HISTORICAL WATER-QUALITY DATA FOR THE CLARK FORK (RIVER) AND THE MOUTHS OF SELECTED TRIBUTARIES, WESTERN MONTANA

By T. M. Brosten and M. A. Jacobson

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DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information
write to:

District Chief
U.S. Geological Survey
428 Federal Building
301 South Park
Drawer 10076
Helena, MT 59626-0076

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Listing of water-quality stations, in downstream order, for which data are presented[1]

[1]All data are given in this report.

CONVERSION FACTORS

The following factors can be used to convert inch-pound units to the International System (SI) of units.

Multiply inch-pound unit	By	To obtain SI unit
acre	0.004047	square kilometer
acre-foot (AC-FT)	1,233	cubic meter
cubic foot	0.02832	cubic meter
cubic foot per second (CFS)	0.02832	cubic meter per second
foot (ft)	0.3048	meter
gallon	3.785	liter
gallon per minute	0.06309	liter per second
gallon per second	3.785	liter per second
mile (mi)	1.609	kilometer
square mile (mi^2)	2.590	square kilometer
ton per acre-foot	0.0007357	megagram per cubic meter
ton per day	0.9072	megagram per day

Temperature in degrees Celsius (°C) can be converted to degrees Fahrenheit (°F) by the equation:

$$°F = 9/5\ (°C) + 32$$

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ABSTRACT

The Clark Fork, occupying a major drainage area in western Montana, leaves the State as Montana's largest river. This report is a compilation of recent historical water-quality data collected by the U.S. Geological Survey on the Clark Fork and near the mouths of major tributaries. Included in the report are water-quality data collected during various time intervals since 1969 at 18 surface-water stations. Because of the large amount of streamflow and water-temperature data collected at these 18 stations and at other sites in the study area, the data are not included in the report. However, station numbers and corresponding periods of record are listed and the availability of the data is identified.

INTRODUCTION

The Clark Fork originates south of Deer Lodge in west-central Montana at the confluence of Silver Bow and Warm Springs Creeks (fig. 1). The drainage encompasses most of the northern and central parts of Montana west of the Continental Divide. At two points along its course, where the Blackfoot River enters east of Missoula and again where the Flathead River enters near Paradise, the Clark Fork nearly doubles in flow. Other major tributaries between the headwaters and the mouth at Pend Oreille Lake in northern Idaho are the Little Blackfoot River, Flint Creek, Rock Creek, Bitterroot River, St. Regis River, Thompson River, and Bull River. During its course, the river flows through a series of four main-stem power-generating dams; in downstream order, these are Milltown Dam, Thompson Falls Dam, Noxon Rapids Dam, and Cabinet Gorge Dam. When the Clark Fork leaves the State, it is Montana's largest river (mean annual flow of 15,560,000 acre-feet), surpassing the individual mean annual flows of the Kootenai, Yellowstone, and Missouri Rivers.

Recently, concerns have been expressed about the quality of water in the Clark Fork and the extent to which the quality has been affected by past use and development. Therefore, knowledge of historical data would be beneficial to understanding the processes that may have affected the water quality.

The purpose of this report is to present, under one cover, the recent historical water-quality data collected by the U.S. Geological Survey on the main stem of the Clark Fork and near the mouths of major tributaries. The data were obtained from 18 water-quality stations used to monitor surface water in western Montana.

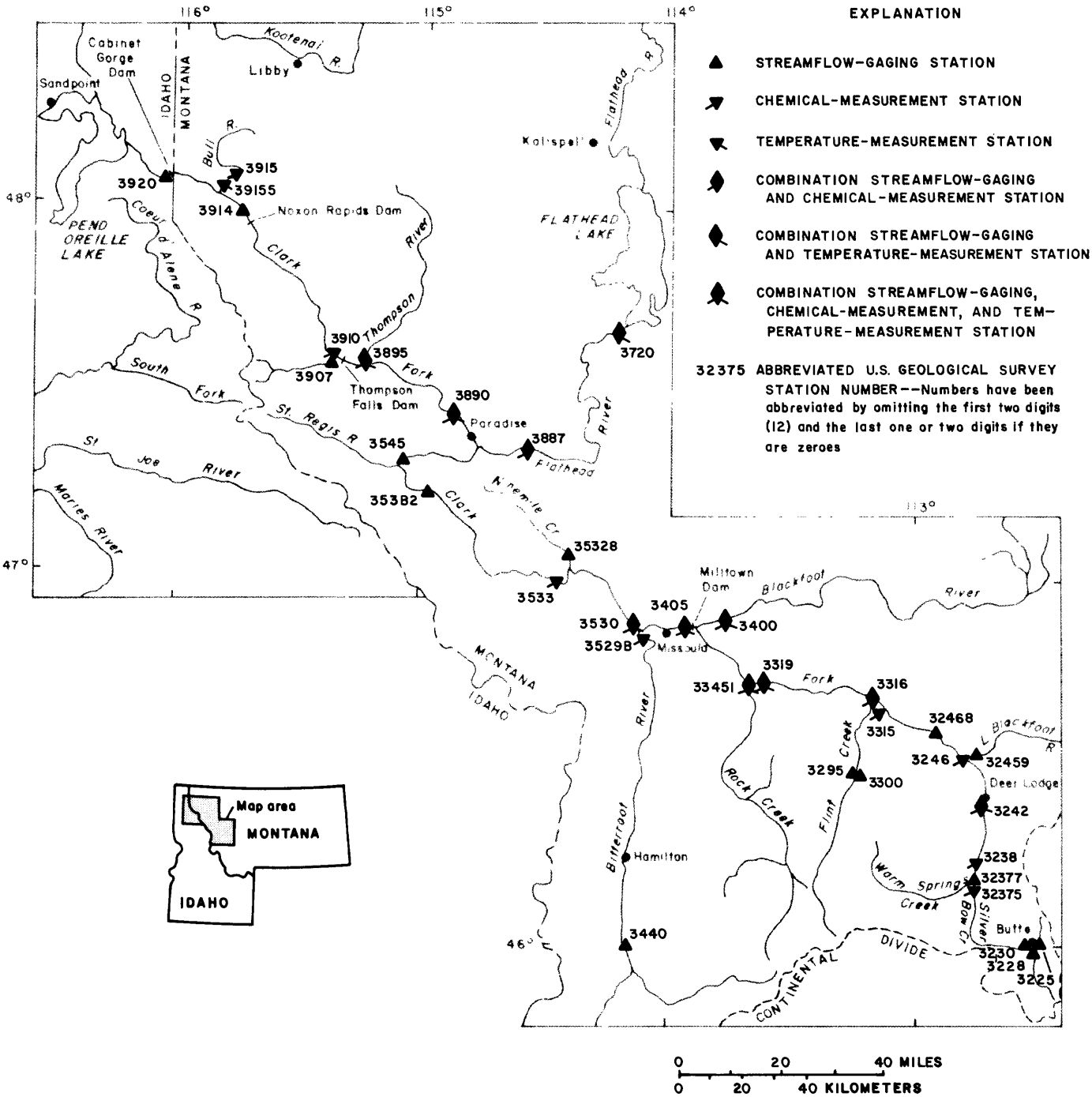

Figure 1.--Location of the Clark Fork (River) and streamflow-gaging, chemical-measurement, and temperature-measurement stations.

WATER-QUALITY RECORDS

Hydrologic data

Since the late 1960's, the U.S. Geological Survey has operated several fixed water-quality stations on the main stem and at the mouths of selected tributaries of the Clark Fork. This report is a compilation of much of the water-quality data that have been collected. The large amount of daily, continuous streamflow data precludes its inclusion in this report. Likewise, daily, continuous water-temperature data for several stations on the main stem and the tributaries are not included. Tables 1 and 2 list the stations and corresponding period of record where daily, continuous streamflow and water temperatures have been collected. Additional streamflow and water-quality data have been collected by the U.S. Geological Survey in the upstream parts of tributary drainages that are not included in this report (most notably the Flathead drainage). All omitted data as well as the data herein have been published in the series, "Water Resources Data for Montana" (U.S. Geological Survey, issued annually), and are stored in the Survey's WATSTORE computer files.

Table 1.--*Availability of daily, continuous streamflow records in the Clark Fork basin*

Station No.	Station name	Period of record (water year)
12322500	Silver Bow Creek above Blacktail Creek, at Butte	1984
12322800	Blacktail Creek near Butte	1984
12323000	Silver Bow Creek below Blacktail Creek, at Butte	1984
12323770	Warm Springs Creek at Warm Springs	1984
12324200	Clark Fork at Deer Lodge	1979-84
12324590	Little Blackfoot River near Garrison	1973-84
12324680	Clark Fork at Gold Creek	1978-84
12329500	Flint Creek near Maxville	1941-84
12330000	Boulder Creek at Maxville	1939-84
12331600	Clark Fork at Drummond	1973-83
12331900	Clark Fork near Clinton	1979-84
12334510	Rock Creek near Clinton	1973-84
12340000	Blackfoot River near Bonner	1940-84
12340500	Clark Fork above Missoula	1929-84
12344000	Bitterroot River near Darby	1937-84
12353000	Clark Fork below Missoula	1930-84
12353280	Ninemile Creek near Huson	1973-83
12353820	Dry Creek near Superior	1982-84
12354500	Clark Fork at St. Regis	1911-84
12372000	Flathead River near Polson	1907-84
12388700	Flathead River at Perma	1983-84
12389000	Clark Fork near Plains	1911-84
12389500	Thompson River near Thompson Falls	1956-84
12390700	Prospect Creek near Thompson Falls	1956-84
12391400	Clark Fork below Noxon Rapids Dam, near Noxon	1960-84
12392000	Clark Fork at Whitehorse Rapids near Cabinet, Idaho	1928-84

Table 2.--*Availability of daily, continuous temperature records in the Clark Fork basin*

Station No.	Station name	Period of record (water year)
12324200	Clark Fork at Deer Lodge	1978-83
12331900	Clark Fork near Clinton	1979-83
12334510	Rock Creek near Clinton	1979-83
12340000	Blackfoot River near Bonner	1959
12340500	Clark Fork above Missoula	1977-83
12353000	Clark Fork below Missoula	1960-82
12372000	Flathead River near Polson	1977-84
12389000	Clark Fork near Plains	1969-77
12389500	Thompson River near Thompson Falls	1977-79
12391550	Bull River near Noxon	1977-79

Many of the early water-quality stations were operated at the request of the Federal Water Pollution Control Administration (now the U.S. Environmental Protection Agency). Changing programs within the agency during this period resulted in short-term station operation and several modifications in parameters measured. Of the water-quality stations maintained, the station Clark Fork below Missoula (12353000) has the longest period of continuous operation--from October 1978 to the present (1984). This station is part of the National Stream Quality Accounting Network (NASQAN).

Samples were collected and processed according to methods outlined in various reports of the series "Techniques of Water-Resources Investigations of the United States Geological Survey" (TWRI's). Samples were collected using depth-integrating type samplers at several verticals in the stream cross section by either the "Equal Discharge Increment" or the "Equal Width Increment" method (Guy and Norman, 1970). Time-dependent measurements that generally were made in the field included water discharge, water temperature, specific conductance, pH, alkalinity, dissolved oxygen, and bacteria concentration. Laboratory analytical methods are described in the report by Skougstad and others (1979).

Station description

The station description accompanying the water-quality data at the back of this report consists of location, drainage area, period of record, and remarks on regulation and diversions. The location and drainage area are obtained from the most detailed maps available. River mileage, given under "Location" for some stations, is that determined and used by the U.S. Army Corps of Engineers. Periods for which published records are available for the present station or for stations generally equivalent to the present one are given under "Period of Record."

Effects of regulation

The natural flows of many streams in the Clark Fork basin are altered by regulation by dams or diversions for irrigation. Where natural conditions have been altered, the reported data can reflect the pattern of operation of regulation and diversion. The "Remarks" section of the station description indicates known regulations and diversions. If this information is needed for other sites, special requests can be directed to the District Office in Helena, Montana. Depending upon the number of sites involved, a cost for computer services may be charged.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below.

Acre-foot is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,500 cubic feet, about 326,000 gallons, or 1,233 cubic meters.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, commonly clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms producing blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL (milliliters) of sample.

Fecal streptococcal bacteria are bacteria found also in intestines of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms producing red or pink colonies within 48 hours at 35°C ± 1.0°C on M-Enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Non-ideal colony count (K) is a remark code used in reporting bacteria concentrations when plate counts fall outside of an ideal range. The lower limit of 20 colonies is set as the number below which statistically valid results become increasingly questionable. The upper limit, which differs according to type of bacteria, represents numbers above which interference from colony crowding, deposition of extraneous material, and other factors appear to result in increasingly questionable results.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or faculative anaerobic, gram-negative, nonspore forming rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the

laboratory these bacteria are defined as the organisms producing colonies within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by micro-organisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of periphyton and benthic organisms are expressed in grams per square meter (G/SQ M).

Biomass/chlorophyll ratio is a measure of the relative amount of chlorophyll containing organisms (autotrophs) to total biomass. This ratio is commonly used as an index to indicate primary productivity.

Dry mass refers to the mass of residue present after drying in an oven at 100°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Cell count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters or liters. Numbers of planktonic organisms can be expressed in these terms.

Total cell count is the total number of organisms collected and enumerated in any particular sample.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigment of plants. Chlorophyll *a* and *b* are the two most common plant pigments and their concentrations provide an indication of plant biomass. Chlorophyll is expressed in units of milligrams per square meter (MG/M2).

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of platinum-cobalt scale.

Cubic feet per second is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second, 448.8 gallons per minute, or 0.02832 cubic meter per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Instantaneous discharge (streamflow) is the discharge at a particular instant of time. In this report, instantaneous discharge is designated by the parameter code 00061.

Mean discharge (MEAN) is the arithmetic mean of the instantaneous discharges during a specified period. In this report, daily mean discharge is designated by the parameter code 00060.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river upstream from the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as an equivalent quantity of calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit map; each hydrologic unit is identified by an 8-digit number.

Less than (<) is a remark code indicating that the analyzed value was found to be less than the numeric value listed. The value associated with the "<" remark indicates the detection limit of the applied laboratory analysis.

Micrograms per liter (UG/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in milligrams per liter, and is based on the mass of sediment per liter of water-sediment mixture.

Not detected (ND) is a remark code sometimes used in water-quality tables in place of a value to show that a constituent concentration was less than the analytical level of detection.

Particle size is the diameter, in millimeters (MM, mm), of suspended sediment determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation.
Silt	.004 - .062	Sedimentation.
Sand	.062 - 2.0	Sedimentation or sieve.
Gravel	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Periphyton are the entire community of micro-organisms attached to and growing upon submerged solid surfaces. Although primarily consisting of algae, periphyton also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are important food producers in shallow, swift streams and serve as useful indicators of water quality.

pH indicates the degree of acidity or alkalinity of water and is expressed in logarithmic units. The pH value of a solution is the negative logarithm of the hydrogen-ion activity, in moles per liter. In this report, pH (parameter code 00400) refers to pH measured onsite at the time of collection of the water sample.

Plankton are the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton are the plant part of the plankton, consisting primarily of algae. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are generally the primary food producers in lakes and large, deep rivers.

D is a remark code used in this report to indicate that the number of cells of an individual species is equal to or greater than 15 percent of the total number of cells in the sample (dominant).

L is a remark code used in this report to indicate that the number of cells of an individual species is less than 0.5 percent of the total number of cells in the sample.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are affected by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of suspended sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge, times the concentration of suspended sediment in milligrams per liter, times 0.0027. The result is expressed in tons per day (T/DAY).

Sodium-adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Waters range, in respect to sodium hazard, from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Specific conductance is a measure of the ability of water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids concentration of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relationship is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-µm (micrometer) membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determination of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Solids, dissolved residue at 180° Celsius is the concentration of dissolved constituents in water, determined by the residue weight after evaporation of water that has been filtered to remove suspended sediment.

Solids, dissolved sum of constituents is the concentration of dissolved constituents in water, calculated by summing the concentrations of individual constituents, after converting bicarbonate to its equivalent weight as anhydrous carbonate.

Solids, suspended residue at 105° Celsius is the concentration of suspended material retained on a glass-fiber filter and dried at 105°C.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sample that is retained on a 0.45-µm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results need to be reported as "suspended, total." Determination of "suspended, total" constituents are made either by analyzing portions of material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of a least 95 percent of the constituent present in both the dissolved and the suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results need to be reported as "total." (Note that the word "total" has a double meaning here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all the constituent in the sample.)

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required for all laboratories performing such analyses because different digestion procedures are likely to produce different degrees of dissolution.

Turbidity of a sample is the reduction of transparency due to the presence of particulate matter. In this report, after May 15, 1978, it is expressed in Nephelometric turbidity units (NTU), parameter code 00076. Values are obtained from the Nephelometric method for turbidity determination, which measures the intensity of light scattered by suspended particles at 90 degrees from the path of an incident light source. Prior to May 15, 1978, turbidity is expressed in Jackson turbidity units (JTU), parameter code 00070.

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Skougstad, M. W., Fishman, M. J., Friedman, L. C., Erdmann, D. E., and Duncan, S. S., 1979, Methods for determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, book 5, chapter A1, 626 p.

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WATER-QUALITY STATION DESCRIPTIONS AND DATA

PEND OREILLE RIVER BASIN

12323750 SILVER BOW CREEK AT WARM SPRINGS, MT

LOCATION.--Lat 46°11'07", long 112°46'04", in NW¼NE¼SE¼ sec.18, T.5 N., R.9 W., Deer Lodge County, Hydrologic Unit 17010201, on right bank 0.2 mi upstream from confluence with Warm Springs Creek, 0.3 mi upstream from county highway bridge, and 1.0 mi northeast of Warm Springs.

DRAINAGE AREA.--483 mi^2.

PERIOD OF RECORD.--October 1970.

WATER QUALITY DATA

DATE OF SAMPLE	TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TEMPER-ATURE (DEG C) (00010)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
1970										
Oct. 07	1630	150	5.0	2	2	.00	0	0	.0	440

12323800 CLARK FORK NEAR GALEN, MT

LOCATION.--Lat 46°12'30", long 112°46'00", in NE¼NE¼NE¼ sec.7, T.5 N., R.9 W., Deer Lodge County, Hydrologic Unit 17010201, on upstream side of county bridge, 1.6 mi downstream from Warm Springs Creek, 1.9 mi southeast of Galen, and at mile 481.9.

DRAINAGE AREA.--793 mi^2.

PERIOD OF RECORD.--July 1971 to December 1973.

REMARKS.-Flow affected by mining operations upstream from station.

WATER QUALITY DATA

DATE OF SAMPLE	TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (UMHOS) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)
1971							
JULY 25	1100	29	--	1260	7.9	20.0	16.0
AUG. 18	1300	80	--	1800	7.6	23.0	18.5
SEPT 15	1115	45	--	1700	7.5	13.0	10.0
OCT. 13	1300	129	--	1500	8.1	14.5	6.5
NOV. 17	1145	183	--	1900	8.0	-1.0	1.5
DEC. 10	0830	109	--	2000	8.6	-5.0	.0
1972							
JAN. 05	1400	109	--	1950	7.7	-1.5	.0
FEB. 15	1100	145	--	1650	8.8	4.5	1.0
16	1430	--	--	--	--	--	--
MAR. 20	1615	346	--	1280	6.9	11.0	7.5
APR. 18	1230	221	--	1660	8.0	5.0	5.0
MAY 18	1300	417	--	1160	8.2	18.0	11.0
JUNE 15	1230	527	--	745	7.3	23.5	13.5
JULY 19	1500	94	--	1850	7.4	8.0	11.5
AUG. 23	1215	87	--	2500	7.2	13.5	15.0
SEPT. 20	1230	53	--	2100	7.4	8.5	8.0
OCT. 18	1045	98	--	1470	7.2	5.0	6.0
NOV. 15	0845	158	--	1300	7.7	1.0	3.0
DEC. 21	1630	167	--	1290	8.8	6.5	.5
1973							
JAN. 18	1015	131	--	1140	9.0	2.5	.5
FEB. 23	0900	145	--	1080	9.1	2.0	2.5
MAR. 22	1350	184	--	1000	8.5	5.0	4.0
APR. 19	1500	99	--	860	8.3	5.5	7.0
MAY 25	1445	311	--	900	8.3	10.0	13.5
JUNE 20	1200	152	--	910	8.1	21.0	14.0
JULY 23	1615	61	--	1320	8.2	20.5	20.5
AUG. 30	0700	212	--	1340	7.9	11.0	13.5
OCT. 24	1500	--	108	1460	7.6	14.5	7.5
DEC. 18	1230	--	96	1240	7.9	.0	1.5

12323800 CLARK FORK NEAR GALEN, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE		OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L) (00310)	COLIFORM TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COLIFORM, FECAL 0.45 UM-MF (COLS./ 100 ML) (31616)	ALKALINITY FIELD (MG/L AS CACO3) (00410)
1971							
JULY	25	8.6	--	1.2	160	20	108
AUG.	18	8.2	--	5.6	2100	20	38
SEPT.	15	11.0	--	2.2	2800	6	69
OCT.	13	11.6	--	2.4	330	0	67
NOV.	17	12.2	--	2.1	1300	10	57
DEC.	10	11.2	--	4.5	370	60	67
1972							
JAN.	05	11.0	--	5.2	450	100	80
FEB.	15	10.8	--	3.0	--	--	77
	16	--	--	--	110	14	--
MAR.	20	10.2	--	2.6	65	10	56
APR.	18	11.2	--	2.2	93	0	61
MAY	18	9.4	--	2.5	--	--	46
JUNE	15	9.0	--	1.6	800	61	53
JULY	19	9.2	--	1.3	24	6	61
AUG.	23	8.4	--	1.4	110	19	37
SEPT	20	10.4	--	1.4	75	15	67
OCT.	18	10.6	--	1.6	1200	55	58
NOV.	15	10.5	--	2.3	190	19	83
DEC.	21	10.6	--	--	330	72	72
1973							
JAN.	18	10.8	--	5.8	80	11	56
FEB.	23	9.9	--	4.7	72	8	75
MAR.	22	11.4	--	2.8	32	16	73
APR.	19	10.6	--	3.5	10	0	74
MAY	25	8.6	--	4.6	1700	25	39
JUNE	20	9.3	--	1.9	1300	1	50
JULY	23	9.1	--	2.0	1300	2	51
AUG.	30	7.1	82	2.8	4400	30	55
OCT.	24	11.4	113	3.1	1300	130	44
DEC.	18	12.0	103	3.0	590	340	84

12323800 CLARK FORK NEAR GALEN, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS, NONCARBONATE (MG/L CACO3) (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)
1971									
JULY 25	1100	10	2	670	--	220	--	29	--
AUG. 18	1300	5	1	--	--	--	--	--	--
SEPT. 15	1115	10	2	--	--	--	--	--	--
OCT. 13	1300	5	60	790	--	290	--	17	--
NOV. 17	1145	3	2	--	--	--	--	--	--
DEC. 10	0830	3	1	--	--	--	--	--	--
1972									
JAN. 05	1400	5	20	1200	--	420	--	30	--
FEB. 15	1100	0	3	--	--	--	--	--	--
MAR. 20	1615	0	3	--	--	--	--	--	--
APR. 18	1230	0	5	1100	--	410	19	19	--
MAY 18	1300	20	10	--	--	--	--	--	--
JUNE 15	1230	10	6	--	--	--	--	--	--
JULY 19	1500	--	--	1200	--	430	--	21	16
AUG. 23	1215	--	--	1800	--	680	--	22	22
SEPT. 20	1230	--	--	1500	--	540	--	28	21
OCT. 18	1045	--	--	870	--	320	--	18	19
NOV. 15	0845	--	--	700	--	250	--	19	5.1
DEC. 21	1630	--	--	770	--	280	--	18	19
1973									
JAN. 18	1015	--	--	660	610	240	--	14	17
FEB. 23	0900	--	--	610	--	220	--	14	15
MAR. 22	1350	--	--	540	--	190	--	17	14
APR. 19	1500	--	--	450	--	150	--	18	16
MAY 25	1445	--	--	440	--	160	--	11	15
JUNE 20	1200	--	--	460	--	160	--	14	16
JULY 23	1615	--	--	680	--	240	--	19	26
AUG. 30	0700	--	--	740	--	250	--	27	29
OCT. 24	1500	--	--	780	730	270	--	25	27
DEC. 18	1230	--	--	640	560	220	--	22	21

DATE OF SAMPLE	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE FET-FLD (MG/L AS HCO3) (00440)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)
1971									
JULY 25	--	5.6	--	--	--	1.7	--	--	--
AUG. 18	--	--	--	--	--	3.8	--	--	--
SEPT. 15	--	--	--	--	--	2.7	--	--	--
OCT. 13	--	5.2	--	--	--	1.2	--	--	--
NOV. 17	--	--	--	--	--	2.2	--	--	--
DEC. 10	--	--	--	--	--	2.2	--	--	--
1972									
JAN. 05	--	10	--	--	--	2.8	--	--	--
FEB. 15	--	--	--	--	--	1.4	--	--	--
MAR. 20	--	--	--	--	--	1.9	--	--	--
APR. 18	--	7.0	--	--	--	2.4	--	--	--
MAY 18	--	--	--	--	--	1.8	--	--	--
JUNE 15	--	--	--	--	--	1.0	--	--	--
JULY 19	.2	--	--	1100	9.0	2.9	1810	2.5	459
AUG. 23	.2	--	--	1800	2.3	3.6	2770	3.8	651
SEPT. 20	.3	--	--	1400	12	2.6	2180	3.0	312
OCT. 18	.3	--	--	810	11	1.8	1340	1.8	355
NOV. 15	.0	--	--	640	11	1.2	1090	1.5	465
DEC. 21	.3	--	--	700	13	1.1	1170	1.6	528
1973									
JAN. 18	.3	--	64	590	12	1.4	960	1.3	340
FEB. 23	.3	--	--	550	15	1.2	892	1.2	349
MAR. 22	.3	--	--	480	6.9	1.1	800	1.1	397
APR. 19	.3	--	--	380	8.1	1.3	668	.91	179
MAY 25	.3	--	--	430	7.2	1.1	708	.96	595
JUNE 20	.3	--	--	410	9.7	1.3	726	.99	298
JULY 23	.5	--	--	630	14	1.5	1030	1.4	170
AUG. 30	.5	--	--	700	17	.40	1170	1.6	670
OCT. 24	.4	--	--	740	14	1.6	1240	1.7	362
DEC. 18	.4	--	--	580	11	1.2	973	1.3	252

12323800 CLARK FORK NEAR GALEN, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)
1971						
JULY 25	.200	.000	--	.200	.610	--
AUG. 18	--	--	--	--	--	--
SEPT. 15	--	--	--	--	--	--
OCT. 13	.380	.020	--	.400	.190	.19
NOV. 17	--	--	--	--	--	--
DEC. 10	--	--	--	--	--	--
1972						
JAN. 05	.540	.010	--	.550	.680	.92
FEB. 15	--	--	--	--	--	--
MAR. 20	--	--	--	--	--	--
APR. 18	.370	.020	--	.390	.400	.08
MAY 18	--	--	--	--	--	--
JUNE 15	--	--	--	--	--	--
JULY 19	--	--	--	.190	--	--
AUG. 23	--	--	--	--	--	--
SEPT. 20	--	--	--	--	--	--
OCT. 18	--	--	--	.560	--	--
NOV. 15	--	--	--	--	--	--
DEC. 21	--	--	--	--	--	--
1973						
JAN. 18	--	--	--	.450	--	--
FEB. 23	--	--	--	--	--	--
MAR. 22	--	--	--	--	--	--
APR. 19	--	--	.290	.260	--	--
MAY 25	--	--	--	--	--	--
JUNE 20	--	--	--	--	--	--
JULY 23	--	--	.060	.060	--	--
AUG. 30	--	--	.140	.140	--	--
OCT. 24	--	--	.570	.110	--	--
DEC. 18	--	--	.670	.600	--	--

DATE OF SAMPLE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
1971						
JULY 25	--	--	.050	.040	.010	8.0
AUG. 18	--	--	--	--	--	--
SEPT. 15	--	--	--	--	--	--
OCT. 13	.38	.78	.160	.120	.000	.00
NOV. 17	--	--	--	--	--	--
DEC. 10	--	--	--	--	--	--
1972						
JAN. 05	1.6	2.2	.200	.070	.010	2.0
FEB. 15	--	--	--	--	--	--
MAR. 20	--	--	--	--	--	--
APR. 18	.48	.87	.100	.100	.020	.00
MAY 18	--	--	--	--	--	--
JUNE 15	--	--	--	--	--	--
JULY 19	.22	.41	.090	.030	.010	--
AUG. 23	--	--	--	--	--	--
SEPT. 20	--	--	--	--	--	--
OCT. 18	.42	.98	.030	--	.010	--
NOV. 15	--	--	--	--	--	--
DEC. 21	--	--	--	--	--	--
1973						
JAN. 18	1.3	1.8	.060	--	.010	--
FEB. 23	--	--	--	--	--	--
MAR. 22	--	--	--	--	--	--
APR. 19	.65	.94	.040	--	.010	--
MAY 25	--	--	--	--	--	--
JUNE 20	--	--	--	--	--	--
JULY 23	.63	.69	.020	--	.010	--
AUG. 30	.35	.49	.080	--	.010	--
OCT. 24	.56	1.1	.180	--	<.010	--
DEC. 18	1.2	1.9	.070	--	.030	--

12323800 CLARK FORK NEAR GALEN, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
1971									
JULY 25	1100	10	0	1	2	0	.00	<10	30
AUG. 18	1300	--	--	--	--	--	--	--	--
SEPT. 15	1115	--	--	--	--	--	--	--	--
OCT. 13	1300	5	5	4	1	2	.00	55	26
NOV. 17	1145	--	--	--	--	--	--	--	--
DEC. 10	0830	--	--	--	--	--	--	--	--
1972									
JAN. 05	1400	12	2	11	7	7	2	120	14
FEB. 15	1100	--	--	--	--	--	--	--	--
MAR. 20	1615	--	--	--	--	--	--	--	--
APR. 18	1230	10	10	4	3	0	.00	20	20
MAY 18	1300	--	--	--	--	--	--	--	--
JUNE 15	1230	--	--	--	--	--	--	--	--

DATE OF SAMPLE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
1971									
JULY 25	10	20	1	0	.0	.0	0	260	180
AUG. 18	--	20	--	--	--	.2	--	--	240
SEPT. 15	--	20	--	--	--	.2	--	--	530
OCT. 13	590	20	4	0	.2	.2	7	210	60
NOV. 17	--	30	--	--	--	.2	--	--	230
DEC. 10	--	20	--	--	--	.4	--	--	130
1972									
JAN. 05	3100	10	6	0	.4	.3	2	950	280
FEB. 15	--	10	--	--	--	.1	--	--	60
MAR. 20	--	20	--	--	--	.5	--	--	220
APR. 18	670	30	12	1	--	.0	0	230	90
MAY 18	--	50	--	--	--	.1	--	--	20
JUNE 15	--	70	--	--	--	.0	--	--	30

12324200 CLARK FORK AT DEER LODGE, MT

LOCATION.--Lat 46°23'52", long 112°44'31", in SW¼SW¼SW¼ sec.33, T.8 N., R.9 W., Powell County, Hydrologic Unit 17010201, on left bank 35 ft upstream from Milwaukee Avenue Bridge in Deer Lodge, 0.05 mi upstream from Taylor Creek, 0.24 mi downstream from Tin Cup Joe Creek, and at mile 461.2.

DRAINAGE AREA.--1,005 mi^2.

PERIOD OF RECORD.--July 1969 to June 1971, June 1982 to August 1983.

WATER QUALITY DATA

DATE OF SAMPLE		TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (UMHOS) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)
1969							
JULY	11	0745	736	--	870	7.6	18.0
AUG.	14	1735	154	--	1330	8.0	34.0
SEPT.	19	1020	250	--	1230	7.6	18.0
OCT.	17	0845	259	--	1070	8.0	-4.5
NOV.	14	0710	296	--	1020	7.7	-2.0
DEC.	30	0930	238	--	1000	7.9	-12.5
1970							
JAN.	15	1700	358	--	1180	7.6	4.0
FEB.	12	1115	282	--	1180	7.9	.5
MAR.	19	0715	282	--	1070	7.9	-11.0
APR.	16	0815	364	--	1100	8.0	-2.0
MAY	15	1510	411	--	1000	8.0	19.0
JUNE	11	0830	876	--	630	7.8	10.0
JULY	13	0815	298	--	1040	7.7	15.5
AUG.	06	1200	214	--	1210	8.2	20.0
SEPT.	11	0715	250	--	1500	7.5	5.0
OCT.	08	0900	229	--	1190	7.9	.0
NOV.	05	0735	290	--	1100	7.7	2.0
DEC.	02	1630	340	--	1250	8.0	6.5
	04	1620	--	--	--	--	--
1971							
JAN.	06	1530	253	--	1380	7.4	-7.5
FEB.	03	1410	410	--	960	7.5	-5.0
MAR.	05	0900	305	--	1310	7.9	-7.0
APR.	08	1630	325	--	1250	8.1	13.0
MAY	06	0710	575	--	845	7.7	8.5
JUNE	04	1300	582	--	810	7.8	15.0
1982							
JUNE	22	1350	--	1170	293	--	21.0
JULY	08	1350	--	738	384	--	21.0
AUG.	18	0840	--	111	660	--	22.0
OCT.	05	1530	--	449	557	--	17.5
NOV.	15	1300	--	337	622	--	-2.0
1983							
JAN.	03	0815	--	262	603	--	-6.0
FEB.	22	1700	--	355	564	--	11.0
APR.	05	1010	--	269	590	--	4.0
MAY	19	0715	--	353	495	--	7.5
	31	0900	--	779	272	--	4.5
JULY	14	1330	--	510	415	--	7.0
AUG.	22	0815	--	213	545	--	10.0

1234200 CLARK FORK AT DEER LODGE, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE		TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L) (00310)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ALKALINITY FIELD (MG/L AS CACO3) (00410)
1969							
JULY	11	16.0	7.6	.1	100	--	93
AUG.	14	20.0	8.0	1.7	20	--	125
SEPT.	19	11.0	8.8	.5	96	--	162
OCT.	17	3.5	10.6	1.0	1200	840	126
NOV.	14	3.0	10.2	2.3	1400	530	126
DEC.	30	.0	11.2	1.7	1200	370	146
1970							
JAN.	15	.0	10.2	1.9	110	--	116
FEB.	12	2.5	12.0	1.0	410	--	116
MAR.	19	.5	12.2	2.2	250	--	113
APR.	16	2.0	11.2	2.1	340	130	101
MAY	15	12.5	9.5	1.9	54	4	92
JUNE	11	9.5	9.2	.8	700	110	61
JULY	13	16.5	7.6	.9	1200	130	105
AUG.	06	17.0	10.6	1.4	310	190	120
SEPT.	11	11.0	8.5	1.3	580	54	108
OCT.	08	4.5	10.9	--	18000	11000	126
NOV.	05	3.0	10.5	.8	.00	8	121
DEC.	02	1.0	11.6	1.7	--	10	120
	04	--	--	--	13	--	--
1971							
JAN.	06	.0	11.6	2.3	68	22	130
FEB.	03	1.5	11.0	4.3	110	0	92
MAR.	05	.0	11.6	1.4	47	13	105
APR.	08	8.5	11.6	1.6	5500	120	106
MAY	06	10.5	9.8	2.0	4300	100	77
JUNE	04	12.5	9.8	1.9	5700	2800	75
1982							
JUNE	22	15.0	--	--	--	--	--
JULY	08	14.5	--	--	--	--	--
AUG.	18	14.5	--	--	--	--	--
OCT.	05	7.0	--	--	--	--	--
NOV.	15	.0	--	--	--	--	--
1983							
JAN.	03	.0	--	--	--	--	--
FEB.	22	5.5	--	--	--	--	--
APR.	05	2.0	--	--	--	--	--
MAY	19	8.0	--	--	--	--	--
	31	10.5	--	--	--	--	--
JULY	14	15.5	--	--	--	--	--
AUG.	22	15.0	--	--	--	--	--

12324200 CLARK FORK AT DEER LODGE, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)
1969									
JULY 11	0745	8	7	360	--	--	--	--	3.9
AUG. 14	1735	3	5	780	--	--	--	--	7.6
SEPT. 19	1020	2	3	630	--	--	--	--	6.2
OCT. 17	0845	2	5	600	--	--	23	.4	5.3
NOV. 14	0710	0	3	630	--	--	21	.4	4.9
DEC. 30	0930	3	3	690	--	--	--	--	5.5
1970									
JAN. 15	1700	4	8	750	--	--	--	--	5.4
FEB. 12	1115	2	4	700	--	--	--	--	5.3
MAR. 19	0715	11	7	660	--	--	--	--	5.3
APR. 16	0815	4	15	690	--	--	--	--	5.1
MAY 15	1510	7	6	570	--	--	--	--	6.4
JUNE 11	0830	10	15	330	--	--	--	--	3.6
JULY 13	0815	16	6	620	--	--	--	--	4.7
AUG. 06	1200	--	5	720	--	--	--	--	6.2
SEPT. 11	0715	--	--	--	--	--	--	--	--
OCT. 08	0900	3	5	690	--	--	--	--	6.4
NOV. 05	0735	--	--	--	--	--	--	--	--
DEC. 02	1630	--	--	--	--	--	--	--	--
1971									
JAN. 06	1530	3	2	780	270	26	--	--	6.0
FEB. 03	1410	--	--	--	--	--	--	--	--
MAR. 05	0900	--	--	--	--	--	--	--	--
APR. 08	1630	5	6	730	260	19	--	--	5.2
MAY 06	0710	--	--	--	--	--	--	--	--
JUNE 04	1300	--	--	--	--	--	--	--	--

DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3) (00440)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)
1969									
JULY 11	--	--	1.8	1.2	--	611	--	--	--
AUG. 14	--	--	7.0	1.9	--	1220	1.7	507	.500
SEPT. 19	--	--	8.2	2.8	--	1200	--	--	--
OCT. 17	--	--	6.1	1.9	--	981	1.3	686	.600
NOV. 14	--	--	6.6	--	--	936	1.3	748	.600
DEC. 30	--	--	7.8	1.3	--	1020	1.4	655	.800
1970									
JAN. 15	--	--	5.6	--	--	1120	1.5	1080	.700
FEB. 12	--	--	9.5	1.3	--	1030	1.4	784	.600
MAR 19	--	--	5.8	--	--	912	1.2	694	.590
APR. 16	--	--	6.8	1.6	--	1040	1.4	1020	.560
MAY 15	--	--	6.8	--	--	852	1.2	945	.400
JUNE 11	--	--	3.6	.90	--	486	.66	1150	.100
JULY 13	--	510	5.4	1.7	--	937	1.3	754	.350
AUG. 06	--	600	--	--	--	--	--	--	.300
SEPT. 11	--	--	--	--	--	--	--	--	.480
OCT. 08	--	560	8.6	1.9	--	1030	1.4	637	.500
NOV. 05	--	--	--	--	--	--	--	--	.600
DEC. 02	--	--	--	--	--	--	--	--	.700
1971									
JAN. 06	--	680	2.7	1.4	10	1140	1.6	779	.140
FEB. 03	--	--	--	--	--	--	--	--	--
MAR. 05	--	--	--	--	--	--	--	--	--
APR. 08	--	660	5.6	1.9	--	1040	1.4	913	.360
MAY 06	--	--	--	--	--	--	--	--	--
JUNE 04	92	--	--	--	--	--	--	--	--

PEND OREILLE RIVER BASIN

12324200 CLARK FORK AT DEER LODGE, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
1969								
JULY 11	.010	--	.280	.42	.120	.090	--	--
AUG. 14	.010	--	.020	.26	.080	.020	--	8.0
SEPT. 19	.040	--	.060	.27	.130	.080	--	6.0
OCT. 17	.100	--	.030	.32	.130	.060	--	7.0
NOV. 14	.000	--	.080	.25	.300	.150	--	6.0
DEC. 30	.000	--	.100	.30	.120	.100	--	2.0
1970								
JAN. 15	.000	--	--	1.4	.040	.030	--	2.0
FEB. 12	.000	--	.090	.28	.170	.100	--	2.0
MAR. 19	.000	--	.150	.30	.070	.040	--	1.0
APR. 16	.000	--	.240	.69	.130	.040	--	2.0
MAY 15	.000	--	.000	.28	.120	.070	--	3.0
JUNE 11	.000	--	.040	.25	.130	.030	--	1.0
JULY 13	.000	--	.010	.42	.050	.050	.050	2.0
AUG. 06	.000	--	.040	.25	.080	.070	.020	4.0
SEPT. 11	--	--	.010	--	.060	.060	.040	--
OCT. 08	.020	--	.050	.30	.100	.070	.070	9.0
NOV. 05	--	--	.100	--	.050	.030	.030	28
DEC. 02	--	--	.060	--	.120	.050	.000	5.0
1971								
JAN. 06	.060	.200	.120	--	--	--	--	3.0
FEB. 03	--	.500	.370	--	.130	--	--	130
MAR. 05	--	.200	.580	--	.070	--	--	11
APR. 08	.040	.400	.060	.20	.090	.020	.050	2.0
MAY 06	--	.400	.210	--	.180	--	.050	7.0
JUNE 04	--	.260	.140	--	.100	--	.040	5.0

DATE OF SAMPLE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)
1969										
JULY 11	0735	200	--	4	0	--	30	0	0	--
AUG. 14	1735	200	--	0	0	--	40	2	0	--
SEPT. 19	1020	400	--	10	0	--	50	0	0	--
OCT. 17	0845	--	120	4	0	--	10	0	0	--
NOV. 14	0710	--	50	4	0	--	30	0	0	--
DEC. 30	0930	--	110	8	0	--	30	0	0	--
1970										
JAN. 15	1700	--	0	4	0	--	10	0	0	--
FEB. 12	1115	--	180	10	0	--	30	0	0	--
MAR. 19	0715	--	0	8	0	.0	70	7	0	--
APR. 16	0815	--	60	0	0	.0	<10	0	0	--
MAY 15	1510	--	10	5	0	.0	30	0	0	--
JUNE 11	0830	--	150	8	0	.0	20	0	0	--
JULY 13	0815	--	160	15	0	.0	20	0	0	--
AUG. 06	1200	--	110	12	0	.0	90	0	0	--
SEPT. 11	0715	--	--	--	--	--	<10	--	--	--
OCT. 08	0900	--	200	0	0	.0	30	0	--	.00
NOV. 05	0735	--	--	--	--	--	20	--	--	--
DEC. 02	1630	--	--	--	--	--	30	--	--	--
1971										
JAN. 06	1530	--	--	0	0	.0	0	17	--	.00
FEB. 03	1410	--	--	--	--	--	10	--	--	--
MAR. 05	0900	--	--	--	--	--	10	--	--	--
APR. 08	1630	--	200	0	100	.0	30	2	--	.00
MAY 06	0710	--	--	--	--	--	10	--	--	--
JUNE 04	1300	--	--	--	--	--	20	--	--	--

12324200 CLARK FORK AT DEER LODGE, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
1969										
JULY 11	0	--	53	--	20	--	3	260	--	--
AUG. 14	2	--	58	--	10	--	0	490	--	--
SEPT. 19	3	--	10	--	10	--	0	230	--	--
OCT. 17	0	--	5	--	11	--	0	--	190	--
NOV. 14	0	--	0	--	13	--	0	--	330	--
DEC. 30	0	--	21	--	0	--	0	--	280	--
1970										
JAN. 15	0	--	11	--	13	--	0	--	1300	--
FEB. 12	0	--	23	--	2	--	0	--	730	--
MAR. 19	0	--	25	--	23	--	0	--	1300	--
APR. 16	0	--	35	--	0	--	0	--	1200	--
MAY 15	0	--	25	--	13	--	0	--	970	--
JUNE 11	0	--	42	--	0	--	0	--	520	--
JULY 13	0	--	33	--	26	--	0	--	220	--
AUG. 06	0	--	18	--	0	--	0	--	150	--
SEPT. 11	--	--	48	--	0	--	0	--	190	--
OCT. 08	0	20	40	200	0	7	0	360	380	--
NOV. 05	--	--	0	--	0	--	0	--	830	--
DEC. 02	--	60	0	400	60	50	0	600	950	<.1
1971										
JAN. 06	7	--	7	--	100	--	0	--	4	.1
FEB. 03	--	210	14	120	120	10	6	1000	1400	--
MAR. 05	--	--	25	--	120	--	0	--	110	.2
APR. 08	0	70	15	580	20	9	5	530	480	.1
MAY 06	--	--	9	--	30	--	0	--	150	.3
JUNE 04	--	110	16	1500	20	19	2	370	170	--

DATE OF SAMPLE	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
1969										
JULY 11	--	22	4	8	0	--	580	0	--	36
AUG. 14	--	0	2	6	0	--	860	0	--	120
SEPT. 19	--	0	2	3	1	--	800	0	--	53
OCT. 17	--	5	4	2	0	--	730	0	--	81
NOV. 14	--	0	2	2	0	--	560	0	--	110
DEC. 30	--	0	5	14	0	--	700	1	--	75
1970										
JAN. 15	--	22	4	3	0	--	650	0	--	110
FEB. 12	--	0	5	6	0	--	630	0	--	170
MAR. 19	--	44	4	0	0	--	610	0	--	220
APR. 16	--	3	5	4	0	--	670	0	--	250
MAY 15	--	0	0	0	4	--	570	0	--	150
JUNE 11	--	3	0	3	0	--	220	0	--	160
JULY 13	.5	8	0	6	0	--	600	0	--	85
AUG. 06	.0	4	0	10	0	--	740	0	--	97
SEPT. 11	.1	--	--	--	--	--	740	--	--	120
OCT. 08	.0	2	2	0	0	580	660	0	180	190
NOV. 05	.8	--	--	--	--	--	560	--	--	160
DEC. 02	.4	--	--	--	--	450	700	--	220	150
1971										
JAN. 06	--	2	2	2	0	--	530	2	--	520
FEB. 03	.4	--	--	--	--	330	420	--	350	130
MAR. 05	.2	--	--	--	--	--	710	--	--	140
APR. 08	.1	0	1	0	1	490	580	0	200	110
MAY 06	.1	--	--	--	--	--	530	--	--	10
JUNE 04	.3	--	--	--	--	300	550	--	210	40

12324600 CLARK FORK AT GARRISON, MT

LOCATION.--Lat 46°31'11", long 112°48'27", near center of east line of sec.23, T.9 N., R.10 W., Powell County, Hydrologic Unit 17010201, at county bridge at Garrison, 1 mi downstream from Little Blackfoot River, and at mile 444.5.

DRAINAGE AREA.--1,550 mi^2.

PERIOD OF RECORD.--July 1969 to June 1971.

WATER QUALITY DATA

DATE OF SAMPLE	TIME	DISCHARGE, IN CUBIC FEET PER SECOND (00060)	SPECIFIC CONDUCTANCE (UMHOS) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)
1969						
JULY 11	1200	1610	640	6.4	24.0	16.0
AUG. 15	0830	229	1020	7.7	16.0	15.0
SEPT. 19	1400	299	1040	8.4	16.0	13.0
OCT. 17	1330	392	925	8.2	7.5	4.5
NOV. 13	1300	456	840	8.1	8.0	3.5
DEC. 30	1545	308	950	8.3	-4.5	.0
1970						
JAN. 16	1250	363	1050	8.0	-8.0	.0
FEB. 12	1500	377	1020	8.4	3.0	2.5
MAR. 18	1215	395	960	8.2	3.0	2.5
APR. 16	1230	496	890	8.1	5.5	4.0
MAY 14	1745	935	740	8.1	14.0	11.0
JUNE 11	1130	1630	420	8.0	11.0	9.5
JULY 13	1200	510	670	8.1	15.0	15.5
AUG. 06	1600	376	950	8.5	28.5	21.5
SEPT. 11	1030	228	1320	7.9	4.0	9.5
OCT. 08	1145	318	900	8.2	9.5	4.5
NOV. 05	1000	379	1030	7.9	4.5	3.0
DEC. 03	0800	383	1210	8.0	-8.5	.0
04	1600	--	--	--	--	--
1971						
JAN. 06	1030	370	1250	7.8	-12.5	.0
FEB. 03	1115	640	700	7.6	-4.0	.5
MAR. 05	1200	430	1130	8.2	-2.0	.0
APR. 09	1000	480	910	8.1	10.5	5.0
MAY 06	0915	1130	660	7.8	10.5	9.0
JUNE 02	1230	1460	600	7.6	15.0	10.0
04	1630	--	--	--	--	10.5

DATE OF SAMPLE	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L) (00310)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ALKALINITY FIELD (MG/L AS CACO3) (00410)
1969					
JULY 11	8.6	2.1	42	--	97
AUG. 15	7.8	1.9	75	--	157
SEPT. 19	9.9	.8	130	--	224
OCT. 17	12.6	.7	78	25	129
NOV. 13	12.2	1.7	100	14	136
DEC. 30	12.6	2.0	240	11	123
1970					
JAN. 16	11.3	1.5	600	--	126
FEB. 12	13.0	1.3	32	--	135
MAR. 18	13.4	2.2	120	--	123
APR. 16	11.9	1.7	160	32	115
MAY 14	9.8	1.4	70	8	100
JUNE 11	9.4	1.6	240	97	85
JULY 13	8.2	1.1	530	100	123
AUG. 06	10.4	1.9	1300	44	115
SEPT. 11	9.7	2.0	680	74	123
OCT. 08	11.9	--	980	230	106
NOV. 05	11.8	.8	750	58	131
DEC. 03	11.6	2.7	--	52	129
04	--	--	130	--	--
1971					
JAN. 06	12.0	2.7	400	120	148
FEB. 03	11.4	4.2	1100	74	97
MAR. 05	12.5	1.1	93	0	114
APR. 09	11.8	1.9	6000	170	106
MAY 06	10.3	2.0	5100	440	77
JUNE 02	10.2	1.2	--	--	81
04	--	--	1700	60	--

12324600 CLARK FORK AT GARRISON, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)
1969								
JULY 11	1200	13	9	290	--	--	--	--
AUG. 15	0830	2	5	520	--	--	--	--
SEPT. 19	1400	3	5	450	--	--	--	--
OCT. 17	1330	0	5	560	--	--	21	.4
NOV. 13	1300	1	5	530	--	--	19	.4
DEC. 30	1545	3	3	630	--	--	--	--
1970								
JAN. 16	1250	2	4	640	--	--	--	--
FEB. 12	1500	2	4	590	--	--	--	--
MAR. 18	1215	7	7	530	--	--	--	--
APR. 16	1230	6	10	500	--	--	--	--
MAY 14	1745	8	7	380	--	--	--	--
JUNE 11	1130	10	20	200	--	--	--	--
JULY 13	1200	18	6	380	--	--	--	--
AUG. 06	1600	--	5	510	--	--	--	--
SEPT. 11	1030	--	--	--	--	--	--	--
OCT. 08	1145	2	5	540	--	--	--	--
NOV. 05	1000	--	--	--	--	--	--	--
DEC. 03	0800	--	--	--	--	--	--	--
1971								
JAN. 06	1030	2	1	720	250	24	--	--
FEB. 03	1115	--	--	--	--	--	--	--
MAR. 05	1200	--	--	--	--	--	--	--
APR. 09	1000	--	--	510	180	15	--	--
MAY 06	0915	--	--	--	--	--	--	--
JUNE 02	1230	--	--	--	--	--	--	--

DATE OF SAMPLE	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)
1969								
JULY 11	3.2	--	1.4	.80	416	.57	1810	.200
AUG. 15	6.4	--	5.4	1.3	869	1.2	537	.300
SEPT. 19	5.8	--	7.6	2.0	946	1.3	764	.500
OCT. 17	5.0	--	7.7	1.4	788	1.1	834	.400
NOV. 13	4.3	--	4.9	--	719	.98	885	.400
DEC. 30	5.4	--	10	1.3	935	1.3	778	.700
1970								
JAN. 16	5.2	--	6.6	--	959	1.3	940	.600
FEB. 12	5.0	--	6.1	.90	873	1.2	889	.600
MAR. 18	5.1	--	6.0	--	797	1.1	850	.530
APR. 16	4.3	--	6.4	1.1	752	1.0	1010	.490
MAY 14	5.1	--	5.5	--	560	.76	1410	.280
JUNE 11	3.1	--	2.7	.60	310	.42	1360	.010
JULY 13	4.0	280	3.8	.90	597	.81	822	.100
AUG. 06	5.3	380	--	--	--	--	--	.070
SEPT. 11	7.6	--	--	--	--	--	--	.340
OCT. 08	5.5	360	8.0	1.0	729	.99	626	.400
NOV. 05	5.3	--	--	1.2	--	--	--	.600
DEC. 03	5.3	--	--	1.5	--	--	--	.700
1971								
JAN. 06	--	620	4.1	1.3	1090	1.5	1090	.050
FEB. 03	--	--	--	--	--	--	--	--
MAR. 05	--	--	--	--	--	--	--	--
APR. 09	--	390	--	--	--	--	--	.300
MAY 06	--	--	--	--	--	--	--	--
JUNE 02	--	--	--	--	--	--	--	--

12324600 CLARK FORK AT GARRISON, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE		NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON ORGANIC TOTAL (MG/L AS C) (00680)
1969									
JULY	11	.000	--	.060	.32	.180	.110	--	--
AUG.	15	.010	--	.010	.30	.110	.030	--	6.0
SEPT.	19	.010	--	.000	.27	.160	.070	--	8.0
OCT.	17	.000	--	.000	.28	.080	.050	--	6.0
NOV.	13	.000	--	.030	.23	.360	.160	--	9.0
DEC.	30	.000	--	.100	.32	.160	.140	--	1.0
1970									
JAN.	16	.000	--	1.10	7.9	.210	.020	--	2.0
FEB.	12	.000	--	.070	.19	.160	.080	--	2.0
MAR.	18	.000	--	.080	.37	.090	.050	--	3.0
APR.	16	.000	--	.180	.03	.150	.080	--	1.0
MAY	14	.000	--	.010	.21	.090	.080	--	3.0
JUNE	11	.000	--	.010	.66	.100	.010	--	1.0
JULY	13	.000	--	.010	.29	.070	.090	.090	4.0
AUG.	06	.000	--	.050	.23	.100	.060	.030	2.0
SEPT.	11	--	--	.020	--	.210	.120	.040	.00
OCT.	08	.010	--	.030	.21	.080	.080	.050	17
NOV.	05	--	--	.090	--	.060	.050	.040	12
DEC.	03	--	--	.180	--	.070	.040	.000	5.0
1971									
JAN.	06	.050	.100	.200	.03	--	--	--	.00
FEB.	03	--	.200	.320	--	.160	--	--	11
MAR.	05	--	.100	.430	--	.070	--	--	3.0
APR.	09	--	--	--	--	--	--	--	3.0
MAY	06	--	.300	.000	--	.120	--	.040	5.0
JUNE	02	--	.140	.110	--	.100	--	.050	4.0

DATE OF SAMPLE		TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
1969											
JULY	11	1200	200	--	0	0	--	30	0	0	--
AUG.	15	0830	300	--	13	0	--	50	0	0	--
SEPT.	19	1400	200	--	4	0	--	60	0	0	--
OCT.	17	1330	--	100	9	0	--	20	0	0	--
NOV.	13	1300	--	90	4	0	--	30	0	0	--
DEC.	30	1545	--	140	6	0	--	40	0	0	--
1970											
JAN.	16	1250	--	30	8	0	--	10	0	0	--
FEB.	12	1500	--	150	13	0	--	40	0	0	--
MAR.	18	1215	--	50	8	0	.0	10	6	0	--
APR.	16	1230	--	70	0	0	.0	<10	2	0	--
MAY	14	1745	--	60	7	0	.0	20	0	0	--
JUNE	11	1130	--	140	12	0	.0	20	0	0	--
JULY	13	1200	--	120	13	0	.0	<10	0	0	--
AUG.	06	1600	--	80	9	0	.0	50	0	0	--
SEPT.	11	1030	--	100	3	0	.0	<10	0	0	--
OCT.	08	1145	--	100	0	0	.0	30	0	--	.00
NOV.	05	1000	--	100	0	0	.0	20	4	--	.00
DEC.	03	0800	--	200	10	0	.0	20	2	--	.00
1971											
JAN.	06	1030	--	--	--	--	--	40	--	--	--
FEB.	03	1115	--	--	--	--	--	10	--	--	--
MAR.	05	1200	--	--	--	--	--	0	--	--	--
APR.	09	1000	--	--	--	--	--	--	--	--	--
MAY	06	0915	--	--	--	--	--	0	--	--	--
JUNE	02	1230	--	--	--	--	--	30	--	--	--

12324600 CLARK FORK AT GARRISON, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
1969										
JULY 11	0	--	42	30	30	--	3	130	--	--
AUG. 15	0	--	120	--	120	--	0	200	--	--
SEPT. 19	3	--	9	--	10	--	0	93	--	--
OCT. 17	0	--	7	--	18	--	0	--	58	--
NOV. 13	0	--	8	--	13	--	0	--	350	--
DEC. 30	0	--	31	--	0	--	0	--	200	--
1970										
JAN. 16	1	--	7	--	0	--	0	--	580	--
FEB. 12	0	--	3	--	6	--	0	--	880	--
MAR. 18	0	--	25	--	34	--	0	--	1000	--
APR. 16	0	--	21	--	0	--	0	--	690	--
MAY 14	0	--	14	--	4	--	0	--	420	--
JUNE 11	0	--	20	--	0	--	0	--	--	--
JULY 13	0	--	20	--	17	--	0	--	110	--
AUG. 06	0	--	0	--	0	--	0	--	70	--
SEPT. 11	0	--	13	--	0	--	0	--	71	--
OCT. 08	0	20	22	170	0	3	0	270	210	--
NOV. 05	0	--	27	--	0	--	0	--	680	.2
DEC. 03	0	20	16	140	90	<1	0	320	480	<.1
1971										
JAN. 06	--	--	0	--	140	--	--	--	0	--
FEB. 03	--	130	14	90	140	10	0	690	880	<.1
MAR. 05	--	--	64	--	560	--	8	--	190	.2
APR. 09	--	40	--	420	--	7	--	300	--	--
MAY 06	--	--	6	--	40	--	0	--	100	.1
JUNE 02	--	90	21	1300	70	14	2	300	80	.2

DATE OF SAMPLE	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
1969										
JULY 11	--	2	1	5	0	--	400	0	--	20
AUG. 15	--	0	0	0	0	--	660	0	--	69
SEPT. 19	--	0	1	4	0	--	690	0	--	33
OCT. 17	--	0	0	2	0	--	580	0	--	46
NOV. 13	--	11	2	6	0	--	540	1	--	76
DEC. 30	--	10	4	11	0	--	660	0	--	73
1970										
JAN. 16	--	27	3	0	0	--	620	0	--	120
FEB. 12	--	7	2	6	0	--	560	0	--	91
MAR. 18	--	36	3	4	0	--	570	0	--	150
APR. 16	--	3	4	10	0	--	550	1	--	150
MAY 14	--	3	0	3	0	--	410	0	--	58
JUNE 11	--	7	0	3	0	--	150	1	--	80
JULY 13	.1	4	0	2	0	--	450	1	--	33
AUG. 06	.1	0	0	2	0	--	620	1	--	19
SEPT. 11	.0	3	0	5	0	--	750	0	--	92
OCT. 08	.0	3	1	0	1	510	540	1	150	90
NOV. 05	.0	4	1	0	0	--	640	<1	--	180
DEC. 03	.4	6	0	12	1	410	620	1	130	140
1971										
JAN. 06	--	--	--	--	--	--	530	--	--	380
FEB. 03	.4	--	--	--	--	250	420	--	250	130
MAR. 05	.2	--	--	--	--	--	600	--	--	140
APR. 09	--	--	--	--	--	360	410	--	100	90
MAY 06	.1	--	--	--	--	--	250	--	--	20
JUNE 02	.1	--	--	--	--	240	530	--	150	70

12331500 FLINT CREEK NEAR DRUMMOND, MT

LOCATION.--Lat 46°37'44", long 113°09'00", in NE¼NW¼NE¼ sec.18, T.10 N., R.12 W., Granite County, Hydrologic Unit 17010201, 2.0 mi upstream from mouth and 2.7 mi south of Drummond.

DRAINAGE AREA.--490 mi^2.

PERIOD OF RECORD.--April 1972 to April 1973.

WATER QUALITY DATA

DATE OF SAMPLE	TIME	DISCHARGE, IN CUBIC FEET PER SECOND (00060)	SPECIFIC CONDUCTANCE (UMHOS) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)
1972						
APR. 13	1400	218	255	7.8	3.0	5.0
MAY 17	1130	419	165	7.4	18.5	9.5
JUNE 14	1200	317	255	7.7	19.0	12.0
JULY 20	1430	90	455	7.8	11.5	10.0
AUG. 23	1600	85	480	7.8	16.5	13.5
SEPT. 21	1315	105	460	8.1	17.5	9.0
OCT. 19	1530	158	365	8.0	8.5	6.5
NOV. 16	1000	181	318	7.7	5.0	3.0
DEC. 20	1515	168	326	7.7	6.0	.0
1973						
JAN. 16	1100	192	300	8.2	6.0	.5
FEB. 21	1400	96	305	8.4	-1.5	2.0
MAR. 21	1300	94	326	8.9	11.0	5.5
APR. 19	1230	112	318	8.6	9.0	5.5

DATE OF SAMPLE	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L) (00310)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ALKALINITY FIELD (MG/L AS CACO3) (00410)
1972					
APR. 13	11.8	2.2	580	--	111
MAY 17	9.4	2.7	1600	--	67
JUNE 14	9.2	.9	12000	--	110
JULY 20	9.6	1.7	300	--	207
AUG. 23	8.8	1.6	1200	--	170
SEPT. 21	10.7	2.2	140	--	170
OCT. 19	10.4	1.7	78	16	149
NOV. 16	11.7	2.1	74	17	147
DEC. 20	11.8	2.9	340	62	143
1973					
JAN. 16	11.4	2.5	230	120	133
FEB. 21	12.3	.9	10	2	145
MAR. 21	12.5	1.6	20	8	146
APR. 19	11.8	2.1	240	160	143

12331500 FLINT CREEK NEAR DRUMMOND, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS, NONCARBONATE (MG/L CACO3) (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE FET-FLD (MG/L AS HCO3) (00440)
1972									
APR. 13	1400	120	5	32	9.5	7.4	.3	2.7	140
MAY 17	1130	74	10	21	5.3	4.4	.2	2.5	78
JUNE 14	1200	120	0	33	8.8	5.5	.2	2.7	140
JULY 20	1430	210	0	55	17	15	.5	5.2	250
AUG. 23	1600	210	8	57	17	16	.5	6.3	250
SEPT. 21	1315	210	6	56	17	16	.5	4.7	250
OCT. 19	1530	170	0	45	13	11	.4	3.5	200
NOV. 16	1000	150	2	40	12	9.4	.3	2.9	180
DEC. 20	1515	150	2	39	12	9.7	.4	4.8	180
1973									
JAN. 16	1100	140	4	37	11	7.8	.3	4.7	160
FEB. 21	1400	150	5	41	12	8.8	.3	3.1	180
MAR. 21	1300	160	3	41	13	8.7	.3	2.9	190
APR. 19	1230	150	10	42	12	8.2	.3	2.7	180

DATE OF SAMPLE	CARBONATE FET-FLD (MG/L AS CO3) (00445)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)
1972									
APR. 13	0	19	3.8	.20	21	160	.22	97	.020
MAY 17	0	13	2.2	.20	18	110	.14	120	.090
JUNE 14	0	15	2.1	.10	19	160	.21	135	.050
JULY 20	0	36	6.0	.30	29	290	.39	70	.040
AUG. 23	0	45	7.6	.40	30	300	.41	69	.020
SEPT. 21	0	41	7.1	.30	30	290	.40	84	.010
OCT. 19	0	30	4.4	.30	24	230	.31	98	.040
NOV. 16	0	24	4.3	.30	22	200	.28	100	.040
DEC. 20	0	23	5.4	.30	22	200	.28	93	.240
1973									
JAN. 16	0	28	4.6	.30	20	200	.27	103	1.09
FEB. 21	0	23	4.2	.20	21	200	.28	53	.290
MAR. 21	0	22	4.0	.20	20	200	.28	52	.020
APR. 19	0	19	3.6	.20	19	190	.26	59	.030

DATE OF SAMPLE	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)
1972							
APR. 13	.000	.020	--	.080	.140	.060	.010
MAY 17	.000	.090	--	.140	.270	.090	.050
JUNE 14	.000	.050	--	.060	.140	.040	.020
JULY 20	.000	.040	--	.040	.090	.090	.050
AUG. 23	.000	.020	--	.050	.150	.110	.080
SEPT. 21	.000	.010	--	.050	.080	.080	.060
OCT. 19	<.010	.040	--	.010	.040	.060	.030
NOV. 16	<.010	.040	--	.020	.050	.040	.020
DEC. 20	<.010	.240	.120	.120	.120	.070	.050
1973							
JAN. 16	.010	1.10	.120	.120	.160	.080	.060
FEB. 21	.010	.300	.040	--	.070	.050	.030
MAR. 21	<.010	.020	<.010	--	.040	.030	.020
APR. 19	<.010	.030	.040	--	.060	.030	.020

12331500 FLINT CREEK NEAR DRUMMOND, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
1972						
APR. 13	1400	0	0	.00	2	3
MAY 17	1130	--	--	--	--	--
JUNE 14	1200	5	0	.00	2	2
JULY 20	1430	5	0	.00	1	2
AUG. 23	1600	--	--	--	--	--
SEPT. 21	1315	--	--	--	--	--
OCT. 19	1530	4	<2	ND	<2	<2
NOV. 16	1000	--	--	--	--	--
DEC. 20	1515	--	--	--	--	--
1973						
JAN. 16	1100	--	--	--	--	--
FEB. 21	1400	--	--	--	--	--
MAR. 21	1300	3	ND	ND	ND	2
APR. 19	1230	6	ND	ND	<2	3

DATE OF SAMPLE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
1972					
APR. 13	40	1	10	.3	20
MAY 17	100	--	38	--	--
JUNE 14	40	0	50	.0	10
JULY 20	30	2	40	.0	10
AUG. 23	100	--	75	--	--
SEPT. 21	20	--	20	--	--
OCT. 19	20	3	<10	<.5	20
NOV. 16	30	--	30	--	--
DEC. 20	40	--	30	--	--
1973					
JAN. 16	50	--	20	--	--
FEB. 21	30	--	<10	--	--
MAR. 21	9	<2	20	<.5	<20
APR. 19	20	2	40	<.5	20

12331600 CLARK FORK AT DRUMMOND, MT

LOCATION.--Lat 46°39'45", long 113°08'57", in SE¼NW¼SE¼ sec.31, T.11 N., R.12 W., Granite County, Hydrologic Unit 17010201, at bridge on old U.S. Highway 10A, 0.4 mi southwest of Drummond, 0.9 mi downstream from Flint Creek, and at mile 417.0.

DRAINAGE AREA.--2,378 mi^2.

PERIOD OF RECORD.--July 1971 to December 1973, June 1982 to August 1983.

WATER QUALITY DATA

DATE OF SAMPLE	TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (UMHOS) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)
1971							
JULY 24	1120	246	--	800	8.2	25.0	18.0
AUG. 17	1145	223	--	750	8.2	24.5	16.0
SEPT. 15	1545	384	--	650	8.2	17.0	12.0
OCT. 13	1810	556	--	650	8.3	8.0	8.5
NOV. 17	1645	708	--	875	8.4	6.0	3.0
DEC. 09	1700	337	--	840	8.0	-4.0	.0
1972							
JAN. 06	1530	455	--	900	7.8	6.0	.0
FEB. 16	1030	572	--	850	7.9	4.5	.5
MAR. 21	1625	1250	--	630	7.6	16.0	7.5
APR. 17	0930	989	--	580	7.7	3.0	3.5
MAY 16	1200	1410	--	545	7.7	19.0	12.0
JUNE 13	1015	2190	--	420	7.6	14.5	11.0
JULY 21	1200	560	--	740	7.8	12.5	12.0
AUG. 24	1700	485	--	890	7.3	25.5	18.0
SEPT. 20	1510	465	--	700	8.2	12.5	8.5
OCT. 18	1415	616	--	690	8.6	12.5	7.5
NOV. 15	1200	652	--	630	7.7	7.5	3.5
DEC. 21	1230	740	--	450	7.6	4.5	.5
1973							
JAN. 16	1430	640	--	595	7.9	6.5	.5
FEB. 21	1630	490	--	610	8.3	4.0	1.0
MAR. 22	1030	545	--	620	8.3	4.5	4.5
APR. 18	1415	505	--	500	8.3	11.5	8.5
MAY 25	1130	415	--	535	8.3	13.5	10.5
JUNE 21	0830	300	--	605	7.9	17.0	13.0
JULY 24	0915	105	--	685	7.9	13.0	12.5
AUG. 29	0930	125	--	740	7.9	15.0	11.0
OCT. 24	1000	--	428	652	7.8	9.5	6.5
DEC. 18	0930	--	420	644	7.8	-3.0	2.5
1982							
JUNE 18	1645	--	3590	273	--	27.0	15.0
JULY 07	1810	--	1850	329	--	17.0	14.0
AUG. 16	1310	--	366	488	--	32.0	18.5
OCT. 05	1245	--	1100	456	--	9.0	7.5
NOV. 17	0730	--	785	487	--	-6.0	.0
1983							
FEB. 24	1250	--	1020	402	--	6.0	5.0
APR. 07	0815	--	617	480	--	6.0	4.0
MAY 17	1640	--	1040	369	--	20.5	12.0
31	1530	--	2150	240	--	23.5	13.0
JULY 12	1750	--	2000	364	--	27.0	18.0
AUG. 22	1530	--	558	473	--	19.5	20.0

12331600 CLARK FORK AT DRUMMOND, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE		OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)
1971							
JULY	24	8.8	--	.9	58	25	177
AUG.	17	10.0	--	1.5	280	62	189
SEPT.	15	10.8	--	1.8	100	40	190
OCT.	13	10.8	--	2.0	170	15	162
NOV.	17	12.9	--	1.8	20	20	128
DEC.	09	13.2	--	2.6	880	170	158
1972							
JAN.	06	12.2	--	1.7	4900	18	152
FEB.	16	10.8	--	2.1	110	18	131
MAR.	21	10.8	--	1.4	110	13	114
APR.	17	11.6	--	2.3	550	16	130
MAY	16	9.0	--	3.1	800	220	92
JUNE	13	9.0	--	1.0	46	68	98
JULY	21	9.2	--	1.8	110	64	148
AUG.	24	9.9	--	2.4	250	140	143
SEPT.	20	11.2	--	1.5	74	68	149
OCT.	18	12.4	--	1.6	56	3	145
NOV.	15	11.6	--	1.1	260	21	147
DEC.	21	11.7	--	2.2	190	74	144
1973							
JAN.	16	10.8	--	2.1	160	72	135
FEB.	21	11.8	--	2.2	90	17	143
MAR.	22	11.2	--	2.7	110	14	136
APR.	18	11.7	--	3.5	56	12	149
MAY	25	10.2	--	3.2	360	190	129
JUNE	21	8.6	--	6.3	1300	42	171
JULY	24	8.8	--	1.6	250	50	208
AUG.	29	8.6	91	2.0	3600	88	204
OCT.	24	10.5	99	1.8	450	75	184
DEC.	18	11.2	96	1.5	230	42	142
1982							
JUNE	18	--	--	--	--	--	--
JULY	07	--	--	--	--	--	--
AUG.	16	--	--	--	--	--	--
OCT.	05	--	--	--	--	--	--
NOV.	17	--	--	--	--	--	--
1983							
FEB.	24	--	--	--	--	--	--
APR.	07	--	--	--	--	--	--
MAY	17	--	--	--	--	--	--
	31	--	--	--	--	--	--
JULY	12	--	--	--	--	--	--
AUG.	22	--	--	--	--	--	--

12331600 CLARK FORK AT DRUMMOND, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)
1971								
JULY 24	1120	9	1	400	130	--	19	--
AUG. 17	1145	7	3	--	--	--	--	--
SEPT. 15	1545	10	6	--	--	--	--	--
OCT. 13	1810	5	30	300	95	--	16	--
NOV. 17	1645	5	4	--	--	--	--	--
DEC. 09	1700	5	3	--	--	--	--	--
1972								
JAN. 06	1530	0	2	450	150	--	18	--
FEB. 16	1030	3	7	--	--	--	--	--
MAR. 21	1625	20	10	--	--	--	--	--
APR. 17	0930	20	8	290	94	14	14	--
MAY 16	1200	40	30	--	--	--	--	--
JUNE 13	1015	20	10	--	--	--	--	--
JULY 21	1200	--	--	290	88	--	17	18
AUG. 24	1700	--	--	460	150	--	20	24
SEPT. 20	1510	--	--	350	110	--	18	19
OCT. 18	1415	--	--	320	100	--	16	15
NOV. 15	1200	--	--	310	99	--	15	14
DEC. 21	1230	--	--	320	100	--	16	16
1973								
JAN. 16	1430	--	--	300	96	--	15	14
FEB. 21	1630	--	--	290	93	--	15	14
MAR. 22	1030	--	--	300	95	--	15	14
APR. 18	1415	--	--	260	80	--	15	15
MAY 25	1130	--	--	250	78	--	13	13
JUNE 21	0830	--	--	300	92	--	17	16
JULY 24	0915	--	--	320	95	--	20	21
AUG. 29	0930	--	--	360	110	--	21	23
OCT. 24	1000	--	--	310	93	--	18	19
DEC. 18	0930	--	--	290	90	--	16	17

DATE OF SAMPLE	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)
1971								
JULY 24	--	4.6	--	--	1.0	--	--	--
AUG. 17	--	--	--	--	.90	--	--	--
SEPT. 15	--	--	--	--	.60	--	--	--
OCT. 13	--	4.1	--	--	.70	--	--	--
NOV. 17	--	--	--	--	1.0	--	--	--
DEC. 09	--	--	--	--	1.1	--	--	--
1972								
JAN. 06	--	5.2	--	--	1.0	--	--	--
FEB. 16	--	--	--	--	.90	--	--	--
MAR. 21	--	--	--	--	.80	--	--	--
APR. 17	--	3.8	--	--	.70	--	--	--
MAY 16	--	--	--	--	.60	--	--	--
JUNE 13	--	--	--	--	.30	--	--	--
JULY 21	.5	--	200	7.0	.80	504	.69	762
AUG. 24	.5	--	320	7.6	.90	744	1.0	974
SEPT. 20	.5	--	200	7.0	.80	522	.71	655
OCT. 18	.4	--	200	5.4	.70	498	.68	828
NOV. 15	.4	--	200	5.4	.60	482	.66	849
DEC. 21	.4	--	200	7.6	.70	508	.69	1010
1973								
JAN. 16	.4	--	180	6.5	.60	450	.61	778
FEB. 21	.4	--	170	6.5	.70	394	.54	521
MAR. 22	.4	--	190	5.7	.50	444	.60	653
APR. 18	.4	--	140	6.5	.60	389	.53	530
MAY 25	.4	--	140	6.0	.60	382	.52	428
JUNE 21	.4	--	150	7.1	.60	437	.59	354
JULY 24	.5	--	140	8.8	.60	463	.63	131
AUG. 29	.5	--	180	8.6	.70	523	.71	177
OCT. 24	.5	--	150	7.7	.60	418	.57	483
DEC. 18	.5	--	170	6.9	.60	427	.58	484

12331600 CLARK FORK AT DRUMMOND, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
1971							
JULY 24	.070	.000	--	.070	.100	--	--
AUG. 17	--	--	--	--	--	--	--
SEPT. 15	--	--	--	--	--	--	--
OCT. 13	.000	.000	--	.000	.070	.14	.21
NOV. 17	--	--	--	--	--	--	--
DEC. 09	--	--	--	--	--	--	--
1972							
JAN. 06	.200	.000	--	.200	.170	.30	.47
FEB. 16	--	--	--	--	--	--	--
MAR. 21	--	--	--	--	--	--	--
APR. 17	.110	.000	--	.110	.030	.33	.36
MAY 16	--	--	--	--	--	--	--
JUNE 13	--	--	--	--	--	--	--
JULY 21	--	--	--	.000	--	--	.34
AUG. 24	--	--	--	--	--	--	--
SEPT. 20	--	--	--	--	--	--	--
OCT. 18	--	--	--	.040	--	--	.25
NOV. 15	--	--	--	--	--	--	--
DEC. 21	--	--	--	--	--	--	--
1973							
JAN. 16	--	--	--	.450	--	--	.65
FEB. 21	--	--	--	--	--	--	--
MAR. 22	--	--	--	--	--	--	--
APR. 18	--	--	.130	.090	--	--	.39
MAY 25	--	--	--	--	--	--	--
JUNE 21	--	--	--	--	--	--	--
JULY 24	--	--	.020	.010	--	--	.39
AUG. 29	--	--	.030	.030	--	--	.40
OCT. 24	--	--	.030	<.100	--	--	.55
DEC. 18	--	--	.450	.410	--	--	.30

DATE OF SAMPLE	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
1971							
JULY 24	--	.090	.080	--	.060	.18	9.0
AUG. 17	--	--	--	--	--	--	--
SEPT. 15	--	--	--	--	--	--	--
OCT. 13	.21	.090	.070	--	.010	.03	.00
NOV. 17	--	--	--	--	--	--	--
DEC. 09	--	--	--	--	--	--	--
1972							
JAN. 06	.67	.080	.040	--	.030	.09	4.0
FEB. 16	--	--	--	--	--	--	--
MAR. 21	--	--	--	--	--	--	--
APR. 17	.47	.090	.030	--	.000	.00	3.0
MAY 16	--	--	--	--	--	--	--
JUNE 13	--	--	--	--	--	--	--
JULY 21	.34	.170	.140	--	.100	.31	--
AUG. 24	--	--	--	--	--	--	--
SEPT. 20	--	--	--	--	--	--	--
OCT. 18	.29	.040	--	.100	.020	.06	--
NOV. 15	--	--	--	--	--	--	--
DEC. 21	--	--	--	--	--	--	--
1973							
JAN. 16	1.1	.120	--	.100	.050	.15	--
FEB. 21	--	--	--	--	--	--	--
MAR. 22	--	--	--	--	--	--	--
APR. 18	.52	.060	--	.020	.010	.03	--
MAY 25	--	--	--	--	--	--	--
JUNE 21	--	--	--	--	--	--	--
JULY 24	.41	.060	--	.050	<.010	.00	--
AUG. 29	.43	.050	--	.050	.040	.12	--
OCT. 24	.58	.140	--	.100	.070	.21	--
DEC. 18	.75	.070	--	.070	.050	.15	--

12331600 CLARK FORK AT DRUMMOND, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
1971									
JULY 24	1120	10	0	<1	0	0	.00	20	20
AUG. 17	1145	--	--	--	--	--	--	--	--
SEPT. 15	1545	--	--	--	--	--	--	--	--
OCT. 13	1810	11	0	0	0	3	.00	10	5
NOV. 17	1645	--	--	--	--	--	--	--	--
DEC. 09	1700	--	--	--	--	--	--	--	--
1972									
JAN. 06	1530	5	5	2	2	2	2	9	3
FEB. 16	1030	--	--	--	--	--	--	--	--
MAR. 21	1625	--	--	--	--	--	--	--	--
APR. 17	0930	8	3	2	1	10	.00	10	10
MAY 16	1200	--	--	--	--	--	--	--	--
JUNE 13	1015	--	--	--	--	--	--	--	--

DATE OF SAMPLE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
1971									
JULY 24	10	10	5	0	.0	.0	4	30	30
AUG. 17	--	20	--	--	--	.1	--	--	0
SEPT. 15	--	10	--	--	--	.2	--	--	20
OCT. 13	100	20	3	0	.2	.2	6	20	10
NOV. 17	--	30	--	--	--	.3	--	--	50
DEC. 09	--	10	--	--	--	.3	--	--	60
1972									
JAN. 06	220	10	4	0	.2	.1	0	80	80
FEB. 16	--	20	--	--	--	.2	--	--	100
MAR. 21	--	20	--	--	--	.5	--	--	32
APR. 17	780	20	10	0	--	.1	0	120	30
MAY 16	--	50	--	--	--	.3	--	--	0
JUNE 13	--	80	--	--	--	.0	--	--	20

12331900 CLARK FORK NEAR CLINTON, MT

LOCATION.--46°43'05", long 113°35'17", in SE¼SW¼SE¼ sec.10, T.11 N., R.16 W., Missoula County, Hydrologic Unit 17010201, on downstream side of county road bridge, 4.5 mi above Rock Creek, 6.5 mi southeast of Clinton, and at mile 386.6.

DRAINAGE AREA.--2,629 mi^2.

PERIOD OF RECORD.--June 1982 to September 1983.

REMARKS.--Some regulation by settling ponds on Silver Bow Creek near Anaconda and by Georgetown Lake (station number 12325000) on Flint Creek. Diversions for irrigation of about 88,400 acres above station.

WATER QUALITY DATA

DATE OF SAMPLE		TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (UMHOS) (00095)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)
1982						
JUNE	14	1200	3020	329	20.0	13.5
	18	1530	3810	294	23.0	16.0
JULY	15	1400	2000	365	19.0	16.5
	29	0945	922	464	21.0	18.5
AUG.	27	0930	387	562	15.5	16.0
SEPT.	15	1000	742	556	5.0	8.5
OCT.	13	1100	1050	486	12.0	9.0
NOV.	18	0930	846	502	.0	1.5
DEC.	30	--	--	533	--	--
1983						
JAN.	06	1130	1270	358	1.0	1.5
FEB.	09	1200	684	491	1.5	1.5
MAR.	24	0900	803	484	4.5	5.0
MAY	06	1115	838	430	6.5	11.0
	31	1625	2310	261	27.0	14.5
JUNE	23	1200	938	458	22.5	16.5
AUG.	04	1057	619	466	18.5	18.5
SEPT.	16	0740	797	493	6.0	12.5

12334510 ROCK CREEK NEAR CLINTON, MT

LOCATION.--Lat 46°43'21", long 113°40'56', in NE¼SW¼ sec.12, T.11 N., R.17 W., Missoula County, Hydrologic Unit 17010202, on left bank 100 ft downstream from private road bridge, 0.2 mi upstream from mouth, and 3.7 mi southeast of Clinton.

DRAINAGE AREA.--885 mi^2.

PERIOD OF RECORD.--June 1982 to September 1983.

REMARKS.--Some regulation by East Fork Rock Creek Reservoir (station number 12332500). During irrigation season water is diverted from East Fork Rock Creek in sec.5, T.4 N., R.14 W., 500 ft below Rock Creek Dam, through a canal into Trout Creek, thence into Flint Creek. Diversions for irrigation of about 16,100 acres.

WATER QUALITY DATA

DATE OF SAMPLE		TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (UMHOS) (00095)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)
1982						
JUNE	10	1100	1950	82	17.0	8.5
	14	1500	3910	78	17.5	10.0
	18	1220	3920	74	25.5	10.0
	23	1200	3650	73	23.5	10.0
JULY	15	1000	1310	100	16.0	12.0
	21	0805	894	120	12.0	13.5
AUG.	26	1245	304	139	26.0	14.5
OCT.	07	1415	373	147	8.5	7.5
NOV.	17	0910	250	155	-2.0	1.0
DEC.	29	0930	153	164	-12.0	.0
1983						
FEB.	09	1030	191	155	.0	.5
MAR.	23	1000	269	148	4.0	4.0
MAY	06	0830	630	110	6.5	7.5
	26	1200	2120	68	25.0	10.0
	31	1240	2570	60	23.5	9.0
JUNE	02	1410	2060	66	24.0	8.5
	06	1750	1780	78	25.0	12.5
	23	0840	898	114	15.0	11.0
JULY	21	1720	795	117	26.0	15.0
AUG.	04	0740	517	136	15.0	14.0
	24	1255	435	163	23.5	14.5
SEPT.	15	0847	314	145	6.0	9.5

12340000 BLACKFOOT RIVER NEAR BONNER, MT

LOCATION.--Lat 46°53'59", long 113°45'20", in SE¼SE¼NW¼ sec.9, T.13 N., R.17 W., Missoula County, Hydrologic Unit 17010203, Lolo National Forest, on right bank 5.0 mi downstream from Union Creek, 5.6 mi northeast of Bonner, and at mile 7.3.

DRAINAGE AREA.--2,290 mi^2.

PERIOD OF RECORD.--June 1982 to September 1983.

WATER QUALITY DATA

DATE OF SAMPLE		TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (UMHOS) (00095)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)
1982						
JUNE	23	0845	8430	152	16.0	12.0
JULY	13	0850	3090	195	18.0	15.5
AUG.	25	1500	824	252	27.5	18.5
OCT.	05	1315	821	262	15.0	11.0
NOV.	15	1535	--	262	-2.0	1.5
DEC.	29	1145	420	282	-5.0	.5
1983						
FEB.	02	1100	541	254	.5	1.0
MAR.	23	1210	871	231	9.0	5.5
MAY	05	--	--	178	--	--
JUNE	01	1745	6490	166	17.0	10.0
	22	1146	2440	211	21.0	12.5
AUG.	08	1450	--	230	30.5	21.0
SEPT.	14	1235	735	259	20.5	14.0

12340500 CLARK FORK ABOVE MISSOULA, MT

LOCATION.--Lat 46°52'38", long 113°55'53", in NW¼NW¼NW¼ sec.19, T.13 N., R.18 W., Missoula County, Hydrologic Unit 17010204, on right bank 0.2 mi downstream from county road bridge, 2.8 mi east of Missoula, 2.8 mi downstream from Milltown Dam, 3.0 mi downstream from Blackfoot River, and at mile 361.6.

DRAINAGE AREA.--5,999 mi^2.

PERIOD OF RECORD.--July 1969 to June 1971, July 1982 to September 1983.

WATER QUALITY DATA

DATE OF SAMPLE	TIME	DISCHARGE, IN CUBIC FEET PER SECOND (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (UMHOS) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)
1969						
JULY 10	1300	7750	--	325	8.0	29.0
AUG. 14	1140	1140	--	340	8.3	25.0
SEPT. 18	1345	1690	--	425	8.3	16.0
OCT. 16	1930	1830	--	490	8.3	7.0
NOV. 13	0810	1690	--	440	8.1	.0
DEC. 18	1730	1450	--	520	8.0	3.0
1970						
JAN. 15	1145	1600	--	515	7.9	9.0
FEB. 11	1230	1180	--	560	8.4	6.0
MAR. 18	0810	1580	--	475	8.3	-1.5
APR. 15	1630	2010	--	450	8.3	8.0
MAY 13	2000	7190	--	255	7.6	10.0
JUNE 10	0840	15300	--	180	8.0	10.5
JULY 12	0915	3810	--	320	8.3	22.0
AUG. 05	1445	2240	--	370	8.2	24.0
SEPT. 10	0930	1400	--	420	8.3	4.0
OCT. 07	0830	1880	--	420	8.2	-.5
NOV. 04	0730	1610	--	520	8.1	1.5
DEC. 02	0900	1640	--	500	8.2	.0
04	1430	--	--	--	--	--
1971						
JAN. 08	1000	1000	--	535	7.5	3.5
FEB. 02	1445	5300	--	350	8.3	5.0
MAR. 03	1730	2000	--	470	8.3	.0
APR. 07	1730	2630	--	475	8.3	8.5
MAY 04	1720	10800	--	205	8.1	23.0
JUNE 02	1700	13900	--	215	7.5	16.0
03	1600	--	--	--	--	--
1982						
JULY 13	1215	--	6080	236	--	26.0
AUG. 26	0815	--	1470	307	--	15.0
NOV. 17	1130	--	1840	375	--	3.0
DEC. 27	--	--	--	395	--	--
1983						
FEB. 02	0815	--	1520	361	--	-3.5
MAR. 23	--	--	--	328	--	--
MAY 05	1450	--	3100	248	--	18.5
JUNE 02	0730	--	9130	184	--	12.0
06	1345	--	7920	187	--	29.0
22	1350	--	4270	256	--	21.5
AUG. 03	0750	--	2360	282	--	17.0
SEPT. 15	1515	--	1770	345	--	22.5

12340500 CLARK FORK ABOVE MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE		TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L) (00310)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ALKALINITY FIELD (MG/L AS CACO3) (00410)
1969							
JULY	10	17.0	9.0	.1	34	--	112
AUG.	14	18.0	8.6	1.8	4	--	141
SEPT.	18	13.0	9.2	1.6	49	--	194
OCT.	16	3.5	12.2	.8	48	6	144
NOV.	13	5.0	11.0	.9	18	7	136
DEC.	18	.5	11.8	.8	14	2	133
1970							
JAN.	15	.0	11.1	1.1	33	--	128
FEB.	11	1.0	12.5	1.4	8	0	128
MAR.	18	3.0	13.0	2.4	34	--	128
APR.	15	5.0	12.2	1.2	710	--	120
MAY	13	8.0	10.5	2.8	22	14	80
JUNE	10	10.5	10.2	1.6	300	60	69
JULY	12	17.0	8.6	.9	3800	170	116
AUG.	05	18.0	8.0	.5	56	52	115
SEPT.	10	12.5	9.0	1.2	110	18	130
OCT.	07	7.0	12.2	--	260	70	134
NOV.	04	2.0	12.1	.8	160	120	131
DEC.	02	2.0	12.0	.8	--	350	125
	04	--	--	--	10	--	--
1971							
JAN.	08	.5	12.1	1.1	370	48	138
FEB.	02	1.5	12.4	3.2	100	32	87
MAR.	03	.5	12.8	.9	26	0	110
APR.	07	8.0	11.8	1.0	33	13	105
MAY	04	10.5	10.3	1.7	480	430	72
JUNE	02	11.0	10.7	.8	--	50	75
	03	11.5	--	--	2600	23	--
1982							
JULY	13	15.5	--	--	--	--	--
AUG.	26	17.0	--	--	--	--	--
NOV.	17	.5	--	--	--	--	--
DEC.	27	--	--	--	--	--	--
1983							
FEB.	02	1.5	--	--	--	--	--
MAR.	23	--	--	--	--	--	--
MAY	05	10.0	--	--	--	--	--
JUNE	02	10.0	--	--	--	--	--
	06	10.5	--	--	--	--	--
	22	13.0	--	--	--	--	--
AUG.	03	20.0	--	--	--	--	--
SEPT.	15	13.5	--	--	--	--	--

12340500 CLARK FORK ABOVE MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)
1969								
JUL. 10	1300	16	18	150	--	--	--	--
AUG. 14	1140	2	3	180	--	--	--	--
SEPT. 18	1345	2	8	240	--	--	--	--
OCT. 16	1930	3	15	260	--	--	11	.3
NOV. 13	0810	1	3	250	--	--	9.5	.3
DEC. 18	1730	2	1	280	--	--	--	--
1970								
JAN. 15	1145	2	2	280	--	--	--	--
FEB. 11	1230	2	3	290	--	--	--	--
MAR. 18	0810	10	9	250	--	--	--	--
APR. 15	1630	9	7	230	--	--	--	--
MAY 13	2000	19	20	120	--	--	--	--
JUNE 10	0840	22	55	90	--	--	--	--
JULY 12	0915	7	6	160	--	--	--	--
AUG. 05	1445	--	7	190	--	--	--	--
SEPT. 10	0930	--	--	--	--	--	--	--
OCT. 07	0830	2	4	220	--	--	--	--
NOV. 04	0730	--	--	--	--	--	--	--
DEC. 02	0900	--	--	--	--	--	--	--
1971								
JAN. 08	1000	1	1	270	83	16	--	--
FEB. 02	1445	--	--	--	--	--	--	--
MAR. 03	1730	--	--	--	--	--	--	--
APR. 07	1730	5	20	230	71	12	--	--
MAY 04	1720	--	--	--	--	--	--	--
JUNE 02	1700	--	--	--	--	--	--	--

DATE OF SAMPLE	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)
1969								
JUL. 10	1.9	--	1.0	.30	202	--	--	.200
AUG. 14	2.4	--	1.4	.30	258	.35	794	.020
SEPT. 18	2.8	--	3.2	.70	321	.44	1460	.000
OCT. 16	2.8	--	2.9	.70	374	.51	1850	.100
NOV. 13	2.3	--	2.9	--	317	.43	1450	.000
DEC. 18	2.8	--	3.2	.50	326	.44	1280	.200
1970								
JAN. 15	2.5	--	3.4	--	386	.53	1670	.300
FEB. 11	2.8	--	3.8	.40	398	.54	1270	.200
MAR. 18	3.0	--	3.2	--	349	.47	1490	.110
APR. 15	2.6	--	3.4	.40	327	.44	1770	.140
MAY 13	2.0	--	1.6	--	172	.23	3340	.040
JUNE 10	1.5	--	1.6	.20	117	.16	4830	.090
JULY 12	2.2	57	.00	.30	219	.30	2250	.010
AUG. 05	2.1	72	--	--	--	--	--	.000
SEPT. 10	--	--	--	--	--	--	--	.020
OCT. 07	2.9	88	3.9	.40	284	.39	1440	.000
NOV. 04	--	--	--	--	--	--	--	.100
DEC. 02	--	--	--	--	--	--	--	.200
1971								
JAN. 08	2.4	130	7.8	.50	356	.48	961	.280
FEB. 02	--	--	--	--	--	--	--	--
MAR. 03	--	--	--	--	--	--	--	--
APR. 07	2.7	140	1.9	.60	350	.48	2490	.010
MAY 04	--	--	--	--	--	--	--	--
JUNE 02	--	--	--	--	--	--	--	--

12340500 CLARK FORK ABOVE MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE		NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON ORGANIC TOTAL (MG/L AS C) (00680)
1969									
JUL.	10	.000	--	.140	.34	.210	.120	--	--
AUG.	14	.000	--	.000	.14	.020	.010	--	10
SEPT.	18	.010	--	.060	.16	.330	.020	--	6.0
OCT.	16	.000	--	.000	.00	.070	.020	--	6.0
NOV.	13	.000	--	.010	.14	.240	.180	--	7.0
DEC.	18	.000	--	.000	.10	.120	.080	--	2.0
1970									
JAN.	15	.000	--	.010	.47	.040	.000	--	4.0
FEB.	11	.000	--	.070	.16	.030	.020	--	2.0
MAR.	18	.000	--	.010	.36	.080	.080	--	4.0
APR.	15	.000	--	.000	.20	.160	.050	--	8.0
MAY	13	.000	--	.060	.47	.100	.050	--	5.0
JUNE	10	.000	--	.000	.26	.210	.050	--	1.0
JULY	12	.000	--	.010	.16	.030	.050	.040	5.0
AUG.	05	.000	--	.020	.08	.140	.020	.000	3.0
SEPT.	10	--	--	.000	--	.110	.030	.020	1.0
OCT.	07	.010	--	.030	.22	.060	.050	.030	25
NOV.	04	--	--	.020	--	.020	.010	.000	.00
DEC.	02	--	--	.010	--	.020	.010	.000	4.0
1971									
JAN.	08	.020	.300	.000	.02	--	--	--	.00
FEB.	02	--	.400	.080	--	.200	--	--	4.0
MAR.	03	--	.100	.050	--	.050	--	--	2.0
APR.	07	.010	.000	.260	.20	.090	.020	.020	1.0
MAY	04	--	.100	.000	--	.060	--	.030	7.0
JUNE	02	--	.030	.080	--	.090	--	.040	48

DATE OF SAMPLE		TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)
1969											
JUL.	10	1300	100	--	4	0	--	10	0	0	--
AUG.	14	1140	100	--	6	0	--	10	0	0	--
SEPT.	18	1345	200	--	2	0	--	20	0	0	--
OCT.	16	1930	--	50	1	0	--	<10	0	0	--
NOV.	13	0810	--	30	3	0	--	<10	0	0	--
DEC.	18	1730	--	80	3	0	--	20	0	0	--
1970											
JAN.	15	1145	--	30	4	0	--	70	0	0	--
FEB.	11	1230	--	90	5	0	--	20	0	0	--
MAR.	18	0810	--	40	7	0	.0	40	0	0	--
APR.	15	1630	--	50	0	0	.0	<10	0	0	--
MAY	13	2000	--	100	1	0	.0	20	0	0	--
JUNE	10	0840	--	190	4	0	.0	10	0	0	--
JULY	12	0915	--	160	3	0	.0	70	0	0	--
AUG.	05	1445	--	100	6	0	.0	10	0	0	--
SEPT.	10	0930	--	--	--	--	--	10	--	--	--
OCT.	07	0830	--	100	0	0	.0	30	0	--	.00
NOV.	04	0730	--	--	--	--	--	10	--	--	--
DEC.	02	0900	--	--	--	--	--	10	--	--	--
1971											
JAN.	08	1000	--	--	0	0	.0	30	0	--	.00
FEB.	02	1445	--	--	--	--	--	0	--	--	--
MAR.	03	1730	--	--	--	--	--	10	--	--	--
APR.	07	1730	--	200	0	200	.0	30	0	--	.00
MAY	04	1720	--	--	--	--	--	10	--	--	--
JUNE	02	1700	--	--	--	--	--	20	--	--	--

12340500 CLARK FORK ABOVE MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
1969										
JUL. 10	0	--	0	--	40	--	5	40	--	--
AUG. 14	1	--	2	--	20	--	0	39	--	--
SEPT. 18	1	--	1	--	20	--	0	--	--	--
OCT. 16	0	--	3	--	4	--	0	--	17	--
NOV. 13	0	--	4	--	15	--	0	--	38	--
DEC. 18	0	--	11	--	0	--	0	--	29	--
1970										
JAN. 15	1	--	3	--	11	--	0	--	37	--
FEB. 11	0	--	0	--	6	--	0	--	110	--
MAR. 18	0	--	0	--	30	--	0	--	150	--
APR. 15	0	--	14	--	10	--	0	--	67	--
MAY 13	0	--	25	--	58	--	0	--	48	--
JUNE 10	0	--	8	--	50	--	0	--	10	--
JULY 12	0	--	22	--	38	--	0	--	27	--
AUG. 05	0	--	0	--	0	--	0	--	39	--
SEPT. 10	--	--	63	--	0	--	0	--	17	--
OCT. 07	0	10	17	50	0	7	0	40	22	--
NOV. 04	--	--	0	--	10	--	0	--	25	.2
DEC. 02	--	10	0	100	30	<1	0	70	77	--
1971										
JAN. 08	0	--	2	--	100	--	0	--	0	1.0
FEB. 02	--	100	11	190	200	15	3	270	200	--
MAR. 03	--	--	32	--	140	--	0	--	94	.3
APR. 07	4	340	24	4200	30	66	0	450	100	.2
MAY 04	--	--	4	--	60	--	0	--	30	.1
JUNE 02	--	10	9	630	80	9	0	90	0	.3

DATE OF SAMPLE	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
1969										
JUL. 10	--	9	3	7	0	--	270	0	--	20
AUG. 14	--	0	0	1	0	--	320	0	--	0
SEPT. 18	--	0	0	4	0	--	360	0	--	0
OCT. 16	--	0	0	13	0	--	360	0	--	25
NOV. 13	--	6	3	8	0	--	340	1	--	19
DEC. 18	--	9	3	7	1	--	390	0	--	17
1970										
JAN. 15	--	6	3	0	0	--	320	1	--	28
FEB. 11	--	12	3	0	0	--	350	0	--	42
MAR. 18	--	13	2	4	0	--	360	0	--	31
APR. 15	--	3	0	6	0	--	330	1	--	13
MAY 13	--	2	15	6	0	--	150	0	--	16
JUNE 10	--	4	0	0	0	--	100	0	--	22
JULY 12	.1	2	0	6	0	--	210	1	--	14
AUG. 05	.0	0	1	3	0	--	270	0	--	0
SEPT. 10	.0	--	--	--	--	--	250	--	--	28
OCT. 07	.0	2	0	0	0	270	320	0	<10	10
NOV. 04	.9	--	--	--	--	--	340	--	--	20
DEC. 02	.2	--	--	--	--	230	380	--	40	10
1971										
JAN. 08	--	2	0	0	0	--	270	2	--	40
FEB. 02	.4	--	--	--	--	130	120	--	210	40
MAR. 03	.2	--	--	--	--	--	350	--	--	40
APR. 07	.2	0	10	0	1	190	220	0	540	40
MAY 04	.1	--	--	--	--	--	120	--	--	5
JUNE 02	.2	--	--	--	--	60	210	--	<10	20

12352980 BITTERROOT RIVER AT MACLAY BRIDGE, NEAR MISSOULA, MT

LOCATION.--Lat 46°51'12", long 114°05'48", in SE¼NW¼SW¼, T.13 N., R.20 W., Missoula County, Hydrologic Unit 17010204, at Maclay Bridge on county road, 1.5 mi upstream from mouth, and 5.2 mi west of the Missoula Post Office.

DRAINAGE AREA.--2,850 mi^2.

PERIOD OF RECORD.--July 1970 to August 1973.

REMARKS.--Water discharge computed by subtracting the discharge of Clark Fork below Missoula (station number 12353000) from that of Clark Fork above Missoula (station number 12340500).

WATER QUALITY DATA

DATE OF SAMPLE		TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	SPE-CIFIC CON-DUCT-ANCE (UMHOS) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)
1970							
JULY	11	1500	3830	98	8.0	27.5	18.0
AUG.	05	1100	1290	175	7.8	24.5	19.0
SEPT.	09	1530	950	210	8.2	18.0	15.0
OCT.	06	1630	960	180	8.0	6.5	10.5
NOV.	03	1450	1100	160	8.0	12.5	5.0
DEC.	01	1315	1350	150	7.6	2.5	4.0
	04	1050	--	--	--	--	--
1971							
JAN.	07	1400	640	175	7.9	6.0	.5
FEB.	02	1810	4980	60	6.8	4.0	2.5
MAR.	04	0900	1520	130	7.6	-2.5	1.0
APR.	08	0930	2480	115	7.6	5.5	6.0
MAY	04	1410	9300	60	7.9	24.0	10.0
JUNE	03	1400	14500	60	6.5	21.0	10.5
JULY	24	1530	2160	120	8.0	30.0	20.0
AUG.	17	1530	760	192	8.1	30.5	20.0
SEPT.	16	0830	870	205	7.4	6.0	11.5
OCT.	14	0945	970	260	7.4	1.5	8.0
NOV.	18	0930	880	210	7.4	-1.0	4.0
DEC.	09	1200	620	185	7.2	2.5	.0
1972							
JAN.	06	0900	400	190	7.0	3.0	.0
FEB.	15	1700	960	180	7.4	1.5	2.5
	16	0745	--	--	--	--	--
MAR.	21	0830	3950	105	6.6	9.0	5.0
APR.	17	1700	2660	118	7.2	12.0	6.5
MAY	16	1530	12000	50	6.7	25.5	10.0
JUNE	13	1530	21500	60	6.4	21.0	11.0
JULY	20	0930	3640	100	6.2	12.0	10.5
AUG.	24	0930	1030	200	7.4	16.5	14.5
SEPT.	20	1845	1070	195	7.2	13.0	12.5
OCT.	18	1715	1110	179	7.5	13.5	8.5
NOV.	15	1530	930	165	7.6	6.5	5.5
DEC.	21	0830	930	116	7.1	3.0	.5
1973							
JAN.	17	0930	1150	148	7.3	3.0	.0
FEB.	22	1015	780	170	8.2	.5	3.0
MAR.	21	1645	780	170	8.7	9.5	8.0
APR.	19	0730	1160	144	7.7	-1.0	6.0
MAY	24	1830	5150	66	8.1	18.0	11.0
JUNE	20	1700	3260	108	7.2	26.0	16.0
JULY	24	1600	580	230	8.2	29.5	19.5
AUG.	29	1300	448	250	8.4	25.5	16.5

12352980 BITTERROOT RIVER AT MACLAY BRIDGE, NEAR MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE		OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)		COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)
1970							
JULY	11	8.8	.8	580		82	44
AUG.	05	7.9	.2	43		14	78
SEPT.	09	10.0	2.0	900		67	100
OCT.	06	11.9	--	82		8	84
NOV.	03	12.2	1.0	24		3	79
DEC.	01	12.7	1.5		--	12	64
	04	--	--	380		--	--
1971							
JAN.	07	13.2	1.2	240		47	80
FEB.	02	12.4	1.3	520		140	23
MAR.	04	12.3	.6	7		4	53
APR.	08	12.0	.8	180		8	43
MAY	04	10.8	2.2	2900		300	32
JUNE	03	10.1	.7	80		130	--
JULY	24	9.2	.7	380		22	54
AUG.	17	10.2	.9	1000		50	92
SEPT.	16	9.6	1.4	36		2	130
OCT.	14	11.6	2.3	52		2	94
NOV.	18	12.2	2.1	1600		90	84
DEC.	09	13.6	1.3	1600		0	89
1972							
JAN.	06	12.0	1.9	13		0	85
FEB.	15	11.6	1.5		--	--	74
	16	--	--	57		6	--
MAR.	21	11.0	1.1	150		26	42
APR.	17	11.6	1.6	150		5	51
MAY	16	9.6	2.1	4600		310	20
JUNE	13	9.4	1.2	490		130	25
JULY	20	9.2	1.4	490		42	41
AUG.	24	8.8	1.5	160		68	75
SEPT.	20	10.4	1.4	32		14	79
OCT.	18	10.8	.7	130		4	79
NOV.	15	13.0	.8	90		3	82
DEC.	21	11.0	1.6	470		92	71
1973							
JAN.	17	11.8	1.1	150		130	79
FEB.	22	12.2	1.5	46		8	83
MAR.	21	12.0	1.6	160		0	79
APR.	19	10.8	2.7	310		26	62
MAY	24	9.4	2.0	850		160	66
JUNE	20	9.0	1.0	170		3	45
JULY	24	11.7	1.5	420		24	104
AUG.	29	8.1	1.3	18		4	118

12352980 BITTERROOT RIVER AT MACLAY BRIDGE, NEAR MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)
1970										
JULY 11	1500	5	6	45	--	--	--	--	.3	--
AUG. 05	1100	--	5	75	--	--	--	--	--	--
SEPT. 09	1530	--	--	--	--	--	--	--	--	--
OCT. 06	1630	2	2	80	--	--	--	--	--	--
NOV. 03	1450	--	--	--	--	--	--	--	--	--
DEC. 01	1315	--	--	--	--	--	--	--	--	--
1971										
JAN. 07	1400	--	--	72	21	--	4.8	--	--	--
FEB. 02	1810	--	--	--	--	--	--	--	--	--
MAR. 04	0900	--	--	--	--	--	--	--	--	--
APR. 08	0930	0	--	46	13	--	3.2	--	--	--
MAY 04	1410	--	--	--	--	--	--	--	--	--
JUNE 03	1400	--	--	--	--	--	--	--	--	--
JULY 24	1530	7	1	50	14	--	3.6	--	--	1.1
AUG. 17	1530	10	1	--	--	--	--	--	--	--
SEPT. 16	0830	6	1	--	--	--	--	--	--	--
OCT. 14	0945	5	0	90	26	--	6.0	--	--	1.8
NOV. 18	0930	3	0	--	--	--	--	--	--	--
DEC. 09	1200	5	1	--	--	--	--	--	--	--
1972										
JAN. 06	0900	0	1	77	22	--	5.3	--	--	1.9
FEB. 15	1700	5	3	--	--	--	--	--	--	--
MAR. 21	0830	20	10	--	--	--	--	--	--	--
APR. 17	1700	20	3	53	14	4.3	4.3	--	--	1.4
MAY 16	1530	--	--	21	6.5	--	1.1	1.8	.2	1.0
JUNE 13	1530	20	15	--	--	--	--	--	--	--
JULY 20	0930	--	--	22	4.7	--	2.5	3.3	.3	--
AUG. 24	0930	--	--	80	23	--	5.6	6.4	.3	--
SEPT. 20	1845	--	--	86	25	--	5.7	7.1	.3	--
OCT. 18	1715	--	--	79	23	--	5.3	5.9	.3	--
NOV. 15	1530	--	--	75	22	--	4.9	6.1	.3	--
DEC. 21	0830	--	--	66	19	--	4.5	5.6	.3	--
1973										
JAN. 17	0930	--	--	72	22	--	4.2	5.1	.3	--
FEB. 22	1015	--	--	73	21	--	5.1	5.8	.3	--
MAR. 21	1645	--	--	72	21	--	4.8	5.4	.3	--
APR. 19	0730	--	--	60	17	--	4.2	4.9	.3	--
MAY 24	1830	--	--	25	7.4	--	1.5	2.3	.2	--
JUNE 20	1700	--	--	44	13	--	2.8	3.8	.3	--
JULY 24	1600	--	--	98	28	--	6.9	8.0	.4	--
AUG. 29	1300	--	--	110	32	--	6.7	9.6	.4	--

12352980 BITTERROOT RIVER AT MACLAY BRIDGE, NEAR MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE		SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
1970											
JULY	11	7.3	1.2	.20	--	72	.10	745	.040	.000	--
AUG.	05	5.5	--	--	--	--	--	--	.070	.000	--
SEPT.	09	--	--	--	--	--	--	--	.050	.000	--
OCT.	06	5.8	3.0	.20	--	110	.15	285	.100	.000	--
NOV.	03	--	--	--	--	--	--	--	.500	.000	--
DEC.	01	--	--	--	--	--	--	--	.000	.010	--
1971											
JAN.	07	9.8	1.8	.20	30	104	.14	180	.080	.020	--
FEB.	02	--	--	--	10	--	--	--	.500	.000	--
MAR.	04	--	--	--	--	--	--	--	.200	.000	--
APR.	08	6.8	--	--	--	77	.10	516	.400	.000	--
MAY	04	--	--	--	--	--	--	--	.400	.000	--
JUNE	03	--	--	--	--	--	--	--	.030	.000	--
JULY	24	--	--	.30	--	--	--	--	.030	.000	--
AUG.	17	--	--	.20	--	--	--	--	--	--	--
SEPT.	16	--	--	.40	--	--	--	--	--	--	--
OCT.	14	--	--	.20	--	--	--	--	.080	.000	--
NOV.	18	--	--	.00	--	--	--	--	--	--	--
DEC.	09	--	--	.20	--	--	--	--	--	--	--
1972											
JAN.	06	--	--	.20	--	--	--	--	.170	.000	--
FEB.	15	--	--	.00	--	--	--	--	--	--	--
MAR.	21	--	--	.20	--	--	--	--	--	--	--
APR.	17	--	--	.30	--	--	--	--	.010	.000	--
MAY	16	3.7	.70	.10	10	53	.07	1720	--	--	--
JUNE	13	--	--	.20	--	--	--	--	--	--	--
JULY	20	6.6	1.0	.10	--	67	.09	658	--	--	--
AUG.	24	7.7	2.1	.20	--	134	.18	373	--	--	--
SEPT.	20	8.3	1.9	.20	--	128	.17	370	--	--	--
OCT.	18	6.2	1.6	.20	--	96	.13	288	--	--	--
NOV.	15	11	1.4	.20	--	132	.18	331	--	--	--
DEC.	21	6.5	2.5	.20	--	128	.17	321	--	--	--
1973											
JAN.	17	5.7	2.2	.20	--	110	.15	342	--	--	--
FEB.	22	10	1.8	.20	--	122	.17	257	--	--	--
MAR.	21	11	1.5	.10	--	100	.14	211	--	--	--
APR.	19	4.6	1.2	.10	--	102	.14	319	--	--	.040
MAY	24	6.9	1.6	.10	--	50	.07	695	--	--	--
JUNE	20	6.5	1.3	.10	--	81	.11	713	--	--	--
JULY	24	9.0	2.8	.30	--	152	.21	238	--	--	.090
* AUG.	29	10	2.2	.10	--	155	.21	187	--	--	.080

12352980 BITTERROOT RIVER AT MACLAY BRIDGE, NEAR MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE		NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
1970										
JULY	11	--	.010	.20	--	--	.090	.090	.080	1.0
AUG.	05	--	.030	.15	--	--	.060	.010	.000	3.0
SEPT.	09	--	.000	.31	--	--	.020	.030	.010	5.0
OCT.	06	--	.040	.18	--	--	.050	.040	.030	3.0
NOV.	03	--	.020	.14	--	--	.010	--	--	36
DEC.	01	--	.020	.19	--	--	.010	.010	.000	1.0
1971										
JAN.	07	.100	.000	.05	--	--	--	--	--	.00
FEB.	02	.500	.020	--	--	--	.070	.080	--	5.0
MAR.	04	.200	.020	.00	--	--	.030	.020	--	1.0
APR.	08	.400	.430	.32	--	--	--	.100	.080	5.0
MAY	04	.400	.150	.28	--	--	.130	.130	.020	8.0
JUNE	03	.030	.070	.19	--	--	.070	.040	.030	2.0
JULY	24	.030	.070	--	--	--	.050	.040	.020	6.0
AUG.	17	--	--	--	--	--	--	--	--	--
SEPT.	16	--	--	--	--	--	--	--	--	--
OCT.	14	.080	.020	.12	.14	.22	.090	.050	.080	.00
NOV.	18	--	--	--	--	--	--	--	--	--
DEC.	09	--	--	--	--	--	--	--	--	--
1972										
JAN.	06	.170	.060	.26	.32	.49	.040	.020	.010	2.0
FEB.	15	--	--	--	--	--	--	--	--	--
MAR.	21	--	--	--	--	--	--	--	--	--
APR.	17	.010	.030	.18	.21	.22	.050	.000	.000	1.0
MAY	16	.080	--	--	--	--	--	.020	.000	--
JUNE	13	--	--	--	--	--	--	--	--	--
JULY	20	.020	--	--	.11	.13	.040	.030	.000	--
AUG.	24	--	--	--	--	--	--	--	--	--
SEPT.	20	--	--	--	--	--	--	--	--	--
OCT.	18	.050	--	--	.13	.18	.030	--	.010	--
NOV.	15	--	--	--	--	--	--	--	--	--
DEC.	21	--	--	--	--	--	--	--	--	--
1973										
JAN.	17	.190	--	--	.23	.42	.060	--	.030	--
FEB.	22	--	--	--	--	--	--	--	--	--
MAR.	21	--	--	--	--	--	--	--	--	--
APR.	19	.030	--	--	.19	.23	.020	--	<.010	--
MAY	24	--	--	--	--	--	--	--	--	--
JUNE	20	--	--	--	--	--	--	--	--	--
JULY	24	.060	--	--	.15	.24	.030	--	<.010	--
AUG.	29	.080	--	--	.30	.38	<.010	--	.010	--

DATE OF SAMPLE		TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)
1971											
JAN.	07	1400	--	--	--	--	--	--	--	--	--
JULY	24	1530	0	0	<1	0	0	.00	<10	2	10
AUG.	17	1530	--	--	--	--	--	--	--	--	--
SEPT.	16	0830	--	--	--	--	--	--	--	--	--
OCT.	14	0945	1	0	1	0	1	.00	1	0	50
NOV.	18	0930	--	--	--	--	--	--	--	--	--
DEC.	09	1200	--	--	--	--	--	--	--	--	--
1972											
JAN.	06	0900	2	2	<1	0	4	4	1	1	40
FEB.	15	1700	--	--	--	--	--	--	--	--	--
MAR.	21	0830	--	--	--	--	--	--	--	--	--
APR.	17	1700	1	1	1	0	10	.00	5	2	270
MAY	16	1530	--	--	--	--	--	--	--	--	--
JUNE	13	1530	--	--	--	--	--	--	--	--	--

12352980 BITTERROOT RIVER AT MACLAY BRIDGE, NEAR MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
1971								
JAN. 07	100	--	--	--	--	--	--	--
JULY 24	30	<1	0	.0	.0	0	<10	0
AUG. 17	20	--	--	--	.2	--	--	10
SEPT. 16	20	--	--	--	.1	--	--	0
OCT. 14	20	9	0	.0	.0	5	10	10
NOV. 18	20	--	--	--	.0	--	--	0
DEC. 09	10	--	--	--	.3	--	--	30
1972								
JAN. 06	20	3	1	.3	.2	1	20	20
FEB. 15	20	--	--	--	.2	--	--	10
MAR. 21	70	--	--	--	.0	--	--	20
APR. 17	60	6	0	--	.2	0	20	10
MAY 16	40	--	--	--	--	--	--	--
JUNE 13	80	--	--	--	.0	--	--	8

12353000 CLARK FORK BELOW MISSOULA, MT

LOCATION.--Lat 46°52'09", long 114°07'33", in NW¼NE¼SE¼ sec.21, T.13 N., R.20 W., Missoula County, Hydrologic Unit 17010204, on right bank 1.0 mi downstream from Bitterroot River, 4.5 mi west of Missoula, and at mile 349.5.

DRAINAGE AREA.--9,003 mi^2.

PERIOD OF RECORD.--October 1978 to September 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 351 micromhos Jan. 27, 1980; minimum daily, 119 micromhos June 21, 1980.

WATER QUALITY DATA

DATE OF SAMPLE		TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (UMHOS) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)
1978							
OCT.	20	1100	--	2650	305	7.9	1.0
NOV.	17	1230	--	2470	318	7.6	2.0
DEC.	21	1200	--	2240	326	7.9	-1.0
1979							
JAN.	29	1500	--	1820	356	7.7	-18.0
FEB.	21	1600	--	2370	327	7.7	.0
MAR.	20	1500	--	4000	297	7.3	9.5
APR.	25	1530	--	5570	229	7.9	9.0
MAY	22	1500	--	20800	104	7.6	24.0
JUNE	12	1000	--	14200	139	7.3	17.0
JULY	17	1500	--	3080	250	8.0	33.5
AUG.	09	1100	--	1610	286	8.1	31.0
SEPT.	11	1500	--	2040	302	8.4	21.0
OCT.	10	1400	--	2040	332	8.6	20.0
NOV.	14	1300	--	1910	363	7.9	4.0
DEC.	11	1400	--	2150	313	8.4	-2.0
1980							
JAN.	22	1100	--	1730	360	7.9	-6.0
FEB.	26	1300	--	2090	306	8.1	5.0
MAR.	27	0930	--	2190	347	8.2	2.0
APR.	23	1100	--	9390	133	7.7	16.0
MAY	22	1330	--	20000	113	7.7	22.0
	23	1200	--	22300	91	7.5	3.0
JUNE	24	1100	--	16100	168	7.9	22.0
JULY	17	1000	--	6440	220	8.2	21.0
AUG.	13	0900	--	1960	290	8.2	15.5
SEPT.	23	1300	--	3720	256	8.1	12.0
OCT.	21	1500	--	3150	323	8.5	10.0
DEC.	17	1500	--	3000	279	8.1	.0
1981							
MAR.	23	1400	--	2920	242	8.5	9.0
MAY	23	1230	--	35000	129	8.0	17.0
JULY	23	1500	--	3880	224	8.6	27.0
SEPT.	23	1500	--	1930	300	8.6	10.0
OCT.	28	1100	--	2950	293	8.3	8.0
DEC.	30	1000	--	2340	288	8.0	-5.0
1982							
FEB.	18	1130	--	6510	233	7.9	.0
APR.	21	1000	--	5450	219	8.1	2.0
MAY	28	1300	--	35800	105	7.6	5.0
JULY	21	1000	--	8540	253	--	20.0
AUG.	26	1530	--	2380	261	8.6	28.5
NOV.	01	1445	--	3520	278	8.2	5.0
DEC.	06	1330	--	2970	270	7.8	.0
1983							
JAN.	12	0930	--	3580	323	--	-4.0
FEB.	01	1045	--	2470	339	--	1.0
	22	1415	--	3200	270	8.1	8.0
MAR.	16	1145	--	4350	292	--	6.0
APR.	04	1600	3180	--	307	--	7.5
MAY	12	1430	--	6530	192	8.2	12.0
JUNE	08	1130	--	15600	118	8.0	20.5
	30	1700	10300	--	155	--	20.5
AUG.	09	1400	--	3240	250	8.4	22.5
	10	0845	--	3170	248	--	20.0
SEPT.	19	1130	3190	--	268	--	5.5

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKALINITY FIELD (MG/L AS CACO3) (00410)
1978							
OCT. 20	7.5	--	9.8	92	K11	K7	130
NOV. 17	1.0	--	12.6	99	K11	100	110
DEC. 21	.5	--	12.2	95	K3	24	110
1979							
JAN. 29	.5	--	12.8	99	--	K1	110
FEB. 21	1.5	--	12.2	99	K2	45	110
MAR. 20	6.0	--	12.0	108	K10	K18	98
APR. 25	9.0	--	10.2	108	K6	K14	74
MAY 22	12.5	--	10.2	106	180	150	36
JUNE 12	13.0	--	9.4	100	150	81	49
JULY 17	21.0	--	9.2	114	K10	K12	94
AUG. 09	16.5	--	9.1	103	K8	53	120
SEPT. 11	15.5	--	11.2	125	K4	K8	120
OCT. 10	9.0	--	11.4	110	K11	K13	110
NOV. 14	2.0	--	12.8	103	<1	K5	120
DEC. 11	1.0	--	13.4	105	K6	K12	100
1980							
JAN. 22	.5	--	12.2	93	72	39	110
FEB. 26	2.5	--	11.9	97	K8	28	100
MAR. 27	4.5	--	11.3	87	K20	K8	110
APR. 23	10.0	--	10.0	88	K170	59	40
MAY 22	13.5	--	9.4	102	440	150	36
23	10.5	--	9.6	97	--	--	32
JUNE 24	12.5	--	9.3	98	210	180	62
JULY 17	16.0	--	8.4	95	88	24	93
AUG. 13	15.5	--	7.8	86	40	K30	160
SEPT. 23	10.5	--	9.9	99	70	43	100
OCT. 21	9.0	--	10.6	103	K8	K4	120
DEC. 17	2.5	--	11.2	92	35	31	100
1981							
MAR. 23	8.0	--	11.2	105	45	K8	96
MAY 23	8.5	--	9.4	90	K1600	330	65
JULY 23	17.5	--	9.8	115	42	K24	98
SEPT. 23	11.0	--	11.6	118	K8	K8	120
OCT. 28	8.0	--	11.2	108	26	K6	110
DEC. 30	.5	--	12.5	98	K38	K20	92
1982							
FEB. 18	.5	--	11.9	92	--	3100	75
APR. 21	5.0	--	11.5	100	45	K1	80
MAY 28	6.5	--	10.3	94	840	960	55
JULY 21	--	--	--	--	--	--	--
AUG. 26	17.0	--	9.6	113	31	740	110
NOV. 01	7.0	686	11.0	101	K2	160	--
DEC. 06	1.5	684	13.0	103	K6	K18	--
1983							
JAN. 12	.5	--	--	--	--	--	--
FEB. 01	2.0	--	--	--	--	--	--
22	4.5	683	11.6	100	K7	410	--
MAR. 16	6.5	--	--	--	--	--	--
APR. 04	8.0	--	--	--	--	--	--
MAY 12	8.5	685	11.7	111	K15	52	--
JUNE 08	13.0	678	9.5	102	110	66	--
30	16.0	--	--	--	--	--	--
AUG. 09	20.5	683	8.8	109	100	69	--
10	18.5	--	--	--	--	--	--
SEPT. 19	9.0	--	--	--	--	--	--

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	PH LAB (STANDARD UNITS) (00403)	TURBIDITY (NTU) (00076)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS, NONCARBONATE (MG/L CACO3) (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)
1978										
OCT. 20	1100	--	.70	--	130	2	38	8.9	21	.8
NOV. 17	1230	--	.40	--	150	39	43	10	7.7	.3
DEC. 21	1200	--	.40	--	150	39	44	9.4	7.6	.3
1979										
JAN. 29	1500	--	.70	--	150	36	42	9.9	7.7	.3
FEB. 21	1600	--	3.2	--	150	35	42	9.8	8.3	.3
MAR. 20	1500	--	7.0	--	140	45	42	9.1	8.1	.3
APR. 25	1530	--	4.1	--	94	20	26	7.1	5.7	.3
MAY 22	1500	--	12	--	49	13	14	3.5	2.7	.2
JUNE 12	1000	--	5.4	--	61	12	17	4.6	3.1	.2
JULY 17	1500	--	.90	--	110	14	29	8.6	6.0	.3
AUG. 09	1100	--	1.3	--	130	14	37	10	6.6	.3
SEPT. 11	1500	--	.70	--	140	23	39	11	8.8	.3
OCT. 10	1400	--	.80	--	130	22	37	9.5	7.8	.3
NOV. 14	1300	--	4.2	--	170	47	47	12	8.8	.3
DEC. 11	1400	--	.90	--	130	31	38	8.8	7.5	.3
1980										
JAN. 22	1100	--	1.0	--	150	41	44	10	7.9	.3
FEB. 26	1300	--	2.4	--	150	51	44	10	7.9	.3
MAR. 27	0930	--	2.7	--	150	41	44	10	8.0	.3
APR. 23	1100	--	12	--	56	17	16	4.0	3.4	.2
MAY 22	1330	--	7.2	--	50	14	14	3.6	2.4	.2
23	1200	--	14	--	39	8	11	2.9	2.2	.2
JUNE 24	1100	--	4.2	--	67	5	19	4.8	3.5	.2
JULY 17	1000	--	2.9	--	100	10	29	7.5	5.2	.2
AUG. 13	0900	--	1.8	--	140	16	38	10	6.4	.2
SEPT. 23	1300	--	1.6	--	120	25	36	8.5	6.5	.3
OCT. 21	1500	8.2	.60	5	150	26	42	10	7.6	.3
DEC. 17	1500	7.9	1.0	5	130	28	37	8.5	6.8	.3
1981										
MAR. 23	1400	8.2	1.8	--	110	17	32	8.1	6.6	.3
MAY 23	1230	7.6	100	44	55	0	15	4.2	3.5	.2
JULY 23	1500	8.1	1.5	13	110	15	32	8.1	5.5	.2
SEPT. 23	1500	8.6	2.4	64	150	28	41	11	8.3	.3
OCT. 28	1100	8.2	16	17	150	36	42	10	7.9	.3
DEC. 30	1000	8.1	.80	<12	130	37	37	8.9	7.0	.3
1982										
FEB. 18	1130	7.5	22	37	110	31	31	7.0	5.9	.3
APR. 21	1000	8.3	2.9	18	110	28	30	8.0	6.9	.3
MAY 28	1300	7.8	30	18	43	0	12	3.2	2.5	.2
AUG. 26	1530	8.3	1.0	--	120	13	34	9.1	6.6	.3
NOV. 01	1445	8.1	2.6	<10	130	17	38	9.3	7.4	.3
DEC. 06	1330	8.2	.50	<10	130	16	37	9.6	7.2	.3
1983										
FEB. 22	1415	7.9	1.7	<10	130	21	37	9.2	7.1	.3
MAY 12	1430	8.0	1.7	15	91	10	25	6.9	4.9	.2
JUNE 08	1130	8.1	2.0	13	58	3	16	4.3	2.6	.2
AUG. 09	1400	8.2	1.9	16	120	6	32	8.9	6.0	.3

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)
1978										
OCT. 20	2.2	--	36	2.9	.30	12	174	200	.24	1240
NOV. 17	2.1	--	45	2.9	.20	14	198	190	.27	1320
DEC. 21	2.0	--	43	2.8	.20	14	197	190	.27	1190
1979										
JAN. 29	2.1	--	45	3.0	.20	16	198	190	.27	973
FEB. 21	2.0	--	51	3.3	.20	15	186	200	.25	1190
MAR. 20	2.4	--	48	3.3	.30	14	179	190	.24	1930
APR. 25	1.6	--	29	1.9	.20	13	145	130	.20	2180
MAY 22	1.0	--	11	.90	.10	8.9	73	64	.10	4100
JUNE 12	.90	--	11	.90	.20	8.2	83	75	.11	3180
JULY 17	1.4	--	22	1.9	.20	11	134	140	.18	1110
AUG. 09	2.1	--	27	2.6	.20	13	167	170	.23	726
SEPT. 11	2.4	--	34	2.7	.20	8.8	188	180	.26	1040
OCT. 10	2.2	--	33	2.5	.20	13	176	170	.24	969
NOV. 14	.50	--	51	3.3	.30	15	218	210	.30	1120
DEC. 11	1.9	--	34	2.6	.20	13	170	170	.23	987
1980										
JAN. 22	2.2	--	51	3.4	.20	15	214	200	.29	1000
FEB. 26	2.6	--	51	3.1	.20	14	192	190	.26	1080
MAR. 27	2.4	--	55	2.4	.20	12	213	200	.29	1260
APR. 23	1.1	--	17	1.0	.10	10	84	77	.11	2130
MAY 22	1.1	--	11	1.2	.10	9.9	65	66	.09	3510
23	1.0	--	8.5	1.8	.10	10	59	58	.08	3550
JUNE 24	1.2	--	16	1.3	.20	11	101	94	.14	4390
JULY 17	1.7	--	26	1.6	.30	12	145	140	.20	2520
AUG. 13	1.9	--	29	2.4	.30	11	174	200	.24	921
SEPT. 23	1.9	--	37	2.7	.30	13	177	170	.24	1780
OCT. 21	2.2	--	50	3.5	.30	14	200	200	.27	1700
DEC. 17	1.8	--	38	2.5	.30	14	174	170	.24	1410
1981										
MAR. 23	1.6	--	32	2.3	.20	12	145	150	.20	1140
MAY 23	1.6	--	12	1.0	.10	10	85	87	.12	8030
JULY 23	1.6	--	27	1.9	.10	12	140	150	.19	1470
SEPT. 23	2.4	--	35	3.3	.20	14	192	190	.26	1000
OCT. 28	2.1	--	47	2.9	.30	14	189	190	.26	1510
DEC. 30	1.8	--	38	2.0	.20	14	170	160	.23	1070
1982										
FEB. 18	6.6	--	27	16	.20	12	156	150	.21	2740
APR. 21	1.7	--	25	2.3	.20	14	148	140	.20	2180
MAY 28	1.2	--	7.0	1.0	.10	11	71	71	.10	6860
AUG. 26	1.9	--	22	2.3	.20	13	149	160	.20	957
NOV. 01	2.0	117	36	2.7	.20	13	175	180	.24	1660
DEC. 06	1.9	116	33	2.5	.20	13	171	170	.23	1370
1983										
FEB. 22	3.3	110	33	3.2	.20	14	160	170	.22	1380
MAY 12	1.5	81	19	1.9	.10	12	118	120	.16	2080
JUNE 08	1.1	55	9.5	.90	<.10	9.6	72	78	.10	3030
AUG. 09	1.9	111	20	2.3	.20	13	146	150	.20	1280

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
1978							
OCT. 20	--	.050	--	.010	--	.33	.19
NOV. 17	--	.120	--	.010	--	.06	.12
DEC. 21	--	.210	--	.010	--	.14	.14
1979							
JAN. 29	--	.130	--	.010	--	.20	.13
FEB. 21	--	.280	--	.070	--	.14	.08
MAR. 20	--	.160	--	.040	--	.25	.14
APR. 25	--	.050	--	.010	--	.24	.20
MAY 22	--	.040	--	.020	--	.23	.16
JUNE 12	--	.040	--	.010	--	.30	.27
JULY 17	--	.040	--	.030	--	1.27	.16
AUG. 09	--	.110	--	<.010	--	.2	.81
SEPT. 11	--	.100	.120	.010	--	.52	.55
OCT. 10	--	.080	.080	.020	.060	.37	.43
NOV. 14	--	.150	.140	.060	.030	.46	.30
DEC. 11	--	.140	.150	.040	.060	.59	.37
1980							
JAN. 22	--	.280	.290	.040	.040	.68	.51
FEB. 26	--	.280	.280	.090	.090	1.11	.09
MAR. 27	--	.120	.150	.020	.010	.6	.35
APR. 23	--	.070	.060	.010	.000	.71	.24
MAY 22	--	.050	.030	.010	.060	.71	.71
23	--	.050	.030	.010	.010	.85	.63
JUNE 24	--	.040	.060	.030	.060	.40	.37
JULY 17	--	.060	.070	.000	.030	.91	.61
AUG. 13	--	.070	.080	.000	.000	.53	.31
SEPT. 23	--	.020	.000	.010	.040	.31	.23
OCT. 21	15	.010	.000	.000	.020	1.69	.42
DEC. 17	14	.230	.210	.050	.080	.1	.37
1981							
MAR. 23	0	.060	.050	.070	.000	1.30	.47
MAY 23	236	.080	.050	.110	.120	.3	1.1
JULY 23	14	.030	.010	.110	.020	.34	.69
SEPT. 23	0	.170	.150	.160	.110	.25	.33
OCT. 28	6	--	<.090	--	.110	--	--
DEC. 30	11	--	.250	--	.110	--	--
1982							
FEB. 18	80	--	.220	--	.430	--	--
APR. 21	2	--	<.100	--	.130	--	--
MAY 28	121	--	<.100	--	.010	--	--
AUG. 26	10	--	<.100	--	.130	--	--
NOV. 01	9	--	<.100	--	.120	--	--
DEC. 06	8	--	.140	--	.150	--	--
1983							
FEB. 22	15	--	.200	--	.590	--	--
MAY 12	<1	--	<.100	--	.220	--	--
JUNE 08	<1	--	<.100	--	.410	--	--
AUG. 09	9	--	<.100	--	.470	--	--

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE		NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)
1978								
OCT.	20	.34	.030	.020	--	3.4	--	--
NOV.	17	.07	.020	.020	--	--	.90	.40
DEC.	21	.15	.020	.030	--	1.4	--	--
1979								
JAN.	29	.21	.050	.050	--	--	.20	.50
FEB.	21	.21	.060	.050	--	1.7	--	--
MAR.	20	.29	.040	.040	--	4.3	--	--
APR.	25	.25	.020	.010	--	3.6	--	--
MAY	22	.25	.030	.010	--	--	4.1	1.1
JUNE	12	.31	.020	.030	--	3.0	--	--
JULY	17	.30	<.010	.020	--	4.2	--	--
AUG.	09	1.2	.030	.030	--	--	2.3	.30
SEPT.	11	.53	.020	.020	--	2.5	--	--
OCT.	10	.39	.000	.010	--	1.8	--	--
NOV.	14	.52	.030	.020	--	--	4.2	.20
DEC.	11	.63	.170	.030	--	8.2	--	--
1980								
JAN.	22	.72	.040	.030	--	1.4	--	--
FEB.	26	.20	.060	.030	--	--	3.5	.20
MAR.	27	1.6	.040	.030	--	3.6	--	--
APR.	23	.72	.060	.020	--	6.6	--	--
MAY	22	.72	.010	.020	--	--	4.9	.70
	23	.86	.020	.020	--	--	5.1	1.1
JUNE	24	.43	.060	.020	--	4.9	--	--
JULY	17	.91	.040	.020	--	2.3	--	--
AUG.	13	.53	.030	.020	--	--	3.1	.10
SEPT.	23	.32	.060	.050	--	4.5	--	--
OCT.	21	.69	.030	.060	--	3.8	--	--
DEC.	17	1.1	.080	.040	--	--	4.3	.30
1981								
MAR.	23	.37	.040	.030	--	3.2	--	--
MAY	23	1.4	.240	.030	--	--	11	3.0
JULY	23	.45	.050	.030	--	--	1.3	.00
SEPT.	23	.41	.020	.020	--	--	2.1	.20
OCT.	28	.43	.030	.030	<.010	--	--	--
DEC.	30	.31	.030	.030	.030	--	--	--
1982								
FEB.	18	2.5	.770	.290	.140	--	--	--
APR.	21	.73	.020	.030	<.020	--	--	--
MAY	28	.90	.120	.070	.010	--	--	--
AUG.	26	.40	.070	<.010	.020	--	--	--
NOV.	01	.50	.010	.020	.010	--	--	--
DEC.	06	1.6	.050	.010	<.010	--	--	--
1983								
FEB.	22	1.7	.120	.150	.100	--	--	--
MAY	12	2.5	.030	.020	.020	--	--	--
JUNE	08	.50	.040	.050	.010	--	--	--
AUG.	09	1.0	.050	.040	.020	--	--	--

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)
1978									
NOV. 17	1230	--	3	3	<100	<100	--	<2	<2
1979									
JAN. 29	1500	--	3	3	<100	<100	--	--	--
MAY 22	1500	--	1	1	<100	<100	--	2	<2
AUG. 09	1100	--	3	3	<100	200	--	<2	16
NOV. 14	1300	--	4	4	400	300	--	4	--
1980									
FEB. 26	1300	--	4	3	200	100	--	8	<1
MAY 22	1330	--	3	3	100	70	--	1	<1
23	1200	--	3	4	0	70	--	2	1
AUG. 13	0900	--	5	4	200	100	--	0	<1
DEC. 17	1500	--	3	2	0	90	--	0	<1
1981									
MAY 23	1230	--	20	5	200	0	--	1	0
JULY 23	1500	--	5	4	100	100	--	1	<1
SEPT. 23	1500	--	5	3	300	130	--	0	<1
OCT. 28	1100	--	5	3	200	100	--	1	<1
1982									
FEB. 18	1130	--	20	12	100	63	--	<1	<1
MAY 28	1300	--	7	2	<100	41	--	1	<3
AUG. 26	1530	--	3	3	<100	120	--	<1	<1
NOV. 01	1445	20	--	4	--	98	<1	--	2
1983									
FEB. 22	1415	30	--	4	--	95	<1	--	<1
JUNE 08	1130	30	--	2	--	67	<1	--	<1
AUG. 09	1400	20	--	5	--	120	<1	--	1

DATE OF SAMPLE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)
1978								
NOV. 17	ND	ND	ND	2	8	3	110	<10
1979								
JAN. 29	<20	ND	2	<3	4	2	100	<10
MAY 22	20	ND	ND	ND	16	2	1400	70
AUG. 09	<20	ND	ND	<3	5	2	120	<10
NOV. 14	0	.00	1	0	5	1	80	240
1980								
FEB. 26	0	.00	1	<3	14	2	220	20
MAY 22	0	.00	0	<3	16	4	1300	560
23	0	.00	0	<3	18	4	1900	820
AUG. 13	0	10	1	<3	8	3	140	<10
DEC. 17	0	.00	2	<3	4	2	100	10
1981								
MAY 23	10	.00	3	0	120	5	8000	40
JULY 23	0	.00	0	<3	10	1	140	20
SEPT. 23	0	.00	0	0	7	4	120	<10
OCT. 28	<10	.00	<1	<3	8	3	170	<10
1982								
FEB. 18	10	<10	3	<3	110	26	2900	88
MAY 28	<10	<10	3	<1	44	5	2800	55
AUG. 26	<10	<10	<1	1	6	2	110	7
NOV. 01	--	<1	--	<3	--	7	--	12
1983								
FEB. 22	--	<1	--	<3	--	7	--	33
JUNE 08	--	<1	--	<3	--	4	--	26
AUG. 09	--	<1	--	<3	--	7	--	16

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)
1978									
NOV. 17	5	2	--	40	20	<.1	<.1	--	--
1979									
JAN. 29	--	--	--	20	8	<.1	<.1	--	--
MAY 22	24	3	--	80	<10	<.1	<.1	--	--
AUG. 09	12	6	--	20	8	<.1	<.1	--	--
NOV. 14	25	--	--	30	20	.0	.0	--	4
1980									
FEB. 26	41	10	--	30	10	.1	.0	--	2
MAY 22	7	0	--	60	50	.0	.0	--	8
23	10	1	--	90	80	.0	.0	--	6
AUG. 13	3	0	--	20	6	.0	.0	--	3
DEC. 17	0	1	--	10	7	.0	.0	--	0
1981									
MAY 23	24	2	--	500	20	.3	.0	--	7
JULY 23	0	1	--	30	10	.0	.1	--	1
SEPT. 23	5	0	--	10	3	.0	.0	--	0
OCT. 28	12	<1	--	20	5	.1	.0	--	3
1982									
FEB. 18	12	<1	--	340	34	.2	<.1	--	4
MAY 28	10	<1	--	150	14	.1	<.1	--	5
AUG. 26	<1	<1	--	10	4	<.1	<.1	--	5
NOV. 01	--	11	16	--	8	--	<.1	<10	--
1983									
FEB. 22	--	1	19	--	18	--	.1	<10	--
JUNE 08	--	3	<4	--	9	--	.1	<10	--
AUG. 09	--	3	13	--	7	--	<.1	<10	--

DATE OF SAMPLE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
1978									
NOV. 17	--	<1	<1	ND	ND	--	--	<20	<20
1979									
JAN. 29	--	<1	<1	<2	ND	--	--	20	<20
MAY 22	--	1	1	ND	ND	--	--	30	<20
AUG. 09	--	<1	<1	ND	ND	--	--	20	<3
NOV. 14	0	--	0	4	1	--	--	20	0
1980									
FEB. 26	0	--	0	0	0	--	--	70	7
MAY 22	1	0	0	0	0	--	--	40	20
23	1	0	0	0	0	--	--	50	30
AUG. 13	0	0	0	0	0	--	--	30	<3
DEC. 17	0	0	0	0	0	--	--	20	5
1981									
MAY 23	0	0	0	0	0	--	--	300	10
JULY 23	2	0	0	0	0	--	--	70	10
SEPT. 23	1	0	0	1	0	--	--	10	<3
OCT. 28	<1	0	0	<1	<1	--	--	30	6
1982									
FEB. 18	<1	<1	<1	<1	<1	--	--	300	40
MAY 28	<1	<1	<1	<1	<1	--	--	80	<12
AUG. 26	1	<1	<1	<1	<1	--	--	10	<3
NOV. 01	3	--	<1	--	<1	150	<6	--	41
1983									
FEB. 22	3	--	<1	--	<1	150	<6	--	10
JUNE 08	<1	--	1	--	<1	61	<6	--	7
AUG. 09	11	--	<1	--	<1	130	<6	--	10

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302	304	307	347	---	297	318	181	158	207	276	310
2	303	308	307	332	322	274	294	184	167	210	277	323
3	287	306	307	333	323	274	295	180	157	212	277	320
4	286	306	306	333	318	274	293	174	148	212	278	322
5	287	302	307	333	326	274	301	176	152	212	276	321
6	287	304	318	335	319	278	271	172	150	209	278	320
7	289	302	320	292	318	286	269	184	150	210	277	320
8	304	300	318	319	317	279	271	205	147	190	278	321
9	290	299	316	319	318	290	272	206	148	195	278	320
10	287	299	318	318	317	290	267	206	147	150	277	318
11	293	288	302	318	284	290	271	206	150	176	277	319
12	293	294	306	318	288	291	271	186	146	221	276	320
13	292	314	308	322	293	290	272	186	151	220	277	319
14	292	315	306	324	312	297	271	195	150	221	280	320
15	310	318	323	318	313	298	271	186	204	266	280	321
16	295	317	323	318	312	290	247	158	203	261	277	320
17	293	292	323	325	326	292	248	156	202	250	309	319
18	295	290	324	318	326	298	248	155	202	236	298	315
19	295	292	322	319	329	297	248	157	207	242	297	318
20	292	292	312	327	332	296	247	172	205	241	297	317
21	297	293	314	337	328	303	247	175	201	247	298	317
22	303	303	320	317	328	288	245	171	203	248	299	318
23	312	304	312	325	327	297	245	169	207	263	298	317
24	298	303	313	318	325	296	247	169	207	262	299	318
25	300	303	313	326	272	298	170	168	204	261	300	318
26	293	303	311	328	273	294	171	169	206	259	300	319
27	297	308	---	327	272	294	171	169	200	261	301	318
28	299	308	342	328	274	294	172	171	200	262	300	317
29	301	307	338	327	---	295	170	171	200	267	301	321
30	302	302	338	330	---	295	170	173	206	270	300	320
31	301	---	340	333	---	295	---	168	---	273	299	---
MEAN	296	303	317	325	311	290	248	177	179	233	288	319

WTR YR 1979 MEAN 273 MAX 347 MIN 146

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), OCTOBER 1979 TO SEPTEMBER 1980
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	317	327	334	319	314	312	320	159	186	205	193	290
2	314	345	340	324	310	310	151	153	190	208	282	289
3	312	341	341	323	313	313	152	152	192	207	231	287
4	317	340	303	321	314	330	150	143	180	210	230	288
5	280	330	302	320	312	340	155	145	177	222	250	282
6	316	339	305	321	311	315	150	144	178	221	229	284
7	320	345	317	321	310	310	147	148	137	221	298	286
8	312	341	311	317	327	310	148	184	178	222	297	307
9	290	340	311	302	328	309	148	170	130	239	298	305
10	314	342	312	321	324	311	149	163	176	240	300	303
11	311	347	309	320	328	327	148	164	178	239	229	301
12	311	338	307	271	324	335	148	182	177	238	300	303
13	313	339	309	255	322	312	152	178	179	251	301	304
14	320	337	313	284	326	329	149	161	131	250	311	285
15	314	336	310	281	330	328	147	161	215	250	299	289
16	310	334	312	284	326	330	149	161	216	261	312	283
17	311	337	298	300	320	327	151	170	208	262	311	283
18	312	339	312	308	318	325	150	158	179	265	312	282
19	311	335	310	315	316	321	150	161	216	266	310	284
20	151	331	303	312	315	323	148	151	215	264	311	282
21	330	338	315	314	315	324	149	131	119	270	311	287
22	331	349	316	315	313	322	148	133	133	281	311	301
23	329	343	317	316	312	320	192	134	213	280	310	282
24	328	340	314	318	313	325	148	240	219	280	311	219
25	330	336	318	349	315	330	149	238	214	281	309	291
26	327	345	313	350	311	330	155	241	217	282	309	291
27	329	343	319	351	339	351	132	240	228	279	310	292
28	331	339	319	350	318	332	132	195	217	278	311	293
29	328	341	320	320	320	317	131	193	218	285	311	293
30	330	344	320	311	---	311	131	283	218	213	310	292
31	330	---	321	314	---	311	---	194	---	241	309	---
MEAN	312	339	315	314	319	322	154	175	188	249	291	289

WTR YR 1980 MEAN 272 MAX 351 MIN 119

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), OCTOBER 1980 TO SEPTEMBER 1981
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	295	265	279	250	290	280	267	181	180	199	305	348
2	299	270	280	297	297	282	265	181	176	191	307	346
3	298	260	299	250	302	291	260	181	182	273	303	343
4	295	268	298	248	278	280	268	181	181	273	299	342
5	295	266	298	247	301	287	262	180	157	211	309	341
6	297	268	293	247	301	280	262	182	157	194	303	339
7	298	269	293	250	305	280	262	185	156	202	312	341
8	295	268	298	250	306	278	269	197	156	272	303	338
9	300	273	298	249	296	---	262	187	157	272	301	339
10	300	272	298	260	311	288	263	203	157	272	300	340
11	300	282	295	260	268	293	269	186	157	203	301	337
12	300	272	296	259	272	281	263	187	157	272	318	335
13	300	282	296	258	280	292	268	186	157	272	307	340
14	300	286	298	259	282	288	266	184	156	211	304	338
15	300	283	299	259	280	280	270	197	158	272	303	339
16	300	282	295	258	282	288	269	184	160	273	303	339
17	300	283	297	259	260	286	260	183	158	273	330	340
18	328	282	298	258	232	270	215	184	155	273	300	338
19	329	284	298	254	262	278	219	185	161	273	301	337
20	325	287	298	258	266	282	222	143	156	274	300	338
21	328	275	298	260	268	276	218	148	156	272	301	336
22	330	274	250	272	243	285	217	140	188	273	297	335
23	328	272	249	271	268	290	220	166	156	272	298	334
24	329	272	249	272	272	279	190	166	157	273	336	331
25	328	283	250	272	270	267	168	165	189	273	322	337
26	329	275	249	271	270	269	168	166	187	273	298	335
27	329	272	249	271	272	275	153	169	187	272	297	336
28	260	277	249	271	272	272	152	167	189	273	295	332
29	261	277	250	274	---	---	153	173	190	273	304	337
30	261	277	250	271	---	277	167	169	188	272	302	339
31	260	---	250	271	---	270	---	167	---	273	302	---
MEAN	303	275	281	261	279	281	232	177	167	257	305	338

WTR YR 1981 MEAN 263 MAX 348 MIN 140

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)
1978						
OCT. 20	1100	2650	4	29	--	--
NOV. 17	1230	2470	4	27	--	--
DEC. 21	1200	2240	3	18	--	--
1979						
JAN. 29	1500	1820	6	29	--	--
FEB. 21	1600	2370	12	77	--	--
MAR. 20	1500	4000	21	227	--	--
APR. 25	1530	5570	21	316	--	--
MAY 22	1500	20800	111	6230	--	--
JUNE 12	1000	14200	44	1690	--	--
JULY 17	1500	3080	5	42	--	--
AUG. 09	1100	1610	6	26	--	--
SEPT. 11	1500	2040	4	22	--	--
OCT. 10	1400	2040	5	28	--	--
NOV. 14	1300	1910	2	10	--	--
DEC. 11	1400	2150	4	23	--	--
1980						
JAN. 22	1100	1730	3	14	--	--
FEB. 26	1300	2090	16	90	--	--
MAR. 27	0930	2190	23	136	--	--
APR. 23	1100	9390	88	2230	--	--
MAY 22	1330	20000	84	4540	--	--
23	1200	22300	138	8310	--	--
JUNE 24	1100	16100	47	2040	--	--
JULY 17	1000	6440	16	278	--	--
AUG. 13	0900	1960	7	37	--	--
SEPT. 23	1300	3720	9	90	--	--
OCT. 21	1500	3150	5	43	--	--
DEC. 17	1500	3000	9	73	--	--
1981						
MAR. 23	1400	2920	6	47	--	--
MAY 23	1230	35000	252	23800	33	53
JULY 23	1500	3880	10	105	--	--
SEPT. 23	1500	1930	4	21	--	--
OCT. 28	1100	2950	4	32	--	--
DEC. 30	1000	2340	3	19	--	--
1982						
FEB. 18	1130	6510	134	2360	--	--
APR. 21	1000	5450	10	147	--	--
MAY 28	1300	35800	206	19900	--	--
AUG. 26	1530	2380	9	58	--	--
NOV. 01	1445	3520	28	266	--	--
DEC. 06	1330	2970	7	56	--	--
1983						
FEB. 22	1415	3200	11	95	--	--
MAY 12	1430	6530	10	176	--	--
JUNE 08	1130	15600	35	1470	--	--
AUG. 09	1400	3240	5	44	--	--

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE OF SAMPLE	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
1978					
OCT. 20	--	--	--	--	73
NOV. 17	--	--	--	--	79
DEC. 21	--	--	--	--	80
1979					
JAN. 29	--	--	--	--	57
FEB. 21	--	--	--	--	83
MAR. 20	--	--	--	--	83
APR. 25	--	--	--	--	73
MAY 22	--	--	--	--	49
JUNE 12	--	--	--	--	48
JULY 17	--	--	--	--	76
AUG. 09	--	--	--	--	80
SEPT. 11	--	--	--	--	82
OCT. 10	--	--	--	--	85
NOV. 14	--	--	--	--	63
DEC. 11	--	--	--	--	75
1980					
JAN. 22	--	--	--	--	58
FEB. 26	--	--	--	--	72
MAR. 27	--	--	--	--	83
APR. 23	--	--	--	--	56
MAY 22	--	--	--	--	55
23	--	--	--	--	49
JUNE 24	--	--	--	--	75
JULY 17	--	--	--	--	76
AUG. 13	--	--	--	--	82
SEPT. 23	--	--	--	--	74
OCT. 21	--	--	--	--	80
DEC. 17	--	--	--	--	85
1981					
MAR. 23	--	--	--	--	48
MAY 23	70	79	92	100	--
JULY 23	--	--	--	--	73
SEPT. 23	--	--	--	--	67
OCT. 28	--	--	--	--	62
DEC. 30	--	--	--	--	81
1982					
FEB. 18	--	--	--	--	69
APR. 21	--	--	--	--	82
MAY 28	--	--	--	--	40
AUG. 26	--	--	--	--	47
NOV. 01	--	--	--	--	92
DEC. 06	--	--	--	--	81
1983					
FEB. 22	--	--	--	--	99
MAY 12	--	--	--	--	81
JUNE 08	--	--	--	--	67
AUG. 09	--	--	--	--	54

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

PERIPHYTON ANALYSES

DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE (DEG C) (00010)	LENGTH OF EXPO-SURE (DAYS) (00022)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS) (70950)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2) (70957)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2) (70958)
1979									
MAY 22	1500	20800	12.5	27	1.18	1.42	46.3	5.18	1.71
AUG. 09	1100	1610	16.5	23	4.33	6.54	178	12.4	.860
SEPT. 11	1500	2040	15.5	33	40.1	49.4	816	11.4	.202
OCT. 10	1400	2040	9.0	29	7.64	8.70	41.1	25.8	2.30
1980									
AUG. 13	0900	1960	15.5	27	12.0	15.9	466	8.37	4.50

PHYTOPLANKTON ANALYSES

DATE OF SAMPLE	TIME	PHYTO-PLANK-TON, TOTAL (CELLS PER ML) (60050)	CHLAMY-DOMONAS (96014)	PANDO-RINA (96038)	PEDIAS-TRUM (96197)	COELA-STRUM (96200)	ANKIS-TRODES-MUS (96202)	CHLOREL-LA (96205)	SELENA-STRUM (96225)	TREU-BARIA (96227)
1978										
NOV. 17	1230	360	--	--	D200	--	D72	--	--	--
1979										
MAR. 20	1500	690	43	--	D330	--	--	--	--	--
MAY 22	1500	1500	--	--	--	--	--	--	--	13
JUNE 12	1000	800	--	--	--	--	--	--	--	--
JULY 17	1500	1100	28	--	--	--	28	--	--	--
AUG. 09	1100	1200	26	--	--	--	13	--	13	--
SEPT. 11	1500	2000	--	--	140	60	110	30	--	--
NOV. 14	1300	730	--	--	--	--	43	--	--	--
1980										
MAR. 27	0930	1200	26	--	--	--	--	--	--	--
MAY 22	1330	560	--	--	--	--	14	--	--	--
JUNE 24	1100	280	13	--	--	--	--	13	--	--
JULY 17	1000	990	--	--	--	--	14	--	--	--
AUG. 13	0900	1200	51	--	--	--	26	--	D210	--
SEPT. 23	1300	490	13	--	--	--	26	--	--	--
DEC. 17	1500	3100	96	--	--	--	L14	--	--	--
1981										
MAR. 23	1400	970	--	--	--	--	26	--	13	26
MAY 23	1230	4100	84	--	--	--	--	--	--	--
JULY 23	1500	1100	28	140	--	--	14	--	--	--
SEPT. 23	1500	430	14	--	--	--	14	--	--	--

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

PHYTOPLANKTON ANALYSES

DATE OF SAMPLE	SCENE-DESMUS	TETRA-STRUM	COLEN-KINIA	MICRACT-INIUM	COS-MARIUM	EUGLENA	TRACHEL-OMONAS	CRYPTO-MONAS	CHRYSO-COCCUS
	(96243)	(96245)	(96252)	(96254)	(96313)	(96387)	(96392)	(96430)	(96587)
1978									
NOV. 17	--	--	--	--	--	--	--	--	--
1979									
MAR. 20	--	--	--	--	14	--	--	--	--
MAY 22	52	--	--	--	--	13	--	--	--
JUNE 12	52	--	--	--	--	--	--	--	--
JULY 17	--	--	--	--	--	--	56	--	--
AUG. 09	D280	--	--	--	--	--	--	--	--
SEPT. 11	D440	--	--	--	L10	--	--	--	--
NOV. 14	--	--	--	--	--	--	--	--	14
1980									
MAR. 27	--	--	--	--	13	--	--	--	--
MAY 22	--	--	--	D100	--	--	--	--	--
JUNE 24	D51	--	--	--	--	--	--	--	--
JULY 17	--	--	--	43	--	--	29	--	--
AUG. 13	--	--	--	--	13	--	--	--	--
SEPT. 23	D100	51	13	26	--	13	--	--	--
DEC. 17	--	--	--	--	--	--	--	--	--
1981									
MAR. 23	--	--	--	100	--	26	--	--	--
MAY 23	--	--	--	--	--	--	--	--	--
JULY 23	--	--	--	28	28	--	14	14	--
SEPT. 23	58	--	--	--	--	--	29	--	--

DATE OF SAMPLE	MALLO-MONAS	COSCINO-DISCA-CEAE	CYCLO-TELLA	MELO-SIRA	STEP-HANO-DISCUS	MERI-DION	DIATOMA	OPE-PHORA	FRAGILA-RIA	SYNE-DRA
	(96595)	(96704)	(96706)	(96707)	(96708)	(96756)	(96759)	(96760)	(96764)	(96765)
1978										
NOV. 17	--	--	--	--	--	--	--	--	14	--
1979										
MAR. 20	--	--	--	--	--	--	--	--	--	--
MAY 22	--	--	--	--	26	--	--	--	90	13
JUNE 12	--	--	--	--	--	--	--	--	--	--
JULY 17	--	--	83	--	--	--	110	--	--	130
AUG. 09	--	--	130	--	--	--	--	--	--	--
SEPT. 11	--	--	130	--	--	--	69	--	--	79
NOV. 14	--	--	--	--	--	--	14	--	--	57
1980										
MAR. 27	--	--	26	--	--	--	77	--	39	90
MAY 22	--	--	--	--	--	--	--	--	D160	--
JUNE 24	--	--	39	--	--	--	--	--	D51	--
JULY 17	--	29	29	--	--	--	--	--	--	43
AUG. 13	--	--	26	--	--	--	--	--	--	90
SEPT. 23	--	--	39	--	--	--	--	--	--	--
DEC. 17	L14	--	L14	--	--	--	--	L14	--	140
1981										
MAR. 23	--	--	13	--	--	--	26	--	--	--
MAY 23	--	--	--	140	--	56	140	--	310	110
JULY 23	--	--	--	--	--	--	41	--	28	D260
SEPT. 23	--	--	--	--	--	--	43	--	--	D100

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

PHYTOPLANKTON ANALYSES

DATE OF SAMPLE	HANNAEA	EUNOTIA	ACHNAN-THES	COCCO-NEIS	RHOCO-SPHENIA	NAVI-CULA	GOMPHO-NEMA	CYMBEL-LA	EPITHE-MIA	NITZ-SCHIA
	(96766)	(96775)	(96777)	(96778)	(96779)	(96791)	(96802)	(96806)	(96807)	(96812)
1978										
NOV. 17	--	--	14	--	--	--	--	D58	--	--
1979										
MAR. 20	--	--	--	--	--	29	14	D160	--	100
MAY 22	--	--	--	--	--	13	26	26	13	77
JUNE 12	--	--	--	--	--	13	13	--	--	D210
JULY 17	--	--	14	56	--	42	28	D310	42	D200
AUG. 09	--	--	--	13	--	26	--	90	--	65
SEPT. 11	--	--	--	--	--	160	--	210	--	99
NOV. 14	--	--	14	--	--	43	14	43	--	D190
1980										
MAR. 27	--	--	26	13	--	D210	64	64	--	D210
MAY 22	--	--	14	--	--	43	--	57	--	57
JUNE 24	--	--	--	--	--	--	--	--	--	D100
JULY 17	--	--	100	14	--	--	--	14	--	D270
AUG. 13	--	--	--	--	--	77	13	100	51	120
SEPT. 23	--	--	--	--	--	39	--	51	51	64
DEC. 17	L14	L14	69	--	--	140	27	210	L14	450
1981										
MAR. 23	--	--	39	--	--	91	--	26	--	52
MAY 23	--	--	480	84	28	480	110	450	170	360
JULY 23	--	--	14	14	--	83	41	83	--	D230
SEPT. 23	--	--	--	--	--	58	--	D86	--	29

DATE OF SAMPLE	CYMATO-PLEURA	SURI-RELLA	ANA-CYSTIS	AGMENEL-LUM	LYNGBYA	OSCIL-LATORIA	SCHIZO-THRIX	ANABAE-NA	RAPHI-DIOPSIS
	(96816)	(96817)	(98082)	(98090)	(98131)	(98136)	(98150)	(98165)	(98194)
1978									
NOV. 17	--	--	--	--	--	--	--	--	--
1979									
MAR. 20	--	--	--	--	--	--	--	--	--
MAY 22	--	--	--	--	--	D1200	--	--	--
JUNE 12	--	--	--	--	--	D520	--	--	--
JULY 17	--	--	--	--	--	--	--	--	--
AUG. 09	--	--	39	--	--	D470	--	--	--
SEPT. 11	--	--	--	--	--	--	D500	--	--
NOV. 14	--	--	--	--	--	D300	--	--	-
1980									
MAR. 27	--	13	--	--	--	D340	--	--	-
MAY 22	--	--	D120	--	--	--	--	--	-
JUNE 24	--	--	13	--	--	--	--	--	--
JULY 17	--	14	72	--	--	D320	--	--	--
AUG. 13	--	--	--	100	--	--	--	D360	--
SEPT. 23	--	--	--	--	--	--	--	--	--
DEC. 17	--	L14	410	--	--	D1400	--	--	--
1981									
MAR. 23	--	13	52	--	D460	--	--	--	--
MAY 23	28	390	--	--	--	560	--	--	170
JULY 23	--	--	--	--	--	--	--	--	--
SEPT. 23	--	--	--	--	--	--	--	--	--

12353000 CLARK FORK BELOW MISSOULA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE		TIME	SPECIFIC CONDUCTANCE (UMHOS) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
1980									
AUG.	12	1730	305	8.7	26.5	19.5	684	9.9	121
	12	1830	--	--	--	19.5	684	9.6	117
	12	1930	--	--	--	19.0	685	9.3	112
	12	2030	305	8.6	20.5	19.0	685	8.9	107
	12	2130	--	--	--	18.5	685	8.4	100
	12	2230	--	--	--	18.0	685	7.9	93
	12	2330	--	--	--	17.5	685	7.7	90
	13	0030	--	--	--	17.0	685	7.6	88
	13	0130	--	--	--	16.5	685	7.5	86
	13	0230	--	--	--	16.0	686	7.4	83
	13	0330	--	--	--	15.5	686	7.4	83
	13	0430	--	--	--	15.5	686	7.4	83
	13	0530	--	--	--	15.0	686	7.4	82
	13	0630	--	--	--	15.0	686	7.4	82
	13	0730	315	8.1	10.5	15.0	686	7.5	83
	13	0830	--	--	--	15.0	686	7.7	85
	13	0900	290	8.2	15.5	15.5	--	7.8	86
	13	0930	--	--	--	15.0	686	8.2	90
	13	1030	310	8.3	17.5	15.5	686	8.8	98
	13	1130	--	8.4	--	16.5	686	9.4	107
	13	1230	--	8.5	--	17.0	685	9.9	114
	13	1330	310	8.6	24.5	18.0	685	10.2	120
	13	1430	--	8.6	--	18.5	685	10.2	121
	13	1530	--	8.7	--	19.5	684	10.4	126
	13	1630	--	8.7	--	19.5	683	10.4	127
	13	1730	310	8.8	28.0	20.0	683	10.2	126

12353300 CLARK FORK NEAR ALBERTON, MT

LOCATION.--Lat 46°59'33", long 114°26'45", in S½SE¼ sec.1, T.14 N., R.23 W., Missoula County, Hydrologic Unit 17010204, at bridge 0.1 mi upstream from Petty Creek, 1.7 mi east of Alberton, and at mile 319.8.

DRAINAGE AREA.--9,272 mi^2.

PERIOD OF RECORD.--July 1969 to June 1971.

REMARKS.--Water discharge estimated from records for Clark Fork at St. Regis (station 12354500).

WATER QUALITY DATA

DATE OF SAMPLE	TIME	DISCHARGE, IN CUBIC FEET PER SECOND (00060)	SPECIFIC CONDUCTANCE (UMHOS) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)
1969						
JULY 10	0945	12200	280	6.9	28.0	16.0
AUG. 14	0820	2600	295	7.9	19.0	17.0
SEPT. 18	1000	2300	342	7.8	12.0	13.0
OCT. 16	1630	3200	345	8.4	10.0	5.0
NOV. 12	1430	2900	340	8.3	13.0	7.0
DEC. 18	1430	2450	375	8.0	1.5	1.5
1970						
JAN. 15	0900	2800	340	7.6	2.5	.0
FEB. 11	0945	2400	390	8.1	-2.0	2.0
MAR. 17	1730	2850	360	8.3	4.5	5.0
APR. 15	1340	3500	335	8.3	5.5	6.0
MAY 13	1615	11400	215	7.4	12.0	8.0
JUNE 09	1750	36100	140	8.0	17.0	12.5
JULY 11	1115	7900	225	8.0	24.0	17.5
AUG. 04	1945	3950	310	8.2	33.5	21.0
SEPT. 09	1200	2500	330	8.1	12.5	13.0
OCT. 06	1230	2880	380	7.9	6.5	10.5
NOV. 03	1200	2900	385	8.1	5.0	3.5
DEC. 01	1610	3230	360	8.1	2.0	3.0
04	1325	--	--	--	--	--
1971						
JAN. 07	0930	1510	340	7.8	3.0	1.5
FEB. 02	1200	12100	200	7.3	5.0	2.5
MAR. 03	1300	3590	335	8.0	2.5	1.5
APR. 07	1245	4790	325	7.9	9.0	8.5
MAY 04	1100	20500	145	7.8	20.5	10.0
JUNE 03	0930	29200	135	7.3	12.5	10.5

DATE OF SAMPLE	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L) (00310)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ALKALINITY FIELD (MG/L AS CACO3) (00410)
1969					
JULY 10	8.0	1.4	800	--	92
AUG. 14	7.6	4.8	50	--	125
SEPT. 18	8.9	1.3	75	--	159
OCT. 16	12.7	1.0	13	2	126
NOV. 12	12.1	1.6	21	5	123
DEC. 18	13.5	1.1	16	5	121
1970					
JAN. 15	11.2	1.7	56	--	110
FEB. 11	11.2	1.2	3	3	112
MAR. 17	12.9	2.5	24	--	107
APR. 15	12.4	1.3	34	--	100
MAY 13	10.2	2.3	130	20	71
JUNE 09	9.6	1.3	529	230	46
JULY 11	8.2	1.0	270	56	79
AUG. 04	9.2	1.7	500	20	102
SEPT. 09	9.5	1.5	--	26	120
OCT. 06	11.0	--	26	20	116
NOV. 03	12.6	1.6	38	1	116
DEC. 01	12.8	1.5	--	0	92
04	--	--	42	--	--
1971					
JAN. 07	11.6	.8	10	7	121
FEB. 02	12.4	3.0	150	74	49
MAR. 03	12.2	.8	40	0	97
APR. 07	10.6	1.2	27	15	80
MAY 04	10.0	2.4	2000	150	43
JUNE 03	10.2	.9	330	55	51

12353300 CLARK FORK NEAR ALBERTON, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)
1969										
JULY 10	0945	14	15	120	--	--	--	--	--	1.9
AUG. 14	0820	3	3	160	--	--	--	--	--	2.4
SEPT. 18	1000	2	6	180	--	--	--	--	--	2.4
OCT. 16	1630	4	10	170	--	--	9.0	10	.3	2.3
NOV. 12	1430	2	3	170	--	--	9.4	11	.3	2.3
DEC. 18	1430	3	1	200	--	--	--	--	--	2.4
1970										
JAN. 15	0900	5	3	180	--	--	--	--	--	2.3
FEB. 11	0945	5	4	190	--	--	--	--	--	2.4
MAR. 17	1730	10	7	180	--	--	--	--	--	2.2
APR. 15	1340	4	7	160	--	--	--	--	--	2.1
MAY 13	1615	25	15	90	--	--	--	--	--	2.2
JUNE 09	1750	30	45	60	--	--	--	--	--	1.3
JULY 11	1115	4	5	110	--	--	--	--	--	--
AUG. 04	1945	--	5	150	--	--	--	--	--	--
SEPT. 09	1200	--	--	--	--	--	--	--	--	--
OCT. 06	1230	3	4	160	--	--	--	--	--	--
NOV. 03	1200	--	--	--	--	--	--	--	--	--
DEC. 01	1610	--	--	--	--	--	--	--	--	--
1971										
JAN. 07	0930	2	--	180	55	11	--	--	--	--
FEB. 02	1200	--	--	--	--	--	--	--	--	--
MAR. 03	1300	--	--	--	--	--	--	--	--	--
APR. 07	1245	5	20	150	47	8.9	--	--	--	--
MAY 04	1100	--	--	--	--	--	--	--	--	--
JUNE 03	0930	--	--	--	--	--	--	--	--	--

DATE OF SAMPLE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3) (71851)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)
1969										
JULY 10	--	.80	.30	--	175	.24	5760	.100	.44	.000
AUG. 14	--	2.0	.30	--	209	.28	1470	.000	.00	.000
SEPT. 18	--	3.0	.50	--	223	.30	1380	.000	.00	.000
OCT. 16	--	3.2	.40	--	235	.32	2030	.100	.44	.000
NOV. 12	--	2.8	--	--	231	.31	1810	.000	.00	.000
DEC. 18	--	3.6	.40	--	256	.35	1690	.200	.89	.000
1970										
JAN. 15	--	4.0	--	--	257	.35	1940	.300	1.3	.000
FEB. 11	--	4.1	.30	--	262	.36	1700	.200	.89	.000
MAR. 17	--	3.0	--	--	261	.36	2010	.100	.44	.000
APR. 15	--	4.0	.30	--	242	.33	2290	.120	.53	.000
MAY 13	--	2.6	--	--	138	.19	4250	.070	.31	.000
JUNE 09	--	1.4	.20	--	79	.11	7700	.060	.27	.000
JULY 11	32	1.4	.30	--	154	.21	3280	.040	.18	.000
AUG. 04	45	--	--	--	--	--	--	.010	.04	.000
SEPT. 09	--	--	--	--	--	--	--	.030	.13	--
OCT. 06	58	3.0	.50	--	219	.30	1700	.000	.00	.010
NOV. 03	--	--	--	--	--	--	--	.500	2.2	--
DEC. 01	--	--	--	--	--	--	--	.100	.44	--
1971										
JAN. 07	59	5.5	.30	14	230	.31	938	.080	--	.020
FEB. 02	--	--	--	--	--	--	--	--	--	--
MAR. 03	--	--	--	--	--	--	--	--	--	--
APR. 07	79	1.8	--	--	198	.27	2560	.070	.44	.030
MAY 04	--	--	--	--	--	--	--	--	--	--
JUNE 03	--	--	--	--	--	--	--	--	--	--

12353300 CLARK FORK NEAR ALBERTON, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
1969										
JULY 10	.00	--	.140	.18	.26	.200	.100	--	--	--
AUG. 14	.00	--	.020	.03	--	.040	.000	--	--	--
SEPT. 18	.00	--	.040	.05	.20	.040	.020	--	--	7.0
OCT. 16	.00	--	.000	.00	.12	.170	.020	--	--	7.0
NOV. 12	.00	--	.010	.01	.80	.520	.170	--	--	8.0
DEC. 18	.00	--	.010	.01	.09	.160	.050	--	--	2.0
1970										
JAN. 15	.00	--	.040	.05	.40	.120	.070	--	--	3.0
FEB. 11	.00	--	.120	.15	.29	.080	.050	--	--	2.0
MAR. 17	.00	--	.040	.05	.26	.070	.050	--	--	3.0
APR. 15	.00	--	.000	.00	.18	.060	.050	--	--	2.0
MAY 13	.00	--	.000	.00	.20	.080	.040	--	--	5.0
JUNE 09	.00	--	.460	.59	1.3	.160	.010	--	--	2.0
JULY 11	.00	--	.010	.01	.19	.060	.010	.010	.03	19
AUG. 04	.00	--	.040	.05	.10	.110	.020	.000	.00	49
SEPT. 09	--	--	.010	.01	--	.030	.020	.010	.03	11
OCT. 06	.03	--	.020	.03	.22	.040	.020	.010	.03	2.0
NOV. 03	--	--	.010	.01	--	.020	.020	.010	.03	54
DEC. 01	--	--	.010	.01	--	.080	.030	.010	.03	.00
1971										
JAN. 07	.07	.100	.060	.08	.02	--	--	--	.03	20
FEB. 02	--	.500	.000	.00	--	.200	--	--	.23	4.0
MAR. 03	--	.100	.050	.06	--	.070	--	--	.10	.00
APR. 07	.10	.100	.270	.35	.20	.200	.020	.040	.12	2.0
MAY 04	--	.100	.080	.10	--	.200	--	.040	.12	4.0
JUNE 03	--	.010	.010	.01	--	.070	--	.040	.12	.00

DATE OF SAMPLE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
1969										
JULY 10	0945	0	--	0	0	--	20	0	0	0
AUG. 14	0820	100	--	2	0	--	30	0	0	0
SEPT. 18	1000	100	--	1	0	--	20	0	0	1
OCT. 16	1630	--	60	8	0	--	4	0	0	0
NOV. 12	1430	--	40	0	0	--	20	0	0	0
DEC. 18	1430	--	20	2	0	--	30	0	0	0
1970										
JAN. 15	0900	--	20	4	0	--	10	0	0	0
FEB. 11	0945	--	100	5	0	--	20	0	0	1
MAR. 17	1730	--	5	3	0	.0	20	0	0	0
APR. 15	1340	--	60	0	0	.0	4	0	0	0
MAY 13	1615	--	170	3	0	.0	10	0	0	0
JUNE 09	1750	--	210	1	0	.0	4	0	0	0
JULY 11	1115	--	--	--	--	--	8	--	--	--
AUG. 04	1945	--	--	--	--	--	20	--	--	--
SEPT. 09	1200	--	--	--	--	--	10	--	--	--
OCT. 06	1230	--	--	--	--	--	30	--	--	--
NOV. 03	1200	--	--	--	--	--	10	--	--	--
DEC. 01	1610	--	--	--	--	--	10	--	--	--
1971										
JAN. 07	0930	--	--	--	--	--	20	--	--	--
FEB. 02	1200	--	--	--	--	--	330	--	--	--
MAR. 03	1300	--	--	--	--	--	80	--	--	--
APR. 07	1245	--	--	--	--	--	20	--	--	--
MAY 04	1100	--	--	--	--	--	10	--	--	--
JUNE 03	0930	--	--	--	--	--	20	--	--	--

12353300 CLARK FORK NEAR ALBERTON, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)
1969										
JULY 10	--	25	40	40	--	3	20	--	--	--
AUG. 14	--	3	--	10	--	0	20	--	--	--
SEPT. 18	--	3	--	30	--	0	--	--	--	--
OCT. 16	--	3	--	34	--	0	--	19	--	--
NOV. 12	--	4	--	34	--	0	--	27	--	--
DEC. 18	--	7	--	34	--	0	--	38	--	--
1970										
JAN. 15	--	1	--	4	--	0	--	30	--	--
FEB. 11	--	14	--	12	--	0	--	47	--	--
MAR. 17	--	9	--	38	--	0	--	70	--	--
APR. 15	--	0	--	13	--	0	--	29	--	--
MAY 13	--	20	--	47	--	0	--	42	--	--
JUNE 09	--	25	--	13	--	0	--	22	--	--
JULY 11	--	0	--	36	--	--	--	12	--	.1
AUG. 04	--	64	--	85	--	--	--	--	--	.1
SEPT. 09	--	17	--	0	--	0	--	14	--	.0
OCT. 06	<10	0	110	0	2	0	40	31	--	.0
NOV. 03	--	0	--	10	--	0	--	51	.2	.2
DEC. 01	--	0	--	10	--	0	--	54	<.1	.0
1971										
JAN. 07	<10	2	<10	160	5	0	40	0	.1	--
FEB. 02	--	20	--	210	--	2	--	61	.1	.3
MAR. 03	--	42	--	200	--	6	--	280	.3	.3
APR. 07	240	10	1900	--	40	2	210	80	--	.2
MAY 04	--	4	--	40	--	1	--	60	.1	.1
JUNE 03	--	7	--	100	--	2	--	0	.2	.1

DATE OF SAMPLE	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
1969									
JULY 10	1	2	6	0	--	220	0	--	15
AUG. 14	0	0	5	0	--	270	1	--	12
SEPT. 18	0	0	2	0	--	290	0	--	12
OCT. 16	0	0	5	0	--	280	1	--	18
NOV. 12	2	3	5	0	--	250	0	--	11
DEC. 18	15	3	6	1	--	290	0	--	10
1970									
JAN. 15	0	2	0	0	--	240	1	--	35
FEB. 11	8	5	5	0	--	250	0	--	21
MAR. 17	20	4	0	1	--	260	0	--	23
APR. 15	2	0	6	0	--	330	1	--	0
MAY 13	0	10	4	0	--	140	0	--	14
JUNE 09	6	0	2	3	--	70	0	--	19
JULY 11	--	--	--	--	--	260	--	--	13
AUG. 04	--	--	--	--	--	240	--	--	84
SEPT. 09	--	--	--	--	--	230	--	--	61
OCT. 06	--	--	--	--	200	280	--	<10	20
NOV. 03	--	--	--	--	--	280	--	--	10
DEC. 01	--	--	--	--	--	340	--	--	20
1971									
JAN. 07	--	--	--	--	40	180	--	220	20
FEB. 02	--	--	--	--	--	150	--	--	50
MAR. 03	--	--	--	--	--	270	--	--	54
APR. 07	--	--	--	--	130	240	--	260	30
MAY 04	--	--	--	--	--	90	--	--	0
JUNE 03	--	--	--	--	--	260	--	--	20

12388700 FLATHEAD RIVER AT PERMA, MT

LOCATION.--Lat 47°22'01", long 114°35'03", in NW¼SW¼NW¼ sec.31, T.19 N., R.23 W., Sanders County, Hydrologic Unit 17010204, on upstream side of bridge on State Highway 382 at Perma, and at mile 10.9.

DRAINAGE AREA.--8,795 mi^2.

PERIOD OF RECORD.--July 1971 to August 1973.

REMARKS.--Water discharge computed by subtracting the discharge of Clark Fork at St. Regis (station number 12354500) from that of Clark Fork near Plains (station number 12389000).

WATER QUALITY DATA

DATE OF SAMPLE	TIME	DISCHARGE, IN CUBIC FEET PER SECOND (00060)	SPECIFIC CONDUCTANCE (UMHOS) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)
1971						
JULY 27	1230	14000	180	8.3	30.0	21.5
AUG. 17	1200	6440	205	8.2	23.5	21.0
SEPT. 14	1200	8720	195	7.8	16.5	15.5
OCT. 13	1200	7160	190	7.8	9.0	11.5
NOV. 10	1130	11100	185	7.3	16.0	4.5
DEC. 15	1230	13700	190	7.7	-2.0	.5
1972						
JAN. 07	1230	13800	185	8.1	4.0	1.0
FEB. 10	1230	13000	185	8.1	2.0	.0
MAR. 15	1200	14400	185	8.1	14.5	4.5
APR. 13	1200	20400	180	8.1	.0	4.5
MAY 03	1100	18700	185	8.2	13.0	7.0
JUNE 09	1200	50300	175	8.3	29.5	15.0
JULY 11	1230	18800	170	8.0	18.5	17.5
AUG. 17	1330	8100	180	7.9	29.0	21.0
SEPT. 20	1500	7160	175	8.2	12.5	14.0
OCT. 26	1330	7500	220	7.7	5.5	8.0
NOV. 09	1500	10700	170	7.4	8.0	6.0
DEC. 21	1330	7000	185	7.7	6.0	.0
1973						
JAN. 16	1300	8500	185	7.8	3.0	2.5
FEB. 21	1330	12700	190	7.5	7.0	2.5
MAR. 29	1300	6100	185	8.2	10.0	6.0
APR. 19	1300	7200	185	8.1	10.5	8.0
MAY 15	1630	10700	185	8.2	29.0	15.0
JUNE 07	1530	12300	180	8.2	21.0	14.0
JULY 12	1700	11000	280	8.3	--	20.0
AUG. 09	1300	5300	190	8.1	31.0	22.5

12388700 FLATHEAD RIVER AT PERMA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L) (00310)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ALKALINITY FIELD (MG/L AS CACO3) (00410)
1971					
JULY 27	9.0	.4	34	4	81
AUG. 17	8.4	1.0	24	9	86
SEPT. 14	9.6	.8	58	8	89
OCT. 13	10.2	1.0	25	3	91
NOV. 10	12.6	1.6	22	1	86
DEC. 15	13.2	1.3	32	1	88
1972					
JAN. 07	13.4	1.2	86	4	87
FEB. 10	13.2	1.2	15	2	87
MAR. 15	12.2	1.1	47	16	87
APR. 13	12.0	1.3	4	1	87
MAY 03	11.6	1.0	10	23	85
JUNE 09	9.8	.8	270	17	82
JULY 11	9.0	.9	27	12	86
AUG. 17	8.0	2.0	17	17	75
SEPT. 20	9.6	1.5	28	7	77
1972					
OCT. 26	10.8	1.5	2	5	79
NOV. 09	11.4	1.9	23	0	90
DEC. 21	12.2	.9	43	23	92
1973					
JAN. 16	12.6	.7	47	30	90
FEB. 21	13.0	.5	.00	0	85
MAR. 29	11.8	1.2	5	0	90
APR. 19	11.0	.7	.00	0	97
MAY 15	10.0	.5	.00	0	91
JUNE 07	9.9	.5	3	5	89
JULY 12	8.7	.8	2	3	86
AUG. 09	8.0	.2	67	17	88

DATE OF SAMPLE	TIME	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)
1971									
JULY 27	1230	7	10	88	25	--	6.2	--	--
AUG. 17	1200	6	1	--	--	--	--	--	--
SEPT. 14	1200	5	1	--	--	--	--	--	--
OCT. 13	1200	5	20	90	25	--	6.6	--	--
NOV. 10	1130	0	1	--	--	--	--	--	--
DEC. 15	1230	3	1	--	--	--	--	--	--
1972									
JAN. 07	1230	0	1	88	25	--	6.2	--	--
FEB. 10	1230	0	1	--	--	--	--	--	--
MAR. 15	1200	5	5	--	--	--	--	--	--
APR. 13	1200	8	3	97	28	6.5	6.5	--	--
MAY 03	1100	0	4	--	--	--	--	--	--
JUNE 09	1200	10	7	--	--	--	--	--	--
JULY 11	1230	--	--	83	24	--	5.6	1.3	.0
AUG. 17	1330	--	--	87	25	--	6.0	2.0	.0
SEPT. 20	1500	--	--	89	25	--	6.4	2.1	.1
OCT. 26	1330	--	--	94	27	--	6.4	1.8	.0
NOV. 09	1500	--	--	87	25	--	6.0	1.4	.0
DEC. 21	1330	--	--	93	26	--	6.9	2.7	.1
1973									
JAN. 16	1300	--	--	92	26	--	6.5	2.6	.1
FEB. 21	1330	--	--	88	25	--	6.1	1.3	.0
MAR. 29	1300	--	--	91	26	--	6.4	1.7	.0
APR. 19	1300	--	--	91	26	--	6.3	1.7	.0
MAY 15	1630	--	--	91	26	--	6.3	1.5	.0
JUNE 07	1530	--	--	91	26	--	6.4	1.5	.0
JULY 12	1700	--	--	88	25	--	6.1	.60	.0
AUG. 09	1300	--	--	85	24	--	6.1	1.8	.0

12388700 FLATHEAD RIVER AT PERMA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)
1971									
JULY 27	.30	--	--	.10	--	--	--	.000	.000
AUG. 17	--	--	--	.10	--	--	--	--	--
SEPT. 14	--	--	--	.10	--	--	--	--	--
OCT. 13	.60	--	--	.10	--	--	--	.210	.000
NOV. 10	--	--	--	.10	--	--	--	--	--
DEC. 15	--	--	--	.00	--	--	--	--	--
1972									
JAN. 07	.50	--	--	.10	--	--	--	.020	.000
FEB. 10	--	--	--	.10	--	--	--	--	--
MAR. 15	--	--	--	.10	--	--	--	--	--
APR. 13	.40	--	--	.10	--	--	--	.000	.000
MAY 03	--	--	--	.00	--	--	--	--	--
JUNE 09	--	--	--	.00	--	--	--	--	--
JULY 11	--	4.3	.60	.00	82	.11	4160	--	--
AUG. 17	--	4.6	.80	.10	114	.16	2490	--	--
SEPT. 20	--	4.3	1.3	.10	110	.15	2130	--	--
OCT. 26	--	6.0	1.0	.10	90	.12	1820	--	--
NOV. 09	--	4.7	1.0	<.10	106	.14	3060	--	--
DEC. 21	--	6.2	.70	.10	102	.14	1930	--	--
1973									
JAN. 16	--	4.6	1.3	.10	128	.17	2940	--	--
FEB. 21	--	7.3	.90	<.10	126	.17	4320	--	--
MAR. 29	--	4.1	1.0	.10	113	.15	1860	--	--
APR. 19	--	3.7	.50	<.10	115	.16	2240	--	--
MAY 15	--	6.0	2.3	<.10	114	.16	3290	--	--
JUNE 07	--	3.7	1.4	.10	101	.14	3350	--	--
JULY 12	--	4.5	.70	<.10	108	.15	3210	--	--
AUG. 09	--	6.1	1.1	<.10	101	.14	1450	--	--

DATE OF SAMPLE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
1971									
JULY 27	--	.000	.060	--	--	.030	.020	.000	5.0
AUG. 17	--	--	--	--	--	--	--	--	--
SEPT. 14	--	--	--	--	--	--	--	--	--
OCT. 13	--	.210	.020	.15	.17	.080	.060	.000	.00
NOV. 10	--	--	--	--	--	--	--	--	--
DEC. 15	--	--	--	--	--	--	--	--	--
1972				.26	.32	.020	.010	.000	1.0
JAN. 07	--	.020	.060	--	--	--	--	--	--
FEB. 10	--	--	--	--	--	--	--	--	--
MAR. 15	--	--	--	.01	.09	.020	.010	.000	.00
APR. 13	--	.000	.080	--	--	--	--	--	--
MAY 03	--	--	--	--	--	--	--	--	--
JUNE 09	--	--	--	--	.11	.020	.020	.000	--
JULY 11	--	.000	--	--	--	--	--	--	--
AUG. 17	--	--	--	--	--	--	--	--	--
SEPT. 20	--	--	--	--	.06	.040	--	<.010	--
OCT. 26	--	.080	--	--	--	--	--	--	--
NOV. 09	--	--	--	--	--	--	--	--	--
DEC. 21	--	--	--						
1973				--	.46	.050	--	.010	--
JAN. 16	--	.040	--	--	--	--	--	--	--
FEB. 21	--	--	--	--	--	--	--	--	--
MAR. 29	--	--	--	--	.11	.010	--	<.010	--
APR. 19	<.100	<.100	--	--	--	--	--	--	--
MAY 15	--	--	--	--	--	--	--	--	--
JUNE 07	--	--	--	--	.14	<.010	--	<.010	--
JULY 12	<.100	<.100	--	--	.03	.240	--	.010	--
AUG. 09	.010	<.100	--						

12388700 FLATHEAD RIVER AT PERMA, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
1971									
JULY 27	1230	0	0	<1	0	0	.00	<10	1
AUG. 17	1200	--	--	--	--	--	--	--	--
SEPT. 14	1200	--	--	--	--	--	--	--	--
OCT. 13	1200	2	2	2	0	10	.00	1	1
NOV. 10	1130	--	--	--	--	--	--	--	--
DEC. 15	1230	--	--	--	--	--	--	--	--
1972								<1	0
JAN. 07	1230	5	5	<1	0	7	.00	--	--
FEB. 10	1230	--	--	--	--	--	--	--	--
MAR. 15	1200	--	--	--	--	--	--	20	1
APR. 13	1200	0	0	0	0	10	.00	--	--
MAY 03	1100	--	--	--	--	--	--	--	--
JUNE 09	1200	--	--	--	--	--	--		

DATE OF SAMPLE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
1971									
JULY 27	<10	10	6	0	.0	.0	0	10	10
AUG. 17	--	20	--	--	--	.4	--	--	0
SEPT. 14	--	10	--	--	--	.2	--	--	0
OCT. 13	40	10	5	0	.2	.2	4	20	0
NOV. 10	--	0	--	--	--	.2	--	--	30
DEC. 15	--	0	--	--	--	.3	--	--	0
1972									
JAN. 07	30	0	3	1	.3	.3	1	10	10
FEB. 10	--	0	--	--	--	.7	--	--	8
MAR. 15	--	0	--	--	--	.3	--	--	10
APR. 13	140	10	8	3	--	.2	0	8	8
MAY 03	--	10	--	--	--	.1	--	--	8
JUNE 09	--	10	--	--	--	.1	--	--	8

PEND OREILLE RIVER BASIN

12389000 CLARK FORK NEAR PLAINS, MT

LOCATION.--Lat 47°25'47", long 114°51'18", in E½SW¼ sec.1, T.19 N., R.26 W., Sanders County, Hydrologic Unit 17010213, on right bank 2.4 mi southeast of Plains, 6.0 mi downstream from Flathead River, and at mile 239.0.

DRAINAGE AREA.--19,958 mi^2.

PERIOD OF RECORD.--July 1969 to June 1970, June 1982 to August 1983.

WATER QUALITY DATA

DATE OF SAMPLE		TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (UMHOS) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)
1969							
JULY	09	1600	30600	--	220	7.5	30.0
AUG.	13	1100	12500	--	190	8.1	22.0
SEPT.	17	1300	18000	--	195	8.3	27.0
OCT.	16	1310	14300	--	205	8.3	10.5
NOV.	12	1010	6830	--	240	8.1	9.5
DEC.	17	1700	16400	--	200	8.1	2.0
1970							
JAN.	14	1320	18300	--	218	7.4	6.0
FEB.	10	1600	8200	--	260	8.2	2.0
MAR.	17	1330	12700	--	230	8.3	7.5
APR.	15	1000	14600	--	215	8.2	4.5
MAY	13	1130	36200	--	180	7.6	14.0
JUNE	09	1400	86900	--	140	7.9	17.0
1982							
JUNE	21	1410	--	86300	162	--	31.0
AUG.	30	1020	--	7440	214	--	17.5
OCT.	06	1630	--	11100	213	--	11.0
1983							
JAN.	24	1545	--	16400	198	--	.0
MAY	04	1645	--	23800	177	--	19.0
	27	1045	--	44000	145	--	18.0
AUG.	02	1645	--	13700	180	--	35.0

DATE OF SAMPLE		TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)
1969							
JULY	09	18.0	8.8	.1	8	--	92
AUG.	13	20.0	8.0	.5	6	--	105
SEPT.	17	16.0	8.9	.8	28	--	136
OCT.	16	7.0	11.9	.8	5	1	111
NOV.	12	6.5	11.1	1.4	7	0	108
DEC.	17	2.0	11.8	1.5	71	3	96
1970							
JAN.	14	.0	12.0	1.1	7	--	95
FEB	10	2.5	11.9	1.2	15	1	102
MAR.	17	5.0	12.5	1.1	14	--	95
APR.	15	6.0	11.3	1.0	14	--	94
MAY	13	8.0	9.8	1.1	110	110	80
JUNE	09	14.0	9.7	.9	550	90	62
1982							
JUNE	21	15.0	--	--	--	--	--
AUG.	30	17.0	--	--	--	--	--
OCT.	06	10.0	--	--	--	--	--
1983							
JAN.	24	1.0	--	--	--	--	--
MAY	04	10.0	--	--	--	--	--
	27	13.0	--	--	--	--	--
AUG.	02	21.0	--	--	--	--	--

12389000 CLARK FORK NEAR PLAINS, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)	HARDNESS (MG/L AS CACO3) (00900)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)
1969									
JULY 09	1600	7	15	96	--	--	1.0	.80	.20
AUG. 13	1100	2	2	100	--	--	1.2	.60	.10
SEPT. 17	1300	1	3	100	--	--	.80	1.2	.10
OCT. 16	1310	1	2	110	3.6	.2	1.0	.90	.10
NOV. 12	1010	1	2	130	5.2	.2	1.3	1.3	--
DEC. 17	1700	2	1	170	--	--	.70	1.4	.20
1970									
JAN. 14	1320	4	6	110	--	--	.80	2.2	--
FEB. 10	1600	4	4	130	--	--	1.1	1.4	.10
MAR. 17	1330	8	10	120	--	--	1.0	2.0	--
APR. 15	1000	5	9	110	--	--	1.0	1.2	--
MAY 13	1130	21	15	82	--	--	1.2	1.4	--
JUNE 09	1400	20	45	68	--	--	.90	.60	.20

DATE OF SAMPLE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
1969									
JULY 09	125	.17	10300	.000	.000	.100	.24	.080	--
AUG. 13	124	.17	4180	.000	.000	.032	.10	.000	6.0
SEPT. 17	99	.13	4810	.010	.000	.060	.05	.010	5.0
OCT. 16	129	.18	4980	.000	.000	.000	.06	.170	6.0
NOV. 12	150	.20	2770	.000	.000	.010	.10	.330	7.0
DEC. 17	127	.17	5620	.000	.000	.010	.34	.060	2.0
1970									
JAN. 14	129	.18	6370	.100	.000	.000	.17	.130	1.0
FEB. 10	158	.21	3500	.100	.000	.010	.10	.110	2.0
MAR. 17	148	.20	5070	.030	.000	.040	.16	.050	3.0
APR. 15	138	.19	5440	.030	.000	.000	.39	.160	1.0
MAY 13	110	.15	10800	.020	.000	.010	.11	.080	3.0
JUNE 09	82	.11	19200	.040	.000	.010	.14	.080	1.0

DATE OF SAMPLE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM DISSOLVED (UG/L AS CD) (01025)
1969								
JULY 09	1600	0	--	8	0	--	2	0
AUG. 13	1100	100	--	4	0	--	10	0
SEPT. 17	1300	200	--	0	0	--	8	0
OCT. 16	1310	--	10	0	0	--	3	0
NOV. 12	1010	--	10	0	0	--	7	0
DEC. 17	1700	--	20	0	0	--	20	0
1970								
JAN. 14	1320	--	0	1	0	--	10	0
FEB. 10	1600	--	100	5	0	--	20	0
MAR. 17	1330	--	30	1	0	.0	4	0
APR. 15	1000	--	7	1	0	.0	10	0
MAY 13	1130	--	80	2	0	.0	10	0
JUNE 09	1400	--	140	1	0	.0	10	0

12389000 CLARK FORK NEAR PLAINS, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
1969								
JULY 09	1	0	--	40	40	8	0	--
AUG. 13	0	1	2	--	30	0	0	--
SEPT. 17	0	1	3	--	30	0	--	--
OCT. 16	0	0	5	--	6	0	--	3
NOV. 12	0	0	4	--	4	0	--	0
DEC. 17	0	0	16	--	28	0	--	10
1970								
JAN. 14	0	1	2	--	0	0	--	0
FEB. 10	0	0	0	--	4	0	--	23
MAR. 17	0	0	18	--	17	0	--	9
APR. 15	0	0	0	--	6	4	--	0
MAY 13	0	0	20	--	36	0	--	14
JUNE 09	0	0	0	--	0	0	--	8

DATE OF SAMPLE	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
1969							
JULY 09	2	1	10	0	220	0	11
AUG. 13	0	0	6	0	220	0	17
SEPT. 17	0	0	0	0	140	0	20
OCT. 16	0	0	2	0	160	0	20
NOV. 12	2	2	0	0	200	0	10
DEC. 17	2	3	11	1	190	0	4
1970							
JAN. 14	3	0	0	0	130	1	15
FEB. 10	13	4	5	0	180	0	0
MAR. 17	13	2	0	0	200	0	14
APR. 15	0	3	5	0	180	0	9
MAY 13	1	8	5	0	160	0	10
JUNE 09	25	0	6	1	75	0	11

12389500 THOMPSON RIVER NEAR THOMPSON FALLS, MT

LOCATION.--Lat 47°35'31", long 115°13'43", in NW¼NE¼SE¼ sec.7, T.21 N., R.28 W., Sanders County, Hydrologic Unit 17010213, Lolo National Forest, on right bank 1.3 mi upstream from mouth and 5.5 mi east of Thompson Falls.

DRAINAGE AREA.--642 mi^2.

PERIOD OF RECORD.--September 1975 to June 1976, June 1982 to August 1983.

WATER QUALITY DATA

DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (UMHOS) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)
1975						
SEPT. 03	1030	238	160	8.1	16.0	9.0
NOV. 11	1330	224	165	7.9	2.0	4.0
1976						
APR. 16	1315	1320	100	8.3	7.0	5.0
JUNE 11	1400	1100	85	8.2	22.0	10.0
1982						
JUNE 22	0835	1450	95	--	18.0	9.5
AUG. 30	1410	261	177	--	19.0	10.5
OCT. 08	0820	217	180	--	2.0	6.0
NOV. 24	0930	176	175	--	-6.0	1.0
1983						
JAN. 25	1030	228	182	--	1.0	2.0
MAR. 18	0930	468	162	--	.0	3.0
MAY 05	0930	694	122	--	8.0	6.0
26	0930	1820	62	--	14.0	8.0
JUNE 21	1645	547	117	--	17.0	11.0
AUG. 03	1100	255	138	--	20.0	14.0

DATE OF SAMPLE	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)
1975					
SEPT. 03	11.0	104	1	4	85
NOV. 11	12.6	105	<1	<1	86
1976					
APR. 16	11.6	98	<1	1	59
JUNE 11	10.6	103	<1	20	48
1982					
JUNE 22	--	--	--	--	--
AUG. 30	--	--	--	--	--
OCT. 08	--	--	--	--	--
NOV. 24	--	--	--	--	--
1983					
JAN. 25	--	--	--	--	--
MAR. 18	--	--	--	--	--
MAY 05	--	--	--	--	--
26	--	--	--	--	--
JUNE 21	--	--	--	--	--
AUG. 03	--	--	--	--	--

12389500 THOMPSON RIVER NEAR THOMPSON FALLS, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	TURBIDITY (JTU) (00070)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS, NONCARBONATE (MG/L CACO3) (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)
1975									
SEPT. 03	1030	1	87	2	22	7.8	2.6	.1	.80
NOV. 11	1330	0	89	3	24	7.1	2.5	.1	.70
1976									
APR. 16	1315	6	56	0	13	5.6	2.5	.2	.80
JUNE 11	1400	1	48	0	12	4.3	1.4	.0	.60

DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3) (00440)	CARBONATE FET-FLD (MG/L AS CO3) (00445)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)
1975									
SEPT. 03	100	0	3.7	.90	.10	11	90	100	.12
NOV. 11	110	0	3.5	.70	<.10	10	102	100	.14
1976									
APR. 16	72	0	3.3	1.0	.10	12	79	74	.11
JUNE 11	59	0	3.2	1.0	.10	.1	60	52	.08

DATE OF SAMPLE	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
1975							
SEPT. 03	58	1	<.010	.12	.12	.040	2.0
NOV. 11	62	--	.020	.05	.07	<.010	7.7
1976							
APR. 16	282	8	.010	.11	.12	.020	4.2
JUNE 11	178	--	.020	.01	.03	.030	1.8

DATE OF SAMPLE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)
1975									
SEPT. 03	1030	<1	<1	<20	ND	ND	ND	<100	ND
NOV. 11	1330	--	1	--	ND	--	4	--	<2
1976									
APR. 16	1315	--	1	--	ND	--	<20	--	2
JUNE 11	1400	--	<1	--	ND	--	<20	--	ND

12389500 THOMPSON RIVER NEAR THOMPSON FALLS, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
1975							
SEPT. 03	<20	<2	80	40	<200	<2	<10
NOV. 11	--	<2	--	<10	--	2	--
1976							
APR. 16	--	ND	--	<10	--	<2	--
JUNE 11	--	ND	--	20	--	<2	--

DATE OF SAMPLE	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
1975							
SEPT. 03	<10	--	<.5	<1	<1	<20	ND
NOV. 11	2	--	<.5	--	<1	--	2
1976							
APR. 16	<10	--	<.5	--	<1	--	<20
JUNE 11	<10	<.5	<.5	--	<1	--	ND

RADIOCHEMICAL ANALYSES

DATE OF SAMPLE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS YT-90) (80060)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L) (80020)
1975									
SEPT. 03	3.2	<.4	2.5	<.4	2.0	<.4	.03	.6	--
1976									
APR. 16	1.5	.6	1.4	<.4	1.1	<.4	.03	--	.40

SUSPENDED-SEDIMENT DISCHARGE

DATE OF SAMPLE	TIME	TEMPER-ATURE (DEG C) (00010)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
1975					
SEPT. 03	1030	9.0	238	2	1.3
NOV. 11	1330	4.0	224	1	.60
1976					
APR. 16	1315	5.0	1320	20	71
JUNE 11	1400	10.0	1100	4	12

PEND OREILLE RIVER BASIN

12391000 CLARK FORK AT THOMPSON FALLS, MT

LOCATION.--Lat 47°36'17", long 115°22'30", in NE¼SE¼ sec.1, T.21 N., R.30 W., Sanders County, Hydrologic Unit 17010213, at bridge on U.S. Highway 10A, 1 mi west of Thompson Falls, 6.5 mi downstream from Thompson River, and at mile 206.

DRAINAGE AREA.--21,113 mi^2.

PERIOD OF RECORD.--July 1969 to August 1973.

REMARKS.--Discharge records furnished by Montana Power Company.

WATER QUALITY DATA

DATE OF SAMPLE	TIME	DISCHARGE, IN CUBIC FEET PER SECOND (00060)	SPECIFIC CONDUCTANCE (UMHOS) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)
1969						
JULY 09	1210	32500	220	7.4	27.0	17.0
AUG. 13	0730	14600	180	8.0	10.0	20.0
SEPT. 17	0930	18700	190	7.7	14.0	15.0
OCT. 15	1600	15400	210	8.2	16.0	7.0
NOV. 12	0715	8600	225	8.0	4.5	6.0
DEC. 18	0915	15800	205	7.8	1.0	2.0
1970						
JAN. 14	1040	17100	218	7.2	2.5	.0
FEB. 10	1300	8400	225	8.4	4.0	3.0
MAR. 17	1100	10300	260	8.3	8.0	5.0
APR. 15	0640	15800	210	7.8	-1.0	6.5
MAY 13	0830	37900	175	7.5	5.5	7.5
JUNE 09	1030	98000	140	7.9	14.0	14.5
JULY 22	1200	14500	210	8.5	23.0	22.0
AUG. 19	1300	7800	245	8.1	25.0	19.5
SEPT. 15	0930	15000	220	8.4	-1.0	11.5
OCT. 13	0900	12600	245	7.5	3.0	9.0
NOV. 17	1030	9000	220	7.8	4.5	5.0
DEC. 09	0800	12600	260	7.6	-5.0	2.0
1971						
JAN. 20	0900	17500	225	6.7	.0	.0
FEB. 16	0900	24000	215	7.5	3.0	4.0
MAR. 16	0900	14600	235	8.3	.0	4.0
APR. 13	0900	20500	220	8.2	3.0	5.5
MAY 18	0730	83000	160	7.8	6.0	8.0
JUNE 08	0800	83300	165	7.5	9.5	11.0
JULY 27	0900	21400	195	8.0	19.0	21.0
AUG. 17	0830	10400	205	8.2	16.5	21.5
SEPT. 14	0900	11400	225	8.3	.5	14.5
OCT. 13	0830	10700	230	8.1	8.5	11.5
NOV. 10	0830	15400	230	7.7	.5	3.5
DEC. 15	0900	16600	195	8.0	-4.5	.0
1972						
JAN. 07	0830	17500	220	7.8	1.0	.0
FEB. 10	0830	15400	225	7.5	-1.5	.0
MAR. 15	0830	24500	180	7.9	3.5	5.5
APR. 13	0830	33500	195	7.7	-1.0	5.5
MAY 03	0800	34000	175	7.8	5.0	8.0
JUNE 09	0830	115000	140	7.7	22.0	14.0
JULY 11	0930	34000	160	7.8	15.0	16.0
AUG. 17	1100	13000	210	7.8	18.5	19.5
SEPT. 20	1300	11000	210	8.5	11.0	14.5
OCT. 26	1030	13000	250	7.8	5.0	8.0
NOV. 09	1230	15000	215	7.5	5.0	6.0
DEC. 21	1000	13000	215	7.7	6.0	.0
1973						
JAN. 16	1030	17000	205	7.6	3.0	.5
FEB. 21	1030	14600	200	7.7	1.5	2.5
MAR. 29	0930	10000	235	8.4	3.0	6.0
APR. 19	1000	11400	205	8.3	6.0	8.0
MAY 15	1330	17000	165	8.1	27.0	14.0
JUNE 07	1230	23200	175	8.2	19.5	14.5
JULY 12	1400	15400	200	8.4	28.0	20.0
AUG. 09	1030	6100	200	8.1	23.0	20.5

12391000 CLARK FORK AT THOMPSON FALLS, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ALKA-LINITY FIELD (MG/L AS CACO3) (00410)
1969					
JULY 09	9.2	1.3	18	--	92
AUG. 13	8.0	.9	9	--	102
SEPT. 17	9.0	1.1	25	3	112
OCT. 15	11.2	1.0	4	1	99
NOV. 12	11.2	.8	11	1	107
DEC. 18	12.9	.9	38	2	97
1970					
JAN. 14	12.2	1.0	8	--	93
FEB. 10	12.0	.7	3	0	104
MAR. 17	12.0	1.2	13	--	100
APR. 15	11.4	.8	25	--	90
MAY 13	10.6	1.3		--	75
JUNE 09	10.4	1.3	230	90	62
JULY 22	7.4	1.2		10	94
AUG. 19	8.4	1.0	12	2	107
SEPT. 15	10.0	.8	16	2	100
OCT. 13	10.1	.9	16	2	99
NOV. 17	11.9	.9	12	1	105
DEC. 09	12.5	1.2	11	1	103
1971					
JAN. 20	12.7	2.2	72	96	80
FEB. 16	12.3	1.7	50	6	81
MAR. 16	12.3	.5	0	0	93
APR. 13	12.8	2.0	48	2	82
MAY 18	11.6	.9	70	18	66
JUNE 08	11.2	1.1	360	16	68
JULY 27	9.0	1.2	30	8	80
AUG. 17	8.8	1.1	10	4	84
SEPT. 14	10.0	.8	16	1	93
OCT. 13	10.6	1.5	12	4	95
NOV. 10	13.0	1.2	30	2	94
DEC. 15	14.4	2.3	44	1	94
1972					
JAN. 07	13.8	1.0	20	1	90
FEB. 10	13.6	1.2	15	0	90
MAR. 15	12.6	1.4	54	20	75
APR. 13	12.0	1.5	10	1	80
MAY 03	11.4	2.2	12	6	77
JUNE 09	10.2	1.1	330	55	62
JULY 11	9.8	1.3	38	8	75
AUG. 17	8.8	2.6	10	6	81
SEPT. 20	9.6	1.7	25	0	85
OCT. 26	11.0	1.8	40	0	85
NOV. 09	12.0	2.0	18	0	99
DEC. 21	13.2	.5	0	0	93
1973					
JAN. 16	12.8	1.0	25	5	91
FEB. 21	12.8	.7	0	0	91
MAR. 29	11.6	.9	20	0	94
APR. 19	11.0	1.4	0	0	106
MAY 15	10.2	1.0	20	3	81
JUNE 07	9.7	.9	20	3	80
JULY 12	8.6	1.0	370	2	90
AUG. 09	8.3	.7	20	0	91

12391000 CLARK FORK AT THOMPSON FALLS, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)
1969									
JULY 09	1210	5	8	94	--	--	--	--	--
AUG. 13	0730	3	2	98	--	--	--	--	--
SEPT. 17	0930	2	3	100	--	--	--	--	--
OCT. 15	1600	0	3	110	--	--	--	3.3	6
NOV. 12	0715	3	2	150	--	--	--	4.8	7
DEC. 18	0915	2	1	110	--	--	--	--	--
1970									
JAN. 14	1040	2	1	110	--	--	--	--	--
FEB. 10	1300	2	3	120	--	--	--	--	--
MAR. 17	1100	5	8	110	--	--	--	--	--
APR. 15	0640	7	5	100	--	--	--	--	--
MAY 13	0830	17	30	80	--	--	--	--	--
JUNE 09	1030	10	50	68	--	--	--	--	--
JULY 22	1200	4	18	96	--	--	--	--	--
AUG. 19	1300	--	3	100	--	--	--	--	--
SEPT. 15	0930	--	--	--	--	--	--	--	--
OCT. 13	0900	4	3	110	--	--	--	--	--
NOV. 17	1030	--	--	--	--	--	--	--	--
DEC. 09	0800	--	--	--	--	--	--	--	--
1971									
JAN. 20	0900	20	30	97	29	--	5.9	--	--
FEB. 16	0900	--	--	--	--	--	--	--	--
MAR. 16	0900	--	--	--	--	--	--	--	--
APR. 13	0900	5	10	94	27	--	6.5	--	--
MAY 18	0730	--	--	--	--	--	--	--	--
JUNE 08	0800	--	--	--	--	--	--	--	--
JULY 27	0900	7	4	90	26	--	6.2	--	--
AUG. 17	0830	6	1	--	--	--	--	--	--
SEPT. 14	0900	6	1	--	--	--	--	--	--
OCT. 13	0830	5	20	110	30	--	7.4	--	--
NOV. 10	0830	0	1	--	--	--	--	--	--
DEC. 15	0900	0	1	--	--	--	--	--	--
1972									
JAN. 07	0830	0	2	100	30	--	6.8	--	--
FEB. 10	0830	0	1	--	--	--	--	--	--
MAR. 15	0830	5	10	--	--	--	--	--	--
APR. 13	0830	10	5	95	27	6.6	6.6	--	--
MAY 03	0800	5	7	--	--	--	--	--	--
JUNE 09	0830	20	30	--	--	--	--	--	--
JULY 11	0930	--	--	77	22	--	5.4	2.5	--
AUG. 17	1100	--	--	99	28	--	7.0	3.2	--
SEPT. 20	1300	--	--	110	30	--	7.6	3.9	--
OCT. 26	1030	--	--	110	33	--	7.6	3.8	--
NOV. 09	1230	--	--	100	29	--	7.4	3.4	--
DEC. 21	1000	--	--	100	30	--	7.1	3.3	--
1973									
JAN. 16	1030	--	--	99	28	--	7.0	3.1	--
FEB. 21	1030	--	--	98	28	--	6.7	2.4	--
MAR. 29	0930	--	--	100	30	--	7.2	3.2	--
APR. 19	1000	--	--	99	28	--	7.0	3.3	--
MAY 15	1330	--	--	85	24	--	6.0	2.4	--
JUNE 07	1230	--	--	85	24	--	6.0	2.3	--
JULY 12	1400	--	--	95	27	--	6.8	2.2	--
AUG. 09	1030	--	--	97	27	--	7.2	3.2	--

12391000 CLARK FORK AT THOMPSON FALLS, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
1969									
JULY 09	--	1.3	--	.40	.20	--	126	.17	11100
AUG. 13	--	1.6	--	.20	.10	--	114	.16	4490
SEPT. 17	--	.80	--	.60	.20	--	114	.16	5760
OCT. 15	.1	1.0	--	1.2	.10	--	131	.18	5450
NOV. 12	.2	1.5	--	1.3	--	--	285	.39	6620
DEC. 18	--	.80	--	2.0	.20	--	126	.17	5380
1970									
JAN. 14	--	.80	--	1.8	--	--	137	.19	6330
FEB. 10	--	1.0	--	3.3	.10	--	141	.19	3200
MAR. 17	--	1.1	--	1.4	--	--	152	.21	4230
APR. 15	--	1.0	--	2.0	--	--	140	.19	5970
MAY 13	--	1.1	--	1.5	--	--	103	.14	10500
JUNE 09	--	.90	--	.80	.20	--	81	.11	21400
JULY 22	--	1.2	12	.80	.00	--	118	.16	4620
AUG. 19	--	1.1	13	--	--	--	--	--	--
SEPT. 15	--	--	--	--	--	--	--	--	--
OCT. 13	--	1.1	19	1.3	.30	--	136	.19	4630
NOV. 17	--	--	--	--	--	--	--	--	--
DEC. 09	--	--	--	--	--	--	--	--	--
1971									
JAN. 20		1.7	22	1.6	.20	6.2	125	.17	5910
FEB. 16	--	--	--	--	--	--	--	--	--
MAR. 16	--	--	--	--	--	--	--	--	--
APR. 13	--	1.0	39	.40	.50	--	102	.14	5650
MAY 18	--	--	--	--	--	--	--	--	--
JUNE 08	--	--	--	--	--	--	--	--	--
JULY 27	--	.50	--	--	.10	--	--	--	--
AUG. 17	--	--	--	--	.20	--	--	--	--
SEPT. 14	--	--	--	--	.10	--	--	--	--
OCT. 13	--	.90	--	--	.20	--	--	--	--
NOV. 10	--	--	--	--	.20	--	--	--	--
DEC. 15	--	--	--	--	.10	--	--	--	--
1972									
JAN. 07	--	1.0	--	--	.10	--	--	--	--
FEB. 10	--	--	--	--	.20	--	--	--	--
MAR. 15	--	--	--	--	.20	--	--	--	--
APR. 13	--	.70	--	--	.10	--	--	--	--
MAY 03	--	--	--	--	.10	--	--	--	--
JUNE 09	--	--	--	--	.10	--	--	--	--
JULY 11	--	--	7.8	.80	.10	--	88	.12	8080
AUG. 17	.1	--	11	1.0	.20	--	126	.17	4420
SEPT. 20	.1	--	16	1.8	.20	--	150	.20	4450
OCT. 26	.2	--	16	1.4	.20	--	122	.17	4280
NOV. 09	.2	--	17	1.9	.10	--	126	.17	5100
DEC. 21	.2	--	14	.70	.10	--	124	.17	4350
1973									
JAN. 16	.1	--	12	1.5	.10	--	130	.18	5970
FEB. 21	.1	--	12	1.2	.10	--	140	.19	5520
MAR. 29	.1	--	16	1.5	.10	--	132	.18	3560
APR. 19	.1	--	13	1.0	.10	--	127	.17	3910
MAY 15	.2	--	9.3	.90	<.10	--	109	.15	5000
JUNE 07	.1	--	8.6	1.6	.10	--	104	.14	6510
JULY 12	.1	--	8.1	1.2	.10	--	117	.16	4860
AUG. 09	.1	--	8.1	1.5	<.10	--	123	.17	2030

12391000 CLARK FORK AT THOMPSON FALLS, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE		NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
1969											
JULY	09	.000	--	--	.120	.92	--	.270	.040	--	--
AUG.	13	.000	--	--	.000	.40	--	.020	.000	--	7.0
SEPT.	17	.010	--	--	.040	.20	--	.010	.010	--	7.0
OCT.	15	.000	--	--	.010	.18	--	.120	.070	--	5
NOV.	12	.000	--	--	.010	.11	--	.280	.080	--	5
DEC.	18	.000	--	--	.010	--	--	.030	.000	--	2
1970											
JAN.	14	.000	--	--	.010	.18	--	.170	.030	--	2
FEB.	10	.000	--	--	.090	.12	--	.020	.020	--	2
MAR.	17	.000	--	--	.040	.12	--	.120	.020	--	1
APR.	15	.000	--	--	.000	.14	--	.040	.020	--	2
MAY	13	.000	--	--	.000	.16	--	.090	.060	--	3
JUNE	09	.000	--	--	.020	.37	--	.100	.000	--	0
JULY	22	.000	--	--	.020	.08	--	.040	.000	.020	5
AUG.	19	.000	--	--	.010	.06	--	.020	.010	.000	10
SEPT.	15	--	--	--	.010	--	--	.040	.040	.030	7
OCT.	13	.000	--	--	.000	.15	--	.040	.020	.000	1
NOV.	17	--	--	--	.070	--	--	.030	--	.000	4
DEC.	09	--	--	--	.050	--	--	.010	--	.010	13
1971											
JAN.	20	.020	--	.000	.000	.09	--	--	.010	--	3
FEB.	16	--	--	.200	.140	--	--	.030	.020	--	1
MAR.	16	--	--	.100	.310	--	--	.030	.030	--	5
APR.	13	.000	--	.100	.340	.40	--	.040	.020	.010	8
MAY	18	--	--	.000	.020	--	--	.100	--	.040	2
JUNE	08	--	--	.030	.050	--	--	.050	--	.020	8
JULY	27	.000	--	.480	.110	--	--	.050	.030	.000	8
AUG.	17	--	--	--	--	--	--	--	--	--	--
SEPT.	14	--	--	--	--	--	--	--	--	--	--
OCT.	13	.000	--	.010	.010	.16	.17	.080	.070	.010	2
NOV.	10	--	--	--	--	--	--	--	--	--	--
DEC.	15	--	--	--	--	--	--	--	--	--	--
1972											
JAN.	07	.000	--	.050	.060	.36	.42	.020	.010	.000	2
FEB.	10	--	--	--	--	--	--	--	--	--	--
MAR.	15	--	--	--	--	--	--	--	--	--	--
APR.	13	.000	--	.000	.100	.07	.17	.040	.010	.000	0
MAY	03	--	--	--	--	--	--	--	--	--	--
JUNE	09	--	--	--	--	--	--	--	--	--	--
JULY	11	--	--	.010	--	--	.08	.020	.020	.000	--
AUG.	17	--	--	--	--	--	--	--	--	--	--
SEPT.	20	--	--	--	--	--	--	--	--	--	--
OCT.	26	--	--	.010	--	--	.09	.040	--	<.010	--
NOV.	09	--	--	--	--	--	--	--	--	--	--
DEC.	21	--	--	--	--	--	--	--	--	--	--
1973											
JAN.	16	--	--	.060	--	--	.19	.050	--	<.010	--
FEB.	21	--	--	--	--	--	--	--	--	--	--
MAR.	29	--	--	--	--	--	--	--	--	--	--
APR.	19	--	<.100	<.100	--	--	.14	.030	--	<.010	--
MAY	15	--	--	--	--	--	--	--	--	--	--
JUNE	07	--	--	--	--	--	--	--	--	--	--
JULY	12	--	<.100	<.100	--	--	.20	.010	--	<.010	--
AUG.	09	--	<.100	<.100	--	--	.08	.030	--	.010	--

12391000 CLARK FORK AT THOMPSON FALLS, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)
1969								
JULY 09	1210	0	--	--	0	0	--	0
AUG. 13	0730	100	--	--	3	0	--	20
SEPT. 17	0930	100	--	--	2	0	--	20
OCT. 15	1600	--	10	--	1	0	--	10
NOV. 12	0715	--	20	--	0	0	--	10
DEC. 18	0915	--	20	--	0	0	--	20
1970								
JAN. 14	1040	--	10	--	3	0	--	10
FEB. 10	1300	--	90	--	4	0	--	10
MAR. 17	1100	--	10	--	2	0	.0	10
APR. 15	0640	--	30	--	1	0	.0	10
MAY 13	0830	--	70	--	1	0	.0	20
JUNE 09	1030	--	140	--	1	0	.0	10
JULY 22	1200	--	70	--	6	0	.0	10
AUG. 19	1300	--	100	--	5	0	.0	480
SEPT. 15	0930	--	--	--	--	--	--	10
OCT. 13	0900	--	100	--	0	0	.0	0
NOV. 17	1030	--	--	--	--	--	--	20
DEC. 09	0800	--	--	--	--	--	--	0
1971								
JAN. 20	0900	--	300	--	0	100	.0	20
FEB. 16	0900	--	--	--	--	--	--	0
MAR. 16	0900	--	--	--	--	--	--	0
APR. 13	0900	--	400	--	30	100	2	10
MAY 18	0730	--	--	--	--	--	--	0
JUNE 08	0800	--	--	--	--	--	--	30
JULY 27	0900	--	--	0	0	--	--	--
AUG. 17	0830	--	--	--	--	--	--	--
SEPT. 14	0900	--	--	--	--	--	--	--
OCT. 13	0830	--	--	1	0	--	--	--
NOV. 10	0830	--	--	--	--	--	--	--
DEC. 15	0900	--	--	--	--	--	--	--
1972								
JAN. 07	0830	--	--	1	1	--	--	--
FEB. 10	0830	--	--	--	--	--	--	--
MAR. 15	0830	--	--	--	--	--	--	--
APR. 13	0830	--	--	0	0	--	--	--
MAY 03	0800	--	--	--	--	--	--	--
JUNE 09	0830	--	--	--	--	--	--	--

12391000 CLARK FORK AT THOMPSON FALLS, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
1969								
JULY 09	--	0	1	--	0	--	0	30
AUG. 13	--	0	0	--	0	--	1	--
SEPT. 17	--	0	0	--	0	--	0	--
OCT. 15	--	0	0	--	0	--	8	--
NOV. 12	--	0	0	--	0	--	3	--
DEC. 18	--	0	0	--	0	--	0	--
1970								
JAN. 14	--	0	0	--	1	--	2	--
FEB. 10	--	0	0	--	0	--	25	--
MAR. 17	--	0	0	--	0	--	17	--
APR. 15	--	0	0	--	0	--	0	--
MAY 13	--	0	0	--	0	--	25	--
JUNE 09	--	0	0	--	0	--	0	--
JULY 22	--	0	0	--	0	--	0	--
AUG. 19	--	0	0	--	0	--	0	--
SEPT. 15	--	--	--	--	--	--	0	--
OCT. 13	--	0	--	.00	0	<10	0	40
NOV. 17	--	--	--	--	--	--	0	--
DEC. 09	--	--	--	--	--	<10	0	50
1971								
JAN. 20	--	0	--	.00	3	--	4	--
FEB. 16	--	--	--	--	--	<10	12	100
MAR. 16	--	--	--	--	--	--	14	--
APR. 13	--	0	--	.00	1	20	3	200
MAY 18	--	--	--	--	--	--	1	--
JUNE 08	--	--	--	--	--	<10	1	210
JULY 27	<1	0	0	.00	--	<10	2	10
AUG. 17	--	--	--	--	--	--	--	--
SEPT. 14	--	--	--	--	--	--	--	--
OCT. 13	3	3	3	.00	--	2	1	20
NOV. 10	--	--	--	--	--	--	--	--
DEC. 15	--	--	--	--	--	--	--	--
1972								
JAN. 07	<1	0	3	1	--	1	1	110
FEB. 10	--	--	--	--	--	--	--	--
MAR. 15	--	--	--	--	--	--	--	--
APR. 13	0	0	0	.00	--	20	1	270
MAY 03	--	--	--	--	--	--	--	--
JUNE 09	--	--	--	--	--	--	--	--

12391000 CLARK FORK AT THOMPSON FALLS, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)
1969								
JULY 09	20	--	0	8	--	--	--	5
AUG. 13	10	--	0	0	--	--	--	0
SEPT. 17	10	--	0	--	--	--	--	0
OCT. 15	4	--	0	--	3	--	--	0
NOV. 12	2	--	0	--	0	--	--	2
DEC. 18	6	--	1	--	0	--	--	0
1970								
JAN. 14	0	--	0	--	17	--	--	3
FEB. 10	2	--	0	--	23	--	--	5
MAR. 17	15	--	0	--	8	--	--	14
APR. 15	4	--	0	--	21	--	--	7
MAY 13	42	--	0	--	28	--	--	2
JUNE 09	0	--	0	--	9	--	--	3
JULY 22	0	--	0	--	0	--	--	0
AUG. 19	27	--	0	--	0	--	--	2
SEPT. 15	24	--	0	--	0	--	.1	--
OCT. 13	0	5	0	20	12	--	.6	0
NOV. 17	0	--	0	--	--	.1	.1	--
DEC. 09	0	<1	0	10	0	--	.0	--
1971								
JAN. 20	200	--	1	--	0	.2	--	0
FEB. 16	120	<1	--	10	--	.1	.1	--
MAR. 16	120	--	--	--	19	--	.3	--
APR. 13	20	1	0	30	20	.1	.1	0
MAY 18	30	--	1	--	10	.1	.1	--
JUNE 08	40	2	0	30	0	--	.3	--
JULY 27	10	1	0	--	--	.0	.0	--
AUG. 17	10	--	--	--	--	--	1.0	--
SEPT. 14	20	--	--	--	--	--	.1	--
OCT. 13	10	8	0	--	--	.2	.2	--
NOV. 10	0	--	--	--	--	--	.4	--
DEC. 15	0	--	--	--	--	--	.3	--
1972								
JAN. 07	0	8	0	--	--	.2	.2	--
FEB. 10	20	--	--	--	--	--	.5	--
MAR. 15	20	--	--	--	--	--	.7	--
APR. 13	20	10	2	--	--	--	.3	--
MAY 03	20	--	--	--	--	--	.3	--
JUNE 09	30	--	--	--	--	--	.1	--

12391000 CLARK FORK AT THOMPSON FALLS, MT--Continued

WATER QUALITY DATA

DATE OF SAMPLE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
1969								
JULY 09	0	6	0	--	260	0	--	16
AUG. 13	0	4	0	--	170	0	--	0
SEPT. 17	0	2	0	--	170	0	--	19
OCT. 15	0	8	0	--	210	1	--	0
NOV. 12	2	6	0	--	160	0	--	0
DEC. 18	3	14	2	--	180	0	--	6
1970								
JAN. 14	0	0	0	--	120	0	--	16
FEB. 10	4	6	0	--	150	0	--	18
MAR. 17	4	0	1	--	170	0	--	13
APR. 15	2	7	0	--	150	0	--	7
MAY 13	12	2	0	--	130	0	--	7
JUNE 09	0	2	2	--	70	0	--	13
JULY 22	0	2	0	--	170	0	--	8
AUG. 19	0	6	0	--	150	0	--	0
SEPT. 15	--	--	--	--	140	--	--	12
OCT. 13	0	0	0	130	160	0	<10	0
NOV. 17	--	--	--	--	130	--	--	10
DEC. 09	--	--	--	70	160	--	<10	0
1971								
JAN. 20	4	13	0	--	110	0	--	30
FEB. 16	--	--	--	60	190	--	20	24
MAR. 16	--	--	--	--	210	--	--	28
APR. 13	2	0	0	60	170	0	20	20
MAY 18	--	--	--	--	0	--	--	40
JUNE 08	--	--	--	40	70	--	<10	10
JULY 27	--	0	--	--	--	--	<10	20
AUG. 17	--	--	--	--	--	--	--	10
SEPT. 14	--	--	--	--	--	--	--	10
OCT. 13	--	4	--	--	--	--	10	10
NOV. 10	--	--	--	--	--	--	--	50
DEC. 15	--	--	--	--	--	--	--	20
1972								
JAN. 07	--	2	--	--	--	--	20	10
FEB. 10	--	--	--	--	--	--	--	20
MAR. 15	--	--	--	--	--	--	--	10
APR. 13	--	0	--	--	--	--	40	20
MAY 03	--	--	--	--	--	--	--	20
JUNE 09	--	--	--	--	--	--	--	0

12391500 BULL RIVER NEAR HERON, MT

LOCATION.--Lat 48°10'54", long 115°51'39", in NE¼NW¼ sec.21, T.28 N., R.33 W., Sanders County, Hydrologic Unit 17010213, at downstream side of road bridge, 0.4 mi upstream from Berray Creek, 9.7 mi northwest of Heron, and 16 mi upstream from mouth.

DRAINAGE AREA.--45.7 mi^2.

PERIOD OF RECORD.--November 1970 to May 1971.

WATER QUALITY DATA

DATE OF SAMPLE	TIME	DISCHARGE, IN CUBIC FEET PER SECOND (00060)	TEMPERATURE (DEG C) (00010)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)
1970 NOV. 17	1500	57	5.0	2.2	.10
1971 MAY 04	1100	686	4.5	2.0	--

DATE OF SAMPLE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)
1970 NOV. 17	1500	100	0	0	.0	30	--	0	0	--
1971 MAY 04	1100	400	--	100	.0	--	2	0	--	.00

DATE OF SAMPLE	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)
1970 NOV. 17	--	0	--	0	--	20	--	0	--
1971 MAY 04	5	--	20	--	540	60	10	0	20

DATE OF SAMPLE	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
1970 NOV. 17	0	--	.2	0	2	0	120	--	--
1971 MAY 04	0	.5	.2	0	4	20	10	50	8