

DRAINAGE AREA.--74,615 SQ MI UPSTREAM FROM GAGING STATION, OF WHICH 12,541 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1946 TO SEPTEMBER 1975. WATER TEMPERATURES: OCTOBER 1946 TO SEPTEMBER 19759

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	2026	10002	32	205000	17600	4.75	32.7
INSTAN. DISCHARGE	59	14861	307	100000	15600	2.46	8.05
SPECIFIC CONDUCTANCE	2077	3081	246	21200	1870	1.99	9.37
PH	1679	8.0	6.6	9.4	0.32	-0.24	1.31
HARDNESS	1937	383	62	2600	188	2.14	14.3
NONCARBONATE HARDNESS	1882	250	6	2510	178	2.82	20.8
DISS. CALCIUM	1359	118	25	705	53.3	2.30	16.4
DISS. MAGNESIUM	1362	33	5.4	205	16.6	1.63	10.1
DISS. SODIUM	1130	490	23	3350	341	2.03	8.55
DISS. SODIUM+POTASSIUM	804	564	36	3830	346	2.17	13.1
DISS. POTASSIUM	163	9	2	35	5.50	2.05	4.62
BICARBONATE	1893	164	26	352	44.7	0.57	0.60
CARBONATE	1900	2	0	41	3.67	3.19	15.6
DISS. SULFATE	2001	164	10	528	75	0.56	0.12
DISS. CHLORIDE	1999	841	32	7450	612	2.46	13.9
DISS. SILICA	233	9.4	0.0	30	5.03	0.60	0.38
DS (RES AT 180 C)	2013	1815	152	13500	1120	2.14	11.4
DISS. NITRATE	1377	3.2	0.00	15	2.00	0.92	1.91

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=33.23 + 0.024 X SC	0.92	1.2
MG=7.50 + 0.007 X SC	0.89	0.4
NA=-50.75 + 0.182 X SC	0.99	2.3
NA+K=-66.10 + 0.183 X SC	0.99	2.6
K=3.73 + 0.001 X SC	0.49	0.8
HCO3=146.97 + 0.005 X SC	0.23	2.0
SO4=82.82 + 0.026 X SC	0.65	2.5
CL=-166.01 + 0.322 X SC	0.99	3.1
SIO2=10.06 + -0.000 X SC	0.06	0.8
DS=-49.67 + 0.600 X SC	0.99	4.4

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07175500 CANEY RIVER NEAR RAMONA, OK

LOCATION.--LAT 363031, LONG 0955036, IN NW 1/4 NW 1/4 SEC. 5, T.23N., R.14E., WASHINGTON COUNTY, AT GAGING STATION AT BRIDGE ON COUNTY ROAD, 1 MI UPSTREAM FROM BUCK CREEK, 2.2 MI DOWNSTREAM FROM DOUBLE CREEK, 4.5 MI SOUTHEAST OF RAMONA, AND AT MILE 32.0.

DRAINAGE AREA.--1,955 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: NOVEMBER 1951 TO AUGUST 1953, OCTOBER 1959 TO AUGUST 1962, OCTOBER 1964 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1966 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	363	1372	11	13900	2170	2.63	8.14
INSTAN. DISCHARGE	159	2239	0.97	29600	3780	3.68	20.0
SPECIFIC CONDUCTANCE	527	695	127	2310	361	1.08	1.69
PH	512	8.0	3.0	9.9	0.62	-2.75	20.0
HARDNESS	484	192	41	490	79.6	0.39	-0.13
NONCARBONATE HARDNESS	429	79	4	430	57.8	1.72	4.98
DISS. CALCIUM	124	61	13	152	28.6	0.60	0.19
DISS. MAGNESIUM	131	10	2.0	27	5.4	1.00	0.83
DISS. SODIUM	473	60	8.5	289	42.0	1.50	3.12
DISS. SODIUM+POTASSIUM	8	98	61	139			
DISS. POTASSIUM	93	4	2	9	1.84	1.01	0.63
BICARBONATE	456	139	0	272	48.9	-0.29	-0.23
CARBONATE	456	2	0	26	3.83	2.84	9.48
DISS. SULFATE	478	32	6.4	112	15	1.47	3.46
DISS. CHLORIDE	528	127	10	610	95.8	1.53	3.16
DISS. SILICA	5	6.1	5.0	9.0	1.74	1.67	2.44
DS (RES AT 180 C)	484	416	76	1380	213	1.17	1.94
DISS. NITRATE	372	2.5	0.00	18	2.15	3.55	19.4

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=18.72 + 0.063 X SC	0.92	2.0
MG=2.17 + 0.012 X SC	0.92	0.4
NA=-19.67 + 0.118 X SC	0.97	1.0
NA+K=5.32 + 0.095 X SC	0.94	14
K=1.62 + 0.004 X SC	0.76	0.3
HCO3=95.87 + 0.061 X SC	0.45	4.5
SO4=8.78 + 0.034 X SC	0.78	1.0
CL=-52.92 + 0.259 X SC	0.97	2.0
SIO2=11.86 + -0.007 X SC	0.98	0.6
DS=-7.32 + 0.621 X SC	0.99	2.8

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07178050 BIRD CREEK NEAR CATOOSA, OK

LOCATION.--LAT 361351, LONG 0954955, TULSA COUNTY, AT BRIDGE ON U.S. HIGHWAY 75, APPROXIMATELY 5.5 MI NORTHWEST OF CATOOSA.

DRAINAGE AREA.--1,080 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES OCTOBER 1964 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	0						
INSTAN. DISCHARGE	0						
SPECIFIC CONDUCTANCE	180	622	160	1420	205	0.52	0.96
PH	153	7.6	6.3	8.6	0.42	-0.22	-0.23
HARDNESS	142	165	48	300	49.5	0.23	0.23
NONCARBONATE HARDNESS	138	64	0	209	33.7	1.30	2.63
DISS. CALCIUM	57	49	15	94	16.2	0.40	0.61
DISS. MAGNESIUM	58	11	0.4	21	4.65	-0.14	-0.03
DISS. SODIUM	131	58	10	175	25.6	1.22	3.11
DISS. SODIUM+POTASSIUM	19	58	4	109	24.1	-0.26	0.89
DISS. POTASSIUM	33	6	2	12	2.52	1.07	0.37
BICARBONATE	138	124	40	223	34.3	-0.03	0.17
CARBONATE	138	0	0	2	0.17	11.7	138
DISS. SULFATE	143	40	8.0	135	16.1	1.78	8.13
DISS. CHLORIDE	155	98	4.0	348	48.9	1.62	4.81
DISS. SILICA.	15	8.2	5.9	11	1.57	0.08	-1.04
DS (RES AT 180 C)	144	381	107	846	128	0.60	1.31
DISS. NITRATE	129	14	0.10	70	14.5	1.35	1.40

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=5.66 + 0.071 X SC	0.85	3.8
MG=0.57 + 0.016 X SC	0.71	1.4
NA=-16.26 + 0.118 X SC	0.96	2.0
NA+K=-2.22 + 0.095 X SC	0.84	9.9
K=2.57 + 0.005 X SC	0.44	1.2
HCO3=68.78 + 0.088 X SC	0.54	7.8
SO4=11.22 + 0.045 X SC	0.59	3.4
CL=-39.67 + 0.222 X SC	0.93	4.5
SIO2=7.64 + 0.000 X SC	0.12	1.3
DS=0.43 + 0.604 X SC	0.99	5.5

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07178600 VERDIGRIS RIVER NEAR INOLA, OK

LOCATION.--LAT 360943, LONG 0953707, IN NORTHWEST CORNER OF SEC. 4, T.19N., R.16E., ROGERS COUNTY, AT GAGING STATION AT BRIDGE ON STATE HIGHWAY 33, 1 MI UPSTREAM FROM SALT CREEK, 6 MI WEST OF INOLA, AND AT MILE 48.8.

DRAINAGE AREA.--7,911 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1947 TO NOVEMBER 1971.
WATER TEMPERATURES: OCTOBER 1950 TO SEPTEMBER 1965, OCTOBER 1967 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	1431	4190	7.4	67000	7530	3.16	12.9
INSTAN. DISCHARGE	0						
SPECIFIC CONDUCTANCE	1497	907	120	5510	659	2.55	9.46
PH	1222	7.9	2.3	9.6	0.49	-3.25	35.8
HARDNESS	1424	208	42	580	78.7	0.86	1.63
NONCARBONATE HARDNESS	1424	87	2	439	59.8	1.88	5.55
DISS. CALCIUM	979	64	11	180	22.4	0.60	1.02
DISS. MAGNESIUM	979	14	2.3	51	7.35	1.60	4.14
DISS. SODIUM	651	88	4.8	756	92.4	3.05	13.0
DISS. SODIUM+POTASSIUM	789	117	4.7	934	118	2.91	11.6
DISS. POTASSIUM	155	5	0	15	2.78	1.59	1.94
BICARBONATE	1424	146	0	315	44.6	0.31	0.84
CARBONATE	1419	1	0	44	3.71	4.84	31.0
DISS. SULFATE	1476	34	8.2	116	13.3	0.90	1.96
DISS. CHLORIDE	1476	189	6.5	1700	203	3.02	12.8
DISS. SILICA	181	7.7	1.0	18	3.12	0.22	0.08
DS (RES AT 180C)	1471	534	87	3060	372	2.63	10.3
DISS. NITRATE	1229	5.6	0.10	36	5.64	2.24	5.24

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=38.84 + 0.024 X SC	0.80	0.7
MG=5.20 + 0.009 X SC	0.87	0.2
NA=-39.96 + 0.152 X SC	0.97	1.5
NA+K=-47.21 + 0.164 X SC	0.99	1.1
K=2.47 + 0.003 X SC	0.52	0.4
HCO3=126.13 + 0.020 X SC	0.31	1.9
SO4=31.50 + 0.002 X S	0.13	0.6
CL=-87.60 + 0.303 X SC	0.99	1.3
SIO2=9.52 + -0.002 X SC	0.28	0.5
DS=24.26 + 0.560 X SC	0.99	2.3

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGIS RIVER) NEAR INOLA, OK

LOCATION.--LAT 360324, LONG 0953206, IN NW 1/4 NE 1/4 SEC.7, T.18 N., R.17 E., WAGONER COUNTY, AT LOCK WELL AT DAM, 6.8 MI SOUTHWEST OF INOLA, AND AT 25.7 NAVIGATION CHANNEL MILES.

DRAINAGE AREA.--8,030 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: DECEMBER 1971 TO SEPTEMBER 1975. WATER TEMPERATURES: DECEMBER 1971 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	0						
INSTAN. DISCHARGE	9	9615	74	30100	9590	1.29	1.76
SPECIFIC CONDUCTANCE	212	394	132	742	112	0.65	0.39
PH	156	7.7	5.4	9.2	0.51	-0.94	3.39
HARDNESS	149	143	47	270	37.6	0.24	0.91
NONCARBONATE HARDNESS	142	38	6	120	18.3	1.66	3.69
DISS. CALCIUM	95	42	15	73	9.70	0.34	1.29
DISS. MAGNESIUM	101	7.8	2.2	22	2.45	1.89	10.6
DISS. SODIUM	143	25	6.1	210	19.4	6.45	58.5
DISS. SODIUM+POTASSIUM	0						
DISS. POTASSIUM	47	3	1	9	0.71	1.02	1.50
BICARBONATE	148	128	48	191	31.0	-0.57	0.07
CARBONATE	149	1	0	38	3.42	9.51	100
DISS. SULFATE	146	34	12	120	12.7	2.34	13.0
DISS. CHLORIDE	150	42	7.6	320	32.5	4.72	35.5
DISS. SILICA	18	6.8	4.5	9.6	1.18	0.35	0.88
DS (RES AT 180 C)	148	241	88	887	85.0	3.41	22.0
DISS. NITRATE	82	2.4	0.10	5.1	1.15	0.01	0.12

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=13.95 + 0.075 X SC	0.82	2.1
MG=0.925 + 0.018 X SC	0.78	0.6
NA=-12.99 + 0.097 X SC	0.58	4.7
K=2.31 + 0.002 X SC	0.24	0.4
HCO3=50.57 + 0.193 X SC	0.73	6.3
SO4=3.53 + 0.078 X SC	0.71	2.7
CL=-31.227 + 0.184 X SC	0.66	7.1
SIO2=8.98 + -0.005 X SC	0.45	1.1
DS=6.80 + 0.599 X SC	0.79	16

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OK

LOCATION.--LAT 355115, LONG 0951345, IN SE 1/4 NW 1/4 SEC.19, T.16N., R.20 E., CHEROKEE COUNTY, AT GAGING STATION, 1.1 MI DOWNSTREAM FROM FORT GIBSON DAM, 4.5 MI NORTH OF FORT GIBSON, AND AT MILE 6.6.

DRAINAGE AREA.--12,495 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1951 TO SEPTEMBER 1975. WATER TEMPERATURES: OCTOBER 1951 TO SEPTEMBER 1963, OCTOBER 1973 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	308	6522	17	73400	9490	3.41	15.8
INSTAN. DISCHARGE	71	17475	18	54400	16100	1.04	-0.01
SPECIFIC CONDUCTANCE	409	297	26	2570	126	14.3	261
PH	309	7.8	6.2	8.4	0.4	-0.84	1.62
HARDNESS	299	130	73	190	19.0	0.07	-0.10
NONCARBONATE HARDNESS	298	36	2	72	11.6	0.13	-0.11
DISS. CALCIUM	183	41	26	52	6.77	-0.28	-0.96
DISS. MAGNESIUM	184	6.2	1.2	11	1.68	0.29	-0.18
DISS. SODIUM	284	10	2.5	17	2.8	0.14	-0.40
DISS. SODIUM+POTASSIUM	0						
DISS. POTASSIUM	155	2.5	0	4	0.57	-1.47	4.40
BICARBONATE	302	114	72	158	15.0	-0.01	0.14
CARBONATE	301	0	0	4	0.77	3.83	14.4
DISS. SULFATE	332	40	7.7	65	9.78	0.08	-0.32
DISS. CHLORIDE	303	12	2.0	23	3.7	0.32	-0.24
DISS. SILICA	164	6.4	0.9	14	3.01	0.22	-0.90
DS (RES AT 180 C)	304	185	102	272	27.1	-0.04	-0.08
DISS. NITRATE	256	2.1	0.00	8.7	1.96	1.13	0.94

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=38.33 + 0.009 X SC	0.24	1.0
MG=5.75 + 0.002 X SC	0.17	0.3
NA=9.20 + 0.004 X SC	0.21	0.4
K=2.50 + 0.000 X SC	0.04	0.1
HCO3=106.15 + 0.025 X SC	0.23	2.1
SO4=35.14 + 0.016 X SC	0.22	1.3
CL=10.26 + 0.005 X SC	0.19	0.5
SIO2=7.23 + -0.002 X SC	0.17	0.5
DS=176.60 + 0.026 X SC	0.13	3.8

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07198000 ILLINOIS RIVER NEAR GORE, OK

LOCATION.--LAT 353423, LONG 950407, IN NE 1/4 SW 1/4 SEC.27, T.13 N., R.21 E., SEQUOYAH COUNTY AT TENKILLER FERRY DAM, 4.3 MI UPSTREAM FROM GAGING STATION, 6 MI NORTHEAST OF GORE, AND AT MILE 12.8.

DRAINAGE AREA.--1,610 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES OCTOBER 1953 TO SEPTEMBER 1975. WATER TEMPERATURES: OCTOBER 1953 TO SEPTEMBER 1963.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	361	1426	4.8	22200	2100	4.18	29.7
INSTAN. DISCHARGE	89	2207	12	11700	2630	1.78	3.73
SPECIFIC CONDUCTANCE	472	194	86	1180	57.5	11.3	186
PH	343	7.7	6.3	8.4	0.40	-0.78	0.54
HARDNESS	373	84	33	226	14.1	2.34	27.4
NONCARBONATE HARDNESS	372	8.5	0	144	8.86	10.0	148
DISS. CALCIUM	239	30	11	39	4.51	-0.75	1.19
DISS. MAGNESIUM	242	2.1	0.0	6.2	1.03	1.40	2.90
DISS. SODIUM	248	5.1	1.5	19	2.44	1.72	5.30
DISS. SODIUM+POTASSIUM	93	9.4	1.4	144	15.2	7.74	67.8
DISS. POTASSIUM	142	2	0	3	0.48	-0.70	1.52
BICARBONATE	375	92	33	146	13.4	-0.69	2.21
CARBONATE	372	0	0	17	1.75	5.94	39.0
DISS. SULFATE	398	7.9	3.0	33	3.10	2.08	10.9
DISS. CHLORIDE	385	9.5	1.2	300	16.5	14.6	252
DISS. SILICA	138	7.4	0.0	17	3.45	0.40	0.15
DS (RES AT 180 C)	371	114	40	740	37.4	12.7	212
DISS. NITRATE	317	1.8	0.00	7.8	1.44	0.80	0.53

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=10.99 + 0.099 X SC	0.80	1.0
MG=-0.61 + 0.014 X SC	0.50	0.3
NA=-7.59 + 0.068 X SC	0.77	0.7
NA+K=-19.355 + 0.134 X SC	0.96	0.9
K=0.88 + 0.004 X SC	0.27	0.3
HCO3=75.026 + 0.087 X SC	0.40	2.1
SO4=3.62 + 0.022 X SC	0.44	0.5
CL=-40.44 + 0.259 X SC	0.95	0.9
SIO2=14.26 + -0.035 SC SC	0.27	2.1
DS=0.69 + 0.587 X SC	0.96	1.8

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07228500 CANADIAN RIVER AT BRIDGEPORT, OK

LOCATION.--LAT 353400, LONG 0982245, IN SE 1/4 SW 1/4 SEC.28, T.13 N., R.11 W., CO. BRIDGE, 1.0 MI NORTH OF BRIDGEPORT, 2.8 MI UPSTREAM FROM LUMPMOUTH CREEK, BLAINE COUNTY, AT GAGING STATION AT CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD AND AT MILE 267.1.

DRAINAGE AREA.--25.229 SQ MI, OF WHICH 4,801 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1969 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1969 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	1256	736	0.00	21250	2100	5.31	34.3
INSTAN. DISCHARGE	24	223	0.25	1600	328	3.57	14.4
SPECIFIC CONDUCTANCE	1264	1195	226	4000	473	0.84	1.00
PH	1110	8.1	6.8	9.7	0.31	-0.42	1.86
HARDNESS	1245	402	110	920	133	0.49	0.52
NONCARBONATE HARDNESS	1244	236	0	710	117	0.83	1.17
DISS. CALCIUM	1077	110	30	250	37.1	0.43	0.15
DISS. MAGNESIUM	1083	30	2.4	76	14.1	5.61	89.5
DISS. SODIUM	559	101	4.8	632	81.0	1.57	4.00
DISS. SODIUM+POTASSIUM	683	108	7.8	413	80.7	1.20	1.02
DISS. POTASSIUM	122	6	2	17	2.59	1.48	3.80
BICARBONATE	1250	200	24	376	50.5	0.04	-0.25
CARBONATE	1247	2	0	34	3.65	3.02	11.9
DISS. SULFATE	1239	279	26	790	115	0.81	1.56
DISS. CHLORIDE	1251	121	3.5	825	115	1.32	1.82
DISS. SILICA	87	17	5.0	28	4.74	-0.20	-0.00
DS (RES AT 180 C)	1249	801	170	2450	305	0.65	0.51
DISS. NITRATE	1190	2.9	0.00	11	1.64	1.16	1.92

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=71.49 + 0.033 X SC	0.41	2.8
MG=7.93 + 0.019 X SC	0.62	0.9
NA=-76.11 + 0.148 X SC	0.91	3.8
NA+K=-84.89 +0.162 X SC	0.91	3.7
K=3.14 + 0.002 X SC	0.39	0.6
HCO3=162.06 + 0.032 X SC	0.29	3.7
SO4=94.89 + 0.156 X SC	0.63	6.9
CL=-142.48 + 0.222 X SC	0.90	3.9
SIO2=17.97 + -0.000 X SC	0.07	1.6
DS=49.37 + 0.633 X SC	0.97	5.5

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07229200 CANADIAN RIVER AT PURCELL, OK

LOCATION.--LAT 350050, LONG 0972050, IN NW 1/4 SEC.7, T.6N., R.1 W., MCCLAIN COUNTY, AT BRIDGE ON U.S. HIGHWAY 77, 0.5 MI EAST OF PURCELL, 1 MI UPSTREAM FROM WALNUT CREEK, AND AT MILE 184.9.

DRAINAGE AREA.--25,939 SQ MI, OF WHICH 4,801 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: MAY 1974 TO SEPTEMBER 1975.
WATER TEMPERATURES: MAY 1974 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	83	1638	8.8	18450	3032	3.77	16.1
INSTAN. DISCHARGE	4	103	6.4	354	168	1.97	3.88
SPECIFIC CONDUCTANCE	102	1163	346	2370	460	0.02	-0.78
PH	100	8.0	7.0	10.0	0.49	1.10	2.52
HARDNESS	84	407	96	890	176	0.06	-0.72
NONCARBONATE HARDNESS	82	226	0.0	529	132	0.01	-0.98
DISS. CALCIUM	72	102	17	180	43.6	0.01	-1.02
DISS. MAGNESIUM	73	35	8.5	61	17.0	-0.11	-1.40
DISS. SODIUM	65	98	2.6	204	51.2	0.07	-0.89
DISS. SODIUM+POTASSIUM	16	144	42	229	59.0	-0.16	-1.17
DISS. POTASSIUM	45	6.9	4	38	4.82	6.37	41.9
BICARBONATE	87	228	120	499	75.8	0.87	1.03
CARBONATE	86	2	0	36	5.54	4.50	22.5
DISS. SULFATE	79	282	48	570	142	-0.15	-1.17
DISS. CHLORIDE	87	106	14	278	70.6	0.70	-0.47
DISS. SILICA	7	11	8.0	14	2.06	0.69	-0.22
DS (RES AT 180 C)	87	810	209	1780	345	0.02	-0.74
DISS. NITRATE	30	2.6	0.00	8.4	2.62	0.97	-0.46

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=3.02 + 0.086 X SC	0.89	6.5
MG=-4.55 + 0.035 X SC	0.93	2.0
NA=-24.03 + 0.104 X SC	0.94	6.2
NA+K=38.47 + 0.080 X SC	0.63	36
K=11.18 + -0.003 X SC	0.30	2.2
HCO3=100.55 + 0.110 X SC	0.67	16
SO4=-42.83 + 0.274 X SC	0.90	20
CL=-55.98 + 0.137 X SC	0.90	9.0
SIO2=7.95 + 0.002 X SC	0.39	3.0
DS=-66.65 + 0.740 X SC	0.99	12

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07229900 LAKE THUNDERBIRD NEAR NORMAN, OK

LOCATION.--LAT 351315, LONG 0971305, IN NW 1/4 SE 1/4 SEC. 29, T.9 N., R.1E., CLEVELAND COUNTY, UPSTREAM FACE OF DAM AT OUTLET GATE, 0.2 MI UPSTREAM FROM GAGING STATION, 13.0 MI EAST OF NORMAN, AND AT MILE 96.4.

DRAINAGE AREA.--256 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1966 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	0						
INSTAN. DISCHARGE	0						
SPECIFIC CONDUCTANCE	113	421	357	486	29.6	0.15	-0.56
PH	110	7.9	6.4	8.5	0.36	-1.44	3.90
HARDNESS	111	182	150	216	14.4	0.01	-0.60
NONCARBONATE HARDNESS	110	6.0	0	16	3.95	0.56	-0.14
DISS. CALCIUM	20	35	30	40	2.30	0.28	0.55
DISS. MAGNESIUM	20	21	19	23	1.31	0.22	-1.36
DISS. SODIUM	105	17	13	21	1.55	0.35	-0.20
DISS. SODIUM+POTASSIUM	6	18	12	23	3.73	-0.97	1.84
DISS. POTASSIUM	30	6	4	7	0.77	-0.53	-0.55
BICARBONATE	110	214	180	248	16.6	0.15	-0.71
CARBONATE	111	1	0	8	1.49	3.12	9.60
DISS. SULFATE	111	11	6.0	21	3.03	1.19	1.18
DISS. CHLORIDE	111	26	16	32	2.62	-0.46	1.00
DISS. SILICA	13	1.7	0.9	3.0	0.61	0.57	0.09
DS (RES AT 180 C)	109	235	198	292	19.2	0.56	-0.05
DISS. NITRATE	102	0.28	0.00	2.0	0.33	2.64	8.72

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=0.34 + 0.085 X SC	0.71	
MG=-1.14 + 0.053 X SC	0.79	
NA=0.42 + 0.039 X SC	0.75	
NA+K=-19.44 + 0.089 X SC	0.94	
HCO3=-5.62 + 0.522 X SC	0.93	
SO4=-8.43 + 0.045 X SC	0.44	
CL=1.64 + 0.058 X SC	0.66	
SIO2=2.24 + -0.001 X SC	0.04	
DS=-1.59 + 0.561 X SC	0.88	

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07231000 LITTLE RIVER NEAR SASAKWA, OK

LOCATION.--LAT 345902, LONG 0963301, IN NW 1/4 SEC.22, T.6 N., R.7 E., SEMINOLE COUNTY, AT GAGING STATION AT BRIDGE ON COUNTY ROAD, 2.8 MI NORTHWEST OF SASAKWA, 8.7 MI DOWNSTREAM FROM SALT CREEK, AND AT MILE 84.1.

DRAINAGE AREA.--865 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: SEPTEMBER 1951 TO SEPTEMBER 1975. WATER TEMPERATURES: OCTOBER 1955 TH SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	999	470	0.00	21400	1420	6.99	69.6
INSTAN. DISCHARGE	157	729	0.00	17600	1960	5.43	37.9
SPECIFIC CONDUCTANCE	1120	8249	142	130000	18200	3.61	13.8
PH	1065	8.0	4.0	9.7	0.46	-2.37	11.6
HARDNESS	1001	1417	48	24400	3070	3.9	17.8
NONCARBONATE HARDNESS	918	1375	4	24400	3200	3.7	16
DISS. CALCIUM	364	855	19	6840	1250	2.11	4.80
DISS. MAGNESIUM	363	255	6.5	1830	349	1.93	3.36
DISS. SODIUM	609	291	9.6	1170	198	0.84	0.59
DISS. SODIUM+POTASSIUM	462	2853	25	36300	5510	2.76	8.15
DISS. POTASSIUM	95	5	2	12	1.74	0.99	1.44
BICARBONATE	922	157	0	411	69.6	0.63	0.35
CARBONATE	922	1.2	0	16	2.62	2.39	5.62
DISS. SULFATE	957	34	0	246	28	3.02	12.3
DISS. CHLORIDE	1117	3306	16	73100	8620	4.22	20.6
DISS. SILICA	32	10	5.0	18	4.05	0.41	-0.61
DS (RES AT 180 C)	1081	5350	106	129000	13800	4.43	22.6
DISS. NITRATE	594	1.4	0.00	11	1.20	2.55	11.1

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=-55.50 + 0.044 X SC	0.99	12
MG=4.28 + 0.012 X SC	0.97	5.2
NA=-35.64 + 0.151 X SC	0.99	1.7
NA+K=-353.08 + 0.228 X SC	0.99	40
K=2.65 + 0.001 X SC	0.94	0.1
HCO3=170.22 + -0.001 X SC	0.38	2.4
SO4=22.60 + 0.001 X SC	0.87	0.5
CL=-563.57 + 0.468 X SC	0.99	38
SIO2=9.72 + 0.000 X SC	0.10	0.8
DS=-622.43 + 0.808 X SC	0.99	57

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07231500 CANADIAN RIVER AT CALVIN, OK

LOCATION.--LAT 345832, LONG 0961424, IN NE 1/4 SW 1/4 SEC. 22, T.6 N., R.10 E., HUGHES COUNTY, AT GAGING STATION AT BRIDGE ON U.S. HIGHWAY 75, 0.5 MI NORTHEAST OF CALVIN, 2.5 MI UPSTREAM FROM SHAWNEE CREEK, 8.5 MI DOWNSTREAM FROM LITTLE RIVER, AND AT MILE 93.9.

DRAINAGE AREA.--27,952 SQ MI, OF WHICH 4,801 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: JULY 1965 TO SEPTEMBER 1975.
WATER TEMPERATURES: JULY 1965 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	477	1642	0.80	61200	4260	7.61	86.4
INSTAN. DISCHARGE	220	2319	3.3	44600	4870	4.70	30.0
SPECIFIC CONDUCTANCE	725	1434	190	40200	2320	13.6	210
PH	669	8.2	6.5	9.6	0.4	-0.58	2.21
HARDNESS	544	325	82	5210	350	10.2	127
NONCARBONATE HARDNESS	475	183	0	5030	367	10.1	119
DISS. CALCIUM	97	121	0	1460	215	5.4	30.7
DISS. MAGNESIUM	101	43	0	394	61.6	4.48	20.8
DISS. SODIUM	596	156	12	1770	129	6.52	73.2
DISS. SODIUM+POTASSIUM	17	1597	73	8010	2571	1.97	2.84
DISS. POTASSIUM	75	7	3	16	8 6	45	
BICARBONATE	480	187	0	2380	147	11.3	158
CARBONATE	477	3.	0	151	8.30	12.2	210
DISS. SULFATE	608	99	7.0	8480	348	23.2	559
DISS. CHLORIDE	640	338	18	15600	912	14.6	237
DISS. SILICA	8	8.6	5.8	11			
DS (RES AT 180 C)	666	898	85	27500	1680	13.0	193
DISS. NITRATE	564	1.9	0.00	18	1.72	3.00	20.0

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=34.97 + 0.036 X SC	0.99	2.1
MG=23.08 + 0.008 X SC	0.82	3.8
NA=-38.51 + 0.151 X SC	0.85	5.7
NA+K=-132.65 + 0.199 X SC	0.99	34
K=4.83 + 0.001 X SC	0.64	0.3
HCO3=185.83 + 0.000 X SC	0.01	7.7
SO4=27.40 + 0.048 X SC	0.35	15
CL=-164.69 + 0.340 X SC	0.92	17
SIO2=5.93 + 0.002 X SC	0.71	1.3
DS=-103.23 + 0.686 X SC	0.99	13

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07232500 BEAVER RIVER NEAR GUYMON, OK
(HEADWATER OF THE NORTH CANADIAN RIVER)

LOCATION.--LAT 364324, LONG 1012930, IN NW 1/4 SW 1/4 SEC. 18, T.3 N., R.15 E., TEXAS COUNTY, AT GAGING STATION AT BRIDGE ON U.S. HIGHWAY 64 AT DRY SAND DRAW, 1.2 MI UPSTREAM FROM GOFF CREEK, 2.5 MI NORTH OF GUYMON, AND AT MILE 650.7.

DRAINAGE AREA.--2,139 SQ MI INCLUDES THAT OF DRY SAND DRAW, OF WHICH 964 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: WATER YEARS 1952-59 (PARTIAL-RECORD STATION), NOVEMBER 1959 TO SEPTEMBER 1963, OCTOBER 1967 TO SEPTEMBER 1975. WATER TEMPERATURES: NOVEMBER 1959 TO SEPTEMBER 1963.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	171	22	0.11	982	88.5	8.40	83.7
INSTAN. DISCHARGE	86	60	0.62	1320	188	5.14	29.4
SPECIFIC CONDUCTANCE	256	530	250	3760	215	13.4	202
PH	238	8.1	6.8	8.7	0.34	-1.14	2.06
HARDNESS	235	219	98	310	33.2	-0.61	1.49
NONCARBONATE HARDNESS	195	13	0	97	11.4	3.02	16.8
DISS. CALCIUM	87	45	18	89	10.0	0.48	4.04
DISS. MAGNESIUM	87	31	3.3	555	57.2	9.13	84.5
DISS. SODIUM	162	30	4.8	238	17.6	10.2	123
DISS. SODIUM+POTASSIUM	74	31	6.9	63	9.06	-0.24	1.89
DISS. POTASSIUM	33	5	1	8	1.64		
BICARBONATE	196	240	124	350	36.8	-0.62	0.78
CARBONATE	195	4	0	20	5.31	1.15	0.24
DISS. SULFATE	208	52	8.0	87	12.5	-1.33	3.19
DISS. CHLORIDE	236	14	1.4	21	3.64	-1.46	2.57
DISS. SILICA	36	28	14	39	5.58	-0.78	0.81
DS (RES AT 180 C)	208	328	155	420	42.9	-1.27	3.10
DISS. NITRATE	133	1.6	0.00	10	1.30	2.54	12.8

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=40.84 + 0.007 X SC	0.25	1.9
MG=26.98 + -0.003 X SC	0.15	1.4
NA=30.91 + -0.002 X SC	0.03	3.3
NA+K=-4.91 + 0.073 X SC	0.63	5.4
K=6.82 + -0.004 X SC	0.10	3.6
HCO3=222.74 + 0.033 X SC	0.22	6.2
SO4=52.78 + -0.001 X SC	0.02	2.2
CL=14.00 + 0.000 X SC	0.01	0.6
SIO2=15.39 + 0.025 X SC	0.21	11
DS=316.46 + 0.021 X SC	0.11	7.4

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07232630 BEAVER RIVER NEAR HOOKER, OK

LOCATION.--LAT 364122, LONG 1011219, AT THE NORTHWEST CORNER OF NW 1/4 SEC. 35, T.3N., R.2E., TEXAS COUNTY, AT BRIDGE ON STATE HIGHWAY 94, 12 MI SOUTH OF HOOKER, AND AT MILE 628.6.

DRAINAGE AREA.--3,017 SQ MI OF WHICH 1,488 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES OCTOBER 1971 TO SEPTEMBER 1973, OCTOBER 1974 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	0						
INSTAN. DISCHARGE	0						
DISS. SILICA	0						
DISS. CALCIUM	2	61	51	71			
DISS. MAGNESIUM	2	25	23	27			
DISS. SODIUM	7	56	34	86			
DISS. SODIUM+POTASSIUM	0						
DISS. POTASSIUM	2	4.4	4.3	4.6			
BICARBONATE	7	244	185	302			
CARBONATE	6	0.3	0.0	1.9			
DISS. SULFATE	7	156	130	210			
DISS. CHLORIDE	7	36	18	76			
DISS. NITRATE	5	1.8	0.2	4.4			
HARDNESS	7	290	220	340			
NONCARBONATE HARDNESS	7	89	70	120			
DS (RES AR 180 C)	7	510	371	639			
SPECIFIC CONDUCTANCE	7	781	574	989			
PH	7	7.9	7.5	8.4			

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07234000 BEAVER RIVER AT BEAVER, OK
(HEADWATER OF THE NORTH CANADIAN RIVER)

LOCATION.--LAT 364920, LONG 1003105, IN SW 1/4 SEC.7, T.4 N., R.24 E., BEAVER COUNTY, AT GAGING STATION AT BRIDGE ON U.S. HIGHWAY 270 AT BEAVER, 1.5 MI DOWNSTREAM FROM HOME CREEK, 5 MI UPSTREAM FROM CLEAR CREEK, AND AT MILE 576.0.

DRAINAGE AREA.--7,955 SQ MI, OF WHICH 4,270 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: WATER YEARS 1958-59 (PARTIAL-RECORD STATION), NOVEMBER 1961 TO SEPTEMBER 1963, OCTOBER 1967 TO SEPTEMBER 1975. WATER TEMPERATURES: OCTOBER 1967 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	288	119	0.00	3530	388	6.26	44.7
INSTAN. DISCHARGE	130	80	0.00	2980	349	7.12	53.2
SPECIFIC CONDUCTANCE	366	2865	286	6020	1220	-0.42	-0.50
PH	349	8.1	7.0	9.0	0.34	-1.02	1.00
HARDNESS	347	527	110	1100	225	0.28	-0.16
NONCARBONATE HARDNESS	304	358	5	940	209	0.22	-0.59
DISS. CALCIUM	161	128	23	250	51.3	0.16	-0.47
DISS. MAGNESIUM	161	65	6.0	140	32.3	-0.02	-0.63
DISS. SODIUM	330	419	12	942	202	-0.35	-0.55
DISS. SODIUM+POTASSIUM	17	358	70	547	153	-0.66	-0.82
DISS. POTASSIUM	20	11	7	18	2.82	0.99	0.86
BICARBONATE	306	211	10	483	63.0	1.07	3.06
CARBONATE	306	2	0	28	3.5	2.89	12.5
DISS. SULFATE	361	343	18	800	181	0.17	-0.63
DISS CHLORIDE	364	640	14	1400	312	-0.36	-0.61
DISS. SILICA	5	23	17	30			
DS (RES AT 180 C)	342	1803	164	3730	294	-0.34	-0.54
DISS. NITRATE	268	2.3	0.00	14	2.06	2.12	5.72

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=23.72 + 0.033 X SC	0.86	5.3
MG=-4.15 + 0.022 X SC	0.91	2.7
NA=-45.31 + 0.16 X SC	0.99	4.1
NA+K=-18.32 + 0.14 X SC	0.98	20.8
K=12.91 + -0.001 X SC	0.34	1.4
HCO3=127.67 + 0.029 X SC	0.59	7.2
SO4=-39.78 + 0.133 X SC	0.90	11
CL=-86.28 + 0.254 X SC	0.99	5.5
SIO2=1.29 + 0.005 X SC	0.78	10
DS=-44.78 + 0.642 X SC	0.99	10

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07237500 NORTH CANADIAN RIVER AT WOODWARD, OK

LOCATION.--LAT 362618, LONG 0991640, IN SE 1/4 SEC.25, T.23 N., R.20 W., WOODWARD COUNTY, AT BRIDGE ON STATE HIGHWAY 15, 200 FT DOWNSTREAM FROM THE ATCHINSON, TOPEKA AND SANTA FE RAILWAY CO. BRIDGE, 6.0 MI EAST OF WOODWARD, 7.2 MI UPSTREAM FROM INDIAN CREEK, 27.5 MI DOWNSTREAM FROM WOLF CREEK, AND AT MILE 460.2.

DRAINAGE AREA.--11,589 SQ MI, OF WHICH 4,812 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1974 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	46	156	0.88	2450	442	4.56	20.8
INSTAN. DISCHARGE	11	76	2.2	359	102	2.51	7.08
SPECIFIC CONDUCTANCE	48	1545	693	3010	461	1.09	1.84
PH	45	7.9	7.4	8.6	0.33	0.26	-0.86
HARDNESS	44	413	172	790	141	0.78	0.79
NONCARBONATE HARDNESS	44	225	50	590	126	1.06	1.31
DISS. CALCIUM	23	115	50	220	47.5	0.80	-0.17
DISS. MAGNESIUM	24	39	13	63	14.4	-0.07	-0.86
DISS. SODIUM	27	170	82	360	70.3	1.20	1.08
DISS. SODIUM+POTASSIUM	18	170	53	272	65.3	-0.24	-0.67
DISS. POTASSIUM	11	6	5	10	1.2	1.25	2.19
BICARBONATE	45	226	111	353	44.9	-0.05	1.15
CARBONATE	44	2.0	0	20	4.93	2.56	5.81
DISS. SULFATE	47	239	55	580	123	1.04	0.93
DISS. CHLORIDE	58	244	64	570	97.1	0.93	1.61
DISS. SILICA	13	18	4.0	26	6.30	-1.19	1.31
DS (RES AT 180 C)	34	1003	350	1950	384	0.74	0.45
DISS. NITRATE	3	0.37	0.00	1.0			

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=-8.01 + 0.078 X SC	0.91	20
MG=12.34 + 0.016 X SC	0.75	7.8
NA=-19.22 + 0.126 X SC	0.96	15
NA+K=-15.74 + 0.130 X SC	0.98	11
K=4.65 + 0.001 X SC	0.60	1.0
HCO3=196.37 + 0.019 X SC	0.21	25
SO4=-121.52 + 0.235 X SC	0.63	24
CL=-54.14 + 0.199 X SC	0.96	13
SIO2=12.34 + 0.004 X SC	0.18	3.9
DS=-64.39 + 0.693 X SC	0.96	58

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07238500 CANTON LAKE NEAR CANTON, OK

LOCATION.--LAT 360503, LONG 0983605, IN SE 1/4 NW 1/4 SEC.32, T.19N., R.13 W., BLAINE COUNTY, NEAR RIGHT END OF CANTON DAM ON NORTH CANADIAN RIVER, 2.0 MI NORTHWEST OF CANTON, AND AT MILE 394.3.

DRAINAGE AREA.--12,483 SQ MI, OF WHICH 4,883 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1951 TO SEPTEMBER 1954, DECEMBER 1955 TO SEPTEMBER 1963, OCTOBER 1967 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1951 TO SEPTEMBER 1954.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	0						
INSTAN. DISCHARGE	0						
SPECIFIC CONDUCTANCE	203	1380	702	1800	220	-1.40	6.73
PH	186	7.8	6.9	8.8	0.30	-0.56	1.09
HARDNESS	193	347	39	540	47.1	-0.83	10.9
NONCARBONATE HARDNESS	193	192	0	340	40.0	-0.61	5.91
DISS. CALCIUM	82	82	51	130	13.9	0.98	2.73
DISS. MAGNESIUM	83	34	16	52	6.06	0.09	0.79
DISS. SODIUM	185	158	60	240	33.4	-0.14	0.15
DISS. SODIUM+POTASSIUM	4	116	104	127			
DISS. POTASSIUM	40	6	1	10	1.81	-1.58	2.75
BICARBONATE	194	187	21	250	25.2	-1.75	9.74
CARBONATE	189	0	0	4	0.61	5.92	34.5
DISS. SULFATE	192	216	84	360	37.2	0.42	1.76
DISS. CHLORIDE	198	219	82	330	49.7	-0.03	-0.51
DISS. SILICA	36	9.0	2.2	14	3.00	-0.60	-0.26
DS (RES AT 180 C)	192	854	426	1090	121	-0.29	0.12
DISS. NITRATE	171	0.73	0.00	17	1.49	8.23	84.8

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=39.81 + 0.034 X SC	0.62	
MG=12.26 + 0.017 X SC	0.74	
NA=-23.04 + 0.13 X SC	0.87	
NA+K=15.34 + 0.092 X SC		
HCO3=147.80 + 0.028 X SC	0.25	
SO4=71.69 + 0.105 X SC	0.63	
CL=-52.40 + 0.197 X SC		
SIO2=9.98 + -0.000 X SC		
DS=181.92 + 0.487 X SC	0.91	

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OK

LOCATION.--LAT 353001, LONG 0971137, IN SW 1/4 NW 1/4 SEC. 22, T.12N., R.1E., OKLAHOMA COUNTY, AT GAGING STATION AT BRIDGE ON COUNTY ROAD, 2.2 MI NORTHWEST OF HARRAH, 3.8 MI DOWNSTREAM FROM CHOCTAW CREEK, AND AT MILE 230.0.

DRAINAGE AREA.--13,501 SQ MI, OF WHICH 4,899 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1968 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1968 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	485	388	40	5090	604	3.94	20.5
INSTAN. DISCHARGE	89	544	42	5920	937	3.70	15.9
SPECIFIC CONDUCTANCE	552	1398	165	2890	565	0.04	-0.74
PH	534	8.0	4.2	9.8	0.46	-1.04	8.26
HARDNESS	481	291	88	560	98.8	-0.00	-0.87
NONCARBONATE HARDNESS	477	127	11	310	60.6	0.16	-0.49
DISS. CALCIUM	235	79	28	160	24.3	0.08	-0.53
DISS. MAGNESIUM	237	28	5.7	50	10.8	-0.26	-0.94
DISS. SODIUM	484	173	19	412	86.6	0.26	-0.69
DISS. SODIUM+POTASSIUM	0						
DISS. POTASSIUM	22	9	5	17	2.66	1.31	2.75
BICARBONATE	483	196	84	382	57.3	0.53	-0.06
CARBONATE	492	2	0	44	5.14	3.97	20.9
DISS. SULFATE	481	124	14	5100	236	19.7	416
DISS. CHLORIDE	482	263	26	680	139	0.45	-0.39
DISS. SILICA	1	16					
DS (RES AT 180 C)	483	831	167	1710	343	0.07	-0.81
DISS. NITRATE	411	20	0.00	71	13.4	0.94	0.53

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=26.51 + 0.038 X SC	0.89	2.0
MG=4.12 + 0.017 X SC	0.90	0.8
NA=-36.24 + 0.151 X SC	0.99	1.6
K=2.95 + 0.004 X SC	0.85	0.9
HCO3=100.76 + 0.068 X SC	0.68	5.1
SO4=24.27 + 0.064 X SC	0.58	6.1
CL=-75.02 + 0.243 X SC	0.98	3.2
DS=-11.16 + 0.607 X SC	0.99	4.2

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OK

LOCATION.--LAT 351553, LONG 0961225, IN CENTER OF SW 1/4 SEC. 12, T.9N., R.10E., HUGHES COUNTY, AT GAGING STATION AT BRIDGE ON U.S. HIGHWAY 75, 2.3 MI UPSTREAM FROM WEWOKA CREEK, 2.5 MI NORTHEAST OF WETUMKA, AND AT MILE 84.4.

DRAINAGE AREA.--14,290 SQ MI, OF WHICH 4,899 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: WATER YEAR 1952 (PARTIAL-RECORD STATION), OCTOBER 1953 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1953 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	1145	682	0.35	29600	1770	8.46	104
INSTAN. DISCHARGE	143	1253	32	13300	2100	3.44	13.6
SPECIFIC CONDUCTANCE	1274	3963	193	37100	5470	2.32	5.40
PH	1277	8.1	4.8	10	0.51	-1.03	6.80
HARDNESS	1216	603	26	21660	895	11.6	253
NONCARBONATE HARDNESS	1140	471	0	4600	691	2.27	5.32
DISS. CALCIUM	525	282	22	1340	243	1.20	1.08
DISS. MAGNESIUM	530	70	3.5	325	58.4	1.28	1.75
DISS. SODIUM	640	845	12	7430	1260	1.91	3.50
DISS. SODIUM+POTASSIUM	629	415	5.5	4380	546	3.04	11.3
DISS. POTASSIUM	46	11	2	58	11.5	2.68	7.01
BICARBONATE	1146	163	2.0	362	67.5	0.61	-0.07
CARBONATE	1146	3	0	52	5.79	2.79	10.6
DISS. SULFATE	1270	68	4.9	351	38.1	1.20	3.61
DISS. CHLORIDE	1273	1225	17	14300	1990	2.54	7.07
DISS. SILICA	35	12	3.0	20	4.44	-0.04	-0.60
DS (RES AT 180 C)	1254	2468	119	25800	3530	2.47	6.65
DISS. NITRATE	625	7.4	0.00	85	6.90	3.34	26.4

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=20.96 + 0.034 X SC	0.99	2.5
MG=10.35 + 0.008 X SC	0.95	1.2
NA=-90.38 + 0.183 X SC	0.99	5.8
NA+K=-60.56 + 0.171 X SC	0.98	5.0
K=3.53 + 0.002 X SC	0.99	0.3
HCO3=176.64 + -0.003 X SC	0.28	2.4
SO4=66.00 + 0.001 X SC	0.06	1.3
CL=-210.44 + 0.362 X SC	0.99	7.4
SIO2=11.29 + 0.000 X SC	0.22	1.0
DS=-85.78 + 0.640 X SC	0.99	14

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07242350 DEEP FORK NEAR ARCADIA, OK

LOCATION.--LAT 353910, LONG 0972058, ON SOUTH LINE OF SW 1/4 SEC.30, T.14 N., R.1 W., OKLAHOMA COUNTY, AT GAGING STATION ON COUNTY ROAD BRIDGE, 1.6 MI UPSTREAM FROM COFFEE CREEK, 1.6 MI SOUTHWEST OF ARCADIA, AND AT MILE 212.8.

DRAINAGE AREA.--108 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1969 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1969 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	364	155	18	4210	362	6.56	55.7
INSTAN. DISCHARGE	88	296	10	3870	747	3.30	10.4
SPECIFIC CONDUCTANCE	448	1151	180	3100	409	-0.35	0.34
PH	437	7.6	6.4	8.6	0.46	-0.21	-0.82
HARDNESS	365	250	91	430	70.6	-0.04	-0.34
NONCARBONATE HARDNESS	356	94	0	180	40.3	-0.37	-0.69
DISS. CALCIUM	156	60	23	90	15.7	-0.28	-0.82
DISS. MAGNESIUM	157	28	7.0	52	10.8	-0.09	-0.85
DISS. SODIUM	366	132	11	280	62.7	-0.13	-0.89
DISS. SODIUM+POTASSIUM	0						
DISS. POTASSIUM	49	7	3	13	2.06	0.54	0.08
BICARBONATE	364	191	80	397	63	0.66	-0.19
CARBONATE	367	0	0	8	1.20	4.93	25.2
DISS. SULFATE	369	127	12	6000	310	18.6	355
DISS. CHLORIDE	398	177	12	400	83.7	-0.08	-0.64
DISS. SILICA	1	13	13	13			
DS (RES AT 180 C)	367	673	136	1140	234	-0.50	-0.87
DISS. NITRATE	344	27	0.00	210	24.3	1.56	7.99

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=22.66 + 0.036 X SC	0.87	1.8
MG=3.40 + 0.024 X SC	0.86	1.3
NA=-40.30 + 0.154 X SC	0.96	2.9
K=2.91 + 0.004 X SC	0.75	0.6
HCO3=124.28 + 0.060 X SC	0.37	9.3
SO4=-4.53 + 0.103 X SC	0.94	2.3
CL=55.21 + 0.203 X SC	0.97	3.4
DS=-0.71 + 0.598 X SC	0.99	6.5

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07243500 DEEP FORK NEAR BEGGS, OK

LOCATION.--LAT 354015, LONG 0960408, ON LINE BETWEEN SECS. 19 AND 20, T.14 N., R.12 E., OKMULGEE COUNTY, AT GAGING STATION AT BRIDGE ON COUNTY ROAD, 3.0 MI DOWNSTREAM FROM ADAMS CREEK, 4.0 MI SOUTH OF BEGGS, 8.0 MI FROM FLAT ROCK (CHECKERBOARD) CREEK, AND AT MILE 85.0.

DRAINAGE AREA.--2,018 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: NOVEMBER 1951 TO SEPTEMBER 1975.
WATER TEMPERATURES: NOVEMBER 1951 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	1498	1296	0.12	69070	5080	9.65	106
INSTAN. DISCHARGE	145	1593	2.6	29500	3150	5.64	43.7
SPECIFIC CONDUCTANCE	1636	1263	83	9250	1120	3.07	12.9
PH	1537	8.0	6.2	9.6	0.40	-0.48	1.15
HARDNESS	1577	250	16	1310	156	2.00	7.01
NONCARBONATE HARDNESS	1502	117	0	1200	140	3.38	14.6
DISS. CALCIUM	972	67	2.8	352	47.4	2.34	7.46
DISS. MAGNESIUM	976	28	1.0	105	15.2	0.86	1.55
DISS. SODIUM	851	127	0	1500	139	4.77	33.2
DISS. SODIUM+POTASSIUM	778	193	15	1410	193	2.77	9.50
DISS. POTASSIUM	137	5	1	9	1.56	0.36	0.35
BICARBONATE	1508	165	10	384	70.8	0.15	-0.56
CARBONATE	1409	2	0	30	3.59	2.82	9.88
DISS. SULFATE	1635	35	1.6	313	25	3.14	19.3
DISS. CHLORIDE	1631	301	7.3	3000	355	3.65	17.2
DISS. SILICA	74	8.2	2.0	17	3.30	0.29	-0.32
DS (RES AT 180 C)	1620	714	86.0	5340	612	3.18	14.6
DISS. NITRATE	1307	2.5	0.00	17	1.80	2.87	15.8

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=13.50 + 0.036 X SC	0.98	0.4
MG=13.37 + 0.009 X SC	0.84	0.4
NA=-22.98 + 0.141 X SC	0.96	2.1
NA+K=-38.06 + 0.158 X SC	0.99	1.2
K=3.43 + 0.001 X SC	0.55	0.2
HCO3=144.45 + 0.015 X SC	0.25	2.7
SO4=23.20 + 0.009 X SC	0.42	0.8
CL=-91.53 + 0.310 X SC	0.98	2.8
SIO2=9.55 + -0.001 X SC	0.24	0.8
DS=16.10 + 0.561 X SC	0.98	4.8

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07245000 CANADIAN RIVER NEAR WHITEFIELD, OK

LOCATION.--LAT 351545, LONG 0951419, IN SE 1/4 SE 1/4 SEC.12, T.9 N., R.19 E., HASKELL COUNTY, AT GAGING STATION AT BRIDGE ON STATE HIGHWAY 2, 0.8 MI NORTH OF WHITEFIELD, 5.5 MI UPSTREAM FROM TALEKA(SNAKE) CREEK, 8.2 MI DOWNSTREAM FROM EUFAULA DAM, AND AT MILE 18.8.

DRAINAGE AREA.--47,576 SQ MI, OF WHICH 9,700 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: SEPTEMBER 1944 TO FEBRUARY 1945, SEPTEMBER 1946 TO SEPTEMBER 1964, OCTOBER 1966 TO SEPTEMBER 1975.
WATER TEMPERATURES: SEPTEMBER 1944 TO FEBRUARY 1945, SEPTEMBER 1946 TO SEPTEMBER 1964, OCTOBER 1966 TO SEPTEMBER 1974.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	2287	5796	1.0	143500	11300	5.21	38.6
INSTAN. DISCHARGE	188	6296	22	37800	9320	1.69	1.96
SPECIFIC CONDUCTANCE	2416	2877	66	22900	3230	1.89	3.96
PH	1796	7.8	5.6	9.3	0.39	-3.55	58.9
HARDNESS	2299	442	18	7860	426	3.77	42.4
NONCARBONATE HARDNESS	2293	341	0	7700	419	3.93	44.4
DISS. CALCIUM	1836	139	6.4	833	114	1.67	3.28
DISS. MAGNESIUM	1838	44	1.7	8500	200	41.3	1750
DISS. SODIUM	1046	356	1.6	3650	525	2.19	5.10
DISS. SODIUM+POTASSIUM	1232	569	3.9	4150	574	1.88	4.28
DISS. POTASSIUM	153	27	0	2900	234	12.3	152
BICARBONATE	2299	124	0	390	42.4	0.57	1.02
CARBONATE	1790	1	0	20	2.71	3.25	11.0
DISS. SULFATE	2356	48	1.6	660	36.0	3.90	40.5
DISS. CHLORIDE	2373	896	2.0	8380	1120	2.01	4.69
DISS. SILICA	121	10	0.1	80	7.66	6.30	56.9
DS (RES AT 180 C)	2323	1799	57	15000	2020	1.97	4.55
DISS. NITRATE	1669	3.2	0.00	22	2.30	1.52	5.26

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=21.62 + 0.033 X SC	0.98	0.8
NA+K=-44.74 + 0.171 X SC	0.98	4.2
K=28.06 + 0.000 X SC	0.00	24
HCO3=116.45 + 0.002 X SC	0.19	1.2
SO4=41.88 + 0.002 X SC	0.18	1.0
CL=-102.07 + 0.342 X SC	0.99	5.2
SIO2=8.44 + 0.000 X SC	0.31	0.9
DS=-6.93 + 0.612 X SC		
DS=-7.09 + 0.612 X SC	0.99	9.6

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

ARKANSAS RIVER BASIN

07246400 ROBERT S. KERR LOCK AND DAM (ARKANSAS RIVER) NEAR SALLISAW, OK

LOCATION.--LAT 352157, LONG 0944643, IN SE 1/4 SW 1/4 SEC.8, T.10 N., R.24 E., SEQUOYAH COUNTY, FROM LOCK WALL AT DAM, 0.4 MI UPSTREAM FROM GAGE ON BRIDGE ON U.S. HIGHWAY 59, 3.5 MI DOWNSTREAM FROM SANS BOIS CREEK, 7.5 MI SOUTH OF SALLISAW, AND AT MILE 395.4.

DRAINAGE AREA.--147,750 SQ MI, OF WHICH 22,241 SQ MI IS PROBABLY NONCONTRIBUTING

PERIOD OF RECORD.--CHEMICAL ANALYSES: DECEMBER 1969 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	10	19057	5210	63400	18500	1.77	3.19
INSTAN. DISCHARGE	0						
SPECIFIC CONDUCTANCE	112	628	280	1500	216	0.86	1.22
PH	84	7.9	6.7	8.9	0.46	-0.62	0.47
HARDNESS	41	139	100	180	20	0.14	-0.60
NONCARBONATE HARDNESS	41	45	22	86	12.9	0.87	1.36
DISS. CALCIUM	20	42	33	51	4.47	0.17	0.13
DISS. MAGNESIUM	21	9.5	4.4	14	2.22	-0.02	0.44
DISS. SODIUM	42	70	26	150	30.6	0.57	-0.39
DISS. SODIUM+POTASSIUM	0						
DISS. POTASSIUM	8	3	2	4			
BICARBONATE	42	114	80	142	16	-0.36	-0.37
CARBONATE	42	0	0	0			
DISS. SULFATE	42	45	23	76	12.0	0.63	0.54
DISS. CHLORIDE	41	107	37	230	48	0.51	-0.45
DISS. SILICA	0						
DS (RES AT 180 C)	42	354	180	594	106	0.41	-0.57
DISS. NITRATE	31	1.8	0.10	17	2.98	4.59	23.6

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=26.59 + 0.024 X SC	0.77	3.6
MG=3.25 + 0.010 X SC	0.80	1.2
NA=-32.15 + 0.166 X SC	0.98	3.0
K=-3.01 +0.011 X SC	0.56	6.4
HCO3=78.81 + 0.055 X SC	0.68	6.5
SO4=13.26 + 0.052 X SC	0.80	4.4
CL=-54.80 + 0.262 X SC	0.98	5.7
DS=0.81 + 0.576 X SC	0.98	11

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

RED RIVER BASIN

07303395 ELM FORK OF NORTH FORK RED RIVER AT SALTON CROSSING NEAR CARL, OK

LOCATION.--LAT 350115, LONG 995658, IN NW 1/4 SW 1/4 SEC.3, T.6 N., R.26 W., HARMON COUNTY, 0.1 MI UPSTREAM FROM FIORD AT SALTWORKS, 2.6 MI UPSTREAM FROM CARL GAGE, AND AT MILE 56.6.

DRAINAGE AREA.--411 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: APRIL 1973 TO SEPTEMBER 1975
WATER TEMPERATURES: APRIL 1973 TO SEPTEMBER 1975

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	36	66	0.00	784	139	4.33	21.0
INSTAN. DISCHARGE	52	114	0.52	1150	249	2.87	7.81
SPECIFIC CONDUCTANCE	91	8849	1360	77800	11000	5.11	29.2
PH	94	7.8	7.0	8.8	0.27	0.18	1.29
HARDNESS	89	2014	630	6600	794	3.65	19.4
NONCARBONATE HARDNESS	89	1913	530	6500	792	3.71	19.7
DISS. CALCIUM	84	619	220	1600	182	2.66	12.9
DISS. MAGNESIUM	89	116	19	640	88.6	4.60	25.8
DISS. SODUIM	88	1338	28	22000	2470	6.97	57.0
DISS. SODIUM+POTASSIUM	0						
DISS. POTASSIUM	32	10	4	50	7.78	4.77	25.1
BICARBONATE	94	122	33	208	29.1	0.23	0.24
CARBONATE	91	0	0	3	0.31	9.54	91.0
DISS. SULFATE	92	1639	510	3100	403	0.14	2.59
DISS. CHLORIDE	93	2597	46	42000	5780	5.89	36.7
DISS. SILICA	7	11	7.5	14	2.53	-0.66	-1.02
DS (RES AT 180 C)	93	6971	1130	74400	10200	5.75	35.3
DISS. NITRATE	47	4.3	0.09	11	2.83	0.64	-0.46

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=485.35 + 0.014 X SC	0.90	11
MG=46.84 + 0.008 X SC	0.98	3.3
NA=-1023.32 + 0.288 X SC	0.98	62
HCO3=123.62 + -0.000 X SC	0.07	3.9
CL=-2022.92 + 0.521 X SC	0.98	117
SO4=1411.26 + 0.025 X SC	0.70	39
SIO2=15.04 + -0.000 X SC	0.39	3.8
DS=-1274.47 + 0.921 X SC	0.99	174

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

RED RIVER BASIN

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OK

LOCATION.--LAT 360042, LONG 995412, IN SW 1/4 NW 1/4 SEC.12, T.6 N., R.26 W., HARMON COUNTY, AT GAGING STATION AT BRIDGE ON STATE HIGHWAY 30, 4.0 MI NORTHEAST OF CARL, AND AT MILE 54.0.

DRAINAGE AREA.--416 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: WATER YEARS 1960-61 (PARTIAL-RECORD STATION), NOVEMBER 1961 TO SEPTEMBER 1962, JULY 1968 TO SEPTEMBER 1975. WATER TEMPERATURES: JULY 1968 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	139	36	0.18	2130	181	11.4	132
INSTAN. DISCHARGE	195	44	0.11	1000	125	5.89	37.9
SPECIFIC CONDUCTANCE	326	42364	2490	202000	44300	2.43	5.27
PH	272	7.8	6.7	9.4	0.27	0.03	4.42
HARDNESS	269	3437	460	15000	2750	2.78	7.11
NONCARBONATE HARDNESS	269	3345	370	14990	2770	2.78	7.14
DISS. CALCIUM	95	690	330	1700	207	2.65	10.2
DISS. MAGNESIUM	97	203	29	1400	180	4.3	22.9
DISS. SODIUM	254	14902	140	118000	24400	2.92	7.69
DISS. SODIUM+POTASSIUM	8	7901	3060	21100			
DISS. POTASSIUM	33	21	11	66	11.2	2.43	7.50
BICARBONATE	271	108	56	390	35.6	2.13	13.3
CARBONATE	271	0	0	0	0	3.14	9.36
DISS. SULFATE	336	1992	660	5800	678	2.29	6.78
DISS. CHLORIDE	335	22356	220	188000	36400	3.03	8.65
DISS. SILICA	7	12	6.5	15			
DS (RES AT 180 C)	334	40140	1890	322000	61400	3.10	9.11
DISS. NITRATE	46	4.6	0.22	12	2.91	1.09	0.84

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=479.33 + 0.008 X SC	0.84	13
MG=51.59 + 0.005 X SC	0.94	5.2
NA=-8082.06 + 0.514 X SC	0.98	456
NA+K=-1463.59 + 0.276 X SC	0.99	216
HCO3=122.35 + -0.000 X SC	0.40	2.8
SO4=1385.99 + 0.014 X SC	0.92	20
CL=-12038.74 + 0.800 X SC	0.97	609
SIO2=15.39 + -0.000 X SC	0.56	2.5
DS=-17590.18 + 1.33 X SC	0.96	1256

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

RED RIVER BASIN

07304500 ELK CREEK NEAR HOBART, OK

LOCATION.--LAT 355451, LONG 990649, IN NW 1/4 NE 1/4, SEC.17, T.5N., T.18W., KIOWA COUNTY, AT COUNTY ROAD BRIDGE, 11 MI DOWNSTREAM FROM LITTLE ELK CREEK, 11.7 MI SOUTH OF HOBART, AND 1.2 MI WEST OF HOBART.

DRAINAGE AREA.--549 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1949 TO SEPTEMBER 1951, WATER YEARS 1957-58 (PARTIAL-RECORD STATION), OCTOBER 1958 TO SEPTEMBER 1963, NOVEMBER 1969 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1949 TO SEPTEMBER 1951, OCTOBER 1958 TO SEPTEMBER 1961, NOVEMBER 1969 TO SEPTEMBER 1975.
SEDIMENT RECORDS: DECEMBER 1958 TO SEPTEMBER 1961.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	822	175	0.00	4880	475	5.00	30.0
INSTAN. DISCHARGE	14	991	6.8	8670	2300	3.29	11.4
SPECIFIC CONDUCTANCE	824	1175	32	3020	570	0.04	-1.02
PH	744	8.2	6.1	9.7	0.41	-0.67	2.44
HARDNESS	818	491	62	1640	255	0.24	-0.59
NONCARBONATE HARDNESS	810	255	0	1320	174	0.76	1.23
DISS. CALCIUM	497	112	23	460	53.7	0.87	3.32
DISS. MAGNESIUM	501	59	3.0	127	31.6	-0.04	-1.19
DISS. SODIUM	650	86	3.0	240	50.0	0.36	-0.54
DISS. SODIUM+POTASSIUM	174	81	6.2	225	50.4	0.48	-0.58
DISS. POTASSIUM	99	7	2	30	4.95	2.64	8.07
BICARBONATE	818	281	36	540	119	0.05	-1.20
CARBONATE	748	6	0	48	9.33	1.67	2.36
DISS. SULFATE	792	306	7.4	1270	196	0.54	-0.01
DISS. CHLORIDE	824	81	2.4	335	51.0	0.79	0.98
DISS. SILICA	64	12	1.0	24	6.4	0.15	-1.16
DS (RES AT 180 C)	800	844	94	2620	442	0.23	-0.71
DISS. NITRATE	594	5.5	0.00	27	3.81	1.05	2.21

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=9.69 + 0.084 X SC	0.88	0.78
MG=-4.61 + 0.052 X SC	0.93	1.2
NA=-13.29 + 0.084 X SC	0.93	1.6
NA+K=-5.84 + 0.0747 X SC	0.90	3.4
HCO3=81.04 + 0.169 X SC	0.80	5.6
SO4=-79.80 + 0.328 X SC	0.94	5.3
CL=-11.06 + 0.078 X SC	0.87	1.9
SIO2=14.50 + -0.001 X SC	0.07	4.0
DS=-53.45 + 0.763 X SC	0.97	8.5

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

RED RIVER BASIN

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OK

LOCATION.--LAT 343804, LONG 990547, IN NW 1/4 NE 1/4 SEC.21, T.2N., R.18 W., TILLMAN COUNTY, AT GAGING STATION AT BRIDGE ON U.S. HIGHWAY 62, 2.5 MI EAST OF HEADRICK, 12.9 MI UPSTREAM FROM OTTER CREEK, AND AT MILE 33.0.

DRAINAGE AREA.--4,224 SQ MI, OF WHICH 399 SQ MI IS PROBABLY NONCONTRIBUTING.

PERIOD OF RECORD.--CHEMICAL ANALYSES: WATER YEARS 1957-59 (PARTIAL-RECORD STATION), OCTOBER 1959 TO SEPTEMBER 1963, JULY 1968 TO SEPTEMBER 1975. WATER TEMPERATURES: NOVEMBER 1959 TO SEPTEMBER 1963, JULY 1968 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	486	455	0.05	16800	1210	7.89	86.1
INSTAN. DISCHARGE	212	365	0.10	8020	1080	5.15	29.3
SPECIFIC CONDUCTANCE	695	7304	340	105000	5510	8.30	142
PH	634	8.0	6.7	8.8	0.30	-0.86	1.5
HARDNESS	631	1075	98	2800	407	0.08	0.22
NONCARBONATE HARDNESS	631	939	13	2700	404	0.23	0.36
DISS. CALCIUM	317	284	40	655	105	0.27	0.43
DISS. MAGNESIUM	318	82	8.2	199	36.0	0.30	0.41
DISS. SODIUM	263	1629	36	4900	974	0.39	-0.24
DISS. SODIUM+POTASSIUM	330	870	68	3200	517	0.60	0.35
DISS. POTASSIUM	6	9	2	30	3.39	3.81	23.5
BICARBONATE	637	163	22	689	61.1	1.36	7.86
CARBONATE	631	1	0	81	2.36	4.18	19.8
DISS. SULFATE	663	814	24	2000	302	-0.34	0.04
DISS. CHLORIDE	697	1989	40	8000	1380	0.97	0.85
DISS. SILICA	42	9.8	1.6	17	3.81	0.20	-0.38
DS (RES AT 180 C)	665	4609	208	17100	2580	0.73	0.89
DISS. NITRATE	229	2.3	0.00	11	2.00	1.67	3.74

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=227.45 + 0.008 X SC	0.54	6.9
MG=64.92 + 0.002 X SC	0.47	2.5
NA=-229.98 + 0.210 X SC	0.98	19
NA+K=-150.94 + 0.189 X SC	0.97	15
HCO3=166.11 + -0.000 X SC	0.54	3.9
SO4=360.97 + 0.065 X SC	0.83	13
CL=610.51 + 0.188 X SC	0.75	57
SIO2=11.50 + -0.000 X SC	0.16	1.7
DS=35.86 + 0.655 X SC	0.99	25

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

RED RIVER BASIN

07311000 EAST CACHE CREEK NEAR WALTERS, OK

LOCATION.--LAT 342144, LONG 981656, ON SOUTH LINE OF SE 1/4 SE 1/4 SEC.19, T.2 S., R.10 W., COTTON COUNTY, AT GAGING STATION AT BRIDGE ON STATE HIGHWAY 53, 1.8 MI EAST OF WALTERS, 12.2 MI UPSTREAM FROM WEST CACHE CREEK, AND AT MILE 19.7.

DRAINAGE AREA.--675 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1951 TO SEPTEMBER 1953, OCTOBER 1960 TO SEPTEMBER 1961, OCTOBER 1962 TO SEPTEMBER 1963, OCTOBER 1969 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1951 TO SEPTEMBER 1953, OCTOBER 1969 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	267	158	6.1	7480	555	9.52	116
INSTAN. DISCHARGE	142	221	4.0	9050	840	8.79	88.5
SPECIFIC CONDUCTANCE	412	646	36	3670	287	3.70	33.8
PH	395	8.0	6.4	10	0.61	0.72	1.39
HARDNESS	404	182	12	960	76.3	3.60	30.0
NONCARBONATE HARDNESS	395	20	0	430	39.8	6.99	62.9
DISS. CALCIUM	223	57	15	156	19.9	0.96	3.58
DISS. MAGNESIUM	228	12	2.1	49	6.18	2.12	8.73
DISS. SODIUM	320	66	9.1	640	43.5	7.58	95.9
DISS. SODIUM+POTASSIUM	84	63	3.0	204	40.6	1.07	1.77
DISS. POTASSIUM	62	7	4	13	1.75	0.71	1.05
BICARBONATE	400	194	0	363	67	-0.05	0.08
CARBONATE	395	4.7	0	82	11	3.7	16
DISS. SULFATE	384	51	5.3	290	24.7	2.92	23.9
DISS. CHLORIDE	417	65	3.0	980	65.9	8.61	102
DISS. SILICA	48	11	5.2	19	3.59	0.49	-0.52
DS (RES AT 180 C)	383	395	75	2160	178	3.87	31.8
DISS. NITRATE	306	16	0.00	61	11.8	1.02	0.79

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=16.85 + 0.060 X SC	0.84	2.0
MG=0.32 + 0.018 X SC	0.80	0.66
NA=-32.57 + 0.151 X SC	0.95	2.1
NA+K=-4.17 + 0.108 X SC	0.93	3.4
HCO3=112.11 + 0.126 X SC	0.55	6.9
SO4=11.99 + 0.061 X SC	0.73	2.1
CL=-70.54 + 0.20. X SC	0.91	3.3
SIO2=8.05 + 0.003 X SC	0.23	1.8
DS=10.37 + 0.598 X SC	0.99	3.5

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

RED RIVER BASIN

07311200 BLUE BEAVER CREEK NEAR CACHE, OK
(HYDROLOGIC BENCH-MARK STATION)

LOCATION.--LAT 343724, LONG 983348, IN N 1/4 NE 1/4 SEC.28, T.2 N., R.13 W., COMANCHE COUNTY, AT GAGING STATION AT BRIDGE ON U.S. HIGHWAY 62, 3,000 FT UPSTREAM FROM ST. LOUIS-SAN FRANCISCO RAILWAY CO. BRIDGE, 4.0 MI EAST OF CACHE, AND AT MILE 12.0.

DRAINAGE AREA.--24.6 SQ MI.

PERIOD OF RECORD.--WATER YEAR 1965-67 (PARTIAL-RECORD STATION), OCTOBER 1967 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	39	16	0.08	133	30.3	2.83	7.57
INSTAN. DISCHARGE	45	13	0.02	235	36.5	5.45	32.8
SPECIFIC CONDUCTANCE	84	161	90	274	45	0.5	-0.7
PH	78	7.4	6.4	8.2	0.5	-0.7	-0.6
HARDNESS	78	52	26	81	15	0.28	-1.01
NONCARBONATE HARDNESS	77	2.4	0	43	5.46	5.64	40.4
DISS. CALCIUM	72	14	6.4	22	4.42	0.04	-1.06
DISS. MAGNESIUM	72	4.1	1.9	9.6	1.22	1.28	4.56
DISS. SODIUM	77	12	6.8	24	3.52	0.57	0.10
DISS. SODIUM+POTASSIUM	0						
DISS. POTASSIUM	63	2	1	3	0.47	1.26	1.16
BICARBONATE	78	66	30	143	24.2	0.45	-0.07
CARBONATE	77	0	0	0	0	0.07	-20.4
DISS. SULFATE	79	17	7.2	90	9.6	5.8	43.3
DISS. CHLORIDE	79	7.4	3.9	14	2.37	0.70	-0.12
DISS. SILICA	69	13	7.0	18	2.9	-0.08	-0.76
DS (RES AT 180 C)	79	105	70	187	23.4	0.73	0.41
DISS. NITRATE	77	0.39	0.00	1.5	0.37	1.42	1.67

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=-0.96 + 0.092 X SC	0.92	0.78
MG=0.90 + 0.020 X SC	0.72	0.39
NA=0.59 + 0.073 X SC	0.92	0.61
HCO3=-14.04 + 0.492 X SC	0.93	3.7
SO4=13.73 + 0.020 X SC	0.08	4.0
CL=0.96 + 0.039 X SC	0.76	0.65
SIO2=9.30 + 0.025 X SC	0.37	1.3
DS=26.96 + 0.484 X SC	0.94	3.3

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

RED RIVER BASIN

07324200 WASHITA RIVER NEAR HAMMON, OK

LOCATION.--LAT 353923, LONG 0991821, ON WEST LINE OF SEC. 26,T.14N., R.20W., CUSTER COUNTY, AT GAGING STATION AT BRIDGE ON COUNTY ROAD, 2.2 MI DOWNSTREAM FROM QUARTERMASTER CREEK, 4.7 MI NORTHEAST OF HAMMON, AND AT MILE 494.5.

DRAINAGE AREA.--1,387 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1969 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1969 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	16	2.0	0.00	15	3.79	3.03	10.0
INSTAN. DISCHARGE	206	40	0.00	1430	155	6.99	54.6
SPECIFIC CONDUCTANCE	190	1520	155	3010	532	-0.21	-0.19
PH	191	8.0	6.6	8.8	0.32	-0.75	2.38
HARDNESS	187	819	68	1980	329	0.20	0.25
NONCARBONATE HARDNESS	180	642	0	1800	315	0.49	0.57
DISS. CALCIUM	75	190	31	320	55.6	-0.62	0.48
DISS. MAGNESIUM	78	89	11	160	31.4	-0.46	0.17
DISS. SODIUM	189	53.6	1.0	130	31.6	0.38	-0.92
DISS. SODIUM+POTASSIUM	0						
DISS. POTASSIUM	31	6	4	10	1.48	1.30	1.11
BICARBONATE	187	200	58	468	90.5	0.26	-0.95
CARBONATE	184	1	0	30	3.32	5.61	38.0
DISS. SULFATE	187	695	16	1820	328	0.30	0.13
DISS. CHLORIDE	190	28	1.0	70	15.7	0.47	-0.52
DS (RES AT 180 C)	184	1265	87	3030	517	0.06	-0.09
DISS. SILICA	0						
DISS. NITRATE	144	1.8	0.00	47	4.32	8.47	85.0

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=-3.68 + 0.119 X SC	0.94	8.3
MG=-17.72 + 0.066 X SC	0.96	3.8
NA=-12.26 + 0.043 X SC	0.73	4.8
K=10.23 + -0.002 X SC	0.56	1.2
HCO3=106.82 + 0.062 X SC	0.36	19
SO4=-207.18 + 0.594 X SC	0.96	20
CL=-4.28 + 0.021 X SC	0.72	2.4
DS=-183.13 + 0.954 X SC	0.99	16

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

RED RIVER BASIN

07324300 FOSS RESERVOIR NEAR FOSS, OK

LOCATION.--LAT 353218, LONG 0991040, IN S 1/2 SEC. 2, T.12N., R.19W., CUSTER COUNTY, NEAR OUTLET WORKS AT DAM ON WASHITA RIVER, 0.5 MI UPSTREAM FROM OAK CREEK, 3.5 MI WEST OF STAFFORD, 6 MI NORTH OF FOSS, AND AT MILE 474.4.

DRAINAGE AREA.--1,496 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: MAY 1963 TO SEPTEMBER 1974.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	0						
INSTAN. DISCHARGE	0						
SPECIFIC CONDUCTANCE	130	1961	1590	2280	183	-0.29	-1.02
PH	128	7.9	6.6	8.4	0.29	-1.89	5.91
HARDNESS	128	1047	800	1200	102	-0.24	-0.72
NONCARBONATE HARDNESS	128	916	679	1100	107	-0.16	-0.53
DISS. CALCIUM	40	212	180	240	15.4	-0.60	-0.46
DISS. MAGNESIUM	40	139	88	160	22.3	-1.28	0.27
DISS. SODIUM	91	91	57	110	11	-0.72	1.14
DISS. SODIUM+POTASSIUM	37	62	24	93	14.9	-0.40	0.55
DISS. POTASSIUM	11	12	12	14	0.67	1.80	2.61
BICARBONATE	128	160	138	200	11.8	0.59	0.58
CARBONATE	128	0	0	10	1.08	7.19	57.8
DISS. SULFATE	125	994	735	1200	127	-0.19	-0.94
DISS. CHLORIDE	128	43	30	59	6.82	0.18	-0.91
DISS. SILICA	18	11	8.4	12	1.25	-0.46	-1.02
DS (RES AT 180 C)	128	1697	1200	2050	194	-0.60	-0.10
DISS. NITRATE	118	0.21	0.00	2.6	0.32	4.26	27.5

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=91.69 + 0.059 X SC	0.87	11
MG=-57.08 + 0.095 X SC	0.97	7.6
NA=-46.13 + 0.067 X SC	0.91	6.5
NA+K=-160.74 + 0.126 X SC	0.51	64
K=-6.89 + 0.010 X SC	0.56	9.6
HCO3=216.86 + -0.029 X SC	0.44	10
SO4=-323.80 + 0.672 X SC	0.96	34
CL=-23.97 + 0.034 X SC	0.91	2.8
SIO2=14.16 + -0.002 X SC	0.16	5.3
DS=-292.43 + 1.013 X SC	0.95	56

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

RED RIVER BASIN

07324400 WASHITA RIVER NEAR FOSS, OK

LOCATION.--LAT 353220, LONG 0991010, IN SW 1/4 SW 1/4 SEC.1, T.12 N., R.19 W., CUSTER COUNTY, AT GAGING STATION AT BRIDGE ON COUNTY ROAD, 0.4 MI DOWNSTREAM FROM OAK CREEK, 0.9 MI DOWNSTREAM FROM FOSS DAM, 2.5 MI WEST OF STAFFORD, 6.0 MI NORTH OF FOSS, AND AT MILE 473.5.

DRAINAGE AREA.--1,511 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: OCTOBER 1946 TO SEPTEMBER 1948, WATER YEARS 1950-51 AND 1956 (PARTIAL-RECORD STATION), OCTOBER 1969 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1946 TO SEPTEMBER 1948, OCTOBER 1969 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	122	20	0.83	493	50.4	7.32	65.1
INSTAN. DISCHARGE	107	23	0.33	396	52.1	5.19	30.4
SPECIFIC CONDUCTANCE	363	1187	164	4670	530	0.97	4.00
PH	245	8.1	7.0	8.8	0.32	-0.89	1.40
HARDNESS	368	625	91	1700	317	0.63	-0.36
NONCARBONATE HARDNESS	367	415	0	1300	329	0.75	-0.61
DISS. CALCIUM	211	149	22	328	78.9	0.50	-0.76
DISS. MAGNESIUM	211	67	7.5	170	34.9	0.50	-0.44
DISS. SODIUM	237	48	3.3	100	20.6	0.73	0.44
DISS. SODIUM+POTASSIUM	125	37	3.4	99	23.4	0.55	-0.65
DISS. POTASSIUM	33	5	2	11	1.93	1.44	2.06
BICARBONATE	370	254	88	454	98.3	0.40	-1.01
CARBONATE	253	2	0	41	4.52	4.08	24.8
DISS. SULFATE	363	462	10	1500	330	0.70	-0.62
DISS. CHLORIDE	370	20	1.0	49	11.5	1.06	0.08
DISS. SILICA	4	15	2.0	23			
DS (RES AT 180 C)	360	912	80	2540	459	0.58	-0.39
DISS. NITRATE	316	2.4	0.00	42	3.11	8.54	97.1

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=1.60 + 0.123 X SC	0.85	7.2
MG=-0.36 + 0.056 X SC	0.86	3.0
NA=2.127 + 0.041 X SC	0.94	1.2
NA+K=21.95 + 0.011 X SC	0.26	5.1
K=0.85 + 0.004 X SC	0.70	0.8
HCO3=253.57 + -0.000 X SC	0.00	13
SO4=-209.38 + 0.567 X SC	0.91	17
CL=1.91 + 0.015 X SC	0.70	1.1
SIO2=4.53 + 0.007 X SC	0.34	20
DS=-74.90 + 0.827 X CS	0.94	21

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

RED RIVER BASIN

07325500 WASHITA RIVER AT CARNEGIE, OK

LOCATION.--LAT 350702, LONG 0983349, IN NW 1/4 NW 1/4 SEC.3, T.7 N., R.13 W., CADDO COUNTY, AT GAGING STATION AT BRIDGE ON STATE HIGHWAY 9, 1,300 FT UPSTREAM FROM RUNNING CREEK, 2.7 MI EAST OF CARNEGIE, AND AT MILE 353.9.

DRAINAGE AREA.--3,129 SQ MI INCLUDES THAT OF RUNNING CREEK.

PERIOD OF RECORD.--CHEMICAL ANALYSES: WATER YEARS 1948-53 (PARTIAL-RECORD STATION), OCTOBER 1953 TO SEPTEMBER 1975.
WATER TEMPERATURES: OCTOBER 1953 TO SEPTEMBER 1975.
SEDIMENT RECORDS: MAY 1947 TO SEPTEMBER 1950.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	1261	430	0.86	12800	941	5.83	50.6
INSTAN. DISCHARGE	11	1029	145	3860	1290	1.48	1.15
SPECIFIC CONDUCTANCE	1282	1416	145	3170	628	-0.02	-1.13
PH	1274	8.1	6.4	9.6	0.31	-0.67	3.42
HARDNESS	1279	692	86	8050	381	5.64	108
NONCARBONATE HARDNESS	1277	530	7	7800	346	7.29	152
DISS. CALCIUM	626	187	31	364	78.8	-0.08	-1.18
DISS. MAGNESIUM	633	58	0.1	370	34.7	2.3	18.9
DISS. SODIUM	1029	73	3.5	2000	74.8	16.8	429
DISS. SODIUM+POTASSIUM	251	73	3.0	311	46.9	0.84	1.75
DISS. POTASSIUM	125	5.5	0	9	1.6	0.04	0.04
BICARBONATE	1285	193	2	404	71.6	0.33	-0.62
CARBONATE	1276	2	0	30	3.55	3.33	14.2
DISS. SULFATE	1262	548	15	1290	290	0.03	-1.18
DISS. CHLORIDE	1287	75.9	1.5	775	60	2.3	16
DISS. SILICA	98	16	4.6	36	5.78	0.54	0.78
DS (RES AT 180 C)	1270	1120	15	2460	547	0.01	-1.2
DISS. NITRATE	869	3.6	0.00	114	5.44	14.5	258

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=13.68 + 0.118 X SC	0.96	2.1
MG=-0.93 + 0.041 X SC	0.76	2.2
NA=-26.11 + 0.070 X SC	0.58	4.7
NA+K=-25.74 + 0.070 X SC	0.93	2.7
K=7.39 + -0.001 X SC	0.37	0.4
HCO3=80.89 + 0.079 X SC	0.69	3.6
SO4=-85.42 + 0.447 X SC	0.97	5.0
CL=-35.00 + 0.078 X SC	0.82	2.4
SIO2=13.23 + 0.002 X SC	0.17	1.8
DS=-89.69 + 0.855 X SC	0.98	7.0

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

RED RIVER BASIN

07331000 WASHITA RIVER NEAR DURWOOD, OK

LOCATION.--LAT 341403, LONG 965832, IN NW 1/4 SW 1/4 SEC.3, T.4 S., R.3 E., CARTER COUNTY, AT GAGING STATION AT BRIDGE ON U.S. HIGHWAY 177, 1.3 MI DOWNSTREAM FROM CADDO CREEK, 4 MI NORTH OF DURWOOD, AND AT MILE 63.4.

DRAINAGE AREA.--7,202 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: MAY 1944 TO SEPTEMBER 1975. WATER TEMPERATURES: APRIL 1947 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	1518	1981	0.00	64550	4250	6.00	54.3
INSTAN. DISCHARGE	138	1281	13	4800	2640	6.06	47.4
SPECIFIC CONDUCTANCE	1889	871.5	95	4010	351	0.6	2.6
PH	1613	8.1	3.5	9.4	0.32	-2.38	26.2
HARDNESS	1787	364	41	880	148	0.48	-0.25
NONCARBONATE HARDNESS	1778	201	0	720	127	0.84	0.52
DISS. CALCIUM	1154	92	9.2	970	44.9	8.6	152
DISS. MAGNESIUM	1159	34	2.4	77	16.3	0.31	-0.83
DISS. SODIUM	772	52	0.4	148	25.6	0.55	-0.22
DISS. SODIUM+POTASSIUM	1022	52	0.7	1119	42.8	15.4	379
DISS. POTASSIUM	140	4.9	0	51	4.28	9.20	98.1
BICARBONATE	1786	195	0	409	62.1	0.32	0.63
CARBONATE	1788	2	0	36	4.04	2.38	7.60
DISS. SULFATE	1835	209	9.6	710	128	0.86	0.57
DISS. CHLORIDE	1839	65	15	300	35.8	1.0	2.21
DISS. SILICA	154	12	2.5	22	3.74	0.06	0.25
DS (RES AT 180 C)	1811	600	70	1470	256	0.51	-0.18
DISS. NITRATE	1442	2.8	0.00	40	2.53	8.95	125

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=29.53 + 0.072 X SC	0.55	3.0
MG=1.05 + 0.038 X SC	0.81	0.8
NA=-9.22 + 0.069 X SC	0.92	1.0
NA+K=-4.20 + 0.064 X SC	0.54	3.0
K=4.20 + 0.000 X SC	0.06	1.2
HCO3=122.25 + 0.083 X SC	0.47	3.5
SO4=-68.32 + 0.318 X SC	0.87	4.0
CL=-5.54 + 0.081 X SC	0.80	1.4
SIO2=10.16 + 0.002 X SC	0.14	1.1
DS=10.047 + 0.676 X SC	0.92	6.2

TABLE 2.--STATISTICAL SUMMARY OF SELECTED DISSOLVED CHEMICAL CONSTITUENTS AND THE RESULTS OF REGRESSION ANALYSIS RELATING THE CONCENTRATION TO SPECIFIC CONDUCTANCE--CONTINUED

RED RIVER BASIN

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OK
(HYDROLOGIC BENCH-MARK STATION)

LOCATION.--LAT 343818, LONG 943645, IN SW 1/4 SE 1/4 SEC.18, T.2 N., R.26 E., LEFLORE COUNTY, IN OUACHITA NATIONAL FOREST, AT GAGING STATION AT BRIDGE ON STATE HIGHWAY 63, 0.2 MI UPSTREAM FROM RATTLESNAKE CREEK, 1.1 MI UPSTREAM FROM BIG BRANCH, 2.1 MI EAST OF BIG CEDAR, AND AT MILE 157.6.

DRAINAGE AREA.--40.1 SQ MI.

PERIOD OF RECORD.--CHEMICAL ANALYSES: DECEMBER 1965 TO SEPTEMBER 1975.

PARAMETER	N	MEAN	MIN VALUE	MAX VALUE	STD DEV	SKEW-NESS	KUR-TOSIS
DISCHARGE	93	219	0.27	6130	790	5.81	37.7
INSTAN. DISCHARGE	56	78	0.75	1010	150	4.74	27.4
SPECIFIC CONDUCTANCE	148	28	15	255	25.7	7.50	60.6
PH	145	6.9	5.2	8.8	0.61	0.57	0.73
HARDNESS	102	8.3	1.0	79	9.65	6.35	42.6
NONCARBONATE HARDNESS	102	1.4	0.0	34	4.11	6.30	44.8
DISS. CALCIUM	102	2.0	0.6	23	2.93	6.15	39.9
DISS. MAGNESIUM	104	0.9	0.0	5.3	.8	3.66	16.2
DISS. SODIUM	104	2.6	1.2	20	2.48	5.86	37.3
DISS. SODIUM+POTASSIUM	0						
DISS. POTASSIUM	95	0.8	0	6	0.58	7.62	67.4
BICARBONATE	105	9.3	4.0	70	7.59	5.83	42.1
CARBONATE	103	0	0	0	0	1.22	-0.53
DISS. SULFATE	105	4.1	0.8	47	5.46	6.73	48.0
DISS. CHLORIDE	105	2.8	1.0	20	2.48	5.33	32.3
DISS. SILICA	104	7.4	0.7	13	1.70	-1.35	4.93
DS (RES AT 180 C)	104	26	16	158	18.6	6.39	42.7
DISS. NITRATE	92	0.25	0.0	2.1	0.31	3.14	14.0

REGRESSION EQUATION	CORRELATION COEFFICIENT	STANDARD ERROR OF ESTIMATE (MG/L)
CA=-0.64 + 0.090 X SC	0.94	0.1
MG=0.31 + 0.019 X SC	0.72	0.1
NA=0.34 + 0.078 X SC	0.96	0.1
K=0.63 + 0.008 X SC	0.10	0.2
HCO3=2.45 + 0.232 X SC	0.92	0.4
SO4=-0.82 + 0.168 X SC	0.92	0.3
CL=0.59 + 0.076 X SC	0.92	0.1
SIO2=6.93 + 0.017 X SC	0.31	0.2
DS=8.56 + 0.601 X SC	0.97	0.6

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OK								
1962	0.80		608	7.5	225	143	77	8.0	32
1973			551	7.8	240	150	81	9.0	12
1974	79	0.42	663	7.3	300	253	100	11	16
1975		3.0	672	7.5	270	180	79	11	28
	07150500 SALT FORK ARKANSAS RIVER NEAR JET, OK								
1951	900		4500	7.7	461	342	127	35	
1952	37		3520	6.8	530	411	136	21	
1953	0.10		10500	7.0	788	623	208	62	
1954		0.51	12400	7.1	756	649	203	60	
1955		0.30	4560	7.2	310	226	92	20	800
1956	0.50		7830	7.6	480	410	140	32	
1957		3.0	1170	7.5	300	224	88	15	
1960		394	3460	7.3	440	335	118	35	576
1961		185	4930	7.6	480	380	128	39	857
1962		5.4	4330	7.1	415	294	106	31	761
1963		411	3080	7.5	308	233	92	19	507
1968		7.6	9890						
1969		4.7	3630						
1970		2.0	3760	7.2	420	300			621
1971	0.40		10000	7.6	490	442			2100
1972		1.8	8120	6.4	510	420			1700
1973		0.6	1690	6.6	320	250	91	22	210
1974		4.0	2470	7.2	270	200	82	17	400
1975		7.9	1670	7.3	280	190	81	20	200
	07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OK								
1952		51	1780	7.2	246	154	64	21	282
1953		5.3	4700	7.4	440	246	110	38	
1954			1220	7.5	390	232	107	30	
1955			755	7.2	110	0	37	3.6	3210
1956		2.6	255	6.4	46	8	11	3.0	35
1957			1190	7.3	174	102	41	16	
1958			2860	7.0	265	132	85	12	
1959			641	7.8	235	124	64	18	
1960			335	7.3	64	0	20	3.4	39
1961			218	6.8	36	10	9.8	2.8	39
1962			351	7.3	60	14	74	31	47

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OK								
1962	24		92	0	199	31	9.4	405	1.0
1973			106	0	160	14		401	2.0
1974			83	0	240	21		470	0.44
1975			102	0	150	36		463	
	07150500 SALT FORK ARKANSAS RIVER NEAR JET, OK								
1951	969		143	0	347	120		3030	1.7
1952			95	0		725		2160	
1953			97	0		3170			
1954			98	0		3800			
1955			101	0	202	1280	4.0	2480	1.4
1956			86	0		2100	5.4		
1957			83	0		150			
1960			122	0	303	900	4.0	2000	0.00
1961			122	0	400	1300	5.6	3040	0.40
1962	724		108	0	272	1090	8.4	2660	
1963			92	0	198	800		1660	
1968					460	3050		5900	
1969					313	900		2110	
1970			56	0	305	950		2240	0.30
1971			37	0	410	3100		6090	0.10
1972			84	0	400	2500		4930	0.40
1973			67	0	230	330		1090	0.00
1974			95	0	190	620		1410	0.60
1975			112	0	210	290		1050	
	07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OK								
1952	546		113	0		398		2030	
1953			126	0		1280			
1954	980		99	0		1400		107	
1955	107		102	0		152			
1956			42	0		49			
1957	155		38	0	117	225			0.40
1958	115		110	0		660		668	4.2
1959	472		48	0	391	680			
1960		4	72	0	8.6	48	6.5	195	0.20
1961		3	32	0	24	32	7.2	148	0.00
1962		6	56	0	25	64	9.0	220	1.8

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
07151000	SALT FORK ARKANSAS RIVER AT TONKAWA, OK--CONTINUED								
1963			352	7.7	76	0	105	31	43
1968			278						
1969			588						
1970			463	7.8	84	11			62
1971		23	1030	7.3	65	0			160
1972		25	2560	6.6	160	88			460
1973		28	241	6.6	49	2	13	4.0	31
1974		89	370	7.0	63	0	18	4.5	49
1975		89	208	7.2	48	2	14	3.1	24
07152500	ARKANSAS RIVER AT RALSTON, OK								
1944	1990		167	7.2	258	130	74	18	
1945	1760		174	7.2	254	130	69	20	
1950	1109		388	7.5	106	20	34	5.2	346
1951	1701		345	7.1	90	23	24	5.0	195
1952	497		492	7.2	141	64	40	10	191
1953	216		398	7.5	117	20	33	5.9	98
1954	62		1230	7.3	180	78	54	11	168
1955	84		316	6.9	88	16	26	5.6	31
1956	23		297	7.1	76	9	22	5.0	332
1957	17		368	6.9	96	28	26	5.8	227
1958	1308		363	7.6	82	24	26	4.1	223
1959	1128		355	7.3	108	18	29	3.8	217
1960	2160		416	7.5	128	38	33	6.9	228
1961	1244		250	7.3	92	6	28	4.1	144
1962	1448		265	7.4	92	10	42	7.5	56
1963	632		481	7.7	108	23	59	10	83
1965	1557		275	8.1	96	11			
1966	502		356	7.5	128	30			
1967	243		302	7.8	108	16			18
1968	868		242	7.5	84	8			11
1969	880		267	7.5	90				19
1970	435		369	7.7	106	21			31
1971	624	608	511	7.7	90	33			54
1972	523	6370	506	6.9	150	31			37
1973		652	280	6.7	90	6	28	4.8	20
1974		966	241	7.5	73	9	22	3.6	20
1975		1060	217	6.0	74	6	23	4.1	15

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OK--CONTINUED									
1963		5	80	0	21	40	9.6	206	
1968					14	51		169	
1969					37	122		334	
1970			70	0	32	87		260	0.10
1971			80	0	51	200		458	0.00
1972			68	0	110	675		1450	0.40
1973			57	0	14	36		151	0.00
1974			49	0	33	65		240	0.00
1975		2	55	0	12	29		442	
07152500 ARKANSAS RIVER AT RALSTON, OK									
1944	185		157	0	126	258	9.0	967	3.5
1945	213		110	0	106	344	7.5	927	0.00
1950	31	10	105	0	18	47	8.2	240	1.1
1951	34	6	82	0	29	42	6.0	208	1.1
1952	44	4	94	0	47	76	8.8	309	0.50
1953	37	6	99	0	24	50	5.5	252	0.20
1954		6	87	0	34	275	10	694	0.10
1955		5	82	0	21	41	2.5	189	0.60
1956	31	5	74	0	15	40	12	166	0.50
1957	41	6	80	0	24	58	5.8	218	1.6
1958	44		71	0	27	63	14	216	2.3
1959	32	2	96	0	21	44	6.8	200	0.00
1960	29	3	98	0	22	57	10	240	0.10
1961	14	2	98	0	6.2	20	7.5	157	0.20
1962	19	6	100	0	8.0	30	8.4	193	0.20
1963	23	4	104	0	34	66	11	294	2.1
1965	17		96	0	7.0	26		170	0.20
1966	24		72	0	15	45		228	0.20
1967		2	92	0	15	30	2.4	209	0.20
1968			82	0	15	15		133	0.10
1969					13	22		174	0.20
1970			76	0	26	42		221	1.1
1971			12	0	22	76		287	0.00
1972			70	0	30	54		144	0.20
1973			102	0	18	24		198	0.00
1974			77	0	18	25		145	0.66
1975		4	83	0	13	19		139	

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
		07157950	CIMARRON RIVER NEAR BUFFALO, OK						
1953			5280	7.7	427	246	102	42	
1960	0.10		1770	7.2	200	83	54	13	
1961	8.2		860	7.8	212	70	70	18	
1962	6.0		1040	7.6	218	52			
1963	2.7		1640						
1968	0.00		4830						
1969	0.00		1930						
1970	6.7		2760	7.9	320	166	79		455
1971		0.00	3900	7.5	300	170			474
1972		0.00	1660	7.6	220	82			240
1973		1.7	1460	6.9	140	31	28	13	230
1974		1.8	1520	7.7	230	64	56	19	230
1975		2.1	1040	7.1	210	53	63	13	120
		07157960	BUFFALO CREEK NEAR LOVEDALE, OK						
1973			1240	7.5	610	540	190	34	31
1974		0.06	427	7.1	200	110	61	12	9.
1975		0.68	1070	7.6	480	390	130	37	37
		07157980	CIMARRON RIVER NEAR FREEDOM, OK						
1973			4630	7.6	180	53	40	20	960
1974		12	5530	7.6	330	220	89	5.3	1200
1975		10	4930	7.1	340	180	84	25	820
		07158000	CIMARRON RIVER NEAR WAYNOKA, OK						
1951	61		8580	8.0	610	470	99	55	
1952	0.10		6680	7.7	720	530	160	46	
1953	0.04		6080	7.4	449	321	115	32	
1954	0.02		2060	7.5	380	250	88	37	142
1955	0.40		2190	7.4	350	140	91	30	178
1956	3.1		7690	7.8	340	235	76	37	
1957	0.07		654	7.3	180	58	37	21	417
1958	47		7320	7.7	540	350	135	36	1430
1959	3.9		6280	7.8	693	606	131	56	1010
1960	7.6		2190	7.2	579	376	159	29	178
1961	4.4		17300	7.5	854	669	211	68	3720
1962	9.6		6670	7.5	330	158			
1963	7.4		4210						

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
		07157950	CIMARRON RIVER NEAR BUFFALO, OK						
1953	958		221	0	239	1480		3130	
1960	224		113	0	72	340	7.5	1100	0.10
1961	87		148	0	59	140	15	512	0.60
1962	129		150	0	62	190		608	
1963						370			
1968					187	1400		1670	
1969					65	420		1150	
1970			96	0	170	700		1580	0.40
1971			68	0	170	192		2300	0.00
1972			110	0	98	360		958	0.10
1973			98	0	68	330		1050	0.00
1974			117	0	110	320		896	0.90
1975		0	158	0	81	180	13	601	
		07157960	BUFFALO CREEK NEAR LOVEDALE, OK						
1973			91	0	530	45		995	0.09
1974			104	0	100	9.3		295	0.04
1975		5	103	0	420	50		799	
		07157980	CIMARRON RIVER NEAR FREEDOM, OK						
1973			105	0	110	1500		2870	2.4
1974			104	0	190	1800		3430	0.58
1975		8	102	0	150	1300		3040	
		07158000	CIMARRON RIVER NEAR WAYNOKA, OK						
1951	1970		153	0	405	2550		6000	5.2
1952			170	0		224			
1953	6200		107	0	613	1500		17200	
1954			86	0		210			
1955			84	0		280			
1956			100	0		2350			
1957			97	0		685			
1958			99	0		104			
1959			90	0		1620			
1960			126	0	441	240	12	4200	1.2
1961			109	0	527	5760	8.0	10800	
1962	1320		139	0	170	2020		3860	
1963						1200			

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07158000 CIMARRON RIVER NEAR WAYNOKA, OK--CONTINUED								
1968	5.0		8140						
1969	1.6		5140						
1970	0.50		1840	8.0	348	213			220
1971		0.90	17400	7.9	570	410			3900
1972		0.00	9700	7.6	360	200			2000
1973		0.00	4670	7.1	240	120	68	17	910
1974		0.00	4510	7.5	380	270	110	22	860
1975		0.00	7090	7.0	370	210	28	32	1400
		07158400 SALT CREEK NEAR OKEENE, OK							
1973			1470	7.4	190	130	57	11	210
1974	10	3.6	1120	7.4	170	77	51	9.9	150
1975		9.7	373	7.4	82	31	24	5.3	50
		07159100 CIMARRON RIVER NEAR DOVER, OK							
1951			2690	7.7	248	166	73	16	
1953			17300	7.9	836	676	205	79	
1973			1940	7.6	140	42	43	7.7	320
1974		22	1670	7.4	160	49	44	9.1	260
1975	76	185	1130	7.0	200	120	58	11	150
		07159750 COTTONWOOD CREEK AT SEWARD, OK							
1973	14	18	272	7.0	90	17	24	7.4	17
1974	16	11	263	7.2	94	24	24	8.3	19
1975	24	41	151	7.2	60	6	16	4.8	13
		07161000 CIMARRON RIVER AT PERKINS, OK							
1953	2.9		1060	7.1	121	28	34	8.8	156
1954	1.5		717	7.5	118	8	36	6.8	94
1955	1.4		1060	7.8	135	54	42	7.3	158
1956	4.2		501	7.4	98	22	29	6.2	1320
1957	3.1		497	7.2	105	0	34	4.0	1130
1958	209		771	7.7	130	42	38	7.4	2350
1959	88		1080	7.3	132	47	33	9.0	1460
1960	331		557	7.1	120	27	24	9.0	
1961	250		583	7.5	112	36	34	6.6	980
1962	173		598	7.3	112	14	124	40	
1963	137		184	7.8	76	10	67	13	

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07158000 CIMARRON RIVER NEAR WAYNOKA, OK--CONTINUED								
1968					310	2550		4740	
1969					166	1520		2950	
1970			100	0	210	320		1190	1.4
1971			36	0	310	6000		1290	
1972			84	0	150	3200		5820	0.60
1973			107	0	110	1400		377	0.30
1974			93	0	190	1400		2890	0.22
1975		9	148	0	470	2100		9840	
		07158400 SALT CREEK NEAR OKEENE, OK							
1973			74	0	110	340		844	0.18
1974		4	88	0	86	210		689	0.58
1975			62	0	41	120		226	
		07159100 CIMARRON RIVER NEAR DOVER, OK							
1951	447		100	0	169	680		1540	2.8
1953	3690		195	0	543	5760		10600	
1973			118	0	43	530		697	1.9
1974			104	0	85	380		913	0.71
1975		5	90	0	130	220		651	0.70
		07159750 COTTONWOOD CREEK AT SEWARD, OK							
1973			89	0	28	17		163	3.1
1974			85	0	45	20		199	2.1
1975		3	66	0	9.1	16		97	
		07161000 CIMARRON RIVER AT PERKINS, OK							
1953	216		92	0	34	255	12	566	1.8
1954	154		100	0	28	136		389	1.2
1955			94	0	57	240	8.0	574	1.2
1956	58		74	0	29	82	10	286	1.8
1957	66		102	0	25	80	8.0	277	1.9
1958	95		106	0	42	140	17	416	1.6
1959	149		23	0	32	250	11	572	1.0
1960	65		90	0	41	102	2.0	301	0.00
1961	66		92	0	43	98	5.8	334	0.10
1962	83		102	0	43	110	15	351	
1963	79		64	0	27	112	11	294	

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07161000 CIMARRON RIVER AT PERKINS, OK--CONTINUED								
1965	125		893	7.4	136	54			123
1966	24		623	7.8	140	61			66
1967	42		1050	8.0	136	34			154
1968	2.4		781	8.0	112	29			127
1969	61		1200	7.6	125				130
1970	18		629	7.9	108	14			79
1971	16	21	627	7.5	110	0			80
1972		18	2600	7.0	210	92			660
1973		43	1040	6.8	110	20	32	8.2	160
1974		112	688	7.6	130	35	36	8.7	88
1975	2470	177	730	7.2	130	41	39	7.7	82
	07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE NEAR TULSA, OK								
1947	577		672	7.7	106	60	45	9.8	294
1948	553		927	7.2	180	88	56	10	216
1949	1380		771	7.6	146	50	45	8.3	425
1950	1360		391	7.4	112	20	36	5.4	400
1951	1973		654	7.4	138	39	39	9.6	130
1952	512		1240	7.2	192	83	54	14	354
1953	333		1160	7.3	161	69	48	10	168
1954	85		1180	7.4	161	68	52	7.5	163
1955	95		1190	6.7	180	66	55	9.8	195
1956	67		568	7.4	120	32	34	7.3	508
1957	50		694	7.2	120	32	34	6.1	330
1958	2033		631	7.5	132	44	42	6.6	375
1959	1412		488	7.3	100	19	25	5.8	301
1960	3644		716	7.5	130	38	36	9.1	91
1961	2155		430	7.1	100	18	31	5.5	49
1962	1519		521	7.2	112	27	37	7.7	46
1963	1308		674	7.5	132	35	100	27	82
1964	344		422	7.6	77	19			46
1965	340		330	7.5	70	11			39
1966	898		886	7.8	140	55			127
1967	338		1410	8.0	130	67			209
1968	479		1210	7.8	128	69			169
1969	113		607	7.7	146	42			76
1970	952		662	7.9	114	42			84
1971	618		246	7.4	62	6			23

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07161000 CIMARRON RIVER AT PERKINS, OK--CONTINUED									
1965			100	0	65	182		488	0.30
1966			70	0	31	120		366	0.20
1967			98	0	55	215	1.5	599	0.00
1968			48	0	38	200		532	0.30
1969					75	240		663	0.30
1970			96	0	27	120		338	0.30
1971			66	0	12	110		339	0.10
1972			110	0	120	980		2110	0.60
1973			102	0	40	250		536	0.40
1974			98	0	43	130		386	0.22
1975			103	0	46	120	7.3	414	
07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE NEAR TULSA, OK									
1947	105		47	0	42	170	3.5	511	0.00
1948	135		91	0	67	215	11	539	0.00
1949	95		90	0	66	135	1.0	442	1.5
1950	36		112	0	18	55	7.5	232	1.0
1951	81		102	0	32	112	8.6	379	0.10
1952	172		92	0	74	268	11	696	0.40
1953	285		101	0	20	288	5.5	646	0.20
1954	979		82	0	34	285	6.8	682	0.10
1955			73	0	63	270	2.5	701	0.70
1956	65		92	0	23	105	5.0	312	1.6
1957	88		100	0	25	134	5.8	396	2.0
1958	70		108	0	35	110	11	170	0.80
1959	56		92	0	14	86	12	268	0.00
1960			86	0	38	135	0.0	406	0.00
1961			92	0	25	68	5.6	263	0.00
1962			100	0	34	74	11	296	1.7
1963			110	0	37	124	7.8	385	1.7
1964			50	0	23	72		241	
1965			48	0	18	54	0.3	185	0.00
1966			70	0	72	180	2.3	491	0.00
1967			68	0	80	322	0.9	822	0.00
1968			72	0	73	260		686	0.00
1969					42	112		346	0.20
1970			64	0	49	125		376	0.10
1971			26	0	10	32		152	0.20

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
07164400 ARKANSAS R AT SAND SPRINGS BRDG NEAR TULSA, OK--CONTINUED									
1972	261		1090	6.7	120	53			160
1973	219		531	6.6	110	35	78	17	60
1974	32		473	7.6	120	40	35	6.1	51
1975		307	482	6.8	92	24	27	6.0	60
07175500 CANEY RIVER NEAR RAMONA, OK									
1953	11		391	7.5	86	25	27	4.4	38
1959	224		296	7.6	76	26	44	7.3	25
1960	19		507	7.4	190	52	58	10	29
1961	35		231	7.5	95	5	29	3.6	9.9
1962	14		447	7.8	148	18			34
1965	13		159	7.1	68	23			25
1966	12		218	7.4	126	57			
1967	11		216	7.6	58	20			18
1968	62		132	7.4	42	6			8.5
1969	29		186	7.4	52				12
1970	17		169	7.8	52	9			13
1971	23		237	7.7	66	19			20
1972	20		222	6.8	70	20			17
1973		18	202	6.3	55	14	17	3.1	13
1974		34	127	7.1	41	7	13	2.0	10
1975		38	131	7.2	44	4	14	2.3	13
07178050 BIRD CREEK NEAR CATOOSA, OK									
1965			214	6.8	56	7	15	0.4	37
1966			270	6.7	66	27			29
1967			324	7.2	88	0			28
1968			545	6.5					49
1970			484	7.2	120	25			40
1971			307	7.0	94	22			17
1972			331	6.8	120	43			37
1973			160	6.3	48	15	23	5.6	11
1974		2.0	276	7.3	70	22	21	2.3	22
1975	3.7	3.0	168	7.7	61	8	19	3.3	10

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07164400 ARKANSAS R AT SAND SPRINGS BRDG NEAR TULSA, OK--CONTINUED									
1972			48	0	68	240		620	0.20
1973			92	0	38	90		300	0.10
1974			89	0	33	78		263	2.9
1975			82	0	28	88	3.7	269	
07175500 CANEY RIVER NEAR RAMONA, OK									
1953	96		59	0	34	66		606	0.40
1959		3	60	0	20	43	5.0	188	2.4
1960			110	0	30	57		296	1.3
1961			72	0	9.1	11		139	0.20
1962			128	0	19	58		270	1.9
1965			46	0	8.0	17		90	0.10
1966	61		72	0	17	28		328	0.00
1967		3	36	0	13	33		118	0.00
1968			44	0	6.4	10		76	0.10
1969					11	20		120	
1970			28	0	11	20		113	0.10
1971			0	0	14	33		151	0.00
1972			58	0	16	29		138	0.50
1973			50	0	13	20		117	0.50
1974			34	0	9.3	16		92	0.58
1975		2	49	0	7.4	12		149	
07178050 BIRD CREEK NEAR CATOOSA, OK									
1965	4	4	44	0	8.0	4.0	5.9	114	0.10
1966		4	48	0	17	49		167	0.30
1967			64	0	17	50		208	0.20
1968				0		70		344	0.40
1970			48	0	24	66		286	0.20
1971			76	0	24	30		182	0.30
1972			94	0	23	64		288	1.8
1973			40	0	17	20		107	0.50
1974			59	0	16	40		171	0.66
1975		2	56	0	9.6	16		110	0.10

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
		07178600 VERDIGRIS RIVER NEAR INOLA, OK							
1948	24		173	7.1	60	16	17	4.4	22
1949	69		225	7.8	64		18	4.6	48
1950	203		267	7.3	82	14	25	4.7	32
1951	140		196	7.2	76	9	23	4.5	71
1952	39		291	7.3	94	20	28	5.8	35
1953	35		348	6.8	87	29	25	5.8	35
1954	13		208	6.9	48	14	11	2.3	13
1955	9.3		263	6.9	65	23	22	2.4	20
1956	9.4		282	6.7	88	35	24	5.7	26
1957	7.4		236	6.9	74	16	24	3.4	14
1958	104		275	7.5	96	28	30	5.1	66
1959	98		195	7.2	66	16	20	2.7	18
1960	107		272	7.0	98	26	30	4.6	14
1961	81		168	7.3	56	2	14	3.9	4.8
1962	52		299	2.3	108	14	46	8.0	17
1963	34		345	5.8	84	26	53	8.8	44
1964	21		289	7.6	68	29	46	11	
1965	59		227	7.6	56	12	54	13	
1966	31		234	7.9	58	22			
1967	43		291	6.4	80	21			19
1968	162		261	7.1	82	25			19
1969	61		210	7.6	64	8			13
1970	52		136	7.8	44	10			9.6
1971			130	6.9	58	16			13
1972			120	6.8	42	8			7.0
		07178620 VERDIGRIS R AT NEWT GRAHAM LOCK AND DAM NR INOLA, OK							
1972			279	7.0	84	22			18
1973			200	6.2	64	21	24	5.2	13
1974		74	160	7.1	54	12	17	2.2	12
1975		176	132	5.4	47	6	15	2.3	6.1
		07193500 NEOSHO RIVER BL FT. GIBSON LAKE NEAR FT. GIBSON, OK							
1952	1947		242	7.4	101	21	32	5.2	8.3
1953	555		311	7.7	129	34	42	6.0	10
1954	185		340	7.5	146	42	43	7.5	13
1955	578		312	6.2	122	46	40	4.1	11
1956	173		312	7.0	128	38	40	4.6	7.9

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
			07178600 VERDIGRIS RIVER NEAR INOLA, OK						
1948	11	3	48	0	8.3	22	1.0	91	0.50
1949	4.7	3	54	0	10	24	5.2	162	1.0
1950	12	3	80	0	10	27	2.4	181	0.50
1951	11	3	78	0	10	14	2.0	151	0.50
1952	24	2	90	0	18	32	5.5	190	1.0
1953	33	4	62	0	17	52	3.2	210	1.1
1954	52	4	36	0	9.7	22		166	1.0
1955	23	3	51	0	14	38	2.5	157	0.20
1956		6	60	0	15	32	3.0	165	1.0
1957	18		70	0	10	26	5.5	144	1.0
1958	14		80	0	15	30	5.0	198	1.2
1959	12	3	52	0	11	22	5.0	154	0.40
1960		0	88	0	14	28	8.0	169	0.80
1961		0	44	0	11	12	5.0	107	0.20
1962		3	0	0	13	28	8.4	175	0.70
1963	23	3	18	0	21	37	6.2	211	3.2
1964	30	4	12	0	12	52	3.9	181	0.90
1965	18		52	0	12	29	5.6	153	0.30
1966	23		44	0	13	37	1.7	143	0.10
1967		4	48	0	16	36	7.8	180	0.10
1968			64	0	18	32		172	0.20
1969			22	0	10	17		119	
1970			42	0	8.2	15		87	0.20
1971			48	0	14	17		117	0.10
1972			42	0	12	6.5		194	0.20
			07178620 VERDIGRIS R AT NEWT GRAHAM LOCK AND DAM NR INOLA, OK						
1972		0	72	0	20	27		168	0.10
1973			48	0	15	20		134	1.0
1974		2	48	0	13	17	6.2	125	1.5
1975		2	50	0	12	7.6	4.5	88	
			07193500 NEOSHO RIVER BL FT. GIBSON LAKE NEAR FT. GIBSON, OK						
1952		2	98	0	30	7.5	5.8	158	0.80
1953		2	117	0	41	10	2.0	184	0.70
1954		2	116	0	48	14	1.5	200	0.00
1955		2	92	0	44	12	1.0	186	0.00
1956		2	100	0	43	12	1.6	174	1.4

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
07193500 NEOSHO R BL FT GIBSON LAKE NR FT GIBSON, OK--CONTINUED									
1957	128		192	6.8	82	22	26	4.1	6.2
1958	1104		225	7.3	98	15	32	4.1	7.1
1959	946		234	6.3	100	15	33	1.2	7.1
1960	3297		215	7.5	98	26	28	3.4	7.0
1961	1392		206	7.3	92	18	28	3.9	5.5
1962	1797		249	7.2	102	26	34	5.6	5.3
1963	572		281	7.8	122	29	39	5.8	8.7
1964	17		320	7.7	136	44	48	7.5	4.8
1965	26		271	7.5	114	31			8.0
1966	255		267	7.5	120	16			6.0
1967	33		292	7.3	124	32			9.4
1968	19		266	7.0	112	27			
1969	21		254	7.0	110	24			
1970	19		251	7.4	104	20			8.1
1971		218	255	7.6	110	20			7.5
1972		23	291	7.1	120	23			10
1973		18	150	6.2	94	12	30	4.4	2.5
1974		457	212	7.2	89	13	29	4.0	5.4
1975		2150	159	6.4	73	2	26	1.9	3.8
		07198000 ILLINOIS RIVER NEAR GORE, OK							
1945			120	7.1	67	3	23	1.7	2.5
1948	166		86	7.4	33	0	11	0.7	2.9
1954	93		170	7.2	80	1	29	1.9	3.3
1955	84		197	6.5	82	0	30	0.5	4.1
1956	145		191	6.9	88	8	30	2.7	4.1
1957	130		150	6.8	61	2	23	0.9	5.4
1958	489		169	6.9	74	0	26	0.7	3.7
1959	310		174	6.3	78	2	25	1.2	3.1
1960	736		150	7.5	70	3	26	1.2	1.6
1961	318		141	6.8	66	2	24	0.7	1.5
1962	363		154	7.1	70	1	27	0.4	2.3
1963	12		134	7.1	60	0	20	0.7	3.3
1964	12		195	7.4	92				
1965	4.8		189	7.5	88	4			
1966	50		176	7.3	80	0			
1967	16		185	7.4	84	5			3.2
1968	9.4		161	7.0	70	3			

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07193500 NEOSHO R BL FT GIBSON LAKE NR FT GIBSON, OK--CONTINUED									
1957		2	74	0	21	7.2	4.8	128	1.3
1958		2	84	0	24	6.5	3.2	139	3.0
1959		0	84	0	26	8.4	3.0	149	
1960		2	72	0	31	7.6	8.4	147	
1961		0	84	0	21	5.1	4.8	143	1.3
1962		2	92	0	29	2.0	7.2	165	2.3
1963		3	112	0	35	9.0	6.2	158	0.00
1964			102	0	48	8.5		188	0.00
1965			98	0	37	8.8		166	0.10
1966			108	0	28	8.0		138	0.00
1967		3	104	0	37	11		169	0.00
1968			104	0	28	4.8		138	0.00
1969			98	0	32	6.0		162	0.10
1970			94	0	31	8.4		146	0.20
1971			104	0	29	8.0		154	0.00
1972			106	0	36	11		168	0.10
1973		2	84	0	25	4.5	0.9	104	0.00
1974		2	86	0	19	5.7	3.4	125	2.1
1975		2	78	0	7.7	4.9	2.6	102	
07198000 ILLINOIS RIVER NEAR GORE, OK									
1945		1	55	0	4.5	4.0	6.3	116	1.0
1948	1.6	1	33	0	3.5	1.2	3.3	40	0.00
1954		2	92	0	3.9	3.8	4.5	100	0.00
1955		1	80	0	3.5	5.4	0.0	110	1.4
1956		1	94	0	3.5	6.5	2.2	106	1.6
1957		2	68	0	3.3	7.8	2.5	105	0.40
1958		2	81	0	3.1	5.2	4.2	99	1.8
1959		0	76	0	3.7	5.0	0.4	102	0.50
1960		1	82	0	4.3	3.8	4.5	97	1.9
1961		0	72	0	3.5	2.4	3.2	87	0.60
1962			82	0	3.0	2.3	4.8	79	1.7
1963	2.3	2	68	0	3.2	2.0	7.8	66	1.8
1964	1.4		102	0	5.8	3.7		110	0.00
1965	3.9		100	0	7.0	4.2		104	0.00
1966	5.1	2	88	0	4.6	5.5		102	0.20
1967			92	0	8.0	4.4		99	0.00
1968			80	0	6.4	2.4		74	0.00

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07198000	ILLINOIS RIVER NEAR GORE, OK--CONTINUED							
1969	14		144	6.9	64	5			
1970	17		164	7.1	78	4			2.8
1971	18		161	7.5	76	4			2.9
1972		12	180	6.6	82	3			3.0
1973		26	144	6.4	68	1	26	1.7	2.4
1974		253	117	7.2	47	0	19	0.0	2.3
1975		12	135	7.4	67	1	24	1.2	2.5
	07228500	CANADIAN RIVER AT BRIDGEPORT, OK							
1949	3.6		608	7.7	226	91	63	15	43
1950	11		420	7.3	166	49	50	10	30
1951	0.53		441	7.1	160	52	44	12	30
1952	0.10		226	7.4	138	45	34	13	27
1953	0.17		294	7.2	124	26	36	6.9	7.8
1954	0.40		348	7.7	123	9	38	3.2	22
1955	2.0		265	6.8	120	17	39	4.9	17
1956	0.00		335	7.1	140	35	43	7.9	33
1957	0.00		409	7.2	156	0	47	2.4	25
1958	8.5		557	7.5	180	57	48	11	185
1959	4.5		265	7.7	112	20	30	9.0	75
1960	32		784	7.6	192	61	40	18	50
1964	26		590	7.4	272	103			15
1970	0.18		420	7.9	154	62			18
1971	4.2		310	7.4	120	23			13
1972	0.00		374	7.0	130	27			24
1973	2.0		332	7.4	120	39	36	7.4	17
1974	0.00		466	7.5	190	75	60	10	17
1975	47	0.25	281	6.9	110	32	31	7.4	4.8
	07229200	CANADIAN RIVER AT PURCELL, OK							
1963			907	7.0	186	0			
1974		8.8	409	7.2	150	50	32	9.6	27
1975		44	346	7.3	130	21	40	8.5	17
	07231000	LITTLE RIVER NEAR SASAKWA, OK							
1952	1.0		953	7.0	156	72	38	15	119
1953	0.07		2850	7.1	370	279	98	31	
1954	28		23200	6.6	3140	2960	855	241	

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
			07198000 ILLINOIS RIVER NEAR GORE, OK--CONTINUED						
1969			72	0	3.1	3.3		94	0.10
1970			84	0	6.5	3.4		95	0.10
1971			84	0	5.4	3.7		96	0.30
1972			92	0	6.0	4.5		100	0.00
1973			70	0	5.4	3.6		88	0.20
1974			57	0	3.5	2.4		68	0.04
1975		2	66	0	5.5	3.6		88	
			07228500 CANADIAN RIVER AT BRIDGEPORT, OK						
1949	29		120	0	142	20	5.0	404	1.0
1950	20		133	0	82	9.5	5.0	278	0.50
1951	19		108	0	79	10	13	288	0.40
1952	15		112	0	66	4.0	17	192	0.40
1953	11		95	0	49	3.5	10	186	0.40
1954			100	0	37	14	6.8	227	0.30
1955			100	0	30	10	14	173	0.10
1956	17		108	0	44	16	14	196	0.60
1957	9.7		82	0	31	12	16	245	0.00
1958	26		118	0	102	12		364	0.80
1959	7.8		86	0	26	14	9.5	172	0.10
1960	45		100	0	123	22	10	540	0.00
1964			116	0	120	13		379	
1970			30	0	85	11		282	0.10
1971			24	0	47	7.2		192	0.50
1972			66	0	36	14		212	0.00
1973			99	0	59	13		252	0.00
1974			108	0	88	14		289	0.27
1975			77	0	43	11		170	0.13
			07229200 CANADIAN RIVER AT PURCELL, OK						
1963	66		120	0	49	43		559	
1974			130	0	67	22		260	0.00
1975		4	125	0	48	14		209	0.00
			07231000 LITTLE RIVER NEAR SASAKWA, OK						
1952	125		88	0	12	235		542	
1953			105	0		840			
1954			60	0		8590			

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07231000	LITTLE RIVER NEAR SASAKWA, OK--CONTINUED							
1955	4.3		11200	6.6	1390	1300	367	115	
1956	0.00		891	5.6	142	68	35	13	
1957	0.00		365	4.3	112	22	26	11	
1960	90		369	7.3	90	8	22	8.5	36
1961	16		744	7.9	166	52	38	15	81
1962	1.1		435	7.5	128	22	62	45	235
1963	0.50		657	7.9	156	51	75	40	277
1964	0.60		303	7.6	96	13	90	49	25
1965	1.4		299	7.6	92	13			
1966	0.10		342	7.5	98	16			
1967	0.10		403	7.2	100	25			39
1968	1.5		175	7.5	146	69			34
1969	0.16		470	7.8	106				46
1970	0.05		177	7.6	60	4			11
1971	1.2		142	7.8	48	7			9.6
1972	0.00		558	4.0	150	38			52
1973	0.09		315	6.5	83	7	22	6.9	28
1974	1.1		270	7.5	74	9	19	6.5	31
1975	2.2	13	309	7.3	85	9	22	7.4	28
	07231500	CANADIAN RIVER AT CALVIN, OK							
1965	4.0		563	7.6	140	38			58
1966	1.9		386	7.5	108	31			22
1967	0.80		341	7.3	84	17			34
1968	35		266	7.2	165	47			25
1969	9.2		408	7.8	100				35
1970	1.9		282	8.0	90	6			20
1971	32		246	7.8	82	0			15
1972		3.3	437	6.7	84	25			37
1973		11	320	6.7	110	0	0.0	0.0	26
1974		23	262	7.1	93	0	27	6.1	12
1975		156	190	6.5	160	36	41	8.4	23
	07232500	BEAVER RIVER NEAR GUYMON, OK							
1953	1.1		289	7.8	135	1	28	10	7.9
1955	.99		350	6.8	162	0	26	10	5.5
1960	2.5		449	7.9	184	3	38	17	28
1961	1.3		275	7.2	98	0	21	11	26

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07231000		LITTLE RIVER NEAR SASAKWA, OK--CONTINUED						
1955			11	0		3740			
1956	99		4	0	6.6	195	8.6	476	0.70
1957	31		0	0	2.3	58	5.3	189	1.0
1960			88	0	0.0	64	6.5	202	0.20
1961			96	0	14	148	5.0	434	0.00
1962	25		92	0	10	68	6.2	247	0.20
1963	76		98	0	10	140	7.4	369	0.70
1964	27		78	0	9.0	48	13	168	1.4
1965			88	0	9.0	40		167	0.04
1966	32		80	0	9.0	54		208	0.10
1967			72	0	9.0	73		264	0.10
1968			104	0		66		234	0.20
1969					8.0	90		282	0.20
1970			68	0	7.6	16		106	0.00
1971			50	0	2.4	16		141	0.00
1972			0	0	7.0	100		312	0.10
1973			79	0	6.9	48		192	0.04
1974			79	0	6.4	39		166	0.13
1975			93	0	5.1	52		190	
		07231500	CANADIAN RIVER AT CALVIN, OK						
1965			104	0	24	70		312	1.8
1966			76	0	23	56		216	0.10
1967		3	52	0	20	52		204	0.30
1968			60	0	11	39		161	0.00
1969					20	57		228	0.10
1970			72	0	14	30		165	0.10
1971			48	0	7.0	23		144	0.00
1972			32	0	9.0	60		243	0.00
1973			110	0	14	41		213	0.00
1974			113	0	8.7	18		144	0.04
1975		4	128	0	26	30		85	0.44
		07232500	BEAVER RIVER NEAR GUYMON, OK						
1953			163	0		1.4			
1955			188	0		3.5			
1960	18	4	208	0	47	12	27	298	0.50
1961	20	1	128	0	25	6.6	14	155	0.00

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07232500	BEAVER RIVER NEAR GUYMON, OK--CONTINUED							
1962	0.20		250	7.8	112	0	32	19	25
1963	0.20		252	8.1	116	0	35	25	28
1968	0.11		384	7.7	164				13
1969	0.15		458	7.0	216				4.8
1970	0.28		435	7.3	174	1			23
1971	0.25		358	7.5	200	8			5.4
1972		0.65	324	7.6	170	8			5.4
1973		0.62	357	6.9	170	0			8.8
1974		1.9	370	7.7	160	0	30	7.3	5.9
1975		3.0	500	7.6	190	0	34	24	23
		07234000	BEAVER RIVER AT BEAVER, OK						
1962			923	7.5	280	24			
1963			634	7.5	290	41			
1968			298	7.8	112	8			15
1969			494	7.7	155				39
1970			462	7.9	140	17			33
1971			332	7.1	120	8	23	6.0	21
1972		0.00	485	7.1	170	13	49	11	34
1973		0.00	286	7.0	110	5	33	6.8	12
1974		0.00	2310	7.5	460	280	100	51	310
1975		0.00	404	7.3	140	8	40	7.3	28
	07237500	NORTH CANADIAN RIVER AT WOODWARD, OK							
1962	0.91		922	7.5	218	70			
1963	0.88		889	7.4	258	55			82
1975		2.3	1050	7.5	270	120	75	21	100
	07241550	NORTH CANADIAN RIVER NEAR HARRAH, OK							
1969	66		466	8.0	126	31	32	7.3	41
1970	47		270	7.5	88	11	42	10	19
1971	52	65	346	7.6	104	19			26
1972	40	52	474	6.7	130	26			41
1973	47	42	165	7.0	98	15	34	6.7	23
1974		55	460	7.3	150	30	45	10	42
1975	236	74	325	4.2	95	12	28	5.7	25

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07232500		BEAVER RIVER NEAR GUYMON, OK--CONTINUED						
1962	11	2	124	0	15	1.5	19	178	0.70
1963	6.9	5	136	0	9.1	4.8	28	163	1.4
1968					26	3.5		230	0.10
1969					8.0	3.4		314	0.10
1970			208	0	39	11		258	0.10
1971			234	0	11	2.9		236	0.00
1972			198	0	12	3.0		226	0.20
1973			207	0	13	6.2		234	0.20
1974			184	0	12	3.3		227	0.00
1975		4	220	0	41	11	15	284	
		07234000	BEAVER RIVER AT BEAVER, OK						
1962	89		188	0	62	108		578	
1963	70		212	0	39	54		539	
1968			92	0	25	16		170	0.10
1969					41	46		338	0.40
1970			104	0	34	38		272	0.30
1971			122	0	26	28		200	0.20
1972			160	0	44	38		310	0.10
1973			126	0	18	14		164	0.00
1974		7	203	0	250	490	17	1430	0.53
1975		8	159	0	21	41		219	
	07237500		NORTH CANADIAN RIVER AT WOODWARD, OK						
1962	114		168	0	96	155		566	
1963			162	0	81	110		538	
1975		5	111	0	170	140	8.0	626	
	07241550		NORTH CANADIAN RIVER NEAR HARRAH, OK						
1969			84	0	36	56		286	1.9
1970			94	0	15	26		167	1.8
1971			102	0	22	37		199	2.7
1972			104	0	14	59		270	2.6
1973			100	0	21	32		184	0.20
1974			146	0	31	59		303	0.00
1975		5	101	0	16	40		194	0.04

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OK								
1954	0.35		621	4.8	115	37	36	6.1	73
1955	11		1450	6.7	208	140	62	13	207
1956	1.5		886	6.9	165	58	50	9.7	
1957	13		353	7.2	108	13	37	3.8	122
1961	120		759	7.5	188	80	50	14	
1962	66		467	7.3	100	23	59	25	231
1963	22		369	7.8	78	0	60	29	250
1964	10		274	7.4	76	10			
1965	24		339	7.7	82	0			
1966	19		335	7.5	100	28			
1967	23		419	7.6	116	27			
1968	67		268	7.2	114	42			22
1969	85		353	7.9	26				28
1970	43		218	7.8	68	13			18
1971	60		193	6.9	50	3			13
1972		35	213	6.9	64	8			15
1973		32	282	6.8	90	5	29	4.2	22
1974		86	280	7.5	74	12	22	4.6	21
1975		219	247	7.2	90	0	30	3.5	17
	07242350 DEEP FORK NEAR ARCADIA, OK								
1970	19		300	7.0	98	24			20
1971	18	10	374	7.0	100	25			32
1972	20	23	356	6.7	140	14			15
1973	21	19	208	6.5	99	0	23	7.0	11
1974	25	20	180	6.9	91	0	24	7.5	13
1975	23	25	230	6.4	94	7	25	7.6	13
	07243500 DEEP FORK NEAR BEGGS, OK								
1947	246		341		89	0	23	7.2	
1952	3.3		289	7.1	80	8	17	8.7	119
1953	0.27		233	7.0	50	4	11	4.9	44
1954	0.15		267	7.4	63	12	16	5.5	102
1955	2.1		166	6.5	16	0	2.8	1.0	19
1956	0.45		260	6.8	62	12	14	6.3	24
1957	0.12		180	6.7	45	3	10	2.2	16
1958	52		179	7.5	48	12	10	4.5	52
1959	30		252	7.3	56	14	14	5.1	56

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07242000		NORTH CANADIAN RIVER NEAR WETUMKA, OK						
1954		39	2	0	7.0	132		381	0.00
1955			52	0	14	378		870	2.8
1956	108		54	0	16	188	10	498	1.0
1957	29	7	54	0	7.0	48	9.0	190	1.4
1961	81		124	0	47	145	5.8	462	0.50
1962	50	7	94	0	18	78	10	267	1.9
1963	5.5	9	68	0	12	51	4.8	246	3.2
1964	21		36	0	11	31		157	0.80
1965	29		36	0	13	47		204	0.30
1966	28		76	0	19	48		198	0.00
1967	37		86	0	20	63		250	0.00
1968			80	0	12	38		186	0.40
1969					13	38		207	0.40
1970			24	0	8.3	28		132	0.40
1971			54	0	6.2	17		119	1.7
1972			68	0	10	23		138	1.0
1973			88	0	12	31		171	0.00
1974			73	0	11	29		173	1.6
1975		3	105	0	14	24		165	
		07242350	DEEP FORK NEAR ARCADIA, OK						
1970			90	0	24	25		202	0.40
1971			80	0	26	44		220	0.20
1972			106	0	21	17		208	0.20
1973			88	0	16	12		164	0.10
1974			100	0	17	16		184	0.00
1975		4	106	0	12	13		136	0.53
		07243500	DEEP FORK NEAR BEGGS, OK						
1947	37		37	0	14	38		210	0.00
1952	25	4	55	0	9.5	34	8.8	206	0.60
1953	22	4	27	0	6.6	30	2.0	140	0.00
1954	63	4	40	0	6.2	43	3.0	190	0.20
1955		2	10	0	2.9	26	3.0	87	0.00
1956	24	4	42	0	2.7	34	5.5	146	0.00
1957	20		13	0	3.7	24	5.0	126	0.10
1958	18	2	36	0	1.6	31	6.5	94	0.40
1959	27		52	0	4.1	46	4.8	161	0.10

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07243500 DEEP FORK NEAR BEGGS, OK--CONTINUED								
1960	27		234	6.6	58	16	14	5.6	18
1961	27		212	7.3	62	13	13	6.3	21
1962	22		217	7.2	50	13	51	25	23
1963	34		227	7.4	54	18	26	22	90
1964	1.0		209	7.1	60	17			
1965	11		234	7.5	52	4			
1966	15		168	7.2	40	0			
1967	7.3		204	7.4	40	9			22
1968	18		158	7.1	74	25			14
1969	12		210	7.1	42				22
1970	3.5		154	7.5	38	10			14
1971	53		173	7.4	34	9			16
1972		7.7	149	6.8	50	11			13
1973		2.6	150	6.2	42	9	10	4.2	12
1974		29	83	7.2	23	2	6.2	1.9	4.4
1975		90	162	7.3	39	7	10	3.3	14
	07245000 CANADIAN RIVER NEAR WHITEFIELD, OK								
1946			1560		257	180	65	23	
1947	246		341		89	0	23	7.2	
1948	166		77	7.6	18	0	6.4	2.8	
1949	211		495	7.7	122	38	33	7.8	330
1950	460		389	7.1	99	24	30	5.8	794
1951	300		677	7.1	140	51	11	9.6	190
1952	42		602	7.2	117	54	34	7.8	792
1953	24		378	7.1	80	33	22	5.9	56
1954	11		633	7.0	125	49	39	6.7	74
1955	20		469	7.0	76	40	22	3.6	68
1956	1.5		846	7.1	160	63	45	12	557
1957	1.0		335	7.1	88	3	28	3.3	61
1958	569		402	7.5	100	8	30	6.1	
1959	256		162	7.3	60	1	19	2.2	74
1960	579		285	7.2	80	19	21	6.6	18
1961	449		360	7.1	96	30	24	7.1	34
1962	223		258	7.3	76	10	30	7.1	23
1963	111		312	6.2	90	15	39	11	20
1964	2.6		95	7.5	40	14			
1967	132		94	7.7	36	0			

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07243500		DEEP FORK NEAR BEGGS, OK--CONTINUED						
1960		1	53	0	10	38	5.5	160	0.00
1961		2	58	0	7.0	36	2.0	142	0.00
1962			38	0	3.4	37	3.2	131	0.20
1963	22	4	36	0	9.0	45	5.8	140	1.1
1964	16		36	0	11	38		130	0.10
1965	26		48	0	11	38		125	0.00
1966	15		26	0	8.0	26		119	0.20
1967		4	28	0	8.0	35		124	0.20
1968			56	0	4.6	22		101	0.20
1969					7.4	38		126	1.8
1970			28	0	8.0	21		94	0.00
1971			24	0	7.4	26		115	0.30
1972			34	0	12	16		101	0.70
1973			40	0	8.4	21		149	0.20
1974			26	0	5.9	7.3		86	0.00
1975		3	38	0	6.4	23		101	
	07245000		CANADIAN RIVER NEAR WHITEFIELD, OK						
1946	105		100	0	20	378		854	1.8
1947	37		11	0	14	38		201	0.00
1948	10		13	0	5.0	7.0	6.0	89	0.00
1949	63	14	55	0	19	107	2.0	308	0.00
1950	16	26	62	0	12	65	4.0	244	0.50
1951	76	9	83	0	20	124	6.6	392	0.70
1952	66	15	70	0	14	128	10	380	1.3
1953	41	14	52	0	8.6	80	12	254	0.70
1954			56	0	6.6	134		361	0.60
1955		5	40	0	11	120	14	281	0.60
1956	100	8	70	0	19	170	8.0	459	1.1
1957	32	7	50	0	5.8	45	10	181	1.0
1958	39		82	0	6.6	72		227	1.1
1959	7.4	1	58	0	1.6	8.0	7.4	104	0.00
1960		0	72	0	8.2	36	2.0	172	0.10
1961		3	80	0	15	62	6.4	220	0.00
1962		3	68	0	14	33	8.8	153	0.10
1963			76	0	4.0	36	7.8	181	0.50
1964			24	0	7.4	6.0	4.3	76	0.20
1967		2	40	0	4.6	4.0		68	0.00

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07245000	CANADIAN RIVER NEAR WHITEFIELD, OK--CONTINUED							
1968	79		129	7.0	38	0			10
1969	57		110	7.2	32	0			8.2
1970	68		113	7.2	40	2			6.8
1971	305	265	266	7.8	72	14			24
1972		22	225	6.2	74	12			24
1973		66	234	6.5	62	14	23	7.2	21
1974		140	83	7.3	31	0	9.8	1.7	3.3
1975	148	212	129	5.6	46	8	14	2.7	9.3
	07246400	ROBERT S. KERR LOCK AND DAM NEAR SALLISAW, OK							
1972			400	7.2	120	28			35
1973			280	6.7	100	25			26
1974			380	7.5	120	22	33	6.7	31
1975				7.3	130	33	36	4.4	27
	07303395	ELM FORK N FORK RED R AT SALTON CROSSING NR CARL, OK							
1973		5.5	1360	7.5	630	530	220	19	28
1974		0.52	1710	7.4	1000	930	350	20	34
1975		0.00	2460	7.0	1100	1000	370	32	89
	07303400	ELM FORK NORTH FORK RED RIVER NEAR CARL, OK							
1960	9.3		5550	7.4	1580	1480	508	76	702
1962	5.6		6960	7.5	1420	1220			1030
1963	4.7		15900	7.4	1910	1820			
1968	4.0		3900						
1969	2.0		12000						
1970	0.18		20700	7.4	2080	2020			4100
1971		0.11	3540	6.7	820	720			500
1972			7180	7.4	460	370			1100
1973		3.3	2950	7.1	1200	1100	430	32	240
1974		0.72	2490	7.3	940	860	330	29	140
1975		0.76	9240	7.2	1700	1600	530	89	1600
		07304500	ELK CREEK NEAR HOBART, OK						
1950	1.7		258	7.6	109	20	31	7.7	113
1959	0.00		237	7.2	96	11	27	5.7	94
1960	8.6		221	7.2	92	14	29	4.7	9.2

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07245000	CANADIAN RIVER NEAR WHITEFIELD, OK--CONTINUED								
1968		3	36	0	13	14	8.8	89	0.00
1969			40	0	7.8	10		78	0.10
1970			36	0	13	7.0		67	0.10
1971			50	0	15	39		160	0.00
1972			54	0	16	36		141	0.10
1973			52	0	18	34		140	0.00
1974			37	0	5.2	2.0		57	0.22
1975		2	46	0	8.3	12	2.3	137	
07246400	ROBERT S. KERR LOCK AND DAM NEAR SALLISAW, OK								
1972			96	0	29	56		240	0.30
1973			80	0	30	38		188	0.10
1974			107	0	24	37		197	1.7
1975		2	82	0	23	38		180	
07303395	ELM FORK N FORK RED R AT SALTON CROSSING NR CARL, OK								
1973			33	0	510	46		1130	0.09
1974			78	0	730	61		1490	1.0
1975		4	89	0	940	130		2050	
07303400	ELM FORK NORTH FORK RED RIVER NEAR CARL, OK								
1960			62	0	1370	1120		3840	
1962			75	0	1510	1600		4970	
1963	3060		69	0	1530	4870		10600	
1968					848	725		2670	
1969					1410	3480		8280	
1970			62	0	1650	6800		14100	
1971			56	0	660	750		2480	
1972			74	0	1200	1800		5060	
1973			74	0	1000	380		2520	0.90
1974			57	0	800	220		1890	0.22
1975		11	71	0	1300	2600		6500	
07304500	ELK CREEK NEAR HOBART, OK								
1950	8.3	12	108	10	28	6.0	1.0	173	1.7
1959	6.2	4	98	0	20	5.8	4.0	151	0.00
1960		2	96	0	26	7.0	3.6	150	0.00

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
		07304500	ELK CREEK NEAR HOBART, OK--CONTINUED						
1961	7.8		247	7.5	98	18	26	4.4	6.9
1962	6.7		194	7.6	84	20	130	89	5.5
1963	1.8		365	7.7	148	46	149	91	15
1970	0.00		260	8.0	96	17			15
1971	0.00		156	8.0	62	0			7.4
1972	0.33		209	7.1	86	9			8.1
1973	0.56		237	6.1	85	6	23	6.7	9.3
1974	1.6		259	7.5	90	16	25	6.6	17
1975	11	18	206	7.4	83	31	23	6.3	9.6
		07305000	NORTH FORK RED RIVER NEAR HEADRICK, OK						
1955	0.05		2500	6.8	560	422	182	17	
1960	21		1200	7.4	400	302	118	22	838
1961	12		1100	7.0	260	129	70	17	532
1962	26		637	7.4	152	54	196	49	233
1963	3.5		964	7.5	305	203			
1968	9.0		1230						
1969	20		496						
1970	1.4		443	7.8	130	45			43
1971		0.10	340	7.7	98	13			36
1972		8.0	2030	7.1	620	530			200
1973		2.0	939	6.7	180	68	52	11	110
1974		5.0	951	7.4	180	82	52	11	64
1975		24	706	7.2	130	46	40	8.2	54
		07311000	EAST CACHE CREEK NEAR WALTERS, OK						
1952	7.6		149	7.1	52	0	15	3.7	87
1953	6.1		246	7.3	92	0	29	4.7	13
1961	15		206	7.6	84	0	26	4.6	13
1962	48		369	7.4	136	0			22
1963	14		312		104				21
1970	6.9		232	7.8	82	0			16
1971	6.4		175	6.8	62	0			12
1972		9.1	295	7.0	12	0			26
1973		4.0	257	6.4	89	0	29	3.6	14
1974		4.0	148	7.2	49	0	16	2.1	12
1975		15	162	7.1	54	0	17	2.9	9.1

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07304500		ELK CREEK NEAR HOBART, OK--CONTINUED						
1961		2	98	0	16	9.0	10	154	0.00
1962		3	78	0	18	2.4	14	135	7.8
1963		4	66	0	63	10	11	242	1.7
1970			42	0	39	9.6		160	0.10
1971			56	0	7.4	4.3		94	0.00
1972			36	0	16	7.5		136	0.10
1973			75	0	22	8.4		155	0.90
1974		4	90	0	26	15		151	2.6
1975			82	0	22	10		135	
	07305000		NORTH FORK RED RIVER NEAR HEADRICK, OK						
1955			106	0		500			
1960	118	9	66	0	84	155	2.5	805	1.4
1961	97	2	76	0	135	145	4.8	702	0.00
1962	68	6	80	0	64	96	6.2	365	
1963	81		68	0	180	108		636	
1968					212	275		752	
1969					63	60		312	
1970			70	0	49	51		261	0.60
1971			22	0	24	40		208	0.00
1972			84	0	480	300		1400	0.40
1973			94	0	63	190		536	0.10
1974			78	0	81	93		528	0.00
1975		5	98	0	44	100	1.6	316	
	07311000		EAST CACHE CREEK NEAR WALTERS, OK						
1952	3.0	6	69	0	8.3	4.5	6.8	75	2.5
1953	14	4	107	0	14	11	5.2	147	4.0
1961			112	0	9.7	4.9		123	3.7
1962			156	0	24	20		256	
1963			76	0		10			
1970					6.0	3.0		155	0.80
1971			0	0	8.0	5.0		111	0.20
1972			30	0	21	12		191	0.30
1973			111	0	14	9.0		160	2.1
1974			74	0	5.3	6.0		104	0.80
1975		4	73	0	8.7	8.5		98	

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
		07311200	BLUE BEAVER CREEK NEAR CACHE, OK						
1968	0.08		104	6.4	30	0	6.4	3.2	7.9
1969	0.73		118	7.0	34	0	6.4	2.6	8.4
1970	0.45		136	7.7	32	0	9.6	1.9	9.5
1971	0.02		146	7.5	64	0	18	4.9	16
1972		0.05	116	6.8	38	0	10	3.2	6.8
1973		0.19	97	6.4	32	0	7.2	3.4	7.0
1974		0.14	148	7.2	47	0	13	3.5	12
		07324200	WASHITA RIVER NEAR HAMMON, OK						
1970	0.00	0.03	645	7.4	286	210			9.1
1971		0.00	280	7.5	130	59			4.0
1972		0.00	507	7.4	220	56			11
1973		0.00	155	6.6	68	0	31	11	11
1974		0.00	566	7.5	270	180	76	20	11
1975		0.50	568	7.4	270	180	72	22	12
		07324400	WASHITA RIVER NEAR FOSS, OK						
1947			258		171	75	44	15	32
1948			353		155	37	50	15	
1970	2.0		391	7.8	162	6			13
1971	1.3		280	7.5	120	0			10
1972		0.68	393	7.3	170	0			18
1973		0.33	491	7.0	200	15	22	23	22
1974		0.83	175	7.5	91	0	24	7.5	3.3
1975		8.1	239	7.7	110	0	27	9.8	8.3
		07325500	WASHITA RIVER AT CARNEGIE, OK						
1954	2.0		355	7.8	162	77	50	9.0	6.9
1955	12		146	7.1	190	96	58	10	5.9
1956	0.86		325	7.5	148	70	45	8.6	3.5
1957	0.92		248	7.5	120	22	38	6.1	16
1958	14		453	7.6	205	113	62	12	92
1959	28		410	7.7	182	82	58	9.1	54
1960	55		547	7.6	260	155	72	20	58
1961	47		301	7.3	136	44	37	9.4	10
1962	57		348	7.5	132	24			12
1963	23		285	7.5	122	58	138	13	6.0
1964	8.2		330	7.7	136	65			7.8

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
		07311200	BLUE BEAVER CREEK NEAR CACHE, OK						
1968		1	30	0	8.7	5.2	9.4	77	0.00
1969		1	30	0	11	3.9	8.4	77	0.20
1970		1	38	0	11	5.0	12	82	0.00
1971		1	74	0	17	8.0	7.0	126	0.00
1972		1	46	0	9.5	4.0	7.2	80	0.00
1973		1	30	0	14	3.7	10	70	0.00
1974			66	0	7.2	4.4		90	0.18
		07324200	WASHITA RIVER NEAR HAMMON, OK						
1970			78	0	250	5.5		425	0.00
1971			66	0	66	1.0		180	0.00
1972			68	0	85	6.0		340	0.20
1973			58	0	16	1.0		87	0.04
1974			96	0	180	7.3		416	0.13
1975		4	105	0	190	6.5		396	
		07324400	WASHITA RIVER NEAR FOSS, OK						
1947	5.1	7	117	0	79	3.0	2.0	236	1.0
1948	3.4		116	0	75	3.0		291	0.50
1970			106	0	32	3.5		252	0.00
1971			88	0	10	4.0		165	0.00
1972			168	0	24	9.0		240	0.00
1973			218	0	49	8.6		299	0.04
1974			92	0	13	1.0		112	1.2
1975		3	121	0	16	4.5		157	
		07325500	WASHITA RIVER AT CARNEGIE, OK						
1954			86	0	77	7.0		232	0.00
1955		4	80	0	105	5.2	8.0	276	0.60
1956	12	4	96	0	64	5.3	13	200	0.50
1957	5.3		109	0	26	1.5	18	163	1.1
1958	8.3		112	0	105	13	9.0	320	1.0
1959	3.0	4	106	0	92	6.0	6.2	280	0.10
1960	13	1	114	0	161	14	4.6	374	0.00
1961		2	94	0	49	8.6	4.6	200	0.00
1962			80	0	51	7.1	6.8	228	0.20
1963		4	78	0	63	4.0	12	181	2.9
1964			54	0	78	7.0		225	

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07325500	WASHITA RIVER AT CARNEGIE, OK--CONTINUED							
1965	8.4		218	7.6	104	38	31	6.4	4.8
1966	19		288	7.6	120	49	58	10	8.0
1967	9.4		216	7.8	102	23			3.8
1968	21		327	7.6	136	42			7.1
1969	46		375	7.8	148	89			14
1970	1.4		292	7.8	140	33			5.0
1971	7.2		212	7.1	86	7			5.2
1972	8.7		468	6.8	210	95			9.1
1973	11		309	6.4	120	35	48	10	7.6
1974	9.1		503	7.3	230	130	66	14	8.6
1975	138	145	424	6.9	160	72	50	9.6	8.7
	07331000	WASHITA RIVER NEAR DURWOOD, OK							
1944	70		39		52	0	9.2	14	
1945	60		110	7.2	120	23	37	5.0	35
1946	667		28		114	21	31	7.7	
1947	452		312		148	36	14	11	
1949	105		369		150	34	40	12	39
1951	205		391	7.7	172	53	49	12	
1952	19		95	7.2	41	6	11	3.3	33
1953	12		232	7.6	99	0	32	4.6	17
1954	1.0		291	7.8	122	19	36	5.8	7.7
1955	40		193	7.3	80	4	28	2.4	59
1956	0.20		435	7.3	188	15	34	15	10
1957	2.2		234	7.0	98	0	30	5.6	34
1958	123		393	7.3	160	22	46	11	
1959	119		440	7.3	208	90	54	11	15
1960	143		376	7.5	162	16	32	11	37
1961	202		421	7.3	158	37	47	9.8	21
1962	171		345	7.4	140	32	39	3.8	17
1963	14		412	7.7	160	66	42	12	70
1964	0.60		328	7.9	124	22	78	28	
1965	60		289	7.6	112	23			
1966	17		398	7.7	154	61			
1967	8.4		186	7.9	80	0	78	17	6.7
1968	81		274	7.7	114	14			11
1969	321		365	7.5	140	19			18
1970	11		265	7.7	108	13			11

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07325500		WASHITA RIVER AT CARNEGIE, OK--CONTINUED						
1965			80	0	28	2.0	7.3	130	0.50
1966			32	0	61	8.8		172	0.30
1967		3	64	0	34	4.0		134	0.10
1968			32	0	65	5.2		216	
1969			22	0	106	14		241	
1970			38	0	40	3.4		199	0.10
1971			18	0	15	3.0		129	0.10
1972			48	0	100	6.3		316	0.00
1973			84	0	49	7.0		200	0.20
1974			98	0	140	5.6		333	1.9
1975		4	107	0	96	8.9		300	
	07331000		WASHITA RIVER NEAR DURWOOD, OK						
1944	13		142	0	59	15		267	1.2
1945	5.1		106	0	23	7.2	6.0	168	0.50
1946	1.2		104	0	20	7.0		140	0.80
1947	1.8		107	0	47	15		193	0.20
1949	20		122	0	49	11		241	2.0
1951	10		95	0	55	14		262	0.20
1952	7.1	3	22	0	23	4.5	5.6	70	0.40
1953	12	3	111	0	17	6.5	4.0	140	0.10
1954		4	110	0	29	9.5	10	160	0.40
1955	4.8	3	93	0	16	5.4	55	110	0.40
1956	24	3	122	0	42	14	10	264	0.00
1957	7.8		100	0	15	8.8	2.5	145	0.50
1958	16		138	0	42	20		222	0.20
1959	15	2	110	0	98	12	7.8	280	0.40
1960	13	2	108	0	21	14	10	229	0.00
1961	10	1	124	0	37	20	5.2	262	0.10
1962		4	132	0	45	21	10	221	0.80
1963	15	3	62	0	63	23	11	260	1.2
1964	12		76	0	37	15		190	
1965	7.4		40	0	30	8.0		204	0.10
1966	9.0		70	0	40	10		238	0.00
1967		3	88	0	13	4.0	3.5	115	0.90
1968			64	0	20	15		160	0.10
1969			88	0	27	23		233	0.10
1970			42	0	18	13		157	0.00

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07331000	WASHITA RIVER NEAR DURWOOD, OK--CONTINUED							
1971	60		215	7.6	94	5			7.8
1972	11		303	6.9	120	32			14
1973	10		125	3.5	100	2	45	9.6	9.8
1974	120	146	265	7.7	110	1	32	7.0	10
1975		404	248	7.4	120	9	35	6.9	13
	07335700	KIAMICHI RIVER NEAR BIG CEDAR, OK							
1966	0.80		19	5.7	4	0	1.4	0.0	1.5
1967	0.30		21	6.4	4	0	0.7	0.5	2.0
1968	0.27		17	5.8	4	0	0.6	0.5	1.2
1970	0.96		15	6.7	1	0	0.8	0.6	1.6
1971	0.86		16	6.1	4	0	0.8	0.2	1.6
1972	9.9		21	6.1	5	0	0.8	0.5	1.7
1973		0.75		6.1	5	0	0.8	0.1	1.5
1974		1.3		6.4	5	0	0.9	0.4	1.8
1975		0.82		6.1	6	0	1.2	0.1	1.5

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07331000	WASHITA RIVER NEAR DURWOOD, OK--CONTINUED							
1971			54	0	9.6	6.0		139	0.00
1972			0	0	34	15		200	0.10
1973			0	0	16	9.0		149	0.10
1974		3	118	0	16	12	7.2	156	0.97
1975		3	130	0	18	17	6.8	214	
	07335700	KIAMICHI RIVER NEAR BIG CEDAR, OK							
1966			6	0	3.2	1.0	3.3	18	0.40
1967		1	6	0	1.8	1.8	5.0	19	0.10
1968		0	4	0	2.6	1.4	4.0	20	0.00
1969		1	4	0	1.1	1.1	6.0	17	0.10
1970		0	6	0	1.8	1.0	5.4	16	0.00
1971		0	4	0	0.8	1.5	6.7	19	0.00
1972		1	8	0	2.0	1.6	7.3	20	0.00
1973		0	4	0	0.9	1.6	0.7	16	0.00
1974		1	5	0	1.8	1.7	3.6	18	0.04
1975		0	6	0	2.1	1.9	2.5	18	

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	RESERVOIR STORAGE	KSC	PH	HRD	NC HRD	CA	MG	NA
	07229900 LAKE THUNDERBIRD NEAR NORMAN, OK							
1967		403	7.5	172	3			15
1966	24710	400	7.9	174	1			15
1969	50800	362	7.6	156	2			13
1970	73120	395	7.8	158	0			18
1971	94750	367	7.8	150	0			15
1972	95600	407	7.4	180	1			16
1973	96500	357	6.4	160	0			15
1974	100000	382	7.6	160	2	33	19	15
1975	100000	382	7.6	160	0	30	19	16
	07238500 CANTON RESERVOIR NEAR CANTON, OK							
1960	108100	885	7.4	244	118	51	22	79
1961	109100	1040	7.4	300	166	70	27	91
1962	104100	1110	7.6	284	156	67	26	123
1963	90030	1200	7.2	310	176	68	31	131
1968	89110	1230	7.7	312	164			137
1969	98870	1200	7.1	296	152			138
1970	77850	1360	7.6	312	158			158
1971	39800	1270	7.4	360	0			120
1972	39800	1410	7.4	320	170			170
1973	69210	1350	6.9	320	170			150
1974	93400	1220	7.6	290	160	71	27	170
1975	65180	1260	7.7	340	200	82	33	130
	07324300 FOSS RESERVOIR NEAR FOSS, OK							
1964	69870	1650	7.8	870	745			
1965	67870	1760	7.7	920	797			
1966	10680	1690	7.7	900	776			
1967	91770	1910	7.8	1020	885			78
1968	89170	2010	7.7	1070	949			77
1969	101200	1900	7.6	800	682			83
1970	112200	1960	7.7	1020	892			86
1971	101600	2020	7.7	1100	959	210		92
1972	91600	2090	7.6	1100	980	200	140	97
1973	89600	1720	6.6	1100	1000	210	150	96
1974	103100	2100	7.9	1100	960	210	140	95

TABLE 3.--MINIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
		07229900 LAKE THUNDERBIRD NEAR NORMAN, OK							
1967		6	200	0	9.0	26		209	0.10
1968		6	196	0	6.5	24	0.9	218	0.00
1969			188	0	6.0	21		206	0.10
1970			188	0	8.0	26		236	0.10
1971			182	0	8.0	23		198	0.00
1972			208	0	7.9	26		226	0.10
1973			188	0	7.3	24		208	0.10
1974			191	0	7.6	23		211	0.00
1975		5	199	0	7.6	23		213	
		07238500 CANTON RESERVOIR NEAR CANTON, OK							
1960		2	102	0	126	110	2.2	575	0.50
1961		2	154	0	191	138	4.6	694	0.00
1962		6	142	0	195	160	7.4	679	0.40
1963			142	0	210	178		769	
1968			164	0	174	185		711	0.00
1969			154	0	155	190		720	0.10
1970			178	0	175	225		808	0.00
1971			166	0	230	140		794	0.00
1972			152	0	190	240		850	0.00
1973			151	0	190	220		834	0.10
1974			157	0	200	180		743	0.00
1975		7	161	0	230	170		796	
		07324300 FOSS RESERVOIR NEAR FOSS, OK							
1964	34		152	0	795	32		1300	0.00
1965	53		144	0	870	34		1450	0.10
1966	24		150	0	790	34		1360	0.00
1967		12	148	0	955	38		1630	0.00
1968			148	0	1020	40	8.4	1720	0.00
1969			144	0	769	41	8.4	1660	0.00
1970			152	0	980	35		1680	0.00
1971			144	0	1000	45		1720	0.00
1972			138	0	1100	42		1810	0.00
1973			138	0	1100	50		1800	0.00
1974			144	0		48		1800	0.00

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07148450	SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OK							
1962	87		2040	8.0	963	824	276	65	119
1973			1330	8.0	620	510	196	36	66
1974	478	318	2070	8.0	861	719	264	51	144
1975		309	2015	8.1	834	691	251	50	140
	07150500	SALT FORK ARKANSAS RIVER NEAR JET, OK							
1951	901		5772	7.9	540	404	149	41	
1952	669		4936	7.8	762	634	201	63	
1953	77		13715	7.6	964	854	252	82	
1954	129		16344	7.9	925	1030	253	81	
1955	222		22554	7.8	1118	994	298	90	
1956	135		21798	7.9	968	936	264	102	
1957	1502		17780	7.9	1420	838	260	75	
1960	519		4320	7.6	564	442	155	43	732
1961	468		5310	7.7	563	427	146	49	975
1962	303		5875	8.0	549	410	139	50	864
1963	627		8309	8.1	515	407	142	40	1705
1968	237		13121						
1969	368		7953						
1970	260		7001	8.2	559	440			1340
1971	85		13636	8.2	681	570			2948
1972		136	12170	7.4	648	533			2606
1973		934	8680	7.4	691	579	215	66	1799
1974		579	5225	7.7	570	431	156	44	820
1975	327	623	5227	7.8	522	368	140	42	928
	07151000	SALT FORK ARKANSAS RIVER AT TONKAWA, OK							
1952		1126	3876	7.8	576	422	154	46	408
1953		52	8051	7.8	685	509	172	62	
1954		80	9031	8.2	665	500	166	60	
1955			7890	8.0	555	408	147	46	
1956		1145	8219	7.9	534	401	120	57	
1957			8592	8.2	548	392	137	50	
1958			4800	7.8	500	368	134	40	
1959			5357	8.2	502	385	132	42	
1960			3901	8.1	516	350	138	42	648
1961			3751	8.1	433	270	117	34	645
1962			4166	8.1	446	261	116	42	738

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OK								
1962	112	6	168	1	817	161	18	1674	1.8
1973			155	0	505	82		1040	2.2
1974			181	0	711	201		1600	3.0
1975			173	0	685	197		1596	
	07150500 SALT FORK ARKANSAS RIVER NEAR JET, OK								
1951	1132		167	0	412	1455		3636	3.0
1952			155	0		1237		2295	
1953			135	0		4272			
1954			144	0		5568			
1955			151	0	862	7658	9.4	14287	1.4
1956			158	0		7249	7.2	14200	
1957			143	0		5973		2539	
1960			149	0	429	1125	7.0	2615	.8
1961			167	0	436	1483	7.0	3263	1.7
1962	1082		168	1	389	1650	13	3560	
1963			132	0	479	2549		5000	
1968					539	4288		8024	
1969					443	2389		4814	
1970			141	2	442	2033		4220	2.0
1971			132	2	546	4473		8509	1.4
1972			140	0	492	3975		7596	1.7
1973			140	0	565	2779		5637	1.7
1974			171	0	445	1429		3210	2.0
1975			188	0	382	1456		3129	
	07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OK								
1952	587		188	0		964		2135	
1953			215	0		2417			
1954	2060		196	2		2940			
1955	1659		179	1		2374			
1956			161	1		2631			
1957	1637		183	3	364	2556			0.4
1958	792		160	1		1300		909	4.2
1959	1140		141	0	428	1736		3740	
1960		8	199	2	364	984	13	2366	1.8
1961		5	196	1	299	970	12	2366	1.6
1962		1	222	2	288	1109	12	2500	1.8

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
07151000	SALT FORK ARKANSAS RIVER AT TONKAWA, OK--CONTINUED								
1963			5548	8.2	424	280	125	38	1044
1968			9222						
1969			5153						
1970			4456	8.3	399	268			811
1971		192	7006	8.3	409	280			1476
1972		242	8256	7.6	496	348			1672
1973		1882	4782	7.8	426	290	118	41	916
1974		2586	3210	7.8	397	224	107	31	494
1975		2601	3171	7.8	371	190	94	33	536
07152500	ARKANSAS RIVER AT RALSTON, OK								
1944	3775		994	7.6	291	160	80	22	395
1945	3042		1764	7.5	356	195	98	28	
1950	7402		2052	7.8	375	217	103	29	395
1951	13174		1874	7.8	371	196	102	28	331
1952	4267		2064	7.9	388	210	104	31	299
1953	1268		2506	8.0	361	202	97	29	401
1954	792		2883	7.9	371	216	100	29	452
1955	1530		2848	7.9	365	208	100	28	441
1956	1251		2826	7.8	392	225	102	34	445
1957	8646		2397	7.9	339	186	96	24	423
1958	6081		1708	8.1	343	166	96	25	272
1959	3942		1947	8.1	356	188	99	26	336
1960	8816		1517	8.1	332	165	92	25	232
1961	7592		1483	8.2	303	137	85	22	265
1962	6918		1434	8.3	310	131	101	26	222
1963	2322		1897	8.2	324	149	92	24	274
1965	11106		1102	8.4	248	118			
1966	1807		2003	8.4	386	231			
1967	2341		2117	8.4	342	180			314
1968	3158		1987	8.3	307	140			297
1969	6895		3263	8.2	272				195
1970	4012		1914	8.5	362	178			267
1971	1917	2364	1843	8.4	290	133			279
1972	2256	6370	2154	7.8	306	147			328
1973		12547	1490	7.7	279	128	89	24	210
1974		16280	1290	8.0	258	101	75	18	165
1975		10674	1382	7.9	271	104	75	20	181

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OK--CONTINUED									
1963		7	170	3	287	1594	11	3227	
1968					354	2920		5804	
1969					288	1453		3032	
1970			152	3	301	1216		2635	2.3
1971			153	2	298	2163		4228	2.4
1972			180	0	349	2502		4929	2.1
1973			167	0	307	1381		2963	1.9
1974			195	0	261	772		1890	2.7
1975		6	223	1	234	774		1937	
07152500 ARKANSAS RIVER AT RALSTON, OK									
1944	230		164	0	168	340	9.0	988	3.8
1945	309		168	14		496	9.4	1254	2.5
1950	263	15	193	0	213	446	18	1208	4.0
1951	216	9	211	1	219	372	14	1135	3.7
1952	275	6	218	0	219	425	15	1232	3.4
1953	374	8	194	0	181	600	9.6	1458	3.4
1954		9	190	0	184	718	14	1638	3.7
1955		7	190	1	166	707	5.4	1606	5.0
1956	432	7	204	0	193	686	15	1625	4.8
1957	359	6	185	1	145	587	13	1384	5.6
1958	224		212	2	167	344	16	1017	5.4
1959	258	5	198	2	191	426	15	1174	4.2
1960	188	8	199	2	161	293	16	927	4.4
1961	170	5	197	2	125	306	13	874	3.0
1962	180	6	209	5	130	277	13	886	3.9
1963	267	5	199	4	145	423	14	1128	4.2
1965	135		150	4	149	180		660	3.6
1966	274		180	4	272	385		1232	3.3
1967		7	185	6	193	467	9.2	1271	4.2
1968			196	4	135	454		1170	2.5
1969			203	11	136	293		865	3.5
1970					197	392		1154	4.6
1971			178	6	140	412		1078	4.4
1972			194	1	151	489		1204	5.2
1973			184	0	134	310		912	4.4
1974			187	1	104	245		757	5.5
1975		6	202	0	108	274		800	

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
		07157950	CIMARRON RIVER NEAR BUFFALO, OK						
1953			5585	8.0	456	265	111	44	
1960	29		9223	8.0	591	439	156	49	
1961	262		3816	8.2	398	224	95	39	
1962	241		6832	7.9	451	283			
1963	600		8681						
1968	60		13399						
1969	254		8148						
1970	116		7200	8.3	427	304	86		1451
1971		46	19182	8.2	670	570			4279
1972	22	124	8615	8.1	470	308			1931
1973		386	7596	7.9	496	321	126	43	1629
1974		176	8207	8.2	580	390	146	53	1345
1975		136	8316	8.1	587	408	147	53	1768
		07157960	BUFFALO CREEK NEAR LOVEDALE, OK						
1973			2425	7.6	1355	1220	410	77	96
1974		272	2509	7.8	1261	1144	344	100	131
1975		21	2780	8.0	1415	1261	362	124	149
		07157980	CIMARRON RIVER NEAR FREEDOM, OK						
1973			24743	7.8	1028	881	248	97	8840
1974		442	22727	8.0	910	742	234	79	4259
1975		340	26157	7.9	1047	878	262	95	5926
		07158000	CIMARRON RIVER NEAR WAYNOKA, OK						
1951	492		18930	8.1	932	786	214	97	
1952	432		16052	8.2	971	803	245	87	
1953	272		24422	7.9	1014	861	266	85	
1954	282		26642	8.0	982	818	240	93	1006
1955	132		21994	8.1	1062	918	280	90	264
1956	59		27950	8.2	1076	923	270	98	
1957	1066		29316	8.0	1248	1073	279	132	5315
1958	164		19221	8.1	976	830	238	91	4448
1959	367		34472	8.0	1113	1011	249	109	4890
1960	742		15617	7.6	1103	943	310	80	3845
1961	176		23220	7.8	1206	1055	230	78	5158
1962	575		18041	7.8	787	614			
1963	495		22396						

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
		07157950	CIMARRON RIVER NEAR BUFFALO, OK						
1953	1034		232	0	254	1595		3280	
1960	1935		181	2	369	3091	15	5738	0.90
1961	676		208	2	198	1055	16	2360	1.2
1962	1355		205	0	266	2092		4096	
1963						2791			
1968					454	4581		6822	
1969					309	2558		4966	
1970			142	4	287	2227		4297	2.4
1971			116	1	562	6554		12807	1.6
1972			197	0	278	2962		5602	1.6
1973			210	1	299	2481		4993	1.9
1974			234	0	358	2721		5115	2.4
1975		8	216	1	356	2563	17	5195	
		07157960	BUFFALO CREEK NEAR LOVEDALE, OK						
1973			163	0	1115	188		2268	0.47
1974			191	0	1170	195		2173	0.96
1975		8	196	0	1220	165		2463	
		07157980	CIMARRON RIVER NEAR FREEDOM, OK						
1973			168	0	635	13300		23905	3.4
1974			199	0	573	9239		15999	2.4
1975		13	201	0	680	10700		20415	
		07158000	CIMARRON RIVER NEAR WAYNOKA, OK						
1951	4612		198	9	588	6487		13135	7.7
1952			215	2		4993			
1953	8200		187	0	660	8836		22540	
1954			204	1	10400	9803			
1955			173	3		7932			
1956			180	4		10144			
1957			204	1		11720			
1958			172	3		6154			
1959			186	0		12293			
1960			196	0	1010	5309	13	13246	
1961			185	0	845	8073	12	14920	
1962	3819		211	0	499	6198		11305	
1963						7965			

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07158000 CIMARRON RIVER NEAR WAYNOKA, OK--CONTINUED								
1968	164		33372						
1969	329		21872						
1970	123		23231	8.2	778	648			5309
1971		65	44962	8.1	1216	1110			11669
1972		131	27606	8.0	870	712			6812
1973		1377	22176	8.0	865	699	227	64	5576
1974		657	17750	8.1	910	739	238	78	3854
1975		260	21192	7.9	1055	885	271	91	5230
	07158400 SALT CREEK NEAR OKEENE, OK								
1973			9535	7.6	595	520	164	46	1905
1974	174	270	10966	7.9	951	767	268	67	2053
1975		552	8691	7.9	1083	904	313	75	1765
	07159100 CIMARRON RIVER NEAR DOVER, OK								
1951			8463	7.8	626	485	160	55	
1953			18100	8.0	879	701	216	82	
1973			5713	7.6	303	184	85	22	1187
1974		2563	10188	7.9	641	466	169	53	2158
1975	2144	3858	8677	7.9	686	491	180	58	1775
	07159750 COTTONWOOD CREEK AT SEWARD, OK								
1973	522	269	1032	7.9	342	138	86	34	94
1974	200	221	1227	8.0	415	144	98	40	107
1975	764	321	1072	8.0	377	118	87	38	92
	07161000 CIMARRON RIVER AT PERKINS, OK								
1953	235		10852	8.0	701	527	180	62	1588
1954	305		11091	8.1	684	513	179	58	2259
1955	20		10588	8.1	705	518	181	62	2231
1956	544		10260	8.0	776	578	197	69	2132
1957	3342		7391	8.1	596	418	159	49	1662
1958	950		9096	8.2	694	497	179	60	2370
1959	695		9339	8.1	698	512	183	59	1985
1960	2705		6304	8.0	642	457	168	54	
1961	1445		6956	8.1	607	423	157	53	1791
1962	1355		6021	8.2	542	344	143	53	
1963	954		8298	8.3	568	393	155	45	1978

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
			07158000 CIMARRON RIVER NEAR WAYNOKA, OK--CONTINUED						
1968					863	12927		22819	
1969					516	7822		14110	
1970			152	2	524	8222		14819	2.3
1971			119	0	781	18164		29780	
1972			189	1	522	10573		18725	1.5
1973			194	0	552	8648		15175	2.4
1974			209	1	601	6687		12750	1.9
1975		11	204	0	773	8096		15634	
			07158400 SALT CREEK NEAR OKEENE, OK						
1973			94	0	440	2920		5872	2.5
1974		7	218	0	725	3505		7432	4.2
1975			227	0	916	2717		6119	
			07159100 CIMARRON RIVER NEAR DOVER, OK						
1951	1619		172	0	340	2587		5150	3.8
1953	3900		218	0	566	6085		11200	
1973			147	0	164	1717		1105	2.5
1974		7	213	0	446	3271		6434	3.1
1975		8	211	0	524	2725		5446	
			07159750 COTTONWOOD CREEK AT SEWARD, OK						
1973			249	0	171	110		678	11
1974			325	1	187	125		770	12
1975		4	306	4	169	99		686	
			07161000 CIMARRON RIVER AT PERKINS, OK						
1953	2372		211	1	377	3452	13	6516	3.5
1954	1504		208	1	362	3537		6625	3.4
1955			219	1	314	3505	9	6566	2.1
1956	1931		239	1	437	3102	16	8308	3.4
1957	1361		212	3	301	2223	16	4384	4.4
1958	1677		236	2	420	2688	19	5513	4.5
1959	1923		220	2	432	3017	16	5890	2.8
1960	1152		224	1	410	1793	14	3838	2.2
1961	1164		221	2	408	2033	14	4262	2.3
1962	1104		235	3	339	1712	18	3654	2.3
1963	1612		202	4	329	2569	16	5002	

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07161000	CIMARRON RIVER AT PERKINS, OK--CONTINUED							
1965	2040		7012	8.2	439	308			1368
1966	453		8663	8.4	554	396			1628
1967	514		11426	8.4	607	440			2384
1968	549		10908	8.5	582	428			2225
1969	1039		9307	8.9	517				1903
1970	391		10657	8.4	627	449			2189
1971	293	214	8990	8.5	551	364			1835
1972		402	11349	8.0	599	429			2404
1973		1981	7512	7.8	514	352	96	32	1581
1974		3365	6249	8.0	484	293	126	42	1081
1975	3540	4570	4397	8.0	511	295	132	44	802
	07164400	ARKANSAS RIVER AT SAND SPRINGS BRIDGE NEAR TULSA, OK							
1947	8096		4003	7.9	522	382	143	40	737
1948	8063		3615	7.6	480	338	135	35	614
1949	13047		2998	8.1	439	292	123	32	588
1950	9315		3382	7.8	474	317	130	36	694
1951	15624		3282	7.8	464	294	127	36	611
1952	5444		3332	7.8	460	295	123	37	524
1953	1822		4497	7.9	513	371	139	40	730
1954	1280		5699	8.0	582	449	161	44	978
1955	3227		5698	7.9	623	490	174	46	945
1956	1901		5609	7.9	608	460	160	51	972
1957	14447		4019	7.9	474	337	133	35	753
1958	7825		3248	8.1	410	242	111	32	607
1959	5633		3221	8.1	403	240	106	34	581
1960	14024		2628	8.1	391	232	104	32	407
1961	10547		2853	8.1	364	202	100	28	469
1962	9615		2208	8.2	341	163	94	25	336
1963	4841		2672	8.2	308	153	105	31	442
1964	2465		3085	8.3	319	184			549
1965	8445		2449	8.2	254	144			416
1966	2607		2981	8.3	320	206			458
1967	3492		2992	8.3	302	171			512
1968	4557		2110	8.2	226	107			350
1969	8782		3591	8.3	233	129			292
1970	5177		1984	8.4	272	129			306
1971	2900		1812	8.4	236	106			284

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07161000 CIMARRON RIVER AT PERKINS, OK--CONTINUED									
1965			152	4	240	2146		4139	4.4
1966			182	5	318	1402		5234	2.8
1967			192	6	336	3684	14	6952	3.2
1968			185	8	324	3438		6515	2.4
1969					595	2978		5690	3.1
1970			194	11	372	3378		6464	7.9
1971			213	8	296	2859		5434	3.4
1972			206	1	331	3741		7012	3.4
1973			197	0	283	2450		4761	3.0
1974			236	1	295	1763		3688	3.8
1975			261	0	318	1242	12	2778	
07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE NEAR TULSA, OK									
1947	647		160	5	257	1093	4.8	2273	2.8
1948	599		172	0	185	1047	18	2161	4.2
1949	489		172	4	206	827	6.6	1818	5.0
1950	507		189	0	227	905	13	1973	3.9
1951	464		207	0	231	843	15	1943	4.0
1952	526		202	0	212	858	15	1958	3.5
1953	763		173	0	184	1286	8.4	2638	2.8
1954	1170		162	0	189	1688	8.4	3354	3.5
1955			162	0	177	1656	6.6	3289	4.0
1956	938		181	0	234	1617	9.7	3270	4.2
1957	639		166	1	168	1120	11	2350	4.4
1958	507		203	1	211	809	13	1881	3.8
1959	521		193	3	209	832	16	1928	2.8
1960			191	2	202	643	9.1	1579	3.0
1961			195	1	186	726	13	1689	1.9
1962			209	4	155	519	15	1332	3.2
1963			185	2	145	682	10	1563	2.6
1964			180	7	150	874		1768	
1965			129	3	128	649	9.4	1407	1.5
1966			132	3	236	678	7.2	1604	1.3
1967			155	2	170	781	5.1	1714	1.5
1968			140	2	103	534		1181	1.8
1969					124	450		1060	2.0
1970			164	5	135	460		1144	2.9
1971			150	4	106	431		1033	2.2

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
07164400 ARKANSAS R AT SAND SPRINGS BRDG NEAR TULSA, OK--CONTINUED									
1972		2102	2497	8.0	258	126			440
1973		12928	2101	7.7	259	130	90	24	339
1974		14861	1447	8.0	235	97	66	16	199
1975		17763	1490	8.0	246	97	68	19	208
07175500 CANEY RIVER NEAR RAMONA, OK									
1953	1063		873	7.7	210	80	64	12	81
1959	2219		652	7.8	180	77	64	11	62
1960	685		851	8.2	250	104	76	16	79
1961	2743		862	8.1	230	112	70	13	84
1962	1572		876	8.2	239	90			84
1965	1962		775	7.8	174	72			73
1966	974		919	8.0	225	99			
1967	370		1030	8.3	254	132			106
1968	746		700	8.2	204	77			60
1969	1678		564	8.4	185				42
1970	1007		740	8.4	221	84			63
1971	231		841	8.3	225	99			80
1972	729		683	7.7	206	70			57
1973	2619		535	7.4	168	54	70	11	41
1974		3426	501	7.8	164	46	52	8	37
1975		2596	480	7.8	168	41	53	8	32
07178050 BIRD CREEK NEAR CATOOSA, OK									
1965			604	7.6	170	73	50	11	55
1966			658	7.4	159	72			66
1967			668	7.7	163	63			67
1968			733	7.3					68
1970			660	7.5	164	65			65
1971			586	7.4	161	61			50
1972			692	7.6	198	78			66
1973			556	7.1	151	53	50	11	49
1974			564	7.8	154	52	46	9.4	50
1975			562	8.1	170	50	50	11	44

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07164400 ARKANSAS R AT SAND SPRINGS BRDG NEAR TULSA, OK--CONTINUED									
1972			157	1	122	669		1466	2.5
1973			156	0	133	519		1214	2.2
1974			161	0	93	314		792	4.4
1975			175	0	101	312	6.8	869	
07175500 CANEY RIVER NEAR RAMONA, OK									
1953	108		159	0	54	170		638	1.1
1959		4	124	0	39	124	6.0	415	3.5
1960			170	4	39	162		474	3.0
1961			139	2	28	188		514	2.5
1962			177	2	35	168		515	2.1
1965			130	0	34	158		520	1.4
1966	93		166	0	45	190		625	1.7
1967		6	142	3	53	216		652	4.8
1968			151	2	34	122		428	1.7
1969					28	84		342	
1970			155	6	33	131		456	2.4
1971			145	4	40	166		501	3.0
1972			165	0	34	114		411	2.3
1973			139	0	27	80		326	2.2
1974			142	0	24	77		300	2.4
1975		3	149	0	23	61		294	
07178050 BIRD CREEK NEAR CATOOSA, OK									
1965	58	7	121	0	42	97	8.2	379	13
1966			106	0	42	112		413	17
1967		7	123	0	39	110		409	14
1968						118		455	7.5
1970			120	0	34	110		397	18
1971			121	0	46	77		351	14
1972			145	0	48	115		440	17
1973			120	0	35	87		318	11
1974			125	0	36	88		318	7.6
1975		4	145	0	32	76		354	14

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
		07178600	VERDIGRIS RIVER NEAR INOLA, OK						
1948	5103		1181	7.7	249	114	72	17	148
1949	5615		759	8.2	183	71	62	12	92
1950	4884		802	7.8	218	74	66	13	101
1951	6492		914	7.8	253	81	76	15	118
1952	3641		856	7.8	230	74	68	15	88
1953	804		1094	7.6	207	90	60	14	116
1954	875		1486	7.9	241	128	71	16	197
1955	1215		1076	7.6	200	101	60	12	127
1956	285		1639	7.6	255	142	71	19	178
1957	6472		1148	7.6	230	116	65	16	71
1958	3897		824	7.9	240	97	71	15	107
1959	3175		768	7.9	213	85	64	13	76
1960	6747		683	8.0	215	74	66	12	56
1961	9490		575	8.0	179	58	55	10	47
1962	5559		675	8.0	210	64	65	12	52
1963	1555		1075	8.2	252	111	78	16	114
1964	855		1155	8.2	230	120	51	12	
1965	4533		650	8.1	172	62	58	15	
1966	809		805	8.2	200	76			
1967	2019		764	8.2	184	78			80
1968	3750		560	8.1	179	57			43
1969	6983		1461	8.2	157	39			28
1970	4978		515	8.4	174	46			37
1971			480	8.6	159	47			36
1972			410	7.9	127	32			28
		07178620	VERDIGRIS R AT NEWT GRAHAM LOCK AND DAM NR INOLA, OK						
1972			504	8.0	172	54			36
1973			369	7.4	135	37	47	8.9	22
1974		9615	330	7.9	124	28	38	6.8	18
1975		10195	398	7.8	148	38	45	8.5	28
		07193500	NEOSHO RIVER BL FT. GIBSON LAKE NEAR FT. GIBSON, OK						
1952	7489		323	7.7	137	42	43	7.2	11
1953	1928		365	7.9	157	42	49	8.3	13
1954	1158		361	7.8	154	46	48	8.3	14
1955	2889		344	7.5	137	49	44	6.3	14
1956	1547		326	7.5	137	44	44	6.5	12

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
			07178600 VERDIGRIS RIVER NEAR INOLA, OK						
1948	146	5	165	0	29	282	5.8	676	3.5
1949	76	6	161	1	29	151	8.4	457	3.3
1950	69	9	176	0	31	147	6.7	476	2.3
1951	75	6	209	0	33	166	6.3	548	3.0
1952	81	3	190	0	38	150	10	502	2.2
1953	148	5	143	0	32	245	5.8	624	7.0
1954	100	4	137	0	34	367		840	6.4
1955	231	5	121	0	34	243	6.8	608	8.2
1956		10	139	0	32	413	6.2	935	13
1957	143		139	0	37	257	8.2	671	10
1958	70		174	0	41	149	6.5	496	5.2
1959	66	4	157	1	31	141	7.0	460	5.1
1960		3	168	0	42	107	10	421	3.3
1961		3	146	0	32	88	11	359	3.2
1962		3	174	2	39	100	12	400	2.6
1963	128	5	170	2	44	231	9.6	653	4.1
1964	140	6	128	2	47	265	7.4	706	7.3
1965	61		132	1	32	114	7.4	395	4.8
1966	85		147	2	34	156	7.2	471	5.8
1967		6	122	3	44	143	7.9	456	9.0
1968			145	1	38	78		340	3.4
1969			139	2	33	48		268	
1970			147	4	34	62		310	3.8
1971			119	9	38	60		288	3.7
1972		6	110	0	32	45		319	2.4
			07178620 VERDIGRIS R AT NEWT GRAHAM LOCK AND DAM NR INOLA, OK						
1972		6	140	2	43	63		305	2.3
1973			122	0	32	36		229	2.4
1974		3	115	0	28	27	7.3	198	2.6
1975		3	136	0	36	46	6.4	249	
			07193500 NEOSHO RIVER BL FT. GIBSON LAKE NEAR FT. GIBSON, OK						
1952		2	116	0	49	10	8.5	202	2.8
1953		2	140	0	51	13	4.1	217	1.5
1954		2	131	0	50	18	3.8	211	0.53
1955		3	106	0	50	17	3.3	200	4.3
1956		3	114	0	46	15	4.8	198	3.1

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
07193500 NEOSHO R BL FT GIBSON LAKE NR FT GIBSON, OK--CONTINUED									
1957	9370		301	7.5	126	36	40	6.2	11
1958	8611		255	7.6	110	28	36	4.7	8.5
1959	4279		296	7.5	122	39	41	4.9	10
1960	10350		276	7.8	122	39	38	6.1	9.8
1961	13336		281	7.7	122	35	39	6.2	8.8
1962	8607		307	7.9	133	34	43	6.7	11
1963	3755		330	8.2	143	37	46	7.0	12
1964	2317		375	8.0	165	58	49	10	13
1965	5360		294	7.8	124	36			11
1966	3630		286	7.8	127	29			9.2
1967	4937		321	8.0	137	37			11
1968	10392		284	7.6	120	30			
1969	11417		289	7.6	128	36			
1970	7018		290	7.8	122	30			9.6
1971		7003	291	7.8	126	32			9.0
1972		3492	301	7.6	130	34			11
1973		19992	305	7.4	110	23	34	5.0	7.3
1974		22890	246	7.7	102	20	33	5.0	7.3
1975		15302	192	7.6	105	22	34	4.8	7.9
07198000 ILLINOIS RIVER NEAR GORE, OK									
1945			204	7.8	94	11	34	2.2	5.5
1948	1772		197	7.7	82	9	29	2.1	6.6
1954	806		191	7.6	86	6	30	2.4	4.2
1955	597		218	7.6	88	10	32	2.1	6.9
1956	376		218	7.4	94	10	32	3.3	5.9
1957	2636		207	7.4	87	7	31	2.3	7.3
1958	1798		187	7.3	79	7	29	1.8	5.8
1959	1034		182	7.6	84	10	29	3.0	5.7
1960	1926		169	7.8	79	7	28	2.3	3.6
1961	1916		163	7.7	73	6	27	1.3	3.0
1962	1446		171	7.8	79	5	30	1.7	4.0
1963	563		191	8.1	87	4	32	1.6	5.4
1964	132		219	7.9	98	9			
1965	1451		261	7.8	105	16			
1966	950		200	7.9	89	8			
1967	109		220	8.0	90	10			8.3
1968	1778		190	7.7	85	8			

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07193500 NEOSHO R BL FT GIBSON LAKE NR FT GIBSON, OK--CONTINUED									
1957		3	110	0	38	14	7.0	184	3.5
1958		3	100	0	31	10	6.4	163	4.0
1959		2	101	0	39	13	7.4	176	3.9
1960		2	100	1	38	12	9.7	190	5.5
1961		2	107	0	38	10	8.5	187	2.2
1962			119	1	41	10	9.6	200	3.9
1963		3	128	1	42	13	9.0	203	2.4
1964			130	0	59	17		235	0.86
1965			107	0	42	11		181	1.4
1966			120	0	32	9.8		167	1.5
1967		3	121	0	42	14		188	0.35
1968			110	0	38	9.2		159	0.87
1969			112	0	38	9.4		180	0.93
1970			115	0	35	9.7		176	1.1
1971			114	0	36	11		172	1.2
1972			116	0	40	12		174	0.35
1973		3	105	0	30	7.7	4.7	151	2.5
1974		3	102	0	28	7.0	6	154	
1975		3	99	0	29	8.4	5.8	156	
07198000 ILLINOIS RIVER NEAR GORE, OK									
1945		2	92	5	5.7	8.0	8.6	125	2.7
1948	8.5	2	90	0	7.2	11	8.9	115	2.6
1954		2	97	0	5.5	7.7	6.6	109	1.5
1955		2	95	0	8.2	13	5.1	123	3.2
1956		2	102	0	6.9	12	6.4	125	2.4
1957		2	98	0	6.4	12	7.8	123	2.4
1958		2	89	0	6.5	9.4	7.7	112	2.5
1959		1	91	0	7.8	8.6	5.7	109	2.0
1960		1	88	0	7.6	5.1	8.1	107	2.5
1961		1	82	0	5.4	4.1	7.1	100	1.8
1962			91	0	7.9	3.8	5.9	105	2.2
1963	5.6	2	102	0	6.4	6.1	8.6	116	4.5
1964	8.8		111	0	8.4	13		122	0.28
1965	17		107	0	11	30		167	0.46
1966	9.1		98	0	11	12		122	1.0
1967		2	98	0	11	16		119	0.18
1968			94	0	12	7.3		110	0.66

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07198000	ILLINOIS RIVER NEAR GORE, OK--CONTINUED							
1969	2430		172	7.4	80	10			
1970	1310		185	7.6	82	8			4.3
1971	1441		186	7.7	82	8			5.1
1972		596	199	7.6	88	8	27	1.8	4.7
1973		3120	174	7.0	77	8			4.5
1974		3064	150	7.7	66	5	24	1.2	3.2
1975		3461	162	7.8	73	7	26	1.6	3.7
	07228500	CANADIAN RIVER AT BRIDGEPORT, OK							
1949	947		1158	8.1	397	232	110	30	124
1950	779		1104	8.0	416	232	119	29	76
1951	655		1157	8.0	434	243	121	32	70
1952	75		1200	8.0	430	249	120	32	127
1953	117		998	8.1	385	208	112	26	85
1954	256		1187	8.2	375	203	108	26	111
1955	488		1034	7.9	358	180	104	24	84
1956	171		1194	7.9	455	258	126	34	
1957	672		1142	8.1	371	184	104	26	
1958	778		1444	8.1	368	186	96	31	198
1959	420		1209	8.2	388	224	110	28	184
1960	1053		1537	8.1	495	332	129	42	166
1964	46		1220	7.8	550	400			63
1970	123		1331	8.4	465	311			114
1971	79		972	8.4	394	217			60
1972	195		1350	8.2	442	263			128
1973	381		1368	8.0	446	263	118	32	127
1974	240		1274	8.0	500	307	144	36	90
1975	616	93	1812	8.1	715	508	188	60	66
	07229200	CANADIAN RIVER AT PURCELL, OK							
1963			1531	8.2	506	276			
1974		327	785	7.8	256	117	60	21	80
1975		1242	1438	8.0	527	313	137	46	123
	07231000	LITTLE RIVER NEAR SASAKWA, OK							
1952	849		21708	7.5	3057	2966	869	225	283
1953	73		39584	7.5	5575	5463	1556	410	
1954	60		41200	7.5	5759	5562	1606	412	

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07198000	ILLINOIS RIVER NEAR GORE, OK--CONTINUED							
1969			85	0	7.4	7.7		119	1.6
1970			90	0	9.4	6.4		104	0.90
1971			91	0	7.6	7.3		109	1.6
1972			97	0	8.3	7.8		112	1.1
1973			84	0	8.4	7.3		107	2.1
1974			74	0	6.4	4.5		90	2.0
1975		2	80	0	7.3	4.8		103	
	07228500	CANADIAN RIVER AT BRIDGEPORT, OK							
1949	103		201	1	287	118	11	794	2.8
1950	89		224	1	273	91	18	765	2.4
1951	99		231	0	284	98	19	799	2.4
1952	84		222	0	309	105	19	820	2.1
1953	62		216	1	266	64	14	682	2.0
1954			208	1	252	128	15	778	2.4
1955			214	2	223	89	17	670	2.9
1956	99		239	1	304	90	19	803	2.9
1957	109		217	3	226	121	21	734	2.9
1958	170		218	2	239	218		915	3.0
1959	102		196	2	264	135	17	808	2.7
1960	151		197	0	386	187	18	1066	3.4
1964			181	0	426	68		914	1.3
1970			172	7	336	146		940	3.1
1971			205	6	249	58		685	4.3
1972			215	2	287	171		919	2.4
1973			222	1	297	176		945	2.5
1974			234	0	340	104		882	2.1
1975			251	0	550	181		1342	1.3
	07229200	CANADIAN RIVER AT PURCELL, OK							
1963	156		264	10	383	151		1095	
1974			196	3	135	48		489	6.8
1975		6	266	0	368	137		1016	1.8
	07231000	LITTLE RIVER NEAR SASAKWA, OK							
1952	5612		117	0	52	8645		26481	
1953			131	0		16709			
1954			160	0		17086			

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07231000	LITTLE RIVER NEAR SASAKWA, OK--CONTINUED							
1955	28		58800	7.5	9936	9822	2853	684	
1956	56		56990	7.3	8941	8841	2359	744	
1957	970		17362	7.6	2586	2497	697	199	
1960	1870		2932	8.0	536	360	105	66	395
1961	370		2631	8.2	453	296	91	54	370
1962	201		2340	8.2	437	245	82	58	341
1963	149		3203	8.2	514	367	80	51	339
1964	174		2756	8.0	390	277	126	66	368
1965	144		2697	8.1	450	330			
1966	54		1874	8.2	338	204			
1967	105		3034	8.2	500	381			424
1968	348		2158	8.2	464	332			285
1969	274		2432	8.2	422				328
1970	229		2677	8.2	451	302			370
1971	327		2491	8.2	444	280			339
1972	79		2641	7.7	496	306			360
1973	950		1436	7.8	302	141	61	30	181
1974	1331		1751	8.0	346	139	75	40	242
1975	1372	828	1262	8.0	289	114	64	31	156
		07231500	CANADIAN RIVER AT CALVIN, OK						
1965	555		1536	8.2	289	166			200
1966	223		1589	8.3	384	232			187
1967	379		1903	8.3	374	210			258
1968	1209		1254	8.3	348	174			148
1969	1524		1358	8.4	300				163
1970	885		1457	8.4	321	150			177
1971	1258		1317	8.5	267	119			167
1972		581	1394	8.0	322	144			167
1973		3047	1048	7.9	264	90	54	22	120
1974		2496	1141	8.0	306	105	74	29	120
1975	452	3030	1028	7.9	339	218	85	30	92
		07232500	BEAVER RIVER NEAR GUYMON, OK						
1953	52		473	8.2	193	7	38	24	26
1955	56		514	7.7	225	28	43	26	23
1960	8.7		539	8.3	233	15	47	28	31
1961	6.9		536	8.1	225	14	46	27	30

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07231000		LITTLE RIVER NEAR SASAKWA, OK--CONTINUED						
1955			87	0		29472			
1956	12906		91	0	98	25595	11	44589	3.2
1957	3030		109	0	40	6787	12	12622	2.1
1960			215	0	22	847	8.6	1658	0.73
1961			188	2	27	761		1466	0.75
1962	311		229	2	27	636	12	1381	1.1
1963	498		176	2	31	953	11	1897	1.3
1964	397		137	0	24	824	13	1671	1.6
1965			144	1	28	782		1643	1.3
1966	248		159	2	31	504		1095	1.3
1967			139	3	38	889		1856	0.95
1968			162	1		595		1326	1.3
1969					31	671		1446	1.0
1970			176	2	34	753		1574	0.92
1971			199	1	34	692		1487	1.1
1972			232	0	31	736		1546	1.2
1973			194	1	20	359		907	1.4
1974			242	0	27	420		975	1.1
1975			225	0	18	292		699	
		07231500	CANADIAN RIVER AT CALVIN, OK						
1965			145	2	112	340		921	3.0
1966			177	3	198	305		982	2.4
1967		7	185	5	122	456		1162	2.4
1968			193	4	93	248		750	2.2
1969					91	285		809	3.0
1970			187	9	86	317		863	2.0
1971			173	4	50	300		747	0.89
1972			214	1	78	302		849	1.6
1973			308	1	60	208		640	2.0
1974			242	2	77	213		653	1.7
1975		5	236	0	134	142	8.0	631	2.4
		07232500	BEAVER RIVER NEAR GUYMON, OK						
1953			222	3		9.8			
1955			242	0		13			
1960	26	6	254	6	54	15	31	349	2.4
1961	29	4	252	3	52	17	27	341	2.8

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07232500	BEAVER RIVER NEAR GUYMON, OK--CONTINUED							
1962	13		500	8.4	212	12	38	26	29
1963	5.9		530	8.4	218	0	41	26	30
1968	8.0		558	8.0	232				31
1969	23		562	7.9	248				28
1970	9.7		546	8.0	230	14			28
1971	36		520	8.0	226	12			29
1972		156	484	8.0	216	16			26
1973		9.1	543	7.7	230	15			29
1974		70	455	7.9	214	8	46	24	26
1975		5.5	533	8.1	213	7	44	26	27
		07234000	BEAVER RIVER AT BEAVER, OK						
1962			2361	7.8	518	327			
1963			2872	8.0	588	390			
1968			3106	8.3	536	366			459
1969			3071	8.3	505				456
1970			3088	8.3	533	365			457
1971			3034	8.2	565	418	112	68	446
1972		122	2923	7.9	515	311	124	53	444
1973		127	3257	7.8	568	378	121	61	493
1974		2.8	4278	8.0	838	596	177	95	635
1975		8.1	2928	7.8	644	455	142	70	402
	07237500	NORTH CANADIAN RIVER AT WOODWARD, OK							
1962	99		1580	8.0	399	212			
1963	242		1466	7.6	366	186			153
1975		76	1794	8.0	512	311	137	41	207
	07241550	NORTH CANADIAN RIVER NEAR HARRAH, OK							
1969	431		1552	8.5	338	165	83	32	194
1970	138		2072	8.2	369	199	98	41	285
1971	111	108	1733	8.2	322	145			234
1972	93	72	1632	7.6	302	132			223
1973	488	610	1486	7.8	314	137	84	28	191
1974	498	320	1568	7.8	354	148	92	30	191
1975	690	986	1292	7.8	354	147	88	32	137

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07232500		BEAVER RIVER NEAR GUYMON, OK--CONTINUED						
1962	30	2	230	7	50	14	30	319	1.8
1963	35	6	247	5	55	16	28	336	2.1
1968					54	13		334	1.3
1969					53	14		359	1.1
1970			262	1	55	15		329	1.1
1971			260	0	54	13		328	1.2
1972			244	0	50	14		307	1.7
1973			262	0	54	16		334	1.4
1974			251	0	45	13		310	1.6
1975		5	256	0	46	14	22	307	
		07234000	BEAVER RIVER AT BEAVER, OK						
1962	312		232	0	293	498		1518	
1963	408		241	0	376	616		1870	
1968			202	3	343	703		1928	1.5
1969					319	718		1924	1.7
1970			200	3	371	688		1922	1.9
1971			177	1	394	677		1894	2.0
1972			248	0	290	682		1849	1.8
1973			232	0	364	769		2031	1.7
1974		9	291	0	554	1001	23	2708	2.1
1975		12	232	0	410	685		1982	
	07237500		NORTH CANADIAN RIVER AT WOODWARD, OK						
1962	192		225	2	235	273		1010	
1963			219	0	217	230		887	
1975		7	244	0	340	307	20	1197	
	07241550		NORTH CANADIAN RIVER NEAR HARRAH, OK						
1969			191	9	151	293		958	13
1970			199	4	144	451		1255	32
1971			212	2	123	351		1036	30
1972			208	0	129	319		976	28
1973			216	0	96	287		897	20
1974			256	1	124	301		932	23
1975		8	250	0	166	191		791	6.1

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07242000	NORTH CANADIAN RIVER NEAR WETUMKA, OK							
1954	284		13843	7.5	1707	1608	500	112	2385
1955	264		14143	7.6	1744	1657	500	121	2482
1956	175		10613	7.8	1080	1255	386	106	2002
1957	1626		2989	7.9	443	308	122	34	444
1961	501		1497	8.2	336	172	83	31	
1962	512		1481	8.1	328	147	92	34	247
1963	124		2094	8.3	356	199	84	32	258
1964	235		2055	8.3	352	202			
1965	302		1540	8.4	268	134			
1966	238		1628	8.4	317	152			319
1967	192		1829	8.4	323	143			
1968	570		1436	8.2	315	147			185
1969	746		1359	8.7	290				166
1970	382		1652	8.4	341	148			214
1971	420		1410	8.3	312	114			175
1972		475	1296	7.6	289	97			158
1973		1494	1043	7.8	253	88	72	21	119
1974		1247	1230	8.1	305	97	82	25	134
1975		1796	975	7.9	278	84	73	24	100
		07242350	DEEP FORK NEAR ARCADIA, OK						
1970	49		1430	7.8	264	130			187
1971	45	28	1280	8.1	248	111			169
1972	35	30	1443	7.4	262	108			197
1973	97	370	1292	7.4	294	118	64	30	154
1974	96	474	1228	7.4	299	101	66	33	134
1975	129	335	1214	7.6	340	103	73	38	122
		07243500	DEEP FORK NEAR BEGGS, OK						
1947	8782		3046		466	354	125	38	
1952	580		1348	7.9	274	108	61	30	170
1953	341		1506	7.9	274	121	63	28	186
1954	258		1331	8.1	268	100	60	29	173
1955	255		2046	7.7	348	192	84	34	279
1956	125		1111	7.7	258	53	55	29	102
1957	1753		1390	7.7	268	136	64	26	189
1958	804		1090	8.1	249	94	57	26	111
1959	538		1328	8.0	288	116	65	30	179

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07242000		NORTH CANADIAN RIVER NEAR WETUMKA, OK						
1954		40	122	0	52	4797		8736	6.5
1955			106	0	70	4870		8876	7.6
1956	1674		175	1	75	3483	14	6543	3.6
1957	433		161	2	71	834	13	1774	5.3
1961	193		191	4	100	323	13	916	4.2
1962	172		216	2	91	308	13	897	5.8
1963	295	10	181	5	95	521	13	1221	11
1964	286		174	5	95	511		1242	14
1965	203		152	6	59	363		920	5.3
1966	214		188	7	111	353		971	10
1967	250		204	8	87	419		1079	9.6
1968			198	5	70	310		850	10
1969					107	260		805	7.6
1970			218	9	85	361		976	10
1971			230	6	59	297		834	8.2
1972			234	0	66	261		758	8.2
1973			195	2	65	195		620	6.3
1974			253	0	69	226		745	8.2
1975		6	229	1	92	152		590	
		07242350	DEEP FORK NEAR ARCADIA, OK						
1970			162	0	148	240		881	51
1971			165	1	136	207		774	44
1972			187	0	145	249		848	39
1973			215	0	104	208		777	32
1974			246	0	118	181		725	26
1975		7	294	0	118	161		732	2.5
		07243500	DEEP FORK NEAR BEGGS, OK						
1947	456		137	0	73	903		1577	3.6
1952	166	5	202	0	28	310	10	757	2.7
1953	206	6	185	0	33	369	5.2	856	2.2
1954	76	6	202	2	30	298	8.0	736	2.9
1955		5	192	0	50	521	4.5	1164	2.3
1956	134	6	250	0	48	200	10	616	3.4
1957	171		160	1	37	335	7.2	796	2.7
1958	127	6	187	1	27	239	9.2	644	2.4
1959	156		208	0	39	304	7.0	775	2.4

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
		07243500	DEEP FORK NEAR BEGGS, OK--CONTINUED						
1960	1576		937	8.0	249	81	54	28	100
1961	595		861	8.1	220	61	46	25	91
1962	831		900	8.2	232	70	61	32	94
1963	175		1124	8.3	252	93	66	33	160
1964	331		1227	8.3	248	110			
1965	385		1017	8.2	202	84			
1966	218		981	8.3	209	70			
1967	380		1096	8.3	230	82			134
1968	714		938	8.1	232	87			109
1969	560		985	8.3	200				102
1970	320		1099	8.3	233	78			138
1971	522		864	8.2	212	86			98
1972		499	1018	7.6	239	89			116
1973		1833	647	7.5	162	52	42	20	67
1974		2100	875	8.0	209	60	47	24	87
1975		1931	699	8.0	204	47	44	23	67
		07245000	CANADIAN RIVER NEAR WHITEFIELD, OK						
1946			2224		415	298	107	36	
1947	8782		3046		466	354	125	38	
1948	7458		2873	7.7	417	320	122	32	
1949	7934		4315	7.9	641	515	175	49	1078
1950	9879		3493	7.4	469	364	128	36	1011
1951	4600		3840	7.7	557	413	149	44	846
1952	2620		4493	7.7	578	469	156	46	910
1953	3264		6314	7.7	815	709	226	61	624
1954	2972		6661	7.9	875	765	242	66	1075
1955	2614		5782	7.8	745	645	206	56	911
1956	1004		7225	7.8	988	874	263	80	1136
1957	11562		2710	7.8	419	310	114	33	451
1958	6186		1375	8.0	275	148	70	24	
1959	4177		1518	8.0	289	159	73	26	235
1960	10200		1093	8.0	250	119	62	23	124
1961	4356		995	8.1	237	100	58	22	113
1962	4691		939	8.0	226	93	71	22	105
1963	1858		1071	8.1	247	111	61	24	124
1964	98		1152	8.3	230	105			145
1967	1127		603	7.9	149	46			62

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07243500		DEEP FORK NEAR BEGGS, OK--CONTINUED						
1960		3	200	2	37	184	12	553	2.0
1961		3	190	2	31	161	8.1	510	1.6
1962			192	3	26	176	10	535	1.4
1963	119	4	182	6	34	247	8.8	658	2.3
1964	160		159	5	52	284		722	1.4
1965	126		140	2	34	229		590	1.4
1966	115		160	4	40	203		563	1.9
1967		6	172	4	48	228		632	1.7
1968			172	2	36	195		541	2.1
1969					34	185		519	2.7
1970			179	5	59	222		634	2.8
1971			149	2	33	176		494	2.5
1972			182	0	41	208		580	2.3
1973			132	1	30	125		390	2.4
1974			190	1	31	173		472	2.8
1975		4	207	1	27	112		398	
	07245000		CANADIAN RIVER NEAR WHITEFIELD, OK						
1946	294		147	0	122	665		1389	4.4
1947	459		126	5	73	903		1809	3.6
1948	435		118	0	45	907	8.8	1716	4.5
1949	730	26	154	0	71	1451	6.4	2700	4.7
1950	483	39	128	0	45	1039	7.8	1939	4.2
1951	515	21	174	0	80	1150	12	2376	4.1
1952	704	16	132	0	44	1421	12	2712	3.5
1953	1235	24	129	0	40	2042	46	3851	2.7
1954			133	0	46	2166		4054	2.9
1955		8	121	0	66	1787	16	3391	3.8
1956	1131	17	140	0	61	2319	14	4398	3.9
1957	381	8	132	0	42	786	13	1647	3.5
1958	165		154	0	53	322		810	3.2
1959	186	5	156	1	47	380	11	899	2.3
1960		8	158	1	64	227	11	652	2.2
1961		4	164	1	77	187	11	601	2.0
1962		5	159	1	66	179	12	561	2.7
1963			163	2	71	218	10	654	1.4
1964			148	2	42	266	12	664	2.0
1967		5	122	1	40	103		348	0.86

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07245000	CANADIAN RIVER NEAR WHITEFIELD, OK--CONTINUED							
1968	6379		460	7.9	116	36			46
1969	6199		470	7.9	120	40			45
1970	3534		483	8.3	124	38			47
1971	6239	4328	431	8.4	107	27			42
1972		2152	427	7.8	113	30			42
1973		9296	415	7.5	110	29	29	9.1	38
1974		5310	373	8.0	107	23	28	8.6	29
1975	11182	8958	386	7.8	119	35	31	10	32
	07246400	ROBERT S. KERR LOCK AND DAM NEAR SALLISAW, OK							
1972			679	7.9	141	46			89
1973			539	7.5	136	48			64
1974			574	7.9	132	38	39	8.4	61
1975			511	7.9	148	44	42	9.8	62
	07303395	ELM FORK N FORK RED R AT SALTON CROSSING NR CARL, OK							
1973		196	6831	7.9	1804	1720	574	94	907
1974		77	11914	7.8	2248	2137	663	134	2075
1975		66	6989	7.7	1888	1788	590	102	955
	07303400	ELM FORK NORTH FORK RED RIVER NEAR CARL, OK							
1960	42		24931	7.7	2452	2368	666	192	4216
1962	21		22076	7.8	2196	2010			4707
1963	17		30671	7.7	2667	2578			
1968	167		27421						
1969	30		37816						
1970	10		74227	7.8	5224	5168			31062
1971		13	69407	7.9	4548	4462			23923
1972		13	40755	7.8	2796	2696			11086
1973		95	26644	7.7	2497	2403	684	190	6570
1974		84	20527	7.8	2807	2709	714	246	5969
1975		30	19235	7.7	2397	2294	677	171	4685
		07304500	ELK CREEK NEAR HOBART, OK						
1950	73		1399	8.2	611	307	130	70	128
1959	92		1509	8.3	612	349	140	64	141
1960	119		1463	8.2	635	314	136	72	108

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07245000 CANADIAN RIVER NEAR WHITEFIELD, OK--CONTINUED									
1968			96	0	29	76	8.9	271	0.86
1969			94	1	34	76		275	1.1
1970			99	3	34	77		280	0.90
1971			91	3	21	72		245	0.50
1972			100	1	24	71		246	0.99
1973			98	0	25	64		248	1.1
1974			100	0	21	50		210	1.7
1975		3	102	0	31	51	6.0	230	
07246400 ROBERT S. KERR LOCK AND DAM NEAR SALLISAW, OK									
1972			115	0	45	136		412	0.89
1973			107	0	47	97		337	1.2
1974			115	0	41	96		321	4.7
1975		3	122	0	46	91		332	
07303395 ELM FORK N FORK RED R AT SALTON CROSSING NR CARL, OK									
1973			105	0	1540	1479		4983	2.7
1974			123	0	1671	4256		9980	5.7
1975		10	127	0	1618	1548		5132	
07303400 ELM FORK NORTH FORK RED RIVER NEAR CARL, OK									
1960			104	0	1829	8655		17120	
1962			105	0	1821	7335		14907	
1963	7073		109	0	1878	11329		22186	
1968					1859	9755		19543	
1969					2008	17332		32284	
1970			82	0	2408	49582		86031	
1971			89	0	2295	38274		68017	
1972			116	0	1839	17553		28519	
1973			120	0	1764	10482		20032	3.3
1974			118	0	1774	16695		31244	6.2
1975		21	134	0	1743	7623		15227	
07304500 ELK CREEK NEAR HOBART, OK									
1950	90	19	365	19	386	84	7.8	981	5.4
1959	86	8	311	6	415	114	9.7	1069	5.2
1960		3	376	8	375	108	16	1064	11

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07304500		ELK CREEK NEAR HOBART, OK--CONTINUED						
1961	113		1494	8.3	663	327	135	79	102
1962	141		1627	8.2	703	406	164	101	116
1963	49		1555	8.4	665	435	165	98	108
1970	22		1498	8.6	607	334			120
1971	36		1346	8.5	480	271			123
1972	43		1142	8.4	458	194			88
1973	136		987	8.0	395	143	84	47	70
1974	54		1326	8.1	540	252	111	63	96
1975	112	1205	1234	8.1	512	239	105	64	79
	07305000		NORTH FORK RED RIVER NEAR HEADRICK, OK						
1955	209		8681	7.3	1257	1137	385	72	
1960	393		6303	8.0	1086	932	294	86	1151
1961	586		5178	8.0	1005	857	270	80	1071
1962	399		6434	8.0	1070	908	265	100	1069
1963	204		6112	8.1	1073	934			
1968	287		8328						
1969	565		7196						
1970	90		11234	8.0	1260	1173			2123
1971		179	11000	8.1	1289	1208			2109
1972		96	9851	7.9	1248	1095			1837
1973		471	9040	7.7	1184	1038	285	69	1778
1974		481	8286	7.9	1099	934	298	87	1400
1975		622	5241	8.0	920	740	250	76	909
	07311000		EAST CACHE CREEK NEAR WALTERS, OK						
1952	107		852	7.8	226	17	66	15	110
1953	70		664	8.0	224	88	126	84	77
1961	503		635	8.2	232	29	69	18	48
1962	169		604	8.1	217	21			46
1963	133		641		157				55
1970	43		658	8.4	177	18			68
1971	58		630	8.6	170	20			68
1972		32	631	8.1	164	14			66
1973		231	584	7.5	170	24	51	9.1	55
1974		166	614	7.7	184	15	56	11	58
1975		529	603	7.8	184	15	55	11	53

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07304500		ELK CREEK NEAR HOBART, OK--CONTINUED						
1961		4	395	7	402	93	16	1117	8.9
1962		4	350	6	480	111	18	1228	9.8
1963		4	263	9	499	105	14	1181	5.7
1970			292	20	405	114		1084	4.3
1971			231	11	346	126		941	2.3
1972			306	8	238	92		786	3.0
1973			302	2	194	66		664	6.2
1974			359	0	315	92		905	7.5
1975		5	355	2	295	73		865	
	07305000		NORTH FORK RED RIVER NEAR HEADRICK, OK						
1951	1175		181	0	783	2064		4430	2.2
1955			146	0		2456			
1960	1006	14	188	1	851	1634	13	4179	4.5
1961	750	7	179	1	801	1251	11	3507	2.3
1962	1059	6	196	1	834	1661	10	4260	
1963	1131		168	1	836	1540		4032	
1968					974	2280		5423	
1969					848	1935		4715	
1970			104	1	1038	3338		7204	1.7
1971			88	1	941	3371		7176	1.6
1972			187	0	856	2944		6506	2.0
1973			179	0	807	2874		6167	2.5
1974			199	0	827	2338		5204	1.6
1975		9	204	0	714	1479	7.7	3796	
	07311000		EAST CACHE CREEK NEAR WALTERS, OK						
1952	65	7	273	1	60	90	12	513	16
1953	203	8	262	8	52	68	42	400	17
1961	16		236	7	50	50		398	10
1962			238	2	57	41		382	
1963						55			
1970			183	6	57	62		409	24
1971			143	13	58	62		391	28
1972			177	5	55	63		385	13
1973			178	0	45	61		354	11
1974			209	0	45	56		369	18
1975		6	205	1	54	53		374	

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
		07311200 BLUE BEAVER CREEK NEAR CACHE, OK							
1968	22		157	7.1	51	2	13	4.7	11
1969	8.4		138	7.5	44	8	12	3.6	10
1970	3.0		172	7.8	51	1	14	3.7	13
1971	0.94		221	7.7	72	2	20	5.6	18
1972		21	149	7.6	50	0	14	4.0	11
1973		19	143	6.9	49	4	14	4.2	11
1974		7.8	184	7.7	56	0	16	4.2	14
		07324200 WASHITA RIVER NEAR HAMMON, OK							
1970	2.0	30	1773	8.1	982	838			61
1971		37	1357	8.2	741	614			32
1972		1.2	1032	7.9	578	390			23
1973		50	1125	7.7	552	368	129	64	41
1974		14	1656	8.0	873	643	198	89	73
1975		110	1691	8.1	910	686	202	98	69
		07324400 WASHITA RIVER NEAR FOSS, OK							
1947			1408		784	615	193	74	51
1948			1642		943	778	228	92	
1970	13		1510	8.3	774	600			68
1971	11		1409	8.2	729	552			60
1972		10	983	8.2	494	224			43
1973		21	1097	7.8	561	253	85	62	46
1974		34	1018	8.1	483	222	95	60	44
1975		39	964	8.0	469	191	90	59	43
		07325500 WASHITA RIVER AT CARNEGIE, OK							
1954	252		1751	8.1	750	571	209	59	116
1955	323		1641	7.9	735	552	207	53	115
1956	211		1804	7.9	886	641	224	75	115
1957	522		1629	8.1	770	565	205	63	82
1958	112		1681	8.0	825	617	215	70	104
1959	366		1642	8.1	788	599	214	62	121
1960	449		1659	8.0	828	642	207	76	87
1961	347		1592	8.1	826	628	207	75	76
1962	375		1785	8.0	927	723			85
1963	161		1753	8.1	890	722	293	94	86
1964	114		1705	8.1	848	749			78

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
		07311200	BLUE BEAVER CREEK NEAR CACHE, OK						
1968		2	62	0	15	7.9	14	106	0.58
1969		2	53	0	14	6.6	12	90	0.34
1970		1	66	0	16	6.7	15	106	0.09
1971		2	89	0	24	10	12	136	0.38
1972		1	68	0	22	5.7	12	96	0.23
1973		1	56	0	16	7.7	13	94	0.23
1974			87	0	11	7.3		123	0.37
		07324200	WASHITA RIVER NEAR HAMMON, OK						
1970			174	1	898	29		1531	0.93
1971			150	2	634	18		1104	2.6
1972			222	1	400	16		855	2.6
1973			226	0	410	24		871	2.2
1974			250	0	708	38		1378	0.91
1975		6	235	0	770	36		1427	
		07324400	WASHITA RIVER NEAR FOSS, OK						
1947	43	8	204	4	639	30	12	1100	2.8
1948	32		201		780	22		1273	2.8
1970			203	4	688	28		1245	1.1
1971			215	1	626	22		1154	2.7
1972			328	1	283	15		724	1.4
1973			371	0	324	15		810	1.9
1974			314	2	289	17		720	2.5
1975		5	344	0	247	17		680	
		07325500	WASHITA RIVER AT CARNEGIE, OK						
1954			221	0	591	146		1297	3.7
1955		5	224	0	564	149	10	1226	3.6
1956	90	4	276	0	656	116	22	1395	3.6
1957	84		243	3	556	116	23	1263	3.4
1958	93		252	1	655	99	14	1339	2.8
1959	79	5	227	2	629	105	15	1316	2.9
1960	85	4	230	0	689	77	18	1359	4.6
1961		3	240	1	666	70	16	1339	3.1
1962			248	0	756	85	17	1496	4.2
1963		4	203	0	758	87	25	1448	
1964			120	0	756	94		1434	

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07325500	WASHITA RIVER AT CARNEGIE, OK--CONTINUED							
1965	363		1639	8.0	790	667	200	68	78
1966	226		1914	8.0	963	779	243	76	100
1967	73		1905	8.3	943	778			97
1968	204		1710	8.3	836	662			88
1969	302		1630	8.3	796	635			83
1970	95		1868	8.2	946	772			95
1971	78		1674	8.3	816	645			92
1972	122		1540	8.1	764	577			81
1973	355		1447	7.7	684	495	174	54	78
1974	268		1714	8.0	845	634	222	70	85
1975	449	1029	1795	8.1	969	744	243	87	76
	07331000	WASHITA RIVER NEAR DURWOOD, OK							
1944	952		741		337	184	92	30	
1945	3520		693	8.1	337	157	84	31	47
1946	2368		602		396	171	88	46	
1947	2539		895		385	179	84	40	
1949	1723		858		359	195	89	33	42
1951	1794		1043	8.1	464	254	106	48	
1952	629		1015	8.0	411	273	94	43	76
1953	518		922	8.1	349	168	86	34	67
1954	1258		1015	8.1	394	218	99	36	65
1955	878		878	8.0	340	173	88	30	90
1956	440		1192	7.9	501	314	117	51	76
1957	3487		836	8.0	343	175	84	32	
1958	934		931	8.1	392	190	94	38	
1959	640		1134	8.0	463	284	116	42	67
1960	1594		1064	8.1	488	302	135	46	66
1961	1135		1002	8.1	440	251	108	42	62
1962	1345		1126	8.2	498	306	127	46	61
1963	629		1200	8.2	503	356	121	52	84
1964	340		1187	8.4	473	331	90	39	
1965	818		963	8.2	386	257			
1966	501		1204	8.3	532	389			
1967	436		1175	8.3	485	325	94	32	76
1968	1161		833	8.2	346	190			47
1969	1521		878	8.2	358	196			49
1970	622		1070	8.3	448	275			63

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07325500		WASHITA RIVER AT CARNEGIE, OK--CONTINUED						
1965			149	0	682	88	15	1313	3.4
1966			223	1	819	100		1597	3.2
1967		6	196	3	807	110		1540	2.0
1968			210	5	676	95		1393	
1969			188	3	671	84		1330	
1970			208	2	805	93		1548	3.1
1971			198	6	687	92		1369	2.7
1972			225	2	609	82		1248	2.6
1973			230	0	524	82		1127	3.7
1974			258	0	673	84		1370	4.8
1975		5	267	0	763	62		1499	
	07331000		WASHITA RIVER NEAR DURWOOD, OK						
1944	34		181	9	211	40		570	3.5
1945	37		211	5	161	48	13	524	2.7
1946	50		263	5	179	65		617	2.9
1947	51		245	3	192	66		602	2.4
1949	48		196	2	200	63		587	3.7
1951	54		254	1	264	66		734	2.1
1952	63	4	168	0	248	76	14	691	2.1
1953	63	5	221	1	188	83	9.5	604	2.0
1954		5	213	1	220	93	14	666	1.8
1955	69	4	202	1	174	76	5.8	563	2.9
1956	72	5	230	0	326	92	14	817	2.4
1957	47		201	1	167	68	12	548	2.9
1958	56		243	2	193	76		618	1.8
1959	67	3	213	2	296	97	12	791	2.6
1960	60	3	225	1	315	65	15	783	2.8
1961	50	3	224	3	257	73	13	711	2.4
1962		5	231	2	327	70	14	817	2.5
1963	74	4	174	3	378	91	15	847	4.2
1964	80	1	63	5	343	105		854	
1965	57		155	1	260	78		670	3.6
1966	65		172	2	398	78		899	3.9
1967		5	185	4	346	90	5.4	843	3.5
1968			187	2	197	60		571	2.2
1969			195	4	205	61		602	1.8
1970			200	5	283	82		737	2.5

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07331000		WASHITA RIVER NEAR DURWOOD, OK--CONTINUED						
1971	737		832	7.6	316	148			55
1972	478		926	8.1	390	202			56
1973	2308		775	7.7	316	138	86	31	43
1974	1976	607	1008	8.1	418	195	102	40	56
1975		3369	870	8.1	381	181	94	37	
	07335700		KIAMICHI RIVER NEAR BIG CEDAR, OK						
1966			25	6.1	6	2	1.8	0.5	3.9
1967			29	6.7	7	0	1.3	0.9	2.5
1968			24	6.7	5	0	1.1	0.8	1.9
1969			24	7.0	6	0	1.6	0.5	2.1
1970			26	7.1	7	1	1.3	1.0	2.0
1971			28	6.9	7	1	2.0	1.2	2.3
1972			20	6.8	6	0	1.2	0.7	2.1
1973		57		7.2	8	2	1.8	0.9	2.0
1974		111		7.1	8	1	1.6	0.8	2.5
1975		76		6.8	9	2	2.3	0.7	2.4

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07331000		WASHITA RIVER NEAR DURWOOD, OK--CONTINUED						
1971			200	2	156	74		544	2.3
1972			288	1	211	72		634	2.0
1973			215	1	143	61		510	2.4
1974		4	272	0	197	76	9.2	657	2.7
1975		5	250	0	205	66	9.3	660	
	07335700		KIAMICHI RIVER NEAR BIG CEDAR, OK						
1966			6	6	4.1	3.2	7.4	23	0.90
1967		1	9	9	3.1	2.4	7.3	23	0.36
1968		1	6	0	3.8	2.8	6.4	25	0.06
1969		1	9	0	2.9	1.7	7.4	20	0.29
1970		1	8	0	5.0	1.8	8.0	23	0.06
1971		1	8	0	2.7	2.7	7.9	25	0.18
1972		1	8	0	2.6	2.2	8.2	22	0.28
1973		1	9	0	3.5	2.8	6.5	23	0.20
1974		1	9	0	3.1	2.3	7.5	26	0.18
1975		1	10	0	3.0	2.9	7.2	26	

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	RESERVOIR STORAGE	KSC	PH	HRD	NC HRD	CA	MG	NA
	07229900 LAKE THUNDERBIRD NEAR NORMAN, OK							
1967		437	8.0	189	7			17
1968	35205	438	8.2	187	6			17
1969	66820	423	8.0	189	6			16
1970	76850	460	8.0	199	5			19
1971	105750	388	8.0	168	5			16
1972	102666	419	8.0	184	6			18
1973	116282	398	7.3	173	8			16
1974	120482	409	7.9	174	6	35	21	17
1975	120650	406	8.2	170	4	34	20	17
	07238500 CANTON RESERVOIR NEAR CANTON, OK							
1960	110011	1024	7.7	308	158	78	28	104
1961	109870	1129	8.0	307	175	72	31	122
1962	108389	1167	7.7	308	171	74	30	127
1963	104397	1277	7.6	335	198	77	34	140
1968	101009	1318	8.1	335	180			147
1969	115212	1349	7.8	331	170			152
1970	96384	1443	7.9	344	183			174
1971	64860	1664	7.9	384	208			204
1972	71600	1579	7.8	364	207			196
1973	106857	1451	7.5	349	190			171
1974	111355	1551	7.9	376	218	89	37	179
1975	81466	1448	8.0	437	270	104	43	140
	07324300 FOSS RESERVOIR NEAR FOSS, OK							
1964	74032	1715	8.1	927	789			
1965	78262	1805	7.9	959	832			
1966	88792	1766	8.0	946	810			
1967	95351	1969	8.0	1060	925			81
1968	93028	2061	8.0	1110	978			87
1969	110478	1960	7.9	1020	890			84
1970	114836	1990	8.0	1050	916			88
1971	106616	2102	8.0	1108	977			96
1972	98350	2150	8.0	1167	1060	219	147	101
1973	96972	2146	7.4	1182	1054	223	154	102
1974	106714	2156	8.2	1128	986	213	147	100

TABLE 4.--MEAN VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
			07229900 LAKE THUNDERBIRD NEAR NORMAN, OK						
1967		8	219	1	12	28		238	0.21
1968		6	218	2	14	27	1.7	243	0.37
1969			222	0	8.9	26		245	0.34
1970			236	0	13	28		261	0.20
1971			198	0	9.1	24		213	0.06
1972			216	0	10	28		232	0.28
1973			199	1	9.9	26		220	0.24
1974			205	0	9.3	26		227	0.33
1975		5	206	0	9.3	26		221	
			07238500 CANTON RESERVOIR NEAR CANTON, OK						
1960		6	182	0	179	134	7.2	661	1.2
1961		5	161	0	201	164	10	716	1.4
1962			167	0	202	167	9.7	720	1.0
1963			166	0	226	193		808	1.9
1968			187	1	206	200		798	0.50
1969			196	0	180	219		817	0.43
1970			195	0	205	241		876	0.30
1971			188	0	260	286		1009	1.1
1972			191	0	228	280		968	0.31
1973			194	0	208	244		899	0.56
1974			193	0	238	258		953	0.32
1975		8	205	0	291	189		944	
			07324300 FOSS RESERVOIR NEAR FOSS, OK						
1964	57		167	0	835	34		1474	0.19
1965	67		155	0	889	36		1558	0.35
1966	62		166	0	856	38		1494	0.22
1967		12	164	0	1007	42		1704	0.10
1968			158	1	1071	43	10	1805	0.08
1969			159	0	976	43	11	1733	0.26
1970			163	0	1003	42		1719	0.07
1971			160	0	1092	47		1821	0.27
1972			150	0	1133	50		1893	0.21
1973			151	0	1173	53		1934	0.35
1974			159	1		52		1880	0.24

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07148450	SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OK							
1962	656		2600	8.5	1280	1160	432	112	149
1973			2110	8.2	1000	870	310	63	120
1974	4490	3380	2730	8.3	1300	1100	360	90	220
1975		3670	2630	8.7	1100	1000	360	73	220
	07150500	SALT FORK ARKANSAS RIVER NEAR JET, OK							
1951	901		6780	8.1	572	438	157	47	
1952	3550		9340	8.1	1090	1010	269	102	
1953	717		18600	8.4	1310	1210	338	118	
1954	1460		23500	9.8	1300	5470	309	119	
1955	3998		38200	8.3	1770	1610	493	201	8530
1956	1014		26000	8.3	1580	1490	297	204	
1957	8840		38000	8.2	1810	1640	480	149	8930
1960	829		5620	8.0	735	600	192	62	1050
1961	640		5850	7.9	620	480	156	58	1080
1962	1895		18000	8.5	895	773	183	122	979
1963	3170		11800	8.2	598	482	163	47	2240
1968	613		17100						
1969	1550		16900						
1970	3610		17000	8.4	830	720			3700
1971	890		20700	8.7	940	840			4700
1972		609	22400	8.4	960	825			5200
1973		8660	18600	8.3	1000	920	280	84	4500
1974		2580	10900	8.2	770	640	210	65	2200
1975	8840	3010	10300	8.3	690	530	190	58	2000
	07151000	SALT FORK ARKANSAS RIVER AT TONKAWA, OK							
1952		6530	6630	8.1	780	640	206	64	567
1953		264	11500	8.2	960	748	248	83	
1954			16700	8.5	1030	861	270	102	
1955			14100	8.4	936	750	255	83	
1956		10500	17900	8.4	914	824	211	116	40
1957			14400	8.9	738	602	199	76	
1958			7240	8.4	1010	896	304	63	
1959			6890	8.4	625	462	178	51	
1960			4980	8.5	700	530	186	68	876
1961			11700	8.7	640	463	180	52	2480
1962			8150	8.6	660	500	165	52	1580

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OK								
1962	155	7	256	8	1170	220	25	2250	2.9
1973			204	0	850	150		1680	2.4
1974			301	0	1000	320		2180	6.6
1975			230	2	920	340		2130	
	07150500 SALT FORK ARKANSAS RIVER NEAR JET, OK								
1951	1310		204	0	464	1980		4210	4.6
1952			198	0		2700		2430	
1953			202	5		6210			
1954			188	4		7930			
1955			264	8	1390	13800	16	27100	1.4
1956			234	8		8920	8.9	16100	
1957			208	0		13300			
1960			180	0	593	1600	10	3370	1.6
1961			208	0	480	1650	9.0	3590	4.0
1962	3780		252	10	636	5910	17	11100	
1963			141	0	623	3800		6490	
1968					900	5700		10600	
1969					711	5550		10600	
1970			200	6	685	5600		10500	4.5
1971			192	18	760	7300		13400	3.1
1972			200	2	760	7800		14300	2.7
1973			212	0	940	7000		1300	5.3
1974			258	0	630	3500		6900	3.1
1975			237	0	470	3000		5990	
	07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OK								
1952	609		266	0		1870		2240	
1953			292	0		3590			
1954	3830		315	10		5470			
1955	3210		306	4		4580			
1956			236	6		5960			
1957	3910		275	16	561	4630			0.4
1958	1390		236	16		2120		1150	4.2
1959	1360		248	4	491	2020		3830	
1960		16	276	12	558	1350	18	3120	6.0
1961		8	284	12	500	3840	14	7130	7.2
1962		9	312	20	525	2400	15	4970	1.9

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
07151000	SALT FORK ARKANSAS RIVER AT TONKAWA, OK--CONTINUED								
1963			9530	9.3	590	455	142	46	2020
1968			11300						
1969			8160						1170
1970			6140	8.5	518	425			
1971		2000	10900	8.7	590	450			2300
1972		2490	12700	8.4	600	520			2600
1973		13800	11500	8.6	750	640	200	62	2500
1974		22600	6800	8.4	660	430	180	50	1300
1975		27700	4970	8.6	540	350	130	54	920
07152500	ARKANSAS RIVER AT RALSTON, OK								
1944	5560		1820	8.0	324	190	87	26	
1945	5530		2560	7.6	410	270	110	33	
1950	58850		3120	8.2	556	354	154	45	449
1951	112200		4070	8.5	582	370	154	48	438
1952	20100		3420	8.3	505	350	138	43	454
1953	15600		4580	8.5	456	290	122	39	816
1954	7620		5800	8.5	550	394	152	43	1090
1955	23400		6060	8.4	495	377	132	45	1060
1956	41900		5030	8.2	570	454	156	45	847
1957	91900		5620	8.7	455	278	144	38	518
1958	44920		3420	8.6	500	278	137	46	338
1959	35750		2760	8.5	530	295	156	54	400
1960	85290		2160	8.6	505	266	136	41	240
1961	135700		2370	8.7	630	400	194	35	308
1962	57560		2240	8.6	475	212	126	33	305
1963	16350		5610	8.8	440	276	106	31	567
1965	40530		1920	8.7	384	207			
1966	7230		2580	8.8	535	350			
1967	26850		4370	9.1	480	272			772
1968	35700		4080	8.9	460	224			730
1969	50700		3990	9.0	392				699
1970	78100		2440	9.3	464	249			374
1971	12300	6720	3280	9.9	440	212			560
1972	6370	9900	4700	9.0	440	240			790
1973		116000	2710	8.3	420	250	110	33	430
1974		204000	2400	8.9	420	190	120	30	360
1975		110000	2100	8.8	410	170	120	31	320

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OK--CONTINUED									
1963		8	260	16	450	3100	15	5710	
1968					463	3620		7800	
1969					419	2450		4790	
1970			230	12	461	1750		3520	12
1971			240	16	540	3500		6580	7.6
1972			272	4	500	4000		7650	5.4
1973			288	6	650	3800		7140	6.0
1974			347	11	470	2000		4060	6.1
1975		11	374	18	390	1400		2960	
07152500 ARKANSAS RIVER AT RALSTON, OK									
1944	276		170	0	211	422	9.0	988	4.0
1946	370		199	19	206	606	11	1480	5.0
1950	477	24	264	0	390	785	18	1760	9.3
1951	667	12	295	12	346	1080	18	2530	7.2
1952	536	8	319	0	319	912	19	2000	7.8
1953	780	10	243	8	281	1250	16	2670	7.6
1954		12	250	4	259	1650	22	3230	9.8
1955		10	241	6	298	1700	8.0	3390	13
1956	895	10	270	0	285	1400	21	2920	15
1957	1070	6	246	10	209	1670	20	3260	14
1958	612		396	22	297	930	18	2110	21
1959	421	7	288	28	344	600	21	1670	8.3
1960	283	10	300	10	266	488	17	1330	10
1961	344	6	282	12	214	525	21	1340	7.1
1962	315	6	312	16	215	485	21	1420	6.2
1963	1040	6	306	16	275	1600	18	3380	8.8
1965	290		204	12	252	410		1150	6.5
1966	412		264	16	465	625		1580	8.9
1967		9	248	24	325	1200	18	2570	9.8
1968			288	16	230	1120		2380	5.6
1969					197	1080		2300	7.2
1970			234	26	304	580		1470	11
1971			266	46	260	860		1930	10
1972			276	16	250	1200		2550	11
1973			266	0	270	660		1610	8.7
1974			303	16	190	570		1330	12
1975		9	319	13	150	480		1210	

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
		07157950	CIMARRON RIVER NEAR BUFFALO, OK						
1953			5890	8.2	484	284	120	45	
1960	66		54100	8.5	1520	1390	426	111	
1961	879		7000	8.5	550	389	110	52	
1962	1170		20500	8.2	712	553			
1963	4480		26200						
1968	300		25600						
1969	3700		45900						
1970	450		27200	8.6	830	738	94		6600
1971		296	63300	8.5	1400	1330			17000
1972		700	58100	8.4	1300	1100			17000
1973		3520	26800	8.5	1200	1000	360	75	6700
1974		527	30200	8.4	1600	1500	480	100	4500
1975		392	27000	8.9	1500	1300	450	96	6700
		07157960	BUFFALO CREEK NEAR LOVEDALE, OK						
1973			3610	7.7	2100	1900	630	120	160
1974		3290	5100	8.1	2000	1800	570	160	490
1975		270	4700	8.3	2000	1800	550	160	450
		07157980	CIMARRON RIVER NEAR FREEDOM, OK						
1953			35000	8.0	1060	895	247	109	
1973			58200	8.1	2200	2000	550	200	16000
1974		2620	61200	8.4	2200	2100	650	180	16000
1975		2700	93400	8.5	2400	2100	760	210	27000
		07158000	CIMARRON RIVER NEAR WAYNOKA, OK						
1951	922		31300	8.3	1210	1000	300	136	
1952	3050		25800	8.4	1530	1400	477	140	
1953	1750		51800	8.4	1660	1510	461	152	
1954	2920		61700	8.4	1920	1700	459	232	1870
1955	955		60700	8.5	1900	1700	526	247	340
1956	273		64700	8.5	1920	1810	460	213	
1957	15200		125000	8.4	3440	3300	892	393	27000
1958	585		31900	8.5	1400	1300	434	138	7800
1959	1480		57900	8.1	1420	1350	315	149	8770
1960	9260		31000	8.1	1710	1590	494	133	7100
1961	641		33200	8.1	1800	1680	242	86	7700
1962	3010		34600	7.9	1360	1240			
1963	2880		52900						

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07157950		CIMARRON RIVER NEAR BUFFALO, OK						
1953	1110		244	0	269	1710		3430	
1960	13800		260	8	1000	21500	21	37200	1.7
1961	1340		316	8	335	2120	17	4220	1.8
1962	4540		238	0	504	7020		12500	
1963						9410			
1968					825	9500		15800	
1969					683	18000		31700	
1970			236	16	600	10000		17200	8.5
1971			180	8	1400	27000		45600	8.5
1972			250	4	800	26000		43600	9.4
1973			304	10	920	10000		17200	7.0
1974			290	3	1000	13000		21200	4.3
1975		12	273	11	1000	8900	21	18900	
	07157960		BUFFALO CREEK NEAR LOVEDALE, OK						
1973			235	0	1700	330		3540	0.84
1974			280	0	1700	850		4270	4.8
1975		14	251	0	1500	210		3960	
	07157980		CIMARRON RIVER NEAR FREEDOM, OK						
1953	8340		207	0	667	13000		22900	
1973			208	0	1500	25000		43400	4.1
1974			303	7	1200	30000		50400	5.1
1975		36	297	0	1200	42000		74300	
	07158000		CIMARRON RIVER NEAR WAYNOKA, OK						
1951	7340		232	45	793	11500		20000	9.7
1952			263	6		8910			
1953	10000		261	6	686	20700		27400	
1954			364	12		26000			
1955			291	18		24500			
1956			300	16		26700			
1957			380	16		63200			
1958			240	20		12000			
1959			610	0		22900			
1960			257	0	1370	11800	14	21000	
1961			261	0	1430	12000	14	22400	
1962	8800		304	0	887	13700		22700	
1963						21000			

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07158000 CIMARRON RIVER NEAR WAYNOKA, OK--CONTINUED								
1968	1100		49500						
1969	5900		48900						
1970	706		37300	8.5	1360	1200			9080
1971		368	71000	8.4	1900	1700			20000
1972		460	58000	8.9	1600	1500			16000
1973		32500	54100	8.5	1500	1300	390	100	15000
1974		11000	38800	8.4	1700	1600	450	140	11000
1975		1210	29200	8.4	1400	1200	380	130	9100
		07158400 SALT CREEK NEAR OKEENE, OK							
1973			17600	7.9	1000	910	270	80	3600
1974	501	2200	34500	8.3	2000	1900	620	120	8900
1975		8400	36100	8.4	2000	1900	640	120	8100
		07159100 CIMARRON RIVER NEAR DOVER, OK							
1951			11600	7.9	848	695	208	80	
1953			18900	8.0	922	726	228	86	
1973			12300	7.7	560	400	150	46	2700
1974		23800	20300	8.4	950	810	270	82	4800
1975	25500	9170	21300	8.4	1200	1000	320	91	5000
		07159750 COTTONWOOD CREEK AT SEWARD, OK							
1973	3230	2680	1450	8.5	520	240	130	49	160
1974	5480	883	2350	8.4	550	220	130	59	150
1975	6520	8000	1850	8.6	520	180	120	54	130
		07161000 CIMARRON RIVER AT PERKINS, OK							
1953	4540		27400	8.5	1130	978	303	105	3140
1954	9250		23800	8.5	1880	1640	392	219	5000
1955	144		30100	8.5	1130	933	284	104	7590
1956	41900		21200	8.6	1110	937	324	104	2980
1957	108000		30600	8.6	1120	930	292	104	2200
1958	27700		16700	8.9	1050	783	277	106	2390
1959	43500		22800	8.6	1140	974	310	102	2470
1960	52400		11700	8.5	920	724	256	85	
1961	25110		16300	8.5	1030	792	262	92	2260
1962	22400		14600	8.6	868	642	172	65	
1963	25470		17700	8.6	930	809	191	65	2240

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
		07158000 CIMARRON RIVER NEAR WAYNOKA, OK--CONTINUED							
1968					2120	20200		35400	
1969					973	19500		34400	
1970			230	16	1170	14000		24700	3.2
1971			212	6	1200	31000		54600	
1972			248	20	990	25000		42700	2.9
1973			272	6	1300	23000		40000	7.5
1974			320	14	1100	30000		51100	4.2
1975		18	272	0	1000	14000		25000	
		07158400 SALT CREEK NEAR OKEENE, OK							
1973			113	0	770	5500		10900	4.8
1974		16	333	0	1300	14000		26300	7.4
1975			338	0	1400	13000		24100	
		07159100 CIMARRON RIVER NEAR DOVER, OK							
1951	2360		229	0	495	3690		7150	4.5
1953	4110		240	0	588	6410		11800	
1973			206	0	340	3800		7630	2.9
1974			310	2	680	7300		14100	6.0
1975		12	334	0	860	8000		14800	
		07159750 COTTONWOOD CREEK AT SEWARD, OK							
1973			364	6	250	170		1000	24
1974			421	20	260	180		1030	20
1975		8	421	62	240	150		928	
		07161000 CIMARRON RIVER AT PERKINS, OK							
1953	6260		362	11	745	9790	14	17600	5.5
1954	2180		319	10	709	8420		15200	11
1955			290	16	840	11500	10	20500	4.5
1956	4580		332	16	851	7240	24	90400	7.3
1957	6950		312	20	646	10900	26	19600	8.7
1958	3180		365	24	669	4970	21	10200	9.0
1959	4960		342	12	765	7770	23	14300	6.0
1960	2340		330	14	683	3640	24	7120	9.6
1961	3380		332	14	656	5320	21	10200	6.8
1962	3030		408	20	587	4770	21	9160	2.3
1963	3920		285	18	527	6160	19	11700	

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07161000	CIMARRON RIVER AT PERKINS, OK--CONTINUED							
1965	33370		12400	8.6	800	642			2460
1966	2218		9910	8.8	860	692			3540
1967	17100		21200	8.7	1010	804			4730
1968	7880		21400	9.5	1080	930			4920
1969	15400		21500	9.8	932				4710
1970	8160		24600	8.9	930	730			5520
1971	5790	934	22400	9.4	890	680			5000
1972		2160	17500	8.6	890	680			3900
1973		11600	20700	8.6	880	670	170	61	4900
1974		30500	13900	8.6	860	550	220	75	2800
1975	4320	75000	8970	9.4	790	490	200	74	1900
	07164400	ARKANSAS RIVER AT SAND SPRINGS BRIDGE NEAR TULSA, OK							
1947	65880		15300	8.1	1280	1200	214	62	1140
1948	40600		6380	8.2	796	670	227	61	995
1949	113000		5340	8.5	690	520	191	53	691
1950	86500		6900	8.1	776	630	209	62	809
1951	108700		5860	8.4	758	520	210	59	941
1952	27400		5880	8.3	726	590	187	63	593
1953	10800		9150	8.4	835	738	232	63	1780
1954	18250		16900	8.6	2010	1920	588	132	3070
1955	42500		16000	8.4	1120	994	328	82	3350
1956	79200		16200	8.4	1610	1530	438	126	2070
1957	205000		21200	8.6	2600	2510	705	205	1170
1958	44980		7750	8.6	640	456	178	66	731
1959	71600		6720	8.6	590	384	150	62	717
1960	175800		5010	8.7	600	458	162	52	876
1961	121700		6980	8.5	630	440	176	61	1320
1962	107000		6280	8.6	550	310	138	40	1210
1963	19460		7390	8.6	570	373	116	34	1420
1964	16050		6460	8.7	520	328			1210
1965	69550		6840	8.8	460	318			1300
1966	6090		6320	8.8	448	292			980
1967	26270		5380	9.3	410	256			997
1968	14200		3760	8.6	332	173			666
1969	37900		3320	8.7	350	209			606
1970	34200		3390	9.1	400	209			558
1971	9160		3060	9.4	340	170			500

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07161000 CIMARRON RIVER AT PERKINS, OK--CONTINUED									
1965			195	20	450	3880		7450	12
1966			246	22	478	3050		5940	9.3
1967			267	16	534	7360	26	16400	9.4
1968			264	22	630	7500		13300	20
1969					544	7500		14100	7.2
1970			242	38	520	8650		15700	18
1971			406	32	500	7900		14100	32
1972			292	14	510	6000		11000	10
1973			286	12	540	7500		13700	7.2
1974			398	14	550	4500		8250	7.5
1975			400	8	510	2900	18	5570	
07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE NEAR TULSA, OK									
1947	1770		210	18	416	5030	6.0	5360	12
1948	1220		236	12	276	2100	30	3890	12
1949	1000		241	33	327	1720	15	3310	8.0
1950	1250		265	14	394	2150	20	4270	7.8
1951	1050		306	9	365	1740	21	3530	11
1952	1020		308	5	323	1780	18	3460	9.0
1953	1560		227	8	304	2820	13	5380	7.8
1954	1890		244	10	368	5960	10	10900	9.0
1955			236	6	411	5120	10	9600	10
1956	2980		268	8	528	5370	16	10100	12
1957	3830		222	10	323	7450	16	13500	15
1958	1430		308	12	333	2300	16	4510	7.8
1959	1300		268	20	350	2000	21	4040	6.3
1960			320	14	389	1400	15	3050	7.8
1961			288	10	361	2100	18	4180	6.2
1962			352	16	270	1900	20	3630	4.4
1963			312	16	275	2250	14	4350	4.6
1964			256	41	232	1920		3770	
1965			208	10	250	2050	23	4120	8.5
1966			194	16	315	1500	16	3090	4.9
1967			210	26	220	1550	11	3020	2.7
1968			194	10	155	1000		2080	3.6
1969					149	925		1890	3.4
1970			216	18	215	850		2010	4.9
1971			188	28	140	810		1740	4.2

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
07164400 ARKANSAS R AT SAND SPRINGS BRDG NEAR TULSA, OK--CONTINUED									
1972	7500		3360	9.3	340	180			620
1973	82000		4600	8.3	360	190	100	28	770
1974	87600		2400	8.6	350	160	97	25	390
1975		100000	2440	9.4	370	180	94	33	360
07175500 CANEY RIVER NEAR RAMONA, OK									
1953	6940		1250	8.2	322	134	99	20	154
1959	5680		944	8.5	292	146	94	14	92
1960	4120		1190	8.6	350	165	110	20	144
1961	8440		1970	8.6	450	292	138	27	236
1962	8340		1510	8.5	336	154			170
1965	13900		1970	8.1	318	160			141
1966	5720		2050	8.4	340	176			
1967	7065		1650	9.1	382	270			204
1968	10000		1590	9.4	334	183			185
1969	11400		1040	9.9	320				108
1970	13100		1180	9.6	330	161			113
1971	4870		1520	9.7	390	220			170
1972	10800		1090	8.7	300	130			100
1973		10300	1320	8.5	340	170	110	17	130
1974		29600	1540	8.5	400	210	130	19	150
1975		20800	983	8.4	300	100	96	14	79
07178050 BIRD CREEK NEAR CATOOSA, OK									
1965			1090	8.3	290	165	94	21	83
1966			1130	8.1	256	153			129
1967			1100	8.2	260	119			118
1968			939	8.1					85
1970			1420	8.0	248	209			175
1971			1010	7.9	210	100			84
1972			1150	8.3	300	140			120
1973			836	7.6	230	88	66	16	78
1974			922	8.6	240	120	69	17	110
1975			898	8.4	270	88	79	18	73

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07164400 ARKANSAS R AT SAND SPRINGS BRDG NEAR TULSA, OK--CONTINUED									
1972			202	12	170	920		1990	4.6
1973			212	0	200	1200		2340	4.8
1974			229	4	160	620		1410	7.0
1975			236	4	180	540	9.7	1370	
07175500 CANEY RIVER NEAR RAMONA, OK									
1953	121		252	0	82	312	0.0	964	2.3
1959		5	188	8	61	177	9.0	595	4.6
1960			272	12	56	280		735	5.9
1961			192	12	65	520		1230	5.0
1962			222	8	57	352		872	2.3
1965			196	0	81	550		1380	4.0
1966	139		212	6	81	508		1350	12
1967		9	196	20	112	435		1150	18
1968			200	12	65	395		1020	3.6
1969					50	222		626	
1970			206	22	51	250		746	5.6
1971			208	26	72	370		940	8.7
1972			230	10	71	220		664	4.0
1973			216	0	58	290		822	5.3
1974			251	7	41	360		961	3.8
1975		4	238	0	36	180		570	
07178050 BIRD CREEK NEAR CATOOSA, OK									
1965	109	11	164	2	135	210	11	622	47
1966			146	0	86	265		740	52
1967		12	184	0	63	229		691	48
1968						158		594	15
1970			164	0	47	348		846	70
1971			180	0	61	160		509	42
1972			192	0	76	230		727	37
1973			176	0	56	150		454	31
1974			170	0	48	220		533	22
1975		5	223	0	54	140		547	70

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
		07178600	VERDIGRIS RIVER NEAR INOLA, OK						
1948	46200		4010	8.1	500	340	133	41	398
1949	36100		1630	8.8	351	180	106	24	204
1950	39200		1260	8.2	322	150	96	21	131
1951	48200		1870	8.7	424	190	125	28	191
1952	27400		1800	8.5	302	152	86	25	215
1953	19900		1850	8.3	320	168	92	23	221
1954	35870		3800	8.5	430	297	136	36	590
1955	23280		4580	8.3	485	342	128	45	756
1956	7928		5510	8.0	580	439	180	50	619
1957	53480		5040	8.3	560	390	140	51	137
1958	28920		1280	8.5	365	192	101	32	137
1959	33940		1150	8.4	335	166	106	24	110
1960	45670		1130	8.6	390	158	113	26	130
1961	67000		1500	9.1	305	134	91	23	192
1962	24540		2940	8.6	300	295	91	16	115
1963	11830		2440	8.5	405	256	94	21	205
1964	15740		2320	9.6	346	211	56	13	
1965	25220		1660	8.9	252	147	61	16	
1966	5667		1780	8.8	358	243			
1967	10760		1610	9.3	292	171			206
1968	21400		824	8.6	256	100			78
1969	26500		648	9.4	242	72			44
1970	33500		901	9.1	276	112			76
1971			1150	9.4	290	140			120
1972			600	8.9	190	55			39
		07178620	VERDIGRIS R AT NEWT GRAHAM LOCK AND DAM NR INOLA, OK						
1972			742	9.2	250	100			68
1973			713	8.4	210	100	64	13	55
1974		30100	480	8.5	170	46	51	10	39
1975		28200	665	8.5	270	120	73	22	210
		07193500	NEOSHO RIVER BL FT. GIBSON LAKE NEAR FT. GIBSON, OK						
1952	15510		384	8.0	160	49	50	9.1	16
1953	7055		396	8.2	171	48	52	10	15
1954	5399		383	8.1	158	52	50	9.4	16
1955	6758		382	8.3	152	61	51	8.9	17
1956	3698		341	8.0	150	55	46	8.5	13

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
		07178600	VERDIGRIS RIVER NEAR INOLA, OK						
1948	674	14	255	9	53	1250	12	1880	12
1949	230	10	252	16	46	435	11	914	12
1950	142	14	249	7	55	290	12	726	4.2
1951	218	12	315	15	58	420	8.1	1150	8.7
1952	250	6	255	9	57	465	18	1010	6.5
1953	257	8	188	4	60	470	8.8	1030	19
1954	145		180	12	65	1150		2230	20
1955	879	9	182	2	81	1350	10	2470	27
1956		15	208	0	66	1650	9.0	3060	36
1957	934	13	210	2	116	1700	12	2930	34
1958	138		236	8	77	275	8.0	761	11
1959	107	5	260	10	63	223	12	689	14
1960		4	294	16	66	255	15	683	7.3
1961		3	206	16	86	365	12	956	8.5
1962		4	252	16	97	440	14	714	5.0
1963	336	11	244	8	53	675	13	1590	26
1964	341	7	220	24	83	630	11	1400	19
1965	228		168	20	49	425	8.8	1000	17
1966	223		290	16	62	465	15	980	19
1967		10	160	28	75	380	8.4	928	31
1968			202	10	62	152		509	13
1969			210	24	56	82		434	
1970			210	24	58	153		584	9.7
1971			178	44	60	250		678	12
1972			160	10	44	68		740	4.3
	07178620	VERDIGRIS R AT NEWT GRAHAM LOCK AND DAM NR INOLA, OK							
1972		9	184	38	71	130		459	5.1
1973			170	5	51	100		407	4.3
1974		4	151	1	47	67	9.6	276	4.7
1975		5	191	0	120	320	8.3	887	
	07193500	NEOSHO RIVER BL FT. GIBSON LAKE NEAR FT. GIBSON, OK							
1952		3	140	0	57	14	10	229	3.9
1953		2	158	0	57	15	6.2	233	3.3
1954		3	141	0	54	21	8.0	221	1.8
1955		4	126	2	54	23	6.2	216	8.0
1956		4	123	0	48	18	10	208	4.5

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
07193500 NEOSHO R BL FT GIBSON LAKE NR FT GIBSON, OK--CONTINUED									
1957	48180		367	8.0	158	52	50	8.5	17
1958	33450		302	8.0	128	43	42	5.6	10
1959	12290		345	8.1	140	60	50	8.3	14
1960	34180		351	8.4	150	52	48	9.7	13
1961	64800		335	8.1	144	52	46	7.9	13
1962	16820		358	8.3	158	46	50	8.0	15
1963	15400		374	8.4	156	46	50	8.9	16
1964	73400		394	8.4	190	72	52	11	17
1965	20100		317	8.0	132	47			17
1966	13300		315	8.2	140	33			15
1967	45200		336	8.4	144	48			12
1968	26000		299	8.1	128	33			
1969	22500		313	8.3	142	48			
1970	45600		382	8.3	134	31			12
1971		15300	320	8.0	140	45			11
1972		16900	311	8.3	140	45			12
1973		54400	713	8.0	140	43	38	5.8	13
1974		52100	280	8.2	110	29	36	5.6	8.6
1975		47200	289	8.1	130	40	42	6.5	12
		07198000 ILLINOIS RIVER NEAR GORE, OK							
1945			242	8.4	104	22	38	2.7	8.7
1948	22200		386	8.4	120	38	39	5.6	13
1954	1717		210	8.0	92	12	33	3.6	5.5
1955	1783		242	8.3	96	22	34	3.4	10
1956	839		248	7.9	107	15	37	4.6	9.0
1957	8046		234	7.9	102	15	35	4.1	13
1958	4068		264	7.8	92	20	33	2.7	16
1959	2435		198	8.2	90	24	32	6.2	7.8
1960	5075		193	8.2	98	16	30	5.6	6.2
1961	5003		178	8.1	80	10	30	2.4	4.8
1962	2851		188	8.0	90	12	34	3.5	7.6
1963	1323		285	8.4	92	14	35	2.9	8.0
1964	1570		270	8.3	104	13			
1965	9520		1180	8.1	226	144			
1966	3430		240	8.3	96	17			
1967	1590		287	8.3	96	17			19
1968	5330		261	8.1	98	20			

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07193500 NEOSHO R BL FT GIBSON LAKE NR FT GIBSON, OK--CONTINUED									
1957		4	130	0	50	19	13	224	6.5
1958		3	114	0	41	13	11	191	5.7
1959		3	116	0	57	19	12	212	8.2
1960		3	120	4	52	14	11	228	8.7
1961		3	120	0	54	14	12	225	3.2
1962		2	136	4	53	14	12	238	6.2
1963		3	140	4	53	18	12	228	3.8
1964			144	4	65	19		272	1.5
1965			114	0	54	14		195	3.2
1966			134	0	37	12		207	3.5
1967		4	132	2	53	18		201	1.2
1968			118	0	49	11		178	2.4
1969			120	2	45	12		200	3.2
1970			128	2	39	13		193	3.5
1971			124	0	44	13		188	2.6
1972			130	0	43	14		180	0.90
1973		3	120	0	46	15	14	192	5.0
1974		4	119	0	35	10	9.1	177	
1975		4	115	0	39	13	9.2	175	
07198000 ILLINOIS RIVER NEAR GORE, OK									
1945		2	107	17	7.8	13	16	137	6.4
1948	30	2	113	9	11	68	17	214	5.0
1954		2	106	0	7.2	12	9.0	123	3.5
1955		3	104	2	16	20	12	140	4.8
1956		2	120	0	9.5	19	14	142	4.0
1957		2	114	0	8.0	22	14	158	5.6
1958		2	96	0	9.9	28	12	144	3.2
1959		2	100	0	16	12	11	116	4.6
1960		2	100	0	16	6.6	14	125	3.3
1961		2	94	0	6.7	5.5	13	116	3.2
1962			106	0	16	4.6	7.2	122	3.0
1963	23	2	108	2	10	23	10	151	7.8
1964	21		146	2	12	28		135	1.2
1965	144		116	0	33	300		740	2.3
1966	17		116	2	16	24		143	3.0
1967		2	106	2	20	37		161	0.6
1968			108	0	18	28		164	2.5

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07198000	ILLINOIS RIVER NEAR GORE, OK--CONTINUED							
1969	6430		222	7.8	104	22			
1970	7250		229	7.9	90	11			7.
1971	3610		228	8.1	94	10			9.
1972		3250	241	8.2	100	13			7.
1973		10600	218	7.9	92	15			8.
1974		11200	192	8.2	80	10	29	1.9	5.
1975		11700	194	8.1	79	17	29	2.5	6.
	07228500	CANADIAN RIVER AT BRIDGEPORT, OK							
1949	18730		2050	8.4	736	610	198	59	177
1950	14130		3000	8.3	662	500	168	64	134
1951	19730		2300	8.6	778	472	211	61	201
1952	2980		2860	8.4	634	450	173	51	458
1953	2850		2320	8.6	600	498	160	49	329
1954	7540		2620	8.5	488	292	146	43	383
1955	11200		4000	8.7	580	421	160	50	632
1956	7725		2500	8.4	610	352	170	51	
1957	12600		2240	8.8	570	316	180	43	
1958	15200		2710	8.5	550	374	150	51	338
1959	16000		2800	8.6	760	670	196	66	235
1960	21250		2500	8.4	835	686	232	70	235
1964			2170	8.3	695	524			219
1970	3550		2220	9.7	710	535			268
1971	2060		2220	9.3	520	334			280
1972	8020		2090	8.9	580	460			250
1973	6310		2090	8.7	680	450	170	52	250
1974	4520		2040	8.3	750	580	220	50	220
1975	19400	1600	2600	8.9	920	710	250	76	360
	07229200	CANADIAN RIVER AT PURCELL, OK							
1963			2370	8.8	890	529			
1974		3650	1360	10	450	240	100	49	120
1975		15400	2100	9.2	700	440	180	61	160
	07231000	LITTLE RIVER NEAR SASAKWA, OK							
1952	4350		54600	8.1	7990	7900	2300	564	
1953	360		83300	8.1	12700	12600	3520	944	
1954	93		79900	7.8	12000	11900	3470	804	

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07198000		ILLINOIS RIVER NEAR GORE, OK--CONTINUED						
1969			104	0	12	20		138	6.1
1970			98	0	13	13		135	2.6
1971			104	0	9.3	14		127	3.8
1972			108	0	10	14		134	3.3
1973			102	0	11	15		134	4.9
1974			89	0	10	11		112	5.3
1975		3	90	0	10	7.8		126	
	07228500		CANADIAN RIVER AT BRIDGEPORT, OK						
1949	265		282	13	596	300	17	1390	7.0
1950	413		310	12	558	575	27	1880	10
1951	259		376	8	528	318	24	1600	5.7
1952	288		291	9	537	530	22	1780	5.5
1953	268		281	14	582	402	22	1440	8.3
1954			266	12	342	510	28	1550	10
1955			276	18	612	825	21	2450	8.3
1956	372		338	8	415	460	24	1550	8.0
1957	301		298	20	354	430	26	1340	11
1958	402		312	16	403	545		1730	8.2
1959	407		252	12	735	570	22	1770	8.8
1960	360		292	8	752	515	25	1620	9.8
1964			220	4	550	325		1410	2.5
1970			296	34	568	382		1540	6.6
1971			248	16	360	400		1380	9.4
1972			288	16	460	370		1410	6.9
1973			356	14	490	360		1430	6.2
1974			332	0	580	310		1290	6.2
1975			300	18	790	280		1580	2.5
	07229200		CANADIAN RIVER AT PURCELL, OK						
1963	229		440	36	570	278		1780	
1974			254	18	330	110		908	8.4
1975		8	342	0	490	210		1320	6.2
	07231000		LITTLE RIVER NEAR SASAKWA, OK						
1952			205	0		22900			
1953			163			38500			
1954			265	0		37800			

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07231000	LITTLE RIVER NEAR SASAKWA, OK--CONTINUED							
1955	79		124000	8.2	24300	24000	6840	1760	
1956	2195		113000	8.2	18100	18100	5110	1400	
1957	21400		130000	8.4	24400	24400	6760	1830	
1960	10300		4930	8.2	930	646	186	113	661
1961	1210		3360	8.5	675	398	146	76	480
1962	1907		4570	8.6	720	486	110	72	493
1963	3732		7320	8.5	1040	956	85	67	410
1964	5420		8240	8.2	880	786	131	69	1060
1965	3786		7020	8.5	1020	899			
1966	948		4930	8.5	780	695			
1967	5265		7590	8.7	1070	996			1170
1968	9760		5330	8.6	655	511			746
1969	2870		4400	9.7	675				651
1970	4310		5730	8.8	790	695			872
1971	12800		6380	9.0	1000	810			960
1972	975		4340	8.4	770	530			630
1973	5980		3520	9.0	720	430	110	63	470
1974	17600		3960	8.5	650	350	140	78	580
1975	4370	4830	2690	8.5	510	260	120	51	400
		07231500	CANADIAN RIVER AT CALVIN, OK						
1965	6404		3630	8.5	545	437			529
1966	2870		3610	8.7	565	464			494
1967	22610		10600	8.7	1800	1600			1770
1968	21400		2210	9.5	500	290			272
1969	16000		2830	9.6	630				380
1970	21700		2400	8.9	500	306			336
1971	61200		2140	9.3	410	240			290
1972		12300	2290	9.4	500	260			320
1973		27500	2700	8.6	440	270	74	41	380
1974		44600	2130	8.6	460	240	110	46	270
1975	727	17500	1650	9.0	560	1300	140	50	150
		07232500	BEAVER RIVER NEAR GUYMON, OK						
1953	344		579	8.4	242	11	50	29	32
1955	286		593	8.3	310	97	58	40	32
1960	22		625	8.6	302	46	61	40	38
1961	71		585	8.6	248	24	58	30	37

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07231000 LITTLE RIVER NEAR SASAKWA, OK--CONTINUED								
1955			175	0		70800			
1956	26200		214	0	176	53100	16	95900	5.7
1957	36300		236	8	246	73100	18	129000	4.8
1960			372	0	38	1450		2630	1.4
1961			350	8	34	1000		2080	1.6
1962	704		404	16	41	1400	18	2780	2.8
1963	1090		284	12	53	2320	14	4600	1.8
1964	1340		170	0	49	2720	16	5570	1.6
1965			240	8	53	2250		4360	5.4
1966	701		244	12	75	1510		3230	5.1
1967			236	8	86	2450		4660	4.8
1968			220	8		1620		3340	7.0
1969					83	1350		2680	2.0
1970			272	12	86	1800		3580	5.9
1971			300	10	73	2000		4010	11
1972			338	4	56	1300		2640	2.9
1973			350	12	41	980		2120	2.9
1974			411	4	49	1200		2320	4.0
1975			312	13	31	770		1530	
	07231500 CANADIAN RIVER AT CALVIN, OK								
1965			184	8	235	1080		2180	5.5
1966			260	12	382	1050		2480	5.2
1967		16	292	20	375	3850		7280	18
1968			272	20	278	570		1360	6.1
1969					185	780		1640	7.6
1970			300	28	304	668		1360	4.6
1971			308	20	170	600		1180	10
1972			358	16	180	640		1880	4.4
1973			2380	10	160	750		1550	7.7
1974			417	25	280	540		1170	5.6
1975		9	334	0	280	240	10	1060	15
	07232500 BEAVER RIVER NEAR GUYMON, OK								
1953			270	12		14			
1955			272	2		17			
1960	38	8	328	14	70	17	37	409	4.3
1961	39	7	276	12	60	21	32	399	10

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07232500	BEAVER RIVER NEAR GUYMON, OK--CONTINUED							
1962	982		593	8.6	266	48	46	33	32
1963	283		608	8.7	270	26	45	27	32
1968	38		689	8.3	306				40
1969	288		617	8.3	298				34
1970	62		665	8.6	288	18			32
1971	413		657	8.3	270	27			39
1972		1320	578	8.2	250	25			33
1973		17	630	8.1	260	27			39
1974		287	670	8.2	260	16	60	34	44
1975		10	620	8.3	230	16	50	27	31
		07234000	BEAVER RIVER AT BEAVER, OK						
1962			4010	8.2	950	783			
1963			4040	8.2	960	773			
1968			4320	9.0	915	738			653
1969			4660	8.6	810				710
1970			5230	8.7	820	687			942
1971			4440	9.0	880	770	180	120	720
1972		2980	4320	8.5	760	520	170	88	700
1973		2460	4540	8.3	850	700	180	110	720
1974		50	6020	8.4	1100	940	250	140	920
1975		902	4970	8.4	1100	880	230	130	730
	07237500	NORTH CANADIAN RIVER AT WOODWARD, OK							
1962	416		2190	8.5	580	402			
1963	2450		2170	7.8	510	331			262
1975		359	3010	8.3	790	590	220	63	360
	07241550	NORTH CANADIAN RIVER NEAR HARRAH, OK							
1969	2680		2730	9.8	460	289	117	46	398
1970	3740		2890	8.6	525	307	128	50	412
1971	1630	360	2370	8.5	460	210			320
1972	878	102	2520	8.5	460	240			360
1973	3440	2440	2350	8.5	490	230	130	40	320
1974	1770	2980	2230	8.8	560	310	160	41	290
1975	5090	5920	2260	8.5	490	230	120	47	280

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07232500		BEAVER RIVER NEAR GUYMON, OK--CONTINUED						
1962	42	4	286	20	66	20	39	358	2.3
1963	45	6	294	20	82	20	29	405	2.1
1968					87	19		420	2.7
1969					63	18		407	1.3
1970			350	10	61	16		400	2.5
1971			296	0	82	18		402	3.0
1972			276	0	61	18		348	4.2
1973			298	0	71	20		388	3.2
1974			307	0	69	20		403	2.8
1975		6	280	0	50	17	25	326	
		07234000	BEAVER RIVER AT BEAVER, OK						
1962	520		330	0	645	880		2770	
1963	547	6	304	0	640	900		2700	
1968			296	18	640	1000		2820	8.2
1969					545	1150		2910	5.4
1970			308	14	746	1230		3320	14
1971			340	28	680	1100		2720	9.4
1972			324	6	520	1100		2740	6.4
1973			360	0	670	1100		2850	6.5
1974		10	483	3	800	1400	30	3730	8.0
1975		18	315	0	770	1200	25	3300	
	07237500		NORTH CANADIAN RIVER AT WOODWARD, OK						
1962	262		286	12	420	380		1490	
1963			276	0	395	365		1380	
1975		10	353	0	580	570	26	1950	
	07241550		NORTH CANADIAN RIVER NEAR HARRAH, OK						
1969			312	44	207	650		1670	34
1970			266	20	206	680		1710	62
1971			284	14	940	525		1450	51
1972			284	10	220	590		1410	71
1973			332	9	190	490		1420	52
1974			348	20	250	520		1320	39
1975		12	382	0	240	460		1340	14

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07242000	NORTH CANADIAN RIVER NEAR WETUMKA, OK							
1954	12300		32100	8.5	4230	4190	1170	319	5810
1955	7470		37100	8.9	4640	4600	1340	325	7430
1956	4580		21100	8.4	3080	2800	814	255	2460
1957	29600		12200	8.8	1400	1300	419	86	748
1961	1020		2350	8.5	530	270	139	48	
1962	3630		2170	8.6	490	250	118	45	259
1963	3143		4380	8.6	620	508	105	39	358
1964	10680		4370	9.1	540	415			
1965	5225		3230	9.3	485	377			
1966	1941		4700	9.3	560	455			
1967	4067		4820	9.2	612	505			
1968	9460		2350	9.5	396	185			318
1969	5570		10500	10	405				702
1970	8480		2490	9.6	445	253			360
1971	8260		2020	8.9	480	194			260
1972		8650	1990	8.5	430	160			250
1973		13300	1850	8.7	450	190	120	36	250
1974		12200	1850	8.7	440	170	120	37	220
1975		7920	1530	8.6	460	180	120	38	180
	07242350	DEEP FORK NEAR ARCADIA, OK							
1970	2050		1880	8.6	324	180			229
1971	606	42	1650	8.5	310	141			220
1972	742	42	1970	8.4	320	170			270
1973	1850	3870	1840	8.3	400	180	83	44	280
1974	2570	3190	3100	8.2	380	120	84	42	180
1975	4210	2490	1750	8.3	430	160	90	52	210
	07243500	DEEP FORK NEAR BEGGS, OK							
1947	69070		8760		1010	890	276	79	
1952	5800		3720	8.6	545	402	136	50	260
1953	4520		8700	8.6	1190	1080	330	90	367
1954	4460		8360	8.6	1090	991	318	72	1360
1955	7132		9250	8.4	1310	1200	352	105	1500
1956	1680		6210	8.4	960	768	264	73	151
1957	15080		6380	8.7	1090	924	274	99	813
1958	11620		3860	8.9	645	426	160	60	170
1959	5285		3390	8.6	555	392	146	55	264

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07242000		NORTH CANADIAN RIVER NEAR WETUMKA, OK						
1954		41	234	14	102	11800		21000	85
1955			182	6	122	14300		25800	11
1956	3870		287	12	167	7940	18	13500	7.5
1957	2070		236	28	351	4090	16	7480	27
1961	300		318	12	162	530	16	1500	9.7
1962	318	8	316	20	201	530	19	1310	10
1963	688	12	350	20	180	1320	15	2570	16
1964	718		270	20	188	1300		2620	35
1965	500		270	24	108	920		2040	20
1966	744		292	30	178	1400		2960	30
1967	758		296	32	181	1420		3030	30
1968			260	52	161	596		1380	35
1969					310	740		2550	17
1970			294	44	172	590		1440	24
1971			336	26	100	450		1290	25
1972			348	6	130	420		1140	28
1973			354	22	170	370		1080	17
1974			362	8	160	410		1030	17
1975		9	356	11	190	280		876	
		07242350	DEEP FORK NEAR ARCADIA, OK						
1970			266	8	178	310		1100	74
1971			200	8	170	330		912	83
1972			276	4	180	400		1140	210
1973			397	0	170	380		1070	79
1974			341	0	150	260		836	49
1975		13	357	0	160	330		988	5.3
		07243500	DEEP FORK NEAR BEGGS, OK						
1947	1310		222		230	3000		3620	16
1952	559	5	308	15	45	1120	12	2330	5.5
1953	1410	8	280	13	92	2900	6.8	5200	8.7
1954	155	8	275	10	45	2780	13	5340	12
1955		8	296	8	158	3000	6.8	5340	11
1956	892	7	384	8	90	1880	17	3680	17
1957	960		286	14	102	2050	9.4	3690	6.0
1958	475	7	332	20	90	1000	12	2360	7.9
1959	479		320	12	313	990	12	2100	9.0

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07243500		DEEP FORK NEAR BEGGS, OK--CONTINUED						
1960	10150		2210	8.6	460	284	105	52	272
1961	3377		1600	8.5	372	188	75	52	206
1962	5439		2540	8.6	490	288	71	39	328
1963	2857		2090	8.7	405	246	83	37	184
1964	4706		2590	9.1	460	306			
1965	3480		2560	8.7	372	224			
1966	1550		1820	9.1	328	183			
1967	4667		1970	8.8	372	140			265
1968	5430		1570	8.6	322	142			204
1969	4220		8230	9.6	390				283
1970	5100		2490	8.6	388	228			366
1971	3860		2840	8.7	840	650			420
1972		5630	1770	8.5	370	180			230
1973		10500	1710	8.6	340	150	76	37	230
1974		29500	2400	8.7	480	210	100	55	330
1975		9830	1520	8.9	350	95	79	40	170
	07245000		CANADIAN RIVER NEAR WHITEFIELD, OK						
1946			3760		571	460	148	49	
1947	69070		8760		1010	890	276	79	
1948	105200		9670	7.9	1160	1100	321	84	
1949	143500		13100	8.2	1810	1660	516	127	1810
1950	85020		10900	7.8	1450	1290	408	105	1120
1951	49600		10400	8.7	1310	1180	367	98	1440
1952	31530		13600	8.3	1670	1590	461	127	1070
1953	35600		18600	8.5	2260	2180	638	162	2730
1954	69900		16700	8.4	2090	1990	603	177	2940
1955	32100		19900	8.4	2420	2400	675	186	3650
1956	18590		18000	8.4	2540	2380	652	222	2250
1957	128000		22900	8.5	3080	2980	833	244	731
1958	47800		3270	8.5	540	406	128	54	
1959	39480		2680	8.4	490	306	126	48	357
1960	129500		2240	8.5	485	290	118	46	270
1961	40850		1650	8.5	410	177	99	40	212
1962	27700		1790	8.5	384	194	102	35	230
1963	25400		1760	8.5	425	222	72	36	247
1964	1029		2030	8.6	388	202			278
1967	3008		694	8.7	180	57			72

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07243500		DEEP FORK NEAR BEGGS, OK--CONTINUED						
1960		5	356	24	97	600	13	1330	15
1961		5	316	12	64	395	10	928	5.7
1962			296	16	53	690	16	1490	2.4
1963	272	5	282	18	69	570	10	1220	3.0
1964	368		230	30	105	740		1490	4.2
1965	383		228	16	80	720		1470	3.4
1966	241		232	16	82	440		1050	5.5
1967		9	276	12	90	450		1180	4.2
1968			220	10	67	345		910	5.2
1969					58	580		1290	5.8
1970			250	16	125	650		1380	7.3
1971			244	12	67	800		1720	5.6
1972			276	8	82	460		1020	5.8
1973			302	18	85	390		982	6.4
1974			324	9	55	600		1390	6.6
1975		5	318	8	52	290		857	
	07245000		CANADIAN RIVER NEAR WHITEFIELD, OK						
1946	544		214	0	263	1080		2160	10
1947	1960		202	18	230	3000		4850	16
1948	1680		188		200	3660	12	5510	15
1949	2610	43	390	0	217	5150	12	9150	18
1950	1960	62	248		87	3900	12	6900	22
1951	1720	32	272	0	660	3370	16	6570	13
1952	2500	18	200	4	121	4940	13	9730	7.6
1953	3240	33	232	8	213	6500	80	11800	7.3
1954			221	9	134	5970		11100	11
1955		18	246	12	324	7000	20	12600	13
1956	2990	31	223	8	152	6260	18	11500	7.3
1957	4150	10	241	8	144	8380	16	15000	12
1958	445		268	12	164	940		1860	7.2
1959	367	8	266	10	123	750	13	1620	7.2
1960		29	278	12	224	540	16	1390	7.8
1961		6	260	16	149	375	14	990	4.5
1962		7	252	12	238	460	16	1140	4.2
1963			248	10	195	448	14	1080	2.7
1964			228	14	102	490	22	1200	8.4
1967		5	154	8	49	120			2.2

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07245000	CANADIAN RIVER NEAR WHITEFIELD, OK--CONTINUED							
1968	29100		597	8.3	152	51			61
1969	28600		577	8.5	146	50			49
1970	12200		620	9.2	146	52			55
1971	37200	35000	529	9.3	130	41			54
1972		23400	550	9.2	150	45			56
1973		37800	570	8.4	150	40	40	11	55
1974		26200	570	8.3	170	33	47	13	43
1975	35400	35400	492	8.4	180	66	52	14	46
	07246400	ROBERT S. KERR LOCK AND DAM NEAR SALLISAW, OK							
1972			1020	8.7	170	68			150
1973			927	8.6	180	86			120
1974			800	8.2	160	58	44	11	98
1975			630	8.5	170	60	46	14	95
	07303395	ELM FORK N FORK RED R AT SALTON CROSSING NR CARL, OK							
1973		1150	11900	8.8	2700	2600	810	170	2100
1974		881	77800	8.3	6600	6500	1600	640	22000
1975		784	21700	8.3	2900	2800	900	160	4500
	07303400	ELM FORK NORTH FORK RED RIVER NEAR CARL, OK							
1960	107		56600	8.1	3630	3570	828	380	9900
1962	72		31000	8.0	2580	2480			7390
1963	26		80100	8.2	4650	4580			
1968	2130		59900						
1969	280		192000						
1970	30		202000	8.1	15000	14990			118000
1971		196	196000	8.3	14000	14000			110000
1972		68	154000	8.2	6800	6700			66000
1973		1000	56700	8.2	3900	3900	930	390	17000
1974		667	65700	8.2	10000	9900	1700	1400	62000
1975		111	59400	9.4	4100	4000	1000	410	17000
		07304500	ELK CREEK NEAR HOBART, OK						
1950	1950		1900	8.6	830	465	172	100	149
1959	3020		3020	8.6	1640	1320	460	127	177
1960	2282		1920	8.7	880	478	208	106	160

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
07245000	CANADIAN RIVER NEAR WHITEFIELD, OK--CONTINUED								
1968			144	2	37	104	9.2	340	2.3
1969			110	4	60	125		328	3.8
1970			130	14	43	91		333	3.0
1971			116	14	27	94		303	1.4
1972			160	20	31	98		303	1.8
1973			160	4	32	90		300	2.2
1974			177	0	34	72		290	8.8
1975		5	184	0	57	86	8.2	350	
07246400	ROBERT S. KERR LOCK AND DAM NEAR SALLISAW, OK								
1972			132	0	69	230		594	2.1
1973			142	0	76	180		549	3.0
1974			124	0	56	150		434	17
1975		4	136	0	61	140		453	
07303395	ELM FORK N FORK RED R AT SALTON CROSSING NR CARL, OK								
1973			164	3	2500	3400		9140	7.5
1974			208	0	3100	42000		74400	11
1975		50	184	0	2100	7900		16200	
07303400	ELM FORK NORTH FORK RED RIVER NEAR CARL, OK								
1960			183	0	2220	22000	13	40400	
1962			135	0	2100	10800		21400	
1963	21100		137	0	2380	34000		62900	
1968					2400	24200		45100	
1969					4090	147000		255000	
1970			112	0	4900	188000		322000	
1971			146	0	5800	170000		290000	
1972			172	0	3400	100000		112000	
1973			196	0	2400	28000		47000	5.3
1974			165	0	3400	110000		194000	12
1975		66	198	0	2200	28000		51700	
07304500	ELK CREEK NEAR HOBART, OK								
1950	167	30	502	28	583	123	14	1360	11
1959	225	9	442	28	1270	335	16	2620	17
1960		5	518	40	564	210	23	1410	27

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
		07304500	ELK CREEK NEAR HOBART, OK--CONTINUED						
1961	2500		1890	8.7	830	460	196	105	145
1962	3850		2240	8.6	970	652	192	111	189
1963	1660		2400	8.7	1030	850	190	102	181
1970	538		2070	9.7	870	532			219
1971	4880		2160	9.2	880	680			240
1972	1910		2060	9.5	850	610			180
1973	3430		1710	8.7	630	330	120	82	150
1974	1443		2070	8.6	760	390	160	100	220
1975	734	8670	2140	8.5	750	430	160	91	150
		07305000	NORTH FORK RED RIVER NEAR HEADRICK, OK						
1955	1980		18700	8.0	1890	1800	617	161	
1960	3772		16100	8.4	1970	1840	581	132	1850
1961	11800		11700	8.6	1690	1580	451	137	1940
1962	5967		11400	8.6	1740	1610	296	129	1570
1963	2880		11400	8.4	1710	1610			
1968	1360		12500						
1969	16800		12200						
1970	1840		14500	8.5	1510	1450			2820
1971		4400	23400	8.8	2800	2700			4900
1972		894	16400	8.4	1800	1700			3400
1973		5420	18700	8.4	2100	2000	500	130	4200
1974		8020	12900	8.3	1500	1300	420	130	2300
1975		7840	11300	8.8	1400	1300	410	180	2200
		07311000	EAST CACHE CREEK NEAR WALTERS, OK						
1952	7480		1280	8.5	305	97	92	22	138
1953	988		2140	8.7	568	430	156	49	138
1961	2640		876	8.7	330	102	94	26	71
1962	450		868	8.4	288	54			82
1963	1010		789		234				74
1970	637		800	9.6	244	52			92
1971	2140		3670	10.0	960	300			640
1972		271	916	10.3	210	65			110
1973		2440	925	8.7	240	64	71	14	110
1974		3030	803	8.6	250	52	77	15	110
1975		9050	970	9.4	280	37	86	16	98

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07304500		ELK CREEK NEAR HOBART, OK--CONTINUED						
1961		7	540	24	560	140	24	1470	16
1962		6	510	24	770	178	24	1760	12
1963		5	422	34	910	210	21	1960	12
1970			418	44	652	240		1510	11
1971			456	42	790	230		1640	20
1972			496	48	660	180		1520	9.4
1973			433	33	430	150		1200	14
1974			493	18	500	220		1480	14
1975		8	447	26	540	240		1500	
	07305000		NORTH FORK RED RIVER NEAR HEADRICK, OK						
1955			284	0		5860			
1960	3200	30	312	10	1550	5090	17	10900	11
1961	2190	10	280	16	1400	3540	17	7820	7.6
1962	2020	7	318	18	1380	3230	15	7810	
1963	2010		264	81	410	3290		7630	
1968					1280	3750		8270	
1969					1280	3580		8160	
1970			178	10	1330	4520		9320	8.6
1971			182	18	2000	8000		17100	11
1972			318	4	1200	5300		10600	9.5
1973			689	2	1400	6900		13800	6.6
1974			335	0	1100	3700		7850	5.8
1975		13	309	0	1100	3600	11	7530	
	07311000		EAST CACHE CREEK NEAR WALTERS, OK						
1952	153	10	363	19	108	220	19	737	26
1953	204	13	294	16	93	540	12	1420	61
1961			294	26	128	78		561	16
1962			362	8	104	68		559	
1963						72			
1970			270	42	75	106		506	47
1971			283	82	290	980		2160	57
1972			248	56	72	170		528	26
1973			252	8	72	140		582	29
1974			273	7	65	130		490	37
1975		9	333	28	81	130		564	

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
		07311200	BLUE BEAVER CREEK NEAR CACHE, OK						
1968	133		238	8.1	81	7	20	9.6	16
1969	22		187	7.9	65	43	19	4.4	13
1970	13		197	8.2	62	3	18	4.9	15
1971	9.7		248	7.9	78	9	22	7.0	24
1972		235	193	7.9	66	0	18	5.4	15
1973		63	241	7.7	80	9	22	6.1	19
1974		37	274	8.0	65	0	19	4.9	16
		07324200	WASHITA RIVER NEAR HAMMON, OK						
1970	15	412	3010	8.7	1980	1800			106
1971		1430	2940	8.7	1600	1390			110
1972		24	1840	8.6	1000	720			62
1973		210	1650	8.3	890	690	200	96	81
1974		108	2380	8.3	1400	1300	300	160	130
1975		1310	2370	8.8	1500	1300	320	160	130
		07324400	WASHITA RIVER NEAR FOSS, OK						
1947			1960		1270	1150	300	130	68
1948			4670		1360	1150	328	141	
1970	119		2320	8.8	1340	1140			93
1971	90		2170	8.7	1200	1100			100
1972		51	2070	8.6	1100	960			95
1973		200	2640	8.4	1700	1300	220	170	98
1974		493	2130	8.6	1100	970	210	150	100
1975		396	1700	8.3	880	620	170	110	73
		07325500	WASHITA RIVER AT CARNEGIE, OK						
1954	4520		3170	8.5	1260	1100	360	370	261
1955	3190		2780	8.3	1230	990	310	111	200
1956	8748		2870	8.4	1860	1270	364	139	147
1957	7448		2360	9.0	1150	951	324	120	130
1958	3053		3150	8.5	1140	1040	320	102	121
1959	4766		2480	8.6	1270	1060	314	118	146
1960	4452		2230	8.4	1150	928	290	113	148
1961	4595		2050	8.4	1160	940	282	111	131
1962	5240		2340	8.5	1280	1050			134
1963	1224		2270	8.5	1240	1070	312	112	157
1964	1920		2870	8.5	1310	1170			215

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
			07311200 BLUE BEAVER CREEK NEAR CACHE, OK						
1968		3	102	0	18	12	18	147	1.5
1969		3	88	0	19	13	14	114	.60
1970		2	84	0	24	10	17	126	.20
1971		3	106	0	31	11	14	147	1.2
1972		2	96	0	90	7.0	16	113	.60
1973		2	111	0	21	14	17	137	.50
1974			143	0	13	10		187	.53
			07324200 WASHITA RIVER NEAR HAMMON, OK						
1970			384	16	1820	51		3030	5.3
1971			394	30	1400	63		2370	47
1972			360	16	770	36		1540	17
1973			468	0	740	51		1360	7.2
1974			365	0	1300	70		2210	3.8
1975		10	346	0	1400	67		2290	
			07324400 WASHITA RIVER NEAR FOSS, OK						
1947	80	9	297	16	1120	48	21	1670	6.5
1948	97		301		1090	44		1740	28
1970			352	22	1200	46		1930	9.1
1971			340	12	1200	49		1950	42
1972			444	6	1100	49		1850	3.1
1973			454	8	1500	42		2540	6.2
1974			449	41	1100	49		1870	4.6
1975		9	430	0	680	35		1400	
			07325500 WASHITA RIVER AT CARNEGIE, OK						
1954			305	16	1080	432		2390	9.4
1955		5	320	6	1060	775	13	2240	13
1956	246	5	404	14	1290	310	30	2460	8.0
1957	162		342	28	952	222	28	1870	10
1958	311		374	12	1100	400	18	2420	5.9
1959	158	8	320	24	1100	204	26	2140	7.8
1960	130	7	352	6	974	180	22	1860	12
1961		5	318	16	945	130	27	1880	7.6
1962			336	12	1070	134	21	2160	5.7
1963		5	340	8	1100	187	28	1960	
1964			208	8	1100	352		2380	

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07325500		WASHITA RIVER AT CARNEGIE, OK--CONTINUED						
1965	12800		2380	8.4	1090	936	264	95	147
1966	6547		2350	8.4	1240	996	320	107	147
1967	2250		2410	8.6	1240	993			168
1968	3600		2630	9.0	1280	1030			168
1969	5950		2260	9.6	1110	896			144
1970	1140		2480	8.7	1240	1030			182
1971	1330		2450	9.4	1200	960			150
1972	2340		2300	9.1	1200	980			200
1973	4490		2320	8.2	1100	830	270	82	180
1974	2990		2380	8.3	1200	920	310	100	140
1975	2540	3860	2550	8.7	1300	1100	340	120	140
	07331000		WASHITA RIVER NEAR DURWOOD, OK						
1944	5380		1730		750	490	212	54	
1945	29280		4010	8.2	880	580	244	66	51
1946	44830		1050		574	280	219	62	
1947	22170		1180		528	300	136	57	
1949	15730		1250		559	320	144	53	52
1951	22120		1330	8.8	628	400	153	66	
1952	11300		1300	8.4	558	550	137	58	97
1953	7898		1410	8.5	541	430	145	66	108
1954	17230		1620	8.6	575	420	148	72	123
1955	17181		1550	8.4	600	420	156	63	127
1956	11000		1710	8.3	715	500	172	77	105
1957	64550		1830	8.5	540	520	152	73	
1958	6770		1260	8.5	550	340	132	66	
1959	5595		1590	8.6	710	610	184	67	105
1960	17200		1560	8.6	840	660	188	73	83
1961	9930		1420	8.6	680	430	166	68	80
1962	9760		1530	8.6	720	468	184	71	99
1963	5510		1800	8.6	760	640	200	74	99
1964	10900		1800	8.8	805	690	102	57	
1965	5880		1470	8.4	670	550			
1966	3120		1830	8.5	860	720			
1967	12200		1710	8.6	765	570	126	60	133
1968	19900		1510	8.8	630	428			97
1969	9150		1770	8.8	742	635			111
1970	18000		1600	9.1	710	474			148

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07325500	WASHITA RIVER AT CARNEGIE, OK--CONTINUED							
1965			278	6	965	205	19	1850	6.8
1966			360	8	1070	184		2030	7.5
1967		10	330	10	1010	220		1920	5.3
1968			320	20	1100	198		2310	
1969			312	18	935	164		1880	
1970			274	12	1080	204		2000	8.0
1971			324	30	1000	170		2080	16
1972			332	16	1000	250		1940	7.9
1973			334	0	860	240		1770	7.0
1974			379	0	1000	160		2000	8.9
1975		8	338	0	1100	130		2170	
	07331000	WASHITA RIVER NEAR DURWOOD, OK							
1944	116		284	24	533	134		1280	8.8
1945	86		392	20	602	210	18	1420	6.5
1946	78		338	20	256	119		840	4.5
1947	72		323	17	354	92		818	10
1949	84		296	9	301	117		866	12
1951	98		382	23	421	86		936	5.1
1952	99	5	299	7	369	121	20	912	40
1953	123	6	370	20	431	185	14	1050	39
1954		6	326	10	432	165	20	1050	5.9
1955	127	5	320	8	397	178	6.5	972	16
1956	139	6	366	4	497	200	18	1160	9.4
1957	182		382	18	324	300	22	1170	7.6
1958	87		388	12	321	119		824	5.6
1959	118	5	334	16	650	153	17	1210	6.0
1960	130	5	348	12	509	205	20	1200	6.4
1961	90	5	314	16	458	124	20	1080	5.1
1962		5	366	14	500	112	17	1190	4.8
1963	160	5	254	12	670	205	19	1450	5.9
1964	146		214	14	695	218		1440	
1965	111		214	8	525	142		1130	6.4
1966	114		272	12	710	155		1470	40
1967		8	274	16	620	195	5.6	1300	6.2
1968			288	14	440	114		1080	6.6
1969			302	20	674	130		1370	2.7
1970			356	14	510	242		1180	10

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	Q MEAN	Q INST	KSC	PH	HRD	NC HRD	CA	MG	NA
	07331000		WASHITA RIVER NEAR DURWOOD, OK--CONTINUED						
1971	42300		1280	9.0	550	290			90
1972	6020		1480	9.4	640	420			100
1973	18200		1310	8.7	560	370	150	55	84
1974	35300		1420	8.5	620	340	150	65	93
1975	24800		1400	8.9	600	410	150	68	89
	07335700		KIAMICHI RIVER NEAR BIG CEDAR, OK						
1966	6130		38	6.5	9	4	2.1	1.0	5.8
1967	177		50	7.3	14	0	2.4	1.9	3.7
1968	3150		34	7.3	8	2	1.8	1.2	2.9
1969	144		30	7.7	8	4	2.2	1.1	2.8
1970	503		47	7.9	11	3	2.6	1.9	3.0
1971	402		63	8.0	12	3	8.0	5.0	6.7
1972	260		26	7.8	8	1	1.6	1.4	2.2
1973		285		8.7	14	5	4.3	1.4	3.9
1974		1010		8.8	14	3	2.7	2.1	4.3
1975		206		7.4	16	7	4.2	1.7	3.9

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
	07331000	WASHITA RIVER NEAR DURWOOD, OK--CONTINUED							
1971			366	36	310	130		875	8.4
1972			344	26	430	140		1090	8.2
1973			354	10	360	250		900	5.8
1974		5	409	10	330	130	12	962	7.3
1975		7	380	0	400	110	13	1000	
	07335700	KIAMICHI RIVER NEAR BIG CEDAR, OK							
1966			6	8	6.0	6.6	10	31	2.1
1967		2	18	0	4.2	3.2	9.1	31	1.0
1968		2	12	0	6.8	4.4	8.5	30	0.20
1969		1	16	0	4.6	2.2	9.4	28	1.1
1970		1	14	0	7.4	3.0	9.4	29	0.20
1971		6	14	0	4.0	9.6	9.1	45	0.40
1972		1	10	0	3.5	3.5	9.3	25	0.70
1973		1	15	0	4.9	3.4	9.0	34	1.0
1974		1	18	0	4.5	3.2	9.0	35	0.35
1975		1	20	0	3.6	5.2	9.2	31	

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	RESERVOIR STORAGE	KSC	PH	HRD	NC HRD	CA	MG	NA
	07229900 LAKE THUNDERBIRD NEAR NORMAN, OK							
1967		486	8.4	216	15			20
1968	50700	470	8.5	200	13			19
1969	83900	454	8.5	204	16			18
1970	83520	484	8.3	214	11			21
1971	111100	421	8.3	190	10			17
1972	107200	433	8.4	190	13			20
1973	133500	435	8.4	190	16			18
1974	123000	427	8.2	190	8	38	23	19
1975	124000	433	8.4	190	11	40	22	18
	07238500 CANTON RESERVOIR NEAR CANTON, OK							
1960	114500	1100	8.0	332	184	86	34	118
1961	112800	1230	8.2	355	190	86	34	137
1962	111200	1300	8.2	356	196	86	34	142
1963	110500	1370	8.0	370	222	86	40	155
1968	121200	1390	8.4	364	196			160
1969	131700	1480	8.4	366	198			170
1970	116800	1600	8.1	366	218			197
1971	74300	1800	8.2	420	250			240
1972	94400	1780	8.2	390	250			230
1973	161400	1590	8.1	380	220			190
1974	123400	1660	8.3	420	260	99	43	190
1975	116300	1570	8.8	540	340	130	52	160
	07324300 FOSS RESERVOIR NEAR FOSS, OK							
1964	76000	1800	8.3	990	865			
1965	89600	1890	8.1	990	870			
1966	110200	1870	8.2	1020	885			
1967	98460	2010	8.4	1080	959			86
1968	101400	2120	8.4	1140	1010			90
1969	118300	1990	8.2	1100	964			87
1970	120200	2030	8.2	1080	945			90
1971	116000	2170	8.2	1200	1060			100
1972	102100	2240	8.3	1200	1100	230	160	110
1973	106000	2280	7.9	1200	1100	240	160	110
1974	115700	2200	8.4	1200	1000	220	150	110

TABLE 5.--MAXIMUM VALUES FOR SELECTED CONSTITUENTS
CONTINUED

WATER YEAR	NA+K	K	HCO3	CO3	SO4	CL	SIO2	DS	NO3
		07229900 LAKE THUNDERBIRD NEAR NORMAN, OK							
1967		7	242	6	15	32		263	0.60
1968		7	236	6	21	30	3.0	274	1.4
1969			246	4	15	29		260	1.3
1970			248	4	19	31		292	0.40
1971			224	0	10	25		231	0.20
1972			220	2	15	31		238	0.50
1973			218	8	12	30		237	0.40
1974			219	0	13	29		244	0.71
1975		6	219	2	12	28		233	
		07238500 CANTON RESERVOIR NEAR CANTON, OK							
1960		8	206	0	218	148	13	709	6.2
1961		7	208	0	229	179	14	822	1.6
1962			196	0	227	190	13	791	1.6
1963		7	180	0	252	210	9.4	882	2.2
1968			212	4	225	220		870	3.7
1969			216	4	198	245		886	0.90
1970			214	0	243	272		958	1.0
1971			250	0	290	330		1090	17
1972			220	0	280	330		1090	0.80
1973			220	0	240	280		964	1.2
1974			217	0	260	290		1050	1.1
1975		10	250	0	360	230		1060	
		07324300 FOSS RESERVOIR NEAR FOSS, OK							
1964	77		184	2	875	36		1690	0.60
1965	87		168	0	935	38		1640	2.6
1966	93		182	0	960	44		1620	0.80
1967		14	176	2	1040	52		1750	0.40
1968			172	6	1100	45	12	1890	0.40
1969			168	0	1020	51	12	1800	1.0
1970			168	0	1050	45		1750	0.20
1971			176	0	1200	50		1900	0.50
1972			164	0	1200	54		1980	0.60
1973			173	0	1200	56		2050	1.1
1974			173	0		59		1920	0.35

STATISTICAL SUMMARIES OF SURFACE-WATER QUALITY DATA FOR SELECTED STREAMS IN OKLAHOMA, THROUGH THE 1979 WATER YEAR

Prepared in cooperation with the
OKLAHOMA WATER RESOURCES BOARD