Water-Quality Data for the Arkansas River Basin, Southeastern Colorado, 1990-93

by Russell G. Dash and Roderick F. Ortiz

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[In pocket]

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CONVERSION FACTORS, ABBREVIATIONS, AND VERTICAL DATUM

Multiply	By	To obtain
acre	0.4047	hectare
centimeter	0.3937	inch
cubic foot per second (ft^3/s)	0.02832	cubic meter per second
	1.9835	acre-foot per day
foot (ft)	0.3048	meter
inch (in.)	2.54	centimeter
liter	0.2642	gallon (US)
mile (mi)	1.609	kilometer
million gallons per day (Mgal/d)	0.043	cubic meter per second
milliliter	0.3381	fluid ounce
millimeter (mm)	0.03937	inches
square mile (mi^2)	2.59	square kilometer
ton per day (t/day)	0.9072	megagram per day

Degree Celsius (°C) may be converted to degree Fahrenheit (°F) by using the following equation:

$$°F = 9/5\ (°C) + 32.$$

Degree Fahrenheit (°F) may be converted to degree Celsius (°C) by using the following equation:

$$°C = 5/9\ (°F–32).$$

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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Abstract

Water-quality data were collected and compiled for 59 surface-water stations in the Arkansas River Basin of Colorado. The purpose of the data collection was to describe selected water-quality characteristics of the Arkansas River from the headwaters downstream to the Colorado-Kansas State line. Data are presented for 19 Arkansas River stations, 31 tributary stations, 2 mine-drainage stations, and 7 transmountain diversion stations. Water-quality data presented in this report include instantaneous discharge; onsite measurements of specific conductance, pH, water temperature, and dissolved oxygen; analytical concentrations of bacteria, dissolved solids, major nutrients, trace elements, pesticides, radiochemicals, and suspended sediment; and quality-assurance data for selected water-quality constituents. Sampling began in April 1990 and continued through March 1993 at the 59 surface-water stations. The basinwide water-quality study was initiated in 1988 by the U.S. Geological Survey in cooperation with 14 local agencies and the Bureau of Reclamation.

INTRODUCTION

Water resources in the Arkansas River Basin of Colorado are critically important to southeastern Colorado. The Arkansas River originates in the Rocky Mountains near Leadville (fig. 1) and drains an area of about 25,400 mi^2. As the river flows southward and then eastward toward the State of Kansas, the flow is affected by diversions for agriculture, power development, and municipal, industrial, and recreational usage. These water uses can affect water quality in the drainage basin.

In recent years, operation of the existing water-supply system and proposed changes in water-use administration have focused attention on water quality in the Arkansas River Basin. The concern that water quality could limit some water uses resulted in the initiation of a U.S. Geological Survey study in 1988, in cooperation with the Colorado Springs Utilities, Water Resources Department; Pueblo Board of Water Works; Southeastern Colorado Water Conservancy District; Pueblo County, Department of Planning and Development; City of Aurora, Department of Utilities; St. Charles Mesa Water District; Upper Arkansas Area Council of Governments; Upper Arkansas Water Conservancy District; City of Pueblo, Department of Utilities; Pueblo West Metropolitan District; Fremont Sanitation District; Cities of Rocky Ford, Las Animas, and Lamar; and the Bureau of Reclamation.

In the early phases of the study, 13 water-quality issues in the Arkansas River Basin were identified by the cooperating agencies and the U.S. Geological Survey. The issues of highest priority were the determination of existing water-quality characteristics in the basin and the establishment of a consistent basinwide network to identify and monitor water-quality changes. Subsequently, a basinwide surface-water monitoring network was designed to provide reliable water-quality information that could be used to (1) evaluate downstream and seasonal variations in water quality; (2) assess variations in water quality that occur during different flow periods; and (3) assess regional effects on water quality that might occur as a result of water and land uses, tributary inflows, point and nonpoint source discharges, and natural, climatic, and geological conditions.

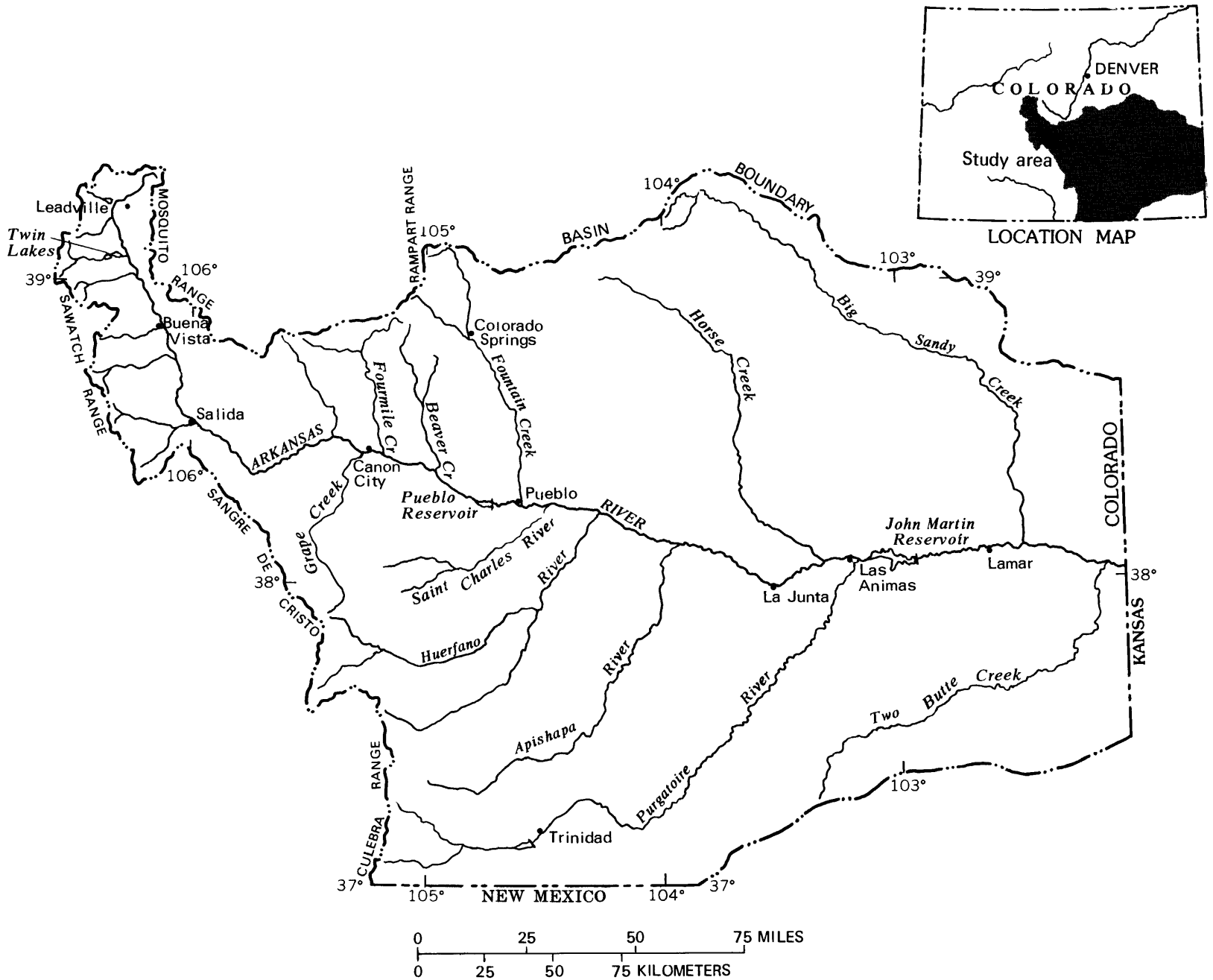

Figure 1. Location of study area (modified from Abbott, 1985, p. 2).

Purpose and Scope

This report lists the types of water-quality data collected, describes methods of data-collection, analysis, and quality-assurance procedures and presents a compilation of selected water-quality data. Data were collected from April 1990 through March 1993 at 59 surface-water stations in the Arkansas River Basin of Colorado (pl. 1) that included 19 Arkansas River stations, 31 tributary stations, 2 mine-drainage stations, and 7 transmountain diversion stations. Water-quality data presented in this report include onsite measurements of instantaneous discharge, specific conductance, pH, water temperature, and dissolved oxygen; bacteriological analyses; chemical analyses of selected inorganic constituents, pesticides, and radiochemicals; analyses of suspended-sediment concentration; and analytical quality-assurance data for selected water-quality constituents.

Acknowledgments

The authors gratefully acknowledge the assistance of many government and local agencies that cooperated with the U.S. Geological Survey to develop a basinwide water-quality study. Appreciation is extended to the many landowners along the Arkansas River corridor who permitted access to their property to measure discharge and to collect water samples. The authors thank State hydrographers Frank Kipple and Tony Gutierrez, Colorado Department of Natural Resources, Division II of Water Resources, Office of the State Engineer, for their timely assistance with streamflow determination. Special thanks are extended to Jeffrey West, Charles (Chuck) Moore, and Matthew Kurchinski of the U.S. Geological Survey for the collection and compilation of water-quality data.

DESCRIPTION OF THE STUDY AREA

The study area includes the entire Arkansas River Basin of Colorado and consists of approximately the southeast one-quarter of the State (fig. 1). Elevations in the basin range from 3,350 ft above sea level at the Colorado-Kansas State line to 14,433 ft at the highest mountain peak in Colorado. Mean annual precipitation in the basin ranges from more than 40 in. in the mountains to less than 10 in. in areas of the eastern plains (Colorado Climate Center, 1984).

Streamflow in the Arkansas River primarily is from melting of snow that accumulates in the mountains from October through May each year. At lower elevations, runoff from summer thunderstorms can contribute substantial quantities of streamflow for short periods of time. Much of the streamflow that occurs east of La Junta (fig. 1) can be irrigation-return flow during parts of most years (Cain, 1985). Mean annual runoff decreases from more than 30 in. in the mountains to less than 0.1 in. downstream from Pueblo (Abbott, 1985). For the interested reader, a more comprehensive description of the historical water resources of the Arkansas River Basin of Colorado is reported in Crouch and others (1984), Abbott (1985), Burns (1985), Cain (1985), and Kuzmiak and Strickland (1994).

Land use in the study area predominantly is agricultural, consisting of rangeland and cropland areas throughout the drainage basin. National forests are located upstream from Canon City and cover about one-third of the upper Arkansas River Basin. The upper basin extends downstream to about Pueblo. Historically, substantial mining of precious metals occurred in the basin upstream from Canon City, but most of the mines are abandoned and ranching presently (1994) is a principal land use in the upper basin. Irrigation water use constitutes the largest withdrawals of surface water in the Arkansas River Basin. It was estimated that irrigation used about 1,730 Mgal/d of water during 1985, with 88 percent of the total irrigation withdrawal from surface-water sources (Litke and Appel, 1989). More than 411,000 acres of alluvial lands in the basin are irrigated, including about 56,000 irrigated acres located in the upper basin. Mainly alfalfa, hay, and pasture grass are irrigated in the upper basin, although fruits and some grain crops are grown on irrigated land in the foothills located around Canon City. Truck-crops, alfalfa, and grain-crops are grown on irrigated land in the lower basin downstream from Pueblo. Most of the nonirrigated agricultural lands in the basin are used for rangeland or dryland wheat production.

Population in the study area was determined by the 1990 census (U.S. Bureau of the Census, 1991) to be 641,700, about 19 percent of the total population of Colorado. Most of the population is located near the cities of Colorado Springs and Pueblo or concentrated in small towns and rural areas along the Arkansas River corridor.

TYPES OF WATER-QUALITY DATA

The types of water-quality data measured and analyzed at each surface-water station are listed in table 1. The surface-water stations are presented in downstream order. Special samples at some stations indicate the irregular collection and analysis of additional water-quality constituents that were appended to routine samples normally collected during station visits. Continuous water-quality and discharge data have been collected at some of the stations, but are not published in this report. However, these data are published in the annual Colorado Water-Data Report series and are available upon request. The types of water-quality data presented in this report are:

1. Onsite measurements, including instantaneous discharge and field determination of specific conductance, pH, water temperature, and dissolved-oxygen concentration.

2. Bacteriological field analyses, including total coliform, fecal coliform, and fecal streptococci.

3. Dissolved solids, including alkalinity, dissolved calcium, dissolved magnesium, dissolved sodium, dissolved sulfate, dissolved chloride, and dissolved-solids residue at 180°C.

4. Major nutrients, including total nitrite plus nitrate as nitrogen and total ammonia as nitrogen for 1990 through 1992; dissolved nitrite plus nitrate as nitrogen and dissolved ammonia as nitrogen for 1993; and total phosphorus for 1990 through 1993.

5. Trace elements, including total and dissolved arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, selenium, silver, and zinc.

6. Pesticides, including organochlorine and organophosphorus insecticides and the chlorinated phenoxy-acid herbicides.

7. Radiochemical constituents, including total and dissolved gross alpha and gross beta constituents and dissolved natural uranium.

8. Suspended sediment, including suspended-sediment concentration and the percentage of the suspended sediment finer than sand (less than 0.062 mm).

Methods of Data Collection and Analysis

Before each field trip, a standard cleaning and rinsing procedure was used to prepare the equipment for water-quality sampling. Sampling equipment was completely disassembled and washed thoroughly using a solution of nonphosphate laboratory detergent, followed by three thorough rinses using public-supplied tap water. Sampling equipment then was rinsed using a 1-percent hydrochloric acid solution and triple-rinsed using deionized water.

Upon arriving at each surface-water station, prior to a sample collection, the sampling equipment was rinsed once with deionized water, followed by a rinse with dilute hydrochloric acid, followed by a triple-rinse with deionized water. Finally, the sampling equipment was triple-rinsed thoroughly with native streamwater before the collection of a water-quality sample. At all stations sampled downstream from the Arkansas River near Avondale, station 07109500 (table 1), east of Pueblo to the Colorado-Kansas State line (pl. 1), the dilute hydrochloric acid rinse was omitted because trace-level contamination of samples was not a concern in sampling the lower basin.

Onsite measurements were made during each site visit at surface-water stations using standardized procedures and techniques (U.S. Geological Survey, 1977). Stream discharge continuously was monitored at some stations or a discharge measurement was made at the time of sampling at other stations. Field water-quality analyses were made for specific conductance, pH, water temperature, and dissolved oxygen (Fishman and Friedman, 1989). Water samples for bacteriological analyses were collected onsite at 17 surface-water stations (table 1) with clean sterilized glass bottles using a multivertical sampling procedure (Patrick Edelmann, U.S. Geological Survey, oral commun., 1990). Bacteriological samples were filtered and analyzed in the field using methods described in Britton and Greeson (1987).

Water samples for chemical analyses were collected using standardized U.S. Geological Survey guidelines (Sylvester and others, 1990). Except for extreme flow situations, surface-water samples from the stream were depth-integrated using the equal-width-increment method (Sylvester and others, 1990) and were transferred into a churn splitter for a composite sample. The churn splitter allowed different subsample volumes to be obtained from the sample while still maintaining the basic chemical and physical properties of the original sample. Numerous aliquots were taken from the churn splitter, processed, and preserved onsite using methods described in Ward and Harr (1990). Water-quality samples were shipped on a regular basis to the laboratory for analysis of the chemical constituents.

Table 1. Selected surface-water stations in the Arkansas River Basin and water-quality constituents measured and analyzed between 1990 and 1993

[X, routine sampling; S, special sampling; --, not collected or analyzed]

U.S. Geological Survey station number (see plate 1)	Station name	Onsite measurements	Bacteria	Dissolved solids	Major nutrients	Trace elements	Pesticides	Radiochemicals	Suspended sediment
09061500	Columbine Ditch near Fremont Pass	X	--	X	X	S	--	--	--
09062000	Ewing Ditch at Tennessee Pass	X	--	X	X	S	--	--	--
09062500	Wurtz Ditch near Tennessee Pass	X	--	X	X	X	--	--	--
392005106130501	East Fork Arkansas River below French Gulch, near Climax	X	--	X	X	X	--	--	--
391937106200301	Tennessee Creek at Highway 24, near Leadville	X	--	X	X	X	--	--	--
07079200	Leadville Mine Drainage Tunnel at Leadville	X	--	X	X	X	--	--	--
07081200	Arkansas River near Leadville	X	X	X	X	X	--	--	X
07081800	California Gulch at Malta	X	--	X	X	X	--	--	--
07082000	Lake Fork above Sugar Loaf Reservoir	X	--	X	X	X	--	--	--
09063700	Homestake Tunnel near Leadville	X	--	X	X	X	--	--	--
09077160	Charles H. Bousted Tunnel near Leadville	X	--	X	X	X	--	--	--
09077500	Busk-Ivanhoe Tunnel at East Portal, near Malta	X	--	X	X	X	--	--	--
07082500	Lake Fork below Sugar Loaf Reservoir	X	--	X	X	X	--	--	--
391226106213201	Lake Fork above Halfmoon Creek, near Malta	X		X	X	X	--	--	--
07083000	Halfmoon Creek near Malta	X	X	X	X	X	--	--	--
391120106194901	Iowa Gulch at Highway 24, near Malta	X	--	X	X	X	--	--	--
391013106190201	Empire Gulch near Malta	X	--	X	X	X	--	--	--
07083710	Arkansas River below Empire Gulch, near Malta	X	X	X	X	X	--	--	X
09073000	Twin Lakes Tunnel at East Portal, near Twin Lakes	X	--	X	X	X	--	--	--
07084500	Lake Creek above Twin Lakes Reservoir	X	--	X	X	X	--	--	--
390444106174900	Lake Creek at State Highway 82, below Twin Lakes Reservoir	X	--	X	X	X	--	--	--
07086000	Arkansas River at Granite	X	--	X	X	X	--	--	S
07086500	Clear Creek above Clear Creek Reservoir	X	--	X	X	X	--	--	--
07087000	Clear Creek below Clear Creek Reservoir	X	--	X	X	X	--	--	--
390009106135001	Pine Creek at mouth, at Highway 24	X	--	X	X	X	--	--	--
07087200	Arkansas River at Buena Vista	X	X	X	X	X	--	X	X
07089520	Cottonwood Creek at Buena Vista	X	--	X	X	X	--	--	--
384427106040101	Chalk Creek at mouth, at Nathrop	X	--	X	X	X	--	--	--
07091200	Arkansas River near Nathrop	X	X	X	X	X	--	--	--
07091500	Arkansas River at Salida	X	X	X	X	--	--	--	--

Table 1. Selected surface-water stations in the Arkansas River Basin and water-quality constituents measured and analyzed between 1990 and 1993--*Continued*

U.S. Geological Survey station number (see plate 1)	Station name	Onsite measurements	Bacteria	Dissolved solids	Major nutrients	Trace elements	Pesticides	Radiochemicals	Suspended sediment
07093500	South Arkansas River near Salida	X	--	X	X	X	--	--	--
07093700	Arkansas River near Wellsville	X	X	X	X	X	--	X	X
07093775	Badger Creek, Lower Station, near Howard	X	--	X	X	X	--	--	--
07094000	Texas Creek at Texas Creek	X	--	X	X	--	--	--	--
382917105225200	Tallahassee Creek near Parkdale	X	--	X	X	X	--	--	--
07094500	Arkansas River at Parkdale	X	X	X	X	X	--	X	X
383113105160401	Grape Creek at mouth, at Canon City	X	--	X	X	S	--	--	--
07096000	Arkansas River at Canon City	X	--	X	X	--	--	--	--
07096500	Fourmile Creek near Canon City	X	--	X	X	X	--	--	--
382337105014600	Hardscrabble Creek at Highway 120, at Portland	X	--	X	X	--	--	--	--
07097000	Arkansas River at Portland	X	X	X	X	X	X	X	X
07099100	Beaver Creek near Portland	X	--	X	X	S	--	--	--
07099400	Arkansas River above Pueblo	X	X	X	X	X	--	--	X
07099970	Arkansas River at Moffat Street, at Pueblo	X	X	X	X	X	--	--	X
07106500	Fountain Creek at Pueblo	X	X	X	X	X	--	--	X
381510104350601	Arkansas River below Highway 227, at Pueblo	X	X	X	X	X	--	--	--
07109500	Arkansas River near Avondale	X	X	X	X	X	X	X	X
07116500	Huerfano River near Boone	X	--	X	X	--	--	--	--
07117000	Arkansas River near Nepesta	X	--	X	X	--	--	--	--
380715103564701	Apishapa River at Highway 50, near Fowler	X	--	X	X	S	--	--	S
07119700	Arkansas River at Catlin Dam, near Fowler	X	X	X	X	X	X	X	X
380111103382101	Timpas Creek at Highway 50, at Swink	X	--	X	X	S	--	--	--
07122500	Crooked Arroyo near La Junta	X	--	X	X	--	--	--	--
07123000	Arkansas River at La Junta	X	--	X	X	--	--	--	--
380421103193101	Horse Creek at mouth, near Las Animas	X	--	X	X	--	--	--	--
07124000	Arkansas River at Las Animas	X	X	X	X	X	X	X	X
07128500	Purgatoire River near Las Animas	X	--	X	X	S	--	--	--
07130500	Arkansas River below John Martin Reservoir	X	X	X	X	X	X	X	X
07134100	Big Sandy Creek near Lamar	X	--	X	X	--	--	--	--

The chemical constituents presented in this report were analyzed at the U.S. Geological Survey National Water Quality Laboratory (NWQL) in Arvada, Colo., using methods listed in Fishman and others (1994). The inorganic constituents, including dissolved solids, major nutrients, and trace elements, were analyzed using methods described by Fishman and Friedman (1989) and Fishman (1993). Pesticides were periodically collected at five surface-water stations (table 1) and were analyzed using methods described by Wershaw and others (1987) and Fishman (1993). Radiochemical constituents were collected at eight surface-water stations (table 1) and were analyzed using methods developed by Thatcher and others (1977).

The nitrogen data presented in the "Water-Quality Data" section at the back of this report indicate a change in the reporting of total nitrite plus nitrate as nitrogen and total ammonia as nitrogen after January 1, 1993. Following a thorough laboratory evaluation of the analytical method used to generate data for the above constituents on unfiltered and filtered samples, the NWQL concluded that "no valid basis exists for distinguishing between unfiltered and filtered determinations of nutrient species" using the current (1992) method, and "concentrations for the identified nutrient species are statistically indistinguishable" (U.S. Geological Survey, written commun., 1992). As a result, nutrient samples collected for the analysis of total nitrite plus nitrate as nitrogen and total ammonia as nitrogen were replaced by the analyses of the dissolved fraction in 1993. The analysis of total phosphorus was not affected by this change.

Suspended-sediment samples were periodically collected at 15 surface-water stations (table 1) using methods described by Guy and Norman (1970). The samples were collected using a DH–48 (hand-held sampler) or a D–74 (cable-and-reel sampler) depth-integrating sampler and the equal-width-increment method described by Sylvester and others (1990). Suspended-sediment samples were analyzed at the U.S. Geological Survey Sediment Laboratory in Cheyenne, Wyo., using methods described by Guy (1969). Samples containing sufficient suspended-sediment concentration were analyzed specifically for the percentage of suspended sediment finer than sand size (less than 0.062 mm).

Quality-Assurance Procedures

Standard U.S. Geological Survey techniques were used during field collection and preservation of all water-quality samples to ensure that representative environmental samples were obtained for analysis. Standard field procedures included checking equipment operation and instrument calibrations before collecting onsite measurements. In addition to standard field procedures, specific quality-control procedures for the collection, treatment, and analysis of water samples were followed (Sylvester and others, 1990). The quality-assurance data presented in this report include laboratory analyses of source-solution blanks and field-equipment blanks. Source-solution blanks are samples obtained from the deionized water supply that is considered free of analytes of interest and that was used for rinsing and to develop field-equipment blanks. Field-equipment blanks consisted of deionized water that was passed over all the surfaces of decontaminated sampling and processing equipment to evaluate the adequacy of field cleaning and rinsing procedures. Laboratory quality assurance included procedures described by Friedman and Erdmann (1982). The data generated from quality-assurance samples were reviewed by appropriate U.S. Geological Survey personnel associated with the investigation to identify potential sample contamination problems. Deficiencies in the quality-assurance data were documented and corrective actions were taken when required.

The cleaning and rinsing procedures described in the preceding "Methods of Data Collection and Analysis" section were designed to decrease the likelihood of equipment-caused contamination between surface-water sites. In an effort to evaluate field-equipment cleaning procedures, a field-equipment blank was collected for laboratory analysis during each sampling trip. During the first year of sampling (1990), measured concentrations of some analytes in the field-equipment blanks were higher than expected. These results prompted a reexamination of the collection process for the field-equipment blanks. It was determined that deionized water that passed over some metal equipment surfaces, which were not in contact with the environmental sample, could have biased the results of the field-equipment blanks. As a result, collection procedures for field-equipment blanks were modified in 1991 to better simulate the contact that occurs between native river water and sampling-equipment surfaces during collection of the environmental sample. Subsequent concentrations of analytes determined in the quality-assurance samples were within acceptable levels throughout the remainder of the study.

RESULTS

The results of the data collected and compiled during this study are presented in the "Water-Quality Data" section at the back of this report. Onsite measurements, bacteriological data at selected stations, and selected inorganic data for all stations sampled during the study are listed in tables 2–60. Selected surface-water stations with pesticide data are listed in table 61; selected stations with radiochemical data are listed in table 62; and selected stations with suspended-sediment data are listed in table 63. Results of field-collected quality-assurance data for the purpose of assessing potential sample contamination are listed in tables 64 and 65.

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WATER-QUALITY DATA

Time is in 24-hour units in tables 2–65.

The following abbreviations are used in tables 2–60:

INST.	=	instantaneous
US/CM	=	microsiemens per centimeter at 25 degrees Celsius
PH	=	pH
DEG C	=	degrees Celsius
MG/L	=	milligrams per liter
NO2+NO3	=	nitrite plus nitrate
UG/L	=	micrograms per liter
--	=	no data
<	=	less than
>	=	greater than
IMMED.	=	immediate
COLS. PER 100 ML	=	colonies per 100 milliliters
UM-MF	=	microns per membrane filter
COLS./100 ML	=	colonies per 100 milliliters
K	=	nonideal count
E	=	estimated

In addition to the above abbreviations, the following are used in table 61:

TOTAL RECOVER	=	total recoverable
TOT. REC	=	total recoverable
UNFLTRD REC	=	unfiltered recoverable
WHLREC	=	whole recoverable
RECOV.	=	recoverable
REC	=	recoverable
RECOVER	=	recoverable

In addition to the above abbreviations, the following area used in table 62:

U-NAT	=	uranium natural
SUSP.	=	suspended
PCI/L	=	picocuries per liter
CS-137	=	cesium 137
SR/YT-90	=	strontium/yttrium 90

In addition to the above abbreviations, the following are used in tables 63–65:

T/DAY	=	ton per day
SED.	=	sediment
DIAM.	=	diameter
%	=	percent
MM	=	millimeter

Table 2. Onsite measurements and selected inorganic data for station 09061500, Columbine Ditch near Fremont Pass

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
MAY 1990												
21...	1600	--	64	7.5	--	--	--	--	--	38	0.100	0.050
JUN												
04...	1730	47	27	7.0	0.5	8.7	--	--	--	18	0.024	0.050
JUN 1991												
17...	1845	38	34	7.2	5.0	8.3	--	--	--	20	0.019	0.026
AUG												
12...	1320	0.82	93	8.3	13.0	--	--	--	--	61	0.010	<0.002
JUN 1992												
24...	0945	12	56	7.8	7.0	8.0	28	5.2	3.7	36	0.025	0.016
AUG												
10...	1500	0.82	107	8.4	13.0	6.3	--	--	--	52	0.005	0.006

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY 1990												
21...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
04...	<1	0.2	3	1	2200	60	4	<0.5	70	5	<10	9
JUN 1991												
17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
12...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 1992												
24...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
10...	--	--	--	--	--	--	--	--	--	--	--	--

Table 3. Onsite measurements and selected inorganic data for station 09062000, Ewing Ditch at Tennessee Pass

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
MAY 1990												
21...	1700	5.4	60	8.1	5.5	8.8	--	--	--	42	0.123	0.040
JUN												
04...	2000	12	40	7.6	4.5	8.7	--	--	--	21	<0.010	0.030
JUN 1991												
17...	1630	7.7	74	8.0	10.5	7.6	--	--	--	41	0.023	0.017
AUG												
12...	1440	1.1	98	8.3	11.0	--	--	--	--	62	0.025	<0.002
JUN 1992												
23...	1645	4.7	81	8.0	9.0	7.6	34	9.3	2.5	52	0.047	0.009
AUG												
10...	1310	1.3	--	8.2	11.0	7.4	--	--	--	58	0.069	0.008

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY 1990												
21...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
04...	<1	<0.1	6	1	1800	59	4	<0.5	70	5	<10	3
JUN 1991												
17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
12...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 1992												
23...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
10...	--	--	--	--	--	--	--	--	--	--	--	--

Table 4. Onsite measurements and selected inorganic data for station 09062500, Wurtz Ditch near Tennessee Pass

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
MAY 1990												
21...	1740	5.6	--	7.5	9.5	7.4	--	--	--	25	0.016	0.030
JUN												
04...	1910	37	25	7.1	8.0	7.8	--	--	--	16	0.038	0.030
JUN 1991												
17...	1715	18	26	8.0	14.5	6.7	--	--	--	19	<0.005	0.025
AUG												
12...	1510	0.82	37	7.8	16.0	--	--	--	--	27	0.006	<0.002
JUN 1992												
23...	1600	6.3	28	7.8	9.0	7.7	12	3.2	0.90	26	<0.005	0.029
AUG												
10...	1350	0.0	44	7.8	14.5	6.0	--	--	--	28	<0.005	0.037

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY 1990												
21...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
04...	<1	<0.1	6	1	5900	47	12	<0.5	170	7	10	4
JUN 1991												
17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
12...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 1992												
23...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
10...	--	--	--	--	--	--	--	--	--	--	--	--

Table 5. Onsite measurements and selected inorganic data for station 392005106130501, East Fork Arkansas River below French Gulch, near Climax

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
APR 1990											
17...	0850	2.7	176	--	1.0	--	107	0.107	<0.010	<1	0.1
JUN											
05...	0815	129	--	7.2	1.0	8.9	42	0.069	0.090	1	0.3
JUL											
16...	1515	19	103	7.8	11.5	6.5	56	0.033	<0.010	<1	0.2
AUG											
28...	0830	8.3	136	7.4	7.0	7.4	74	0.130	<0.010	<1	<0.1
OCT											
29...	1215	4.8	167	7.8	5.0	7.5	93	0.123	0.020	<1	0.5
APR 1991											
22...	1545	3.4	217	7.7	5.0	8.4	95	0.106	0.018	<1	0.4
JUN											
18...	0630	97	71	7.2	4.0	--	29	0.090	0.017	<1	0.1
JUL											
15...	1610	23	88	7.8	13.5	6.6	44	0.040	0.006	<1	0.1
OCT											
21...	1530	6.0	156	7.8	7.0	7.5	90	0.097	0.022	<1	0.1
APR 1992											
20...	1620	8.7	209	7.8	2.5	8.8	118	0.150	0.006	<1	0.2
JUN											
24...	0830	89	67	7.7	6.0	8.0	36	0.081	0.011	<1	<0.1
AUG											
11...	0725	15	113	7.8	8.0	7.0	62	0.078	0.003	<1	<0.1
OCT											
27...	0930	4.5	169	8.1	1.0	9.4	112	0.084	0.004	<1	0.2

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990										
17...	2	1	170	83	<1	<0.5	30	27	90	78
JUN										
05...	9	5	2600	72	23	3	200	28	100	41
JUL										
16...	4	2	160	70	3	0.8	40	28	30	22
AUG										
28...	2	1	140	78	3	0.7	60	36	30	18
OCT										
29...	7	1	170	76	<1	0.6	60	52	20	20
APR 1991										
22...	3	1	290	87	3	<0.5	50	34	40	15
JUN										
18...	4	3	190	55	5	<0.5	20	14	20	26
JUL										
15...	3	1	80	57	5	<0.5	20	20	10	15
OCT										
21...	5	<1	150	100	4	0.6	40	35	<10	10
APR 1992										
20...	2	1	260	44	1	<0.5	70	45	40	27
JUN										
24...	1	1	130	33	2	0.6	20	7	20	12
AUG										
11...	2	<1	140	63	3	0.8	31	24	70	19
OCT										
27...	1	<1	40	64	1	0.7	<10	24	<10	10

Table 6. Onsite measurements and selected inorganic data for station 391937106200301, Tennessee Creek at Highway 24, near Leadville

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
APR 1990											
17...	1030	4.1	68	8.0	0.0	8.5	60	0.119	0.020	<1	<0.1
JUN											
05...	0820	128	--	7.1	2.0	9.7	23	0.037	0.020	<1	<0.1
JUL											
17...	0830	12	42	7.4	7.5	8.3	21	<0.010	<0.010	<1	<0.1
AUG											
28...	0815	1.3	80	7.9	7.5	7.6	48	0.021	<0.010	2	<0.1
OCT											
29...	1335	2.3	49	7.7	4.0	8.5	35	<0.010	0.030	<1	<0.1
APR 1991											
22...	1425	1.2	99	7.4	2.0	8.5	48	0.079	0.027	<1	<0.1
JUN											
10...	0520	--	--	--	--	--	16	--	--	<1	0.9
18...	0705	97	32	6.8	4.0	8.6	16	0.014	0.020	<1	<0.1
JUL											
15...	1815	15	52	6.9	15.0	6.4	15	<0.005	0.009	<1	0.4
OCT											
21...	1350	0.75	64	7.4	5.0	8.5	42	0.006	0.014	<1	0.1
APR 1992											
20...	1620	4.2	66	7.6	2.5	--	50	0.030	0.025	<1	1.3
JUN											
24...	1030	50	33	7.7	9.5	7.5	18	<0.005	0.024	<1	<0.1
AUG											
11...	0825	6.8	54	7.6	9.5	7.2	34	<0.005	0.010	<1	<0.1
OCT											
27...	0855	2.8	54	7.9	1.0	9.3	53	0.007	0.005	<1	1.0

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990										
17...	2	1	840	380	1	<0.5	60	39	30	21
JUN										
05...	3	1	1200	98	3	<0.5	30	8	<10	5
JUL										
17...	1	1	290	150	1	<0.5	20	9	--	20
AUG										
28...	2	<1	570	190	4	<0.5	60	22	30	15
OCT										
29...	3	<1	400	230	<1	<0.5	20	8	30	30
APR 1991										
22...	2	1	910	620	2	0.5	30	30	20	17
JUN										
10...	4	3	450	260	1	--	20	9	<10	37
18...	4	2	200	92	2	<0.5	<10	4	<10	8
JUL										
15...	3	<1	190	150	5	<0.5	10	11	<10	5
OCT										
21...	2	<1	370	280	1	<0.5	30	22	<10	7
APR 1992										
20...	1	1	630	220	<1	<0.5	30	20	20	10
JUN										
24...	<1	<1	200	81	<1	0.7	10	6	<10	<3
AUG										
11...	<1	1	520	360	<1	<0.5	30	18	<10	3
OCT										
27...	1	1	670	350	1	<0.5	<10	25	<10	10

Table 7. Onsite measurements and selected inorganic data for station 07079200, Leadville Mine Drainage Tunnel at Leadville

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 1991										
22...	1640	2.5	1010	--	7.5	7.1	470	160	18	4.0
MAY										
13...	1310	1.4	1010	7.1	7.5	6.9	540	130	52	3.8
JUN										
18...	0725	2.7	859	7.0	8.0	7.1	450	110	43	3.3
JUL										
16...	0840	2.8	732	7.3	7.5	7.8	380	94	36	2.7
AUG										
12...	1600	1.5	661	7.5	8.0	--	350	85	34	3.2
OCT										
21...	1700	1.8	847	7.4	7.0	7.3	440	110	41	3.4
DEC										
16...	1300	2.3	847	7.4	7.0	7.3	--	--	--	--
APR 1992										
20...	1730	2.6	930	7.0	7.0	8.2	--	--	--	--
MAY										
20...	1230	1.9	1010	7.6	7.5	8.2	--	--	--	--
JUN										
24...	1100	2.0	805	7.4	7.5	8.6	--	--	--	--
JUL										
13...	1030	2.3	712	7.5	7.5	8.3	--	--	--	--
AUG										
11...	0845	2.5	657	7.4	7.5	8.4	--	--	--	--
OCT										
26...	1210	2.5	764	7.4	7.0	8.7	--	--	--	--
JAN 1993										
11...	1040	2.3	835	7.6	7.0	8.5	--	--	--	--
MAR										
22...	0900	2.4	890	7.6	7.0	8.2	--	--	--	--

DATE	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)
APR 1991										
22...	600	0.400	--	0.020	--	--	<1	11	<10	2
MAY										
13...	742	0.490	--	0.021	--	40	38	<5	40	<10
JUN										
18...	601	0.420	--	0.030	--	36	31	<5	20	<10
JUL										
16...	507	0.340	--	<0.010	--	23	18	<5	10	<10
AUG										
12...	468	0.410	--	0.030	--	13	12	<5	20	<10
OCT										
21...	557	0.390	--	0.020	--	14	11	<5	<10	<10
DEC										
16...	643	0.381	--	0.024	--	10	10	--	--	<1
APR 1992										
20...	666	0.374	--	0.024	--	<1	<0.1	--	<1	<1
MAY										
20...	760	0.419	--	0.015	--	<1	0.4	--	<1	<1
JUN										
24...	624	0.333	--	0.010	--	<1	0.2	--	<1	<1
JUL										
13...	518	0.342	--	0.008	--	<1	0.4	--	<1	<1
AUG										
11...	460	0.385	--	0.016	--	1	0.1	--	1	<1
OCT										
26...	572	0.410	--	0.014	--	<1	0.3	--	<1	<1
JAN 1993										
11...	607	--	0.398	--	0.016	<1	0.2	--	1	<1
MAR										
22...	648	--	0.389	--	0.015	<1	0.3	--	<1	<1

Table 7. Onsite measurements and selected inorganic data for station 07079200, Leadville Mine Drainage Tunnel at Leadville--Continued

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1991										
22...	42000	<10	7	<1	3800	<10	<1	<1	4700	<10
MAY										
13...	2300	870	7	10	3400	3400	<10	2	7800	7400
JUN										
18...	1300	55	5	<10	2600	2700	<10	<1	6100	6000
JUL										
16...	5500	7	20	<10	1600	1400	<10	<1	3400	3600
AUG										
12...	880	10	8	<10	840	910	<10	<1	2300	2300
OCT										
21...	2100	56	9	<10	1500	1500	<10	<1	3400	3500
DEC										
16...	1500	400	4	<0.5	1600	1800	--	--	3600	3800
APR 1992										
20...	30	<3	<1	<0.5	20	13	--	--	20	8
MAY										
20...	20	4	<1	<0.5	380	430	--	--	30	22
JUN										
24...	20	<3	<1	<0.5	180	180	--	--	20	10
JUL										
13...	40	3	<1	<0.5	150	130	--	--	20	14
AUG										
11...	2600	7	2	<0.5	120	110	--	--	170	15
OCT										
26...	10	4	<1	<0.5	190	230	--	--	<10	13
JAN 1993										
11...	10	<3	<1	<0.5	730	830	--	--	60	43
MAR										
22...	10	9	<1	<0.5	300	330	--	--	<10	15

Table 8. Onsite measurements and bacteriological and selected inorganic data for station 07081200, Arkansas River near Leadville

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
APR 1990											
17...	1315	--	170	8.2	5.0	8.2	--	<1	56	82	20
MAY											
22...	1230	128	121	7.7	9.0	8.0	--	<1	44	53	13
JUN											
05...	1135	493	76	7.7	7.5	8.0	880	K10	K50	33	9.4
19...	1200	271	101	7.9	9.5	8.0	K120	<2	K10	46	11
JUL											
17...	1100	70	153	8.2	11.5	7.8	K57	K1	20	65	14
AUG											
28...	1030	32	223	8.5	10.0	7.8	<2	E1	E3	120	28
OCT											
29...	1445	27	219	8.4	7.0	8.1	E45	<1	86	110	26
DEC											
19...	1210	18	273	7.7	0.5	9.5	E33	<2	E8	140	33
MAR 1991											
25...	1350	17	299	8.5	1.5	9.4	--	<1	--	140	34
APR											
23...	0755	27	221	7.9	1.5	9.1	E32	E1	E7	100	25
MAY											
14...	0820	94	121	8.2	1.0	9.4	250	<1	E11	52	13
29...	0930	295	79	--	--	--	--	--	--	--	--
JUN											
10...	0610	385	--	--	--	--	--	--	--	35	8.9
18...	0945	325	87	7.7	7.0	8.4	280	E2	E4	41	9.7
JUL											
16...	0945	89	133	8.1	10.5	7.7	E31	E14	E8	66	16
AUG											
13...	0615	73	167	7.9	9.0	--	56	28	51	78	19
OCT											
22...	0850	20	249	8.1	1.5	9.1	E3	--	E3	120	29
DEC											
16...	1445	16	265	7.8	1.0	9.4	60	<1	--	120	30
MAR 1992											
23...	1340	32	289	8.1	1.5	9.4	--	--	--	130	31
APR											
20...	1850	39	191	8.0	7.0	7.8	35	<1	E2	80	19
MAY											
20...	1100	249	85	7.7	7.0	8.2	E6	E11	E15	37	9.3
JUN											
24...	1330	229	101	8.0	10.5	8.1	E8	E9	E9	48	12
JUL											
13...	1200	124	131	8.2	9.5	7.4	E13	E9	E6	61	15
AUG											
11...	1000	58	177	8.2	10.0	7.7	74	E66	81	86	21
26...	0750	67	156	7.8	5.5	8.6	60	34	59	75	18
OCT											
26...	1310	31	223	8.3	6.0	8.6	30	<1	E8	97	23
JAN 1993											
11...	1200	E26	289	8.0	0.5	9.7	E32	<1	<1	120	28
MAR											
22...	1000	E26	260	8.1	1.0	9.7	<2	<1	--	110	26

Table 8. Onsite measurements and bacteriological and selected inorganic data for station 07081200, Arkansas River near Leadville--Continued

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
APR 1990											
17...	7.9	2.4	50	42	0.90	121	0.040	--	0.010	--	2
MAY											
22...	5.0	1.7	36	22	1.1	81	0.037	--	<0.010	--	2
JUN											
05...	2.4	1.4	23	14	0.30	48	0.026	--	0.020	--	2
19...	4.5	1.0	37	9.8	0.60	57	0.050	--	<0.010	--	1
JUL											
17...	7.3	0.50	60	20	0.20	94	0.057	--	<0.010	--	<1
AUG											
28...	11	1.9	80	33	1.7	131	0.105	--	<0.010	--	<1
OCT											
29...	10	2.3	75	36	2.1	131	0.078	--	0.020	--	<1
DEC											
19...	13	2.4	85	53	4.5	163	0.134	--	0.002	--	1
MAR 1991											
25...	13	2.5	83	61	5.1	156	0.126	--	0.030	--	<1
APR											
23...	9.9	2.2	67	43	1.8	120	0.072	--	0.018	--	<1
MAY											
14...	4.7	1.5	36	18	1.0	83	0.056	--	0.015	--	2
29...	--	--	--	--	--	--	--	--	--	--	--
JUN											
10...	3.2	1.2	30	6.6	--	28	--	--	--	--	1
18...	4.0	0.90	32	7.7	0.40	46	0.049	--	0.022	--	1
JUL											
16...	6.4	1.3	52	16	1.5	92	0.058	--	0.005	--	<1
AUG											
13...	7.3	1.6	65	22	0.20	100	0.080	--	0.003	--	<1
OCT											
22...	11	2.1	89	40	1.2	139	0.086	--	0.021	--	<1
DEC											
16...	12	2.6	87	51	<0.10	166	0.093	--	0.007	--	<1
MAR 1992											
23...	13	5.9	66	82	3.6	174	0.370	--	0.034	--	<1
APR											
20...	7.8	4.2	48	42	0.70	116	0.045	--	0.016	--	<1
MAY											
20...	3.4	1.3	27	12	0.50	78	0.054	--	0.011	--	<1
JUN											
24...	4.4	1.2	40	18	0.50	78	0.053	--	0.002	--	1
JUL											
13...	5.8	1.5	49	16	0.40	108	0.049	--	0.005	--	<1
AUG											
11...	8.1	2.4	63	27	0.80	118	0.161	--	0.010	--	<1
26...	7.3	2.3	54	19	1.2	84	0.057	--	0.008	--	<1
OCT											
26...	9.6	3.4	66	44	0.90	136	0.069	--	0.003	--	<1
JAN 1993											
11...	12	5.1	71	66	0.90	172	--	0.164	--	0.020	<1
MAR											
22...	11	6.0	66	60	0.80	150	--	0.128	--	0.006	<1

Table 8. Onsite measurements and bacteriological and selected inorganic data for station 07081200, Arkansas River near Leadville--Continued

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990											
17...	1.4	3	3	1800	710	3	0.8	290	230	420	370
MAY											
22...	1.6	4	2	740	120	4	<0.5	250	180	440	350
JUN											
05...	0.3	15	3	2300	25	110	4.8	300	29	360	85
19...	0.4	6	2	580	68	4	<0.5	80	47	120	87
JUL											
17...	0.5	1	1	230	100	1	0.5	70	63	160	130
AUG											
28...	0.3	2	<1	130	52	1	0.9	90	76	210	180
OCT											
29...	0.5	1	<1	140	120	1	<0.5	80	71	180	170
DEC											
19...	0.6	4	1	130	70	2	<0.5	130	130	330	320
MAR 1991											
25...	0.7	2	1	210	65	<1	<0.5	150	140	240	310
APR											
23...	0.4	2	1	410	230	3	<0.5	130	130	220	210
MAY											
14...	0.8	5	2	660	170	4	0.9	140	100	220	160
29...	--	--	--	1700	90	--	--	--	--	90	30
JUN											
10...	1.8	6	3	670	500	5	6.7	60	63	120	140
18...	0.7	18	5	350	87	10	<0.5	60	35	90	85
JUL											
16...	0.3	3	1	210	88	16	<0.5	50	52	90	87
AUG											
13...	0.3	2	<1	330	96	5	<0.5	70	51	120	99
OCT											
22...	0.5	2	<1	120	68	1	<0.5	100	94	210	200
DEC											
16...	1.3	--	<1	170	75	<1	<0.5	120	110	300	270
MAR 1992											
23...	0.3	<1	<1	140	68	<1	<0.5	30	27	60	45
APR											
20...	0.4	2	1	520	330	1	<0.5	50	36	60	47
MAY											
20...	0.4	4	2	740	82	5	0.8	210	34	120	69
JUN											
24...	1.0	3	2	260	55	3	<0.5	30	14	40	24
JUL											
13...	0.1	1	<1	210	80	1	<0.5	30	18	20	16
AUG											
11...	0.1	3	<1	240	140	3	0.6	40	28	30	17
26...	0.1	9	1	330	180	3	0.5	50	28	70	55
OCT											
26...	0.1	<1	2	140	92	<1	<0.5	<10	27	30	23
JAN 1993											
11...	0.1	<1	<1	160	88	1	<0.5	60	38	50	35
MAR											
22...	0.1	<1	<1	190	92	<1	<0.5	30	18	20	21

Table 9. Onsite measurements and selected inorganic data for station 07081800, California Gulch at Malta

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 1991										
23...	0910	--	741	7.2	3.5	8.7	300	61	36	14
MAY										
14...	1015	1.9	990	6.5	7.5	7.7	440	89	53	8.3
JUN										
18...	1140	1.8	957	6.7	16.0	6.8	410	89	46	14
JUL										
16...	1125	1.9	971	7.6	19.5	6.2	420	110	36	17
AUG										
13...	0815	2.2	935	6.9	11.5	--	410	100	39	15
OCT										
22...	1005	0.59	686	7.8	4.5	8.7	230	52	24	31
DEC										
16...	1610	1.3	716	7.3	1.0	9.2	--	--	--	--
APR 1992										
20...	1750	1.8	971	6.9	8.5	--	--	--	--	--
MAY										
20...	1700	3.3	518	8.1	16.0	--	--	--	--	--
JUN										
24...	1500	2.0	628	8.0	17.5	6.8	--	--	--	--
JUL										
13...	1300	1.8	689	8.0	15.5	6.9	--	--	--	--
AUG										
11...	1045	2.5	792	7.5	13.0	7.0	--	--	--	--
OCT										
26...	1420	1.2	670	7.5	7.5	7.9	--	--	--	--
JAN 1993										
11...	1310	0.59	492	7.9	1.0	9.6	--	--	--	--
MAR										
22...	1120	1.0	619	7.9	2.5	9.1	--	--	--	--

DATE	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)
APR 1991										
23...	514	0.320	--	4.20	--	--	34	1	100	12
MAY										
14...	766	0.370	--	0.990	--	--	95	<5	--	20
JUN										
18...	763	0.410	--	0.790	--	150	140	<5	130	70
JUL										
16...	728	0.340	--	2.50	--	100	74	<5	170	10
AUG										
13...	675	0.370	--	4.10	--	62	45	<5	170	<10
OCT										
22...	419	1.80	--	3.40	--	32	15	<5	60	<10
DEC										
16...	568	4.00	--	0.950	--	52	48	--	--	7
APR 1992										
20...	764	0.464	--	0.311	--	62	48	--	220	12
MAY										
20...	340	0.509	--	2.10	--	5	1.0	--	18	7
JUN										
24...	414	0.370	--	2.80	--	6	3.6	--	29	16
JUL										
13...	512	0.545	--	1.50	--	9	4.4	--	29	6
AUG										
11...	592	0.614	--	2.20	--	14	6.1	--	67	5
OCT										
26...	438	1.30	--	3.70	--	22	16	--	80	9
JAN 1993										
11...	314	--	5.10	--	0.689	6	2.8	--	26	8
MAR										
22...	374	--	1.10	--	--	11	9.1	--	10	6

Table 9. Onsite measurements and selected inorganic data for station 07081800, California Gulch at Malta--Continued

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1991										
23...	5900	100	240	1	11000	9700	<1	<1.0	4300	1900
MAY										
14...	--	7100	--	<10	--	19000	20	5.0	--	26000
JUN										
18...	4600	230	130	30	12000	14000	20	2.0	31000	32000
JUL										
16...	3000	6	77	<10	10000	11000	20	1.0	19000	15000
AUG										
13...	12000	69	1200	<10	9100	10000	10	2.0	13000	10000
OCT										
22...	1500	7	51	<10	4700	5100	<10	2.0	9200	4400
DEC										
16...	2100	42	65	<0.5	7500	8500	--	--	15000	14000
APR 1992										
20...	26000	5500	290	<0.5	22000	24000	--	--	22000	22000
MAY										
20...	1600	14	38	<0.5	1800	1700	--	--	1800	320
JUN										
24...	2000	60	52	<0.5	2700	2800	--	--	2000	1100
JUL										
13...	4300	43	120	0.6	3600	3800	--	--	3000	1500
AUG										
11...	8100	22	850	<0.5	3700	3600	--	--	3600	2600
OCT										
26...	14000	1400	250	0.8	6000	5700	--	--	11000	7900
JAN 1993										
11...	2600	23	120	0.6	3100	3000	--	--	3500	2600
MAR										
22...	3600	37	150	<0.5	3800	3800	--	--	5200	4000

Table 10. Onsite measurements and selected inorganic data for station 07082000, Lake Fork above Sugar Loaf Reservoir

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
APR 1990												
16...	1745	--	27	7.9	0.0	--	--	--	--	17	0.086	<0.010
JUN												
04...	1420	65	--	6.8	6.0	8.3	--	--	--	27	0.031	0.100
AUG												
27...	1415	2.4	31	7.8	12.5	7.1	--	--	--	21	0.032	<0.010
JUN 1991												
17...	1805	95	16	6.7	7.5	8.2	--	--	--	12	0.015	0.017
JUL												
15...	1500	10	19	7.0	11.0	7.3	--	--	--	11	0.006	0.014
OCT												
22...	0955	--	32	7.4	2.0	8.5	--	--	--	21	0.062	0.019
MAY 1992												
20...	1250	62	17	7.1	5.0	8.4	7	2.1	0.47	26	0.032	0.012
JUN												
23...	1515	50	18	7.3	10.0	7.2	--	--	--	12	0.008	0.002
AUG												
10...	1415	9.5	25	7.3	10.5	--	--	--	--	22	0.015	0.010
OCT												
27...	1050	2.2	32	7.4	2.5	9.1	--	--	--	36	0.052	0.003

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990												
16...	<1	<0.1	3	1	400	110	1	<0.5	40	16	20	6
JUN												
04...	<1	0.3	9	5	140	93	3	1.2	10	8	--	23
AUG												
27...	<1	0.1	1	1	300	93	2	0.6	40	13	10	6
JUN 1991												
17...	<1	<0.1	2	<1	120	52	2	<0.5	10	1	<10	5
JUL												
15...	<1	<0.1	3	<1	60	52	5	<0.5	10	5	<10	4
OCT												
22...	<1	<0.1	3	<1	80	79	2	<0.5	10	12	<10	5
MAY 1992												
20...	<1	0.1	<1	<1	120	50	<1	0.5	<10	2	<10	<3
JUN												
23...	<1	<0.1	<1	<1	80	37	<1	<0.5	10	3	<10	<3
AUG												
10...	<1	0.1	17	<1	130	81	20	<0.5	20	14	1900	<3
OCT												
27...	<1	0.2	<1	<1	110	98	<1	<0.5	<10	17	<10	5

Table 11. Onsite measurements and selected inorganic data for station 09063700, Homestake Tunnel near Leadville

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
JUL 1990												
16...	1515	94	21	7.1	4.0	--	--	--	--	24	0.072	0.010
AUG												
27...	1510	90	22	7.7	5.0	8.9	--	--	--	12	0.078	0.020
JUL 1991												
15...	1400	3.6	116	9.1	7.5	8.5	--	--	--	65	0.071	0.027
AUG												
13...	1020	2.0	71	8.0	7.0	--	--	--	--	39	0.065	<0.002
AUG 1992												
26...	0620	108	23	7.4	4.5	8.9	10	3.1	0.63	8	0.062	0.050
SEP												
22...	1015	108	23	7.3	5.0	8.5	--	--	--	24	0.067	0.024

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUL 1990												
16...	<1	0.1	2	2	80	38	1	<0.5	20	4	<10	4
AUG												
27...	<1	<0.1	2	1	80	41	<1	<0.5	20	2	<10	<3
JUL 1991												
15...	<1	<0.1	3	<1	150	60	9	<0.5	30	11	<10	<3
AUG												
13...	<1	<0.1	2	<1	200	63	2	<0.5	10	7	<10	<3
AUG 1992												
26...	<1	<0.1	2	<1	30	46	<1	--	<10	4	<10	<3
SEP												
22...	<1	<0.1	1	1	70	39	<1	<0.5	10	3	<10	4

Table 12. Onsite measurements and selected inorganic data for station 09077160, Charles H. Bousted Tunnel near Leadville

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
MAY 1990												
22...	0920	125	38	7.5	2.0	9.5	--	--	--	17	0.061	<0.010
JUN												
04...	1550	500	--	6.6	4.0	10.0	--	--	--	21	0.045	0.020
JUN 1991												
17...	1930	908	22	6.6	5.5	9.0	--	--	--	17	0.035	0.016
JUL												
15...	1615	75	39	7.1	9.0	7.8	--	--	--	12	0.033	0.012
AUG												
13...	1050	10	77	7.9	8.5	--	--	--	--	57	0.087	<0.002
MAY 1992												
20...	1425	516	22	7.3	3.5	8.9	10	3.1	0.49	20	0.065	0.017
JUN												
23...	1645	370	23	7.4	7.5	7.9	--	--	--	22	0.027	0.007
AUG												
10...	1525	10	73	8.1	9.5	--	--	--	--	34	0.059	0.003

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY 1990												
22...	<1	<0.1	1	1	280	92	<1	<0.5	30	4	10	3
JUN												
04...	<1	<0.1	5	3	140	65	1	<0.5	<10	3	<10	6
JUN 1991												
17...	<1	0.7	5	1	140	46	3	<0.5	<10	<1	<10	8
JUL												
15...	<1	0.1	3	<1	20	25	5	<0.5	<10	<1	<10	4
AUG												
13...	<1	<0.1	1	<1	100	40	4	<0.5	<10	<1	<10	<3
MAY 1992												
20...	<1	<0.1	<1	<1	190	61	1	<0.5	10	2	<10	<3
JUN												
23...	<1	<0.1	1	<1	100	46	<1	<0.5	<10	1	<10	16
AUG												
10...	<1	<0.1	<1	<1	100	46	<1	<0.5	10	2	20	4

Table 13. Onsite measurements and selected inorganic data for station 09077500, Busk-Ivanhoe Tunnel at East Portal, near Malta

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
MAY 1990												
22...	1040	6.8	32	6.6	2.0	8.6	--	--	--	27	0.107	0.070
JUN												
04...	1745	48	--	6.6	1.0	8.6	--	--	--	14	0.074	0.090
JUN 1991												
17...	1640	94	14	6.6	7.0	7.6	--	--	--	1	0.018	0.035
JUL												
15...	1245	7.1	19	6.8	13.0	6.7	--	--	--	9	0.009	0.006
AUG												
13...	0915	3.9	25	6.8	10.5	--	--	--	--	16	0.016	<0.002
MAY 1992												
20...	1120	47	15	6.8	2.5	8.6	6	1.7	0.32	20	0.074	0.012
JUN												
23...	1340	7.3	20	7.0	9.5	6.8	--	--	--	11	0.014	0.009
AUG												
11...	1635	6.5	22	6.9	14.0	--	--	--	--	10	0.021	0.017

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY 1990												
22...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
04...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 1991												
17...	<1	0.2	3	2	530	210	4	<0.5	20	18	<10	8
JUL												
15...	<1	<0.1	6	<1	180	110	5	<0.5	20	3	40	4
AUG												
13...	<1	0.2	2	<1	220	110	3	<0.5	10	5	<10	9
MAY 1992												
20...	<1	0.1	1	<1	190	110	<1	<0.5	10	6	<10	<3
JUN												
23...	<1	<0.1	1	1	150	75	<1	<0.5	<10	3	<10	<3
AUG												
11...	<1	<0.1	1	<1	500	100	2	<0.5	30	10	20	4

Table 14. Onsite measurements and selected inorganic data for station 07082500, Lake Fork below Sugar Loaf Reservoir

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
JUN 1990											
04...	1935	14	--	7.7	6.0	8.5	16	<0.010	0.020	<1	0.2
JUL											
16...	1620	17	26	7.3	6.5	9.3	8	0.031	0.030	<1	<0.1
AUG											
27...	1620	7.0	26	7.2	8.5	8.6	10	0.053	0.020	2	0.1
OCT											
29...	1540	3.1	29	7.4	7.0	8.1	19	0.044	0.020	<1	<0.1
JUN 1991											
18...	1110	15	27	7.1	7.0	9.3	18	0.037	0.036	<1	1.3
JUL											
16...	1045	17	25	6.8	7.0	8.5	13	0.044	0.012	<1	<0.1
OCT											
22...	1115	3.1	26	7.0	7.0	8.2	22	0.068	0.033	<1	0.1
MAY 1992											
20...	1600	17	28	7.3	6.0	9.0	30	0.038	0.010	<1	<0.1
JUN											
23...	1815	17	25	7.3	8.0	8.7	18	0.017	0.003	<1	<0.1
AUG											
10...	1750	3.4	26	7.0	8.0	--	12	0.051	0.013	<1	<0.1
OCT											
27...	1025	3.7	27	7.3	8.0	8.3	25	0.031	0.006	<1	<0.1

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
JUN 1990										
04...	2	2	300	69	2	<0.5	50	32	--	110
JUL										
16...	2	1	160	79	<1	<0.5	20	3	<10	8
AUG										
27...	3	1	230	130	1	<0.5	30	5	10	6
OCT										
29...	3	1	120	79	<1	<0.5	20	2	10	10
JUN 1991										
18...	4	3	120	78	4	<0.5	20	4	<10	13
JUL										
16...	3	1	110	96	7	<0.5	20	2	<10	7
OCT										
22...	4	1	210	130	5	<0.5	20	4	<10	9
MAY 1992										
20...	<1	<1	220	70	<1	<0.5	50	29	<10	<3
JUN										
23...	1	1	130	68	<1	<0.5	<10	2	10	<3
AUG										
10...	30	<1	160	93	41	<0.5	10	3	3300	7
OCT										
27...	<1	<1	70	41	<1	<0.5	<10	2	<10	<3

Table 15. Onsite measurements and selected inorganic data for station 391226106213201, Lake Fork above Halfmoon Creek, near Malta

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
APR 1990											
17...	1430	32	94	7.9	7.5	9.1	60	0.048	<0.010	<1	0.1
JUN											
05...	1500	75	--	--	14.5	6.5	39	0.022	0.030	<1	0.3
JUL											
17...	1145	56	70	--	13.0	9.3	44	0.016	<0.010	<1	<0.1
AUG											
28...	1200	35	117	7.5	14.0	9.4	69	0.021	<0.010	<1	0.1
OCT											
30...	0800	28	126	7.9	1.5	12.5	67	0.011	0.020	<1	<0.1
APR 1991											
23...	1115	29	100	7.7	5.5	9.5	38	0.044	0.025	<1	<0.1
JUN											
18...	1145	82	67	7.4	11.0	7.8	32	0.030	0.026	<1	0.2
JUL											
16...	1300	54	69	7.6	16.5	7.5	27	0.031	0.013	<1	0.1
OCT											
22...	1410	27	97	8.5	8.5	10.0	61	0.029	0.038	<1	0.2
APR 1992											
21...	0930	37	82	7.6	3.0	8.8	69	0.053	0.031	<1	0.8
JUN											
24...	1520	79	57	7.9	15.0	7.5	46	0.012	0.008	<1	<0.1
AUG											
11...	1125	43	79	8.5	13.0	8.8	46	0.015	0.007	<1	<0.1
OCT											
27...	1250	30	94	7.2	7.5	10.4	74	0.025	0.011	<1	<0.1

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990										
17...	3	1	630	260	2	<0.5	100	71	30	25
JUN										
05...	7	4	650	150	2	0.7	100	69	--	37
JUL										
17...	3	2	720	260	1	<0.5	80	54	20	12
AUG										
28...	2	1	960	450	2	<0.5	140	100	80	27
OCT										
30...	3	2	370	170	<1	<0.5	60	44	20	20
APR 1991										
23...	2	1	730	270	3	<0.5	150	150	60	49
JUN										
18...	8	3	1200	120	4	<0.5	180	100	40	21
JUL										
16...	3	<1	510	220	6	<0.5	80	50	<10	11
OCT										
22...	2	<1	320	180	3	<0.5	20	11	<10	11
APR 1992										
21...	2	2	670	210	<1	<0.5	160	120	70	62
JUN										
24...	2	1	450	170	<1	<0.5	50	26	10	<3
AUG										
11...	4	<1	490	250	1	0.7	40	28	20	5
OCT										
27...	1	<1	360	170	<1	<0.5	10	14	10	6

Table 16. Onsite measurements and bacteriological and selected inorganic data for station 07083000, Halfmoon Creek near Malta

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
APR 1990										
17...	1530	--	--	--	--	--	--	--	--	--
JUN										
05...	1740	153	39	7.4	9.5	7.8	--	--	--	--
JUL										
17...	1410	42	65	8.0	13.0	7.0	--	--	--	--
AUG										
28...	1315	15	92	7.4	14.5	--	--	--	--	--
OCT										
30...	0940	9.1	85	8.1	0.5	9.2	K2	21	40	10
JUN 1991										
25...	1205	89	50	7.6	8.5	7.8	<1	<1	24	6.3
JUL										
16...	1200	43	63	7.8	12.0	6.9	--	--	--	--
AUG										
13...	1530	25	80	7.7	14.5	--	<1	K5	37	9.4
OCT										
21...	1645	6.4	84	7.8	7.0	8.1	--	<1	44	11
JUN 1992										
23...	1425	94	58	7.9	10.0	7.8	--	--	--	--
AUG										
10...	1700	34	76	8.0	10.0	7.4	--	--	--	--
OCT										
27...	1210	7.9	90	8.1	4.0	8.7	--	--	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
APR 1990										
17...	--	--	--	--	--	--	--	--	--	--
JUN										
05...	--	--	--	--	--	--	--	--	--	--
JUL										
17...	--	--	--	--	--	--	--	--	--	--
AUG										
28...	--	--	--	--	--	--	--	--	--	--
OCT										
30...	3.7	1.4	39	5.7	<0.10	48	0.100	0.100	0.020	0.010
JUN 1991										
25...	2.0	0.80	24	3.8	0.30	25	0.089	0.089	0.010	0.010
JUL										
16...	--	--	--	--	--	--	--	--	--	--
AUG										
13...	3.2	1.2	36	4.0	0.30	46	0.098	0.098	<0.010	<0.010
OCT										
21...	4.1	1.6	43	5.2	0.60	51	0.078	0.078	<0.010	<0.010
JUN 1992										
23...	--	--	--	--	--	--	--	--	--	--
AUG										
10...	--	--	--	--	--	--	--	--	--	--
OCT										
27...	--	--	--	--	--	--	--	--	--	--

DATE	PHOS-PHORUS TOTAL (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR 1990										
17...	--	--	<1	--	--	1	--	80	--	1
JUN										
05...	--	--	<1	--	--	3	--	2000	--	3
JUL										
17...	--	--	<1	--	--	2	--	120	--	1
AUG										
28...	--	--	2	--	--	1	--	110	--	1

Table 16. *Onsite measurements and bacteriological and selected inorganic data for station 07083000, Halfmoon Creek near Malta--Continued*

DATE	PHOSPHORUS TOTAL (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
OCT 1990										
30...	<0.010	<1	<1	<1.0	<1	1	<1	100	45	1
JUN 1991										
25...	0.010	<1	--	2.0	<1	--	<1	--	32	--
JUL										
16...	--	--	<1	--	--	5	--	<10	--	7
AUG										
13...	<0.010	<1	<1	<1.0	<1	1	<1	140	76	3
OCT										
21...	<0.010	--	<1	<1.0	--	5	<1	--	69	2
JUN 1992										
23...	--	--	<1	<1.0	--	1	<1	170	30	1
AUG										
10...	--	--	<1	<1.0	--	<1	1	100	90	1
OCT										
27...	--	--	<1	<1.0	--	<1	<1	110	70	<1

DATE	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990									
17...	--	<10	--	--	--	--	--	<10	--
JUN									
05...	--	40	--	--	--	--	--	<10	--
JUL									
17...	--	<10	--	--	--	--	--	<10	--
AUG									
28...	--	20	--	--	--	--	--	<10	--
OCT									
30...	<1	<10	5	<0.1	<1	<1	<1.0	<10	<3
JUN 1991									
25...	1	--	3	<0.1	2	<1	<1.0	--	5
JUL									
16...	--	10	--	--	--	--	--	<10	--
AUG									
13...	<1	<10	4	<0.1	<1	<1	<1.0	<10	<3
OCT									
21...	<1	--	5	--	1	<1	<1.0	40	40
JUN 1992									
23...	<1	<10	<10	--	--	--	--	<10	<10
AUG									
10...	<1	20	<10	--	--	--	--	<10	<10
OCT									
27...	<1	<10	<10	--	--	--	--	<10	<10

Table 17. Onsite measurements and selected inorganic data for station 391120106194901, Iowa Gulch at Highway 24, near Malta

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
APR 1990											
18...	0800	1.2	1010	8.4	2.0	--	826	0.189	<0.010	<1	0.2
JUN											
05...	1340	21	418	8.2	13.5	6.9	289	0.737	0.030	1	0.3
JUL											
17...	1515	1.1	685	8.4	19.5	6.3	480	0.397	<0.010	<1	<0.1
JUN 1991											
18...	1230	17	429	8.0	11.0	7.8	262	0.441	0.009	<1	0.3
JUL											
16...	1445	3.3	597	8.2	14.0	6.9	399	0.394	0.018	<1	0.3
OCT											
22...	1105	0.64	846	8.5	5.5	8.4	591	0.287	0.038	<1	0.3
MAY 1992											
20...	1400	8.4	702	8.3	13.5	7.2	507	0.890	0.015	<1	0.2
JUN											
24...	1600	17	384	8.2	12.0	7.3	262	0.361	0.045	<1	0.2
AUG											
11...	1140	7.8	604	8.4	13.0	7.3	414	0.311	0.025	<1	0.2
OCT											
27...	1350	1.0	814	8.4	8.5	7.9	625	0.272	0.022	<1	0.2

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990										
18...	2	<1	100	5	3	<0.5	40	14	130	100
JUN										
05...	10	2	1200	11	51	0.7	270	17	230	93
JUL										
17...	2	1	150	13	6	<0.5	60	10	80	45
JUN 1991										
18...	5	2	190	17	14	<0.5	60	13	70	57
JUL										
16...	4	2	100	20	11	0.8	50	20	50	47
OCT										
22...	2	<1	90	12	7	0.6	40	11	60	57
MAY 1992										
20...	4	<1	540	22	30	0.6	220	13	130	40
JUN										
24...	3	1	280	16	16	<0.5	80	11	90	41
AUG										
11...	10	<1	230	31	21	0.5	100	31	1100	63
OCT										
27...	<1	<1	10	22	3	<0.5	20	24	70	65

Table 18. Onsite measurements and selected inorganic data for station 391013106190201, Empire Gulch near Malta

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
APR 1990											
17...	1555	0.50	--	8.5	6.0	--	100	0.014	<0.010	<1	<0.1
JUN											
05...	1610	5.0	155	8.1	16.0	6.6	95	0.020	0.030	<1	<0.1
JUL											
17...	1300	2.8	173	8.2	17.0	6.8	98	0.011	0.010	<1	<0.1
AUG											
28...	1400	0.28	202	8.0	18.0	6.5	106	<0.010	<0.010	<1	<0.1
OCT											
30...	1140	1.1	203	8.4	5.0	8.6	115	<0.010	0.020	<1	<0.1
APR 1991											
23...	1235	--	243	7.7	1.0	8.5	143	0.016	0.019	3	0.1
JUN											
18...	1315	6.5	171	7.9	13.5	7.2	90	<0.005	0.013	<1	<0.1
JUL											
16...	1530	1.9	--	--	14.5	6.9	99	0.022	0.018	<1	2.4
OCT											
22...	1215	0.18	213	8.2	4.5	8.5	119	<0.005	0.028	<1	<0.1
APR 1992											
21...	0900	0.28	225	8.4	1.0	9.6	128	0.023	0.021	<1	<0.1
JUN											
24...	1640	6.9	166	8.4	14.0	6.6	98	0.006	0.017	<1	<0.1
AUG											
11...	1245	1.3	230	8.3	13.0	6.9	142	0.054	0.013	3	<0.1

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990										
17...	2	1	510	26	5	<0.5	50	7	30	25
JUN										
05...	5	1	1600	55	20	0.8	350	10	50	10
JUL										
17...	2	1	510	110	8	<0.5	50	5	20	5
AUG										
28...	2	<1	300	66	5	<0.5	20	2	20	5
OCT										
30...	1	<1	270	89	<1	<0.5	20	2	<10	<3
APR 1991										
23...	10	1	1800	49	180	3.2	180	47	420	14
JUN										
18...	2	<1	630	87	5	<0.5	80	4	<10	<3
JUL										
16...	5	1	1900	82	28	<0.5	250	7	50	<3
OCT										
22...	2	<1	190	130	3	<0.5	10	<1	<10	9
APR 1992										
21...	<1	<1	220	71	<1	<0.5	20	1	<10	<3
JUN										
24...	1	<1	630	110	4	0.9	100	4	10	<3
AUG										
11...	1	<1	520	120	3	<0.5	60	5	<10	<3

Table 19. Onsite measurements and bacteriological and selected inorganic data for station 07083710, Arkansas River below Empire Gulch, near Malta

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 1990												
17...	1720	91	191	8.2	8.5	--	--	<2	K400	88	21	8.6
MAY												
22...	1615	140	154	7.9	13.0	7.7	--	K6	K12	65	16	6.0
JUN												
05...	1430	512	115	7.7	12.0	7.8	K380	K16	K40	51	13	4.5
19...	1510	360	136	7.9	14.5	7.5	K150	<2	K10	65	16	6.1
JUL												
17...	1420	139	179	8.3	17.5	7.4	K16	<1	K9	78	18	8.1
AUG												
28...	1245	72	210	8.4	15.0	8.1	K2	<1	<1	98	24	9.2
OCT												
30...	1300	99	200	--	7.5	9.2	--	--	--	92	23	8.3
DEC												
19...	1415	48	210	7.7	0.5	10.3	2	<1	E100	94	23	8.9
MAR 1991												
25...	1550	57	239	8.5	5.0	9.2	--	<1	--	100	26	9.5
APR												
23...	1325	79	206	7.8	10.0	8.0	230	<1	<1	87	21	8.3
MAY												
14...	1400	156	150	7.6	11.0	7.6	160	<2	E1	62	15	5.9
JUN												
18...	1345	427	129	--	12.0	7.7	290	<2	E8	56	14	5.1
JUL												
16...	1600	137	174	8.0	15.5	6.5	140	E27	54	80	20	7.4
AUG												
13...	1315	132	194	8.1	16.0	--	E17	E3	E17	90	23	8.0
OCT												
22...	1430	71	212	8.3	9.0	8.4	E50	--	<3	92	23	8.3
DEC												
17...	0900	77	250	7.6	0.5	9.4	E2	E2	<1	110	27	9.7
MAR 1992												
23...	1530	61	215	8.5	5.5	9.1	--	--	--	89	22	8.2
APR												
21...	1030	95	179	7.9	3.0	9.8	390	E1	E3	78	19	7.3
MAY												
20...	1520	297	124	8.0	12.5	7.7	E14	E6	E14	54	14	4.7
JUN												
24...	1710	350	138	8.0	12.5	7.6	23	E17	57	63	16	5.5
JUL												
13...	1615	219	168	8.5	16.0	6.7	E7	E1	E6	77	20	6.6
AUG												
11...	1330	134	215	8.4	14.0	8.2	54	32	51	100	27	8.3
26...	1000	180	205	8.2	7.5	8.6	E34	E13	40	95	25	8.0
OCT												
26...	1515	95	209	8.7	9.0	8.9	E4	E5	E14	92	23	8.5
JAN 1993												
11...	1440	45	211	8.0	0.0	--	--	<1	<1	86	21	8.1
MAR												
22...	1330	58	219	8.2	5.5	9.1	E7	<1	--	89	22	8.2

Table 19. Onsite measurements and bacteriological and selected inorganic data for station 07083710, Arkansas River below Empire Gulch, near Malta--Continued

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
APR 1990											
17...	4.0	47	42	2.2	128	0.095	--	<0.010	--	0.083	3
MAY											
22...	3.3	39	30	2.7	95	0.037	--	<0.010	--	0.057	3
JUN											
05...	1.6	31	22	0.50	77	0.075	--	0.030	--	0.026	5
19...	1.9	42	24	1.9	77	0.060	--	<0.010	--	0.024	2
JUL											
17...	3.2	54	37	1.1	108	--	--	--	--	--	2
AUG											
28...	4.2	64	37	2.9	122	0.026	--	<0.010	--	0.021	2
OCT											
30...	4.4	64	35	3.1	115	0.040	--	0.020	--	0.020	<1
DEC											
19...	4.8	63	41	4.4	125	0.206	--	0.026	--	0.053	1
MAR 1991											
25...	5.7	64	48	3.6	129	0.180	--	0.053	--	0.034	1
APR											
23...	4.4	56	41	2.9	109	0.151	--	0.051	--	0.028	2
MAY											
14...	2.7	36	30	1.4	84	0.074	--	0.053	--	0.023	4
JUN											
18...	1.8	37	17	0.30	66	0.058	--	0.010	--	0.028	2
JUL											
16...	2.9	53	35	2.5	96	0.090	--	0.010	--	0.027	2
AUG											
13...	3.3	59	36	1.1	116	0.108	--	0.011	--	0.021	1
OCT											
22...	4.5	67	30	3.6	124	0.096	--	0.028	--	0.025	1
DEC											
17...	5.3	71	48	2.1	158	0.267	--	0.011	--	0.029	2
MAR 1992											
23...	5.5	58	44	3.6	128	0.168	--	0.016	--	0.047	<1
APR											
21...	4.4	46	37	1.5	88	0.110	--	0.029	--	0.023	1
MAY											
20...	2.4	33	24	0.70	90	0.077	--	0.015	--	0.020	2
JUN											
24...	2.0	45	23	0.50	90	0.065	--	0.004	--	0.017	<1
JUL											
13...	2.5	52	28	1.2	92	0.043	--	0.003	--	0.015	<1
AUG											
11...	3.4	61	45	1.5	134	0.095	--	0.017	--	0.024	<1
26...	3.6	59	40	2.0	120	0.101	--	0.025	--	0.019	1
OCT											
26...	4.5	61	38	2.8	133	0.066	--	0.004	--	0.021	<1
JAN 1993											
11...	5.1	60	40	5.0	108	--	0.265	--	0.018	0.030	<1
MAR											
22...	6.1	61	42	2.6	134	--	0.213	--	0.079	0.050	<1

Table 19. Onsite measurements and bacteriological and selected inorganic data for station 07083710, Arkansas River below Empire Gulch, near Malta--Continued

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990											
17...	1.9	8	4	1900	440	22	1.7	570	480	730	470
MAY											
22...	1.5	8	5	1200	110	22	1.1	390	220	640	330
JUN											
05...	1.2	17	6	3200	87	80	1.4	580	100	890	310
19...	1.4	8	4	420	67	8	<0.5	150	110	360	290
JUL											
17...	1.4	12	9	360	150	6	1.1	180	170	290	230
AUG											
28...	0.9	7	4	330	120	6	<0.5	130	100	250	180
OCT											
30...	0.5	4	1	270	77	4	<0.5	90	58	170	110
DEC											
19...	0.9	6	2	490	60	11	<0.5	190	110	370	290
MAR 1991											
25...	0.4	4	2	260	71	5	0.5	110	87	200	160
APR											
23...	1.2	4	2	540	170	14	0.8	250	250	330	270
MAY											
14...	1.8	10	3	940	240	29	1.7	360	310	570	290
JUN											
18...	1.2	17	14	530	100	13	<0.5	150	87	240	210
JUL											
16...	1.2	5	2	360	140	13	<0.5	140	130	240	230
AUG											
13...	0.9	5	2	430	92	17	0.5	120	120	160	110
OCT											
22...	0.6	3	1	200	78	4	0.7	50	41	130	100
DEC											
17...	1.7	--	2	180	68	<1	0.8	170	170	500	530
MAR 1992											
23...	0.4	1	1	270	70	4	<0.5	80	57	130	82
APR											
21...	0.9	4	2	640	190	7	<0.5	300	280	360	320
MAY											
20...	0.5	7	3	1100	91	27	2	240	58	270	110
JUN											
24...	0.5	3	2	330	88	6	<0.5	70	36	120	90
JUL											
13...	0.3	2	1	290	130	5	0.6	60	38	70	48
AUG											
11...	0.9	3	1	380	110	10	<0.5	90	67	150	95
26...	0.7	3	1	380	160	9	0.6	140	110	240	180
OCT											
26...	0.1	2	<1	460	89	8	<0.5	80	24	100	45
JAN 1993											
11...	0.2	3	<1	470	66	12	0.5	160	60	230	150
MAR											
22...	0.5	1	<1	440	70	8	<0.5	150	80	180	120

Table 20. Onsite measurements and selected inorganic data for station 09073000, Twin Lakes Tunnel at East Portal, near Twin Lakes

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
MAY 1990												
22...	1815	159	44	--	1.0	8.8	--	--	--	38	0.087	<0.010
JUN												
04...	1350	302	40	7.3	2.0	9.6	--	--	--	39	0.053	0.030
JUN 1991												
17...	1500	461	37	7.1	5.0	8.6	--	--	--	21	0.054	0.027
JUL												
15...	1420	83	47	7.8	9.0	7.6	--	--	--	23	0.024	<0.002
AUG												
13...	1805	1.8	86	7.3	9.5	--	--	--	--	58	0.058	<0.002
JUN 1992												
23...	1240	374	36	7.5	5.0	8.6	13	4.3	0.65	34	0.041	<0.002
JUL												
13...	1820	145	48	7.6	8.0	7.9	--	--	--	36	0.022	0.006
AUG												
11...	1555	0.66	95	8.3	10.5	7.1	--	--	--	64	0.151	0.007

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY 1990												
22...	--	<0.1	--	3	--	29	--	<0.5	--	6	--	16
JUN												
04...	<1	<0.1	8	5	210	39	4	<0.5	<10	5	<10	14
JUN 1991												
17...	1	0.3	8	6	70	24	7	<0.5	<10	2	10	27
JUL												
15...	<1	0.1	6	5	80	19	6	<0.5	<10	<1	<10	10
AUG												
13...	<1	<0.1	45	4	3000	6	8	<0.5	110	<1	50	3
JUN 1992												
23...	<1	<0.1	10	4	190	21	1	<0.5	<10	2	20	6
JUL												
13...	<1	<0.1	12	7	250	15	<1	<0.5	<10	3	10	7
AUG												
11...	<1	<0.1	5	3	130	13	<1	<0.5	10	<1	<10	<3

Table 21. Onsite measurements and selected inorganic data for station 07084500, Lake Creek above Twin Lakes Reservoir

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
APR 1990												
16...	1545	E23	131	7.8	6.5	--	--	--	--	71	0.164	<0.010
JUN												
04...	1525	706	--	7.5	7.5	8.4	--	--	--	37	0.079	0.030
AUG												
27...	1800	42	127	7.9	14.5	7.1	--	--	--	64	0.117	<0.010
JUN 1991												
17...	1335	798	49	7.6	7.0	9.5	--	--	--	27	0.062	0.018
JUL												
15...	1320	188	69	7.5	12.0	7.4	--	--	--	35	0.072	0.004
OCT												
21...	1445	16	137	7.7	5.0	9.1	--	--	--	86	0.131	0.017
JUN 1992												
23...	1115	632	48	7.5	7.0	9.9	19	6.1	0.95	27	0.061	<0.002
JUL												
13...	1735	314	62	7.6	10.5	8.0	--	--	--	56	0.038	<0.002
AUG												
11...	1525	77	100	7.8	12.0	7.5	--	--	--	56	0.096	0.005
OCT												
27...	1500	27	133	7.8	4.5	8.7	--	--	--	76	0.142	<0.002

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990												
16...	<1	0.2	39	4	2200	<3	1	<0.5	40	25	40	6
JUN												
04...	<1	1.4	18	6	800	72	2	<0.5	10	7	<10	8
AUG												
27...	<1	<0.1	33	4	400	11	<1	<0.5	30	19	20	<3
JUN 1991												
17...	<1	<0.1	42	11	640	34	9	0.6	20	4	<10	14
JUL												
15...	<1	<0.1	19	9	260	44	9	<0.5	10	8	<10	5
OCT												
21...	<1	0.2	30	5	340	<3	<1	<0.5	30	22	<10	10
JUN 1992												
23...	<1	<0.1	49	9	410	30	2	<0.5	20	5	10	6
JUL												
13...	<1	<0.1	16	9	250	57	<1	<0.5	<10	7	20	4
AUG												
11...	<1	0.1	30	6	450	12	<1	<0.5	10	14	20	5
OCT												
27...	<1	0.1	32	5	360	<3	<1	<0.5	<10	20	<10	7

Table 22. Onsite measurements and selected inorganic data for station 390444106174900, Lake Creek at State Highway 82, below Twin Lakes Reservoir

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 1990									
18...	0930	7.3	56	7.9	4.0	8.9	--	--	--
MAY									
22...	1800	219	54	7.6	12.0	8.1	--	--	--
JUN									
05...	1700	958	61	7.8	12.0	9.8	--	--	--
19...	1700	805	61	7.7	13.5	8.4	--	--	--
JUL									
17...	1600	598	53	7.6	15.5	7.9	--	--	--
AUG									
28...	1420	53	58	7.7	15.0	6.9	--	--	--
OCT									
30...	1420	12	68	8.1	10.0	8.1	--	--	--
MAR 1991									
25...	1705	132	55	8.2	2.0	9.5	--	--	--
APR									
23...	1525	212	52	7.1	4.0	9.8	--	--	--
MAY									
14...	1800	453	48	7.3	6.0	9.7	--	--	--
JUN									
18...	1610	894	54	7.4	12.5	8.9	--	--	--
JUL									
16...	1745	216	52	7.6	15.5	7.1	--	--	--
AUG									
13...	1845	87	59	7.4	15.5	--	--	--	--
OCT									
22...	1650	14	63	7.5	10.5	8.0	--	--	--
DEC									
17...	1030	164	53	7.8	2.5	9.7	23	7.5	1.1
MAR 1992									
23...	1650	132	53	7.5	3.0	10.0	--	--	--
APR									
21...	1320	39	50	7.6	5.5	9.5	--	--	--
MAY									
20...	1945	618	51	7.5	10.0	8.9	--	--	--
JUN									
24...	1900	574	54	7.6	13.0	9.0	--	--	--
JUL									
13...	1910	280	55	7.8	15.0	7.7	--	--	--
AUG									
11...	1610	371	53	7.8	15.0	7.6	--	--	--
26...	1200	106	55	7.5	13.5	7.7	--	--	--
OCT									
27...	1515	14	60	8.0	10.0	8.7	--	--	--
JAN 1993									
12...	0930	122	55	7.7	1.0	10.2	--	--	--
MAR									
22...	1515	357	53	7.4	2.0	10.4	--	--	--

Table 22. Onsite measurements and selected inorganic data for station 390444106174900, Lake Creek at State Highway 82, below Twin Lakes Reservoir--Continued

DATE	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)
APR 1990									
18...	26	0.034	--	<0.010	--	<1	<0.1	2	1
MAY									
22...	30	<0.010	--	<0.010	--	<1	<0.1	2	2
JUN									
05...	24	<0.010	--	0.020	--	<1	<0.1	5	2
19...	29	0.010	--	<0.010	--	<1	0.4	5	2
JUL									
17...	23	0.021	--	<0.010	--	<1	<0.1	4	3
AUG									
28...	28	0.023	--	0.010	--	<1	<0.1	4	2
OCT									
30...	41	0.019	--	0.020	--	<1	<0.1	4	2
MAR 1991									
25...	42	0.025	--	0.025	--	--	--	--	--
APR									
23...	23	0.030	--	0.022	--	<1	<0.1	3	2
MAY									
14...	27	0.009	--	0.018	--	--	--	--	--
JUN									
18...	29	0.014	--	0.015	--	<1	<0.1	6	3
JUL									
16...	16	0.024	--	0.004	--	<1	0.1	6	3
AUG									
13...	34	0.042	--	0.016	--	--	--	--	--
OCT									
22...	48	0.020	--	0.029	--	<1	0.2	4	2
DEC									
17...	29	0.009	--	0.005	--	<1	0.6	--	2
MAR 1992									
23...	31	0.032	--	0.024	--	--	--	--	--
APR									
21...	22	0.016	--	0.009	--	<1	<0.1	2	2
MAY									
20...	30	0.013	--	0.010	--	--	--	--	--
JUN									
24...	40	0.008	--	0.036	--	<1	<0.1	3	3
JUL									
13...	34	0.007	--	0.009	--	--	--	--	--
AUG									
11...	30	0.018	--	0.018	--	<1	<0.1	4	3
26...	22	0.010	--	0.016	--	--	--	--	--
OCT									
27...	42	0.013	--	0.006	--	<1	0.1	2	2
JAN 1993									
12...	37	--	0.013	--	0.020	--	--	--	--
MAR									
22...	14	--	0.013	--	0.007	<1	<0.1	2	2

Table 22. Onsite measurements and selected inorganic data for station 390444106174900, Lake Creek at State Highway 82, below Twin Lakes Reservoir--Continued

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990								
18...	140	6	<1	<0.5	20	7	<10	<3
MAY								
22...	170	8	1	<0.5	30	6	10	<3
JUN								
05...	360	13	4	<0.5	20	4	<10	7
19...	400	9	1	<0.5	20	4	<10	<3
JUL								
17...	140	16	1	<0.5	20	4	<10	6
AUG								
28...	100	19	3	<0.5	20	2	20	8
OCT								
30...	70	7	<1	<0.5	20	9	<10	<3
MAR 1991								
25...	--	--	--	--	--	--	--	--
APR								
23...	80	15	2	<0.5	<10	3	<10	5
MAY								
14...	--	--	--	--	--	--	--	--
JUN								
18...	80	16	24	0.6	20	<1	<10	<3
JUL								
16...	60	21	7	<0.5	10	1	<10	<3
AUG								
13...	--	--	--	--	--	--	--	--
OCT								
22...	40	10	2	1.1	30	10	<10	6
DEC								
17...	60	9	<1	<0.5	10	2	30	<3
MAR 1992								
23...	--	--	--	--	--	--	--	--
APR								
21...	200	15	<1	<0.5	20	8	<10	<3
MAY								
20...	--	--	--	--	--	--	--	--
JUN								
24...	90	14	<1	0.5	10	3	<10	<3
JUL								
13...	--	--	--	--	--	--	--	--
AUG								
11...	140	22	1	<0.5	10	3	40	3
26...	--	--	--	--	--	--	--	--
OCT								
27...	40	11	<1	<0.5	<10	3	<10	<3
JAN 1993								
12...	--	--	--	--	--	--	--	--
MAR								
22...	50	15	<1	<0.5	<10	2	<10	5

Table 23. Onsite measurements and selected inorganic data for station 07086000, Arkansas River at Granite

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 1990										
18...	1030	118	178	8.4	5.0	9.2	82	20	7.9	3.9
MAY										
22...	1920	408	100	7.9	12.5	7.4	41	11	3.3	2.2
JUN										
05...	1810	1720	81	7.6	12.5	7.4	33	8.0	3.1	0.90
19...	1920	1220	88	7.9	14.0	7.1	39	11	2.8	1.5
JUL										
17...	1700	867	81	8.0	16.5	6.8	36	10	2.6	1.6
AUG										
28...	1545	150	162	8.2	16.5	6.8	70	18	6.1	3.4
OCT										
30...	1525	118	185	8.6	8.0	8.5	87	22	7.7	4.5
DEC										
19...	1605	227	155	7.7	1.0	10.0	66	17	5.6	3.5
MAR 1991										
25...	1800	223	112	8.3	3.5	9.5	47	13	3.5	2.5
APR										
23...	1640	313	105	7.7	6.5	8.9	42	12	2.9	2.2
MAY										
14...	1930	748	88	7.6	7.5	8.0	34	9.6	2.5	1.7
JUN										
10...	1520	1500	--	--	--	--	33	9.4	2.3	1.4
18...	1730	1450	82	7.7	13.5	7.5	36	10	2.6	1.4
JUL										
16...	1930	410	109	8.0	15.5	7.1	48	13	3.8	2.1
AUG										
13...	2000	241	148	7.9	--	--	65	17	5.4	2.8
OCT										
22...	1710	94	183	8.5	9.0	8.2	82	21	7.1	4.4
DEC										
17...	1155	229	99	8.2	2.5	9.8	42	12	2.9	2.1
MAR 1992										
23...	1750	207	106	8.4	4.0	9.5	44	12	3.3	2.7
APR										
21...	1245	147	147	8.3	6.0	8.7	59	15	5.3	3.8
MAY										
20...	1820	990	80	8.0	10.5	7.8	34	9.5	2.4	1.7
JUN										
24...	2010	951	102	8.0	14.0	7.3	39	11	2.8	1.6
JUL										
13...	2015	536	117	8.3	15.0	6.8	48	13	3.7	1.9
AUG										
11...	1730	567	100	8.1	15.0	6.8	43	12	3.2	2.0
26...	1315	313	156	8.3	12.5	7.4	71	19	5.8	3.1
OCT										
27...	1630	117	191	8.6	8.0	8.2	83	21	7.3	4.1
JAN 1993										
12...	1030	227	116	8.0	1.0	10.5	48	13	3.7	2.7
MAR										
22...	1630	470	84	8.5	3.5	10.1	34	9.6	2.4	2.1

Table 23. Onsite measurements and selected inorganic data for station 07086000, Arkansas River at Granite--Continued

DATE	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
APR 1990										
18...	45	34	1.5	117	0.055	--	<0.010	--	4	2.0
MAY										
22...	29	19	1.3	60	0.018	--	<0.010	--	2	0.5
JUN										
05...	24	9.2	0.90	48	0.046	--	0.020	--	2	0.5
19...	26	16	<0.10	63	0.014	--	0.010	--	1	0.4
JUL										
17...	26	14	0.20	50	0.013	--	0.010	--	<1	0.2
AUG										
28...	50	26	2.2	86	0.010	--	0.020	--	2	0.5
OCT										
30...	64	29	3.3	115	<0.010	--	0.020	--	<1	0.6
DEC										
19...	47	27	2.8	91	0.100	--	0.070	--	<1	0.5
MAR 1991										
25...	34	17	1.7	72	0.014	--	0.025	--	<1	0.4
APR										
23...	30	17	1.4	55	0.033	--	0.021	--	<1	<0.1
MAY										
14...	24	15	1.0	35	0.017	--	0.024	--	1	0.6
JUN										
10...	23	12	--	--	--	--	--	--	1	0.3
18...	25	11	<0.10	33	0.020	--	0.018	--	<1	0.3
JUL										
16...	34	19	1.5	61	0.018	--	0.011	--	<1	0.6
AUG										
13...	48	25	0.70	89	0.023	--	0.005	--	<1	0.4
OCT										
22...	63	22	2.5	113	0.008	--	0.019	--	<1	0.2
DEC										
17...	32	16	<0.10	62	0.038	--	0.011	--	<1	0.7
MAR 1992										
23...	32	18	1.7	49	0.025	--	0.009	--	<1	0.2
APR										
21...	42	30	1.4	104	0.021	--	0.013	--	<1	0.6
MAY										
20...	23	13	0.50	46	0.024	--	0.009	--	2	0.3
JUN										
24...	29	15	0.50	54	0.013	--	0.002	--	<1	0.2
JUL										
13...	35	16	0.70	64	0.005	--	<0.002	--	<1	0.1
AUG										
11...	31	16	0.60	56	0.018	--	0.013	--	<1	<0.1
26...	48	32	1.6	104	0.044	--	0.030	--	<1	0.5
OCT										
27...	59	31	1.8	122	0.015	--	0.004	--	<1	0.2
JAN 1993										
12...	35	19	1.0	72	--	0.075	--	0.009	<1	0.1
MAR										
22...	27	13	0.70	36	--	0.033	--	<0.002	<1	0.2

Table 23. Onsite measurements and selected inorganic data for station 07086000, Arkansas River at Granite--Continued

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990										
18...	9	5	2200	570	38	6	640	500	940	620
MAY										
22...	6	4	1400	48	37	0.7	280	82	380	96
JUN										
05...	17	5	3300	110	72	14	390	60	370	130
19...	8	3	390	25	8	0.9	40	22	80	55
JUL										
17...	5	4	190	31	2	<0.5	30	20	40	31
AUG										
28...	4	2	180	57	4	<0.5	60	41	150	96
OCT										
30...	5	1	210	74	5	<0.5	80	47	170	120
DEC										
19...	4	2	280	57	4	<0.5	90	70	200	180
MAR 1991										
25...	3	2	150	35	3	<0.5	50	22	110	85
APR										
23...	5	2	250	69	13	<0.5	70	43	100	52
MAY										
14...	17	4	490	77	18	2.4	110	63	160	110
JUN										
10...	8	5	1000	330	19	<0.5	90	80	150	140
18...	7	4	330	46	11	<0.5	60	20	80	58
JUL										
16...	8	2	160	59	8	<0.5	50	33	90	73
AUG										
13...	3	2	220	50	7	0.6	50	35	80	48
OCT										
22...	4	<1	110	39	5	1.5	40	23	80	60
DEC										
17...	--	2	120	21	7	0.9	30	20	130	73
MAR 1992										
23...	<1	2	160	56	<1	<0.5	40	17	50	36
APR										
21...	2	2	490	150	6	0.6	160	120	220	140
MAY										
20...	9	3	790	47	20	<0.5	170	23	200	43
JUN										
24...	75	7	220	45	8	<0.5	40	15	60	41
JUL										
13...	3	2	120	52	3	0.6	30	14	40	24
AUG										
11...	12	2	440	37	15	<0.5	40	12	1000	24
26...	4	2	270	100	7	0.9	80	48	130	96
OCT										
27...	2	1	260	61	4	0.6	40	24	90	55
JAN 1993										
12...	3	2	190	35	6	<0.5	60	19	100	61
MAR										
22...	2	2	370	26	10	<0.5	90	16	80	26

Table 24. Onsite measurements and selected inorganic data for station 07086500, Clear Creek above Clear Creek Reservoir

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
APR 1990												
16...	1420	17	144	8.0	9.5	7.4	--	--	--	91	0.117	<0.010
JUN												
04...	1200	199	80	7.7	8.0	8.5	--	--	--	51	0.103	0.010
AUG												
27...	1615	41	133	7.4	16.5	7.2	--	--	--	69	0.093	<0.010
APR 1991												
22...	1215	11	155	7.7	6.5	9.3	--	--	--	90	0.136	0.013
JUN												
17...	1410	240	76	7.4	10.5	7.8	--	--	--	37	0.105	0.024
JUL												
15...	1205	91	100	7.9	14.0	7.3	--	--	--	68	0.086	0.008
OCT												
21...	1305	15	142	8.0	7.5	8.2	--	--	--	86	0.120	0.015
APR 1992												
20...	1315	16	149	8.0	7.5	8.2	--	--	--	84	0.113	0.007
JUN												
23...	1115	162	81	7.8	10.0	8.0	37	13	1.0	60	0.087	<0.002
AUG												
10...	1200	46	121	8.0	12.0	--	--	--	--	56	0.081	0.005
OCT												
28...	0715	19	143	7.9	4.0	9.0	--	--	--	89	0.140	0.007

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
04...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
27...	--	--	--	--	--	--	--	--	--	--	--	--
APR 1991												
22...	<1	<0.1	2	1	50	33	2	<0.5	<10	9	<10	6
JUN												
17...	<1	0.2	4	2	290	28	3	<0.5	10	3	30	8
JUL												
15...	<1	<0.1	3	1	70	23	11	<0.5	<10	4	<10	<3
OCT												
21...	<1	0.5	3	<1	30	18	4	0.7	20	6	<10	7
APR 1992												
20...	<1	<0.1	<1	<1	60	17	<1	<0.5	10	5	<10	<3
JUN												
23...	<1	<0.1	1	1	100	17	<1	<0.5	<10	3	<10	<3
AUG												
10...	<1	0.2	1	<1	50	24	<1	<0.5	<10	5	50	<3
OCT												
28...	<1	<0.1	<1	<1	<10	13	<1	<0.5	<10	5	<10	<3

Table 25. Onsite measurements and selected inorganic data for station 07087000, Clear Creek below Clear Creek Reservoir

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
APR 1990											
18...	1150	15	134	8.5	5.0	9.0	72	<0.010	<0.010	<1	<0.1
JUN											
05...	1940	304	111	8.0	9.5	8.6	65	<0.010	0.020	<1	<0.1
JUL											
17...	1800	92	83	7.7	12.5	7.5	56	0.014	<0.010	<1	<0.1
AUG											
28...	1530	41	112	8.1	14.5	7.5	54	0.011	<0.010	<1	<0.1
OCT											
30...	1620	28	119	8.3	7.5	8.5	67	<0.010	0.020	<1	<0.1
APR 1991											
24...	0755	18	144	7.8	5.0	9.1	94	0.052	0.016	<1	<0.1
JUN											
18...	1820	218	78	7.3	9.0	8.4	41	0.114	0.016	<1	0.2
JUL											
16...	1920	171	87	7.3	15.5	7.2	44	0.010	0.007	<1	<0.1
OCT											
22...	1815	1.7	145	7.8	9.0	7.5	83	0.030	0.021	<1	0.3
APR 1992											
21...	1500	25	137	8.0	4.5	9.1	82	<0.005	0.014	<1	<0.1
JUN											
24...	2005	124	97	8.1	11.5	7.7	70	0.013	0.009	<1	<0.1
AUG											
11...	1845	40	108	8.0	14.5	7.2	58	0.005	0.007	<1	<0.1
OCT											
28...	0825	19	124	8.2	7.5	8.6	82	0.005	0.008	<1	<0.1

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990										
18...	2	<1	60	<3	1	<0.5	10	5	10	<3
JUN										
05...	5	1	130	19	2	<0.5	10	<1	<10	8
JUL										
17...	1	1	170	55	<1	<0.5	20	7	<10	5
AUG										
28...	3	<1	170	79	4	<0.5	60	15	<10	<3
OCT										
30...	2	<1	40	10	<1	<0.5	<10	4	<10	5
APR 1991										
24...	3	1	70	8	5	<0.5	20	7	10	<3
JUN										
18...	6	4	220	33	4	<0.5	<10	1	<10	9
JUL										
16...	3	<1	100	67	5	<0.5	20	<1	<10	<3
OCT										
22...	3	<1	240	34	6	1.4	80	76	70	62
APR 1992										
21...	<1	<1	120	13	<1	<0.5	40	10	<10	<3
JUN										
24...	<1	<1	70	13	<1	<0.5	10	<1	<10	<3
AUG										
11...	16	<1	90	33	18	<0.5	20	6	1700	<3
OCT										
28...	<1	<1	60	17	<1	<0.5	<10	4	<10	<3

Table 26. Onsite measurements and selected inorganic data for station 390009106135001, Pine Creek at mouth, at Highway 24

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
APR 1990									
18...	1245	--	113	7.9	5.5	9.8	64	--	--
JUN									
06...	1405	84	--	7.6	8.5	8.3	24	--	--
JUL									
17...	1840	27	73	7.8	12.5	7.3	43	0.078	0.020
AUG									
28...	1620	13	99	7.6	13.5	7.4	57	0.105	0.020
OCT									
31...	0800	6.6	96	--	1.5	9.8	63	0.131	0.020
APR 1991									
24...	0835	3.1	117	7.5	1.5	9.8	63	0.130	0.022
JUN									
18...	1830	56	59	7.3	9.5	8.0	22	0.091	0.023
JUL									
17...	1010	19	77	7.9	10.0	7.9	34	0.051	0.014
OCT									
22...	1845	3.5	109	8.0	5.5	9.0	66	0.069	0.047
APR 1992									
21...	1500	2.0	113	8.1	8.5	7.8	60	0.086	0.012
JUN									
25...	1030	32	66	8.0	9.5	8.0	32	0.053	0.010
AUG									
11...	1915	15	88	8.0	11.5	7.6	70	0.050	0.010
OCT									
28...	0815	5.9	107	8.1	3.0	9.7	69	0.084	0.009

Table 27. Onsite measurements and bacteriological and selected inorganic data for station 07087200, Arkansas River at Buena Vista

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 1990												
18...	1530	171	176	8.3	9.0	8.8	--	<2	350	80	21	6.8
MAY												
23...	0900	519	108	7.9	9.5	8.5	--	K7	K37	45	13	3.1
JUN												
06...	1100	2240	89	7.6	11.0	8.4	1300	K20	130	37	11	2.3
20...	1240	1690	88	7.8	12.5	8.7	410	<2	K6	38	11	2.5
JUL												
18...	1110	970	90	7.8	15.0	7.6	170	K2	56	37	11	2.4
AUG												
29...	0820	227	143	7.8	12.5	7.8	K3	<1	22	55	15	4.3
OCT												
31...	1000	167	168	8.3	5.0	9.9	--	--	--	80	22	6.1
DEC												
20...	0900	219	159	7.7	0.0	10.0	220	<1	23	71	19	5.7
JAN 1991												
16...	1310	517	100	8.3	0.0	--	<2	<1	E4	45	13	3.1
MAR												
26...	0830	252	133	7.9	2.5	10.0	--	<1	E9	49	14	3.3
APR												
24...	0945	E378	110	7.5	4.5	9.7	230	<1	E2	46	13	3.2
MAY												
15...	1130	868	99	7.2	7.5	8.7	420	<2	E9	38	11	2.5
30...	0810	1420	85	--	--	--	--	--	--	--	--	--
JUN												
19...	0830	1780	86	7.6	11.5	8.3	510	E4	E11	38	11	2.5
JUL												
17...	0730	648	105	7.9	13.0	7.7	E19	E6	E15	48	14	3.2
AUG												
14...	0800	423	133	7.7	13.0	--	E22	E3	E22	59	17	4.0
SEP												
03...	1045	213	146	8.1	14.0	8.0	--	--	--	--	--	--
OCT												
23...	0825	114	172	8.2	5.0	9.4	<5	--	E1	78	21	6.1
DEC												
17...	1320	254	105	7.7	0.5	10.5	55	E13	<1	45	13	3.0
MAR 1992												
24...	0830	219	113	8.0	2.0	10.5	--	--	--	46	13	3.3
APR												
22...	0815	192	146	8.0	6.0	8.8	220	E1	<1	64	18	4.7
MAY												
21...	0840	1210	83	7.8	10.0	7.7	E2	E7	24	37	11	2.4
JUN												
25...	1020	1250	97	7.9	12.5	8.2	E8	E11	30	42	12	2.8
JUL												
14...	0715	634	111	7.9	12.0	7.9	E5	E6	E14	46	13	3.2
AUG												
12...	0830	595	105	8.0	13.0	8.0	E11	E3	E16	45	13	3.1
25...	1745	462	128	8.0	13.0	7.8	E19	26	38	59	17	4.0
OCT												
28...	0950	154	173	8.3	7.0	9.2	E8	E3	E9	76	21	5.7
JAN 1993												
12...	1200	229	120	8.0	0.0	11.4	41	<1	72	47	13	3.5
MAR												
23...	0730	450	90	7.8	0.5	10.9	130	E2	--	35	10	2.4

Table 27. Onsite measurements and bacteriological and selected inorganic data for station 07087200, Arkansas River at Buena Vista--Continued

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
APR 1990											
18...	4.1	51	31	1.3	111	0.051	--	<0.010	--	--	--
MAY											
23...	2.5	32	18	1.3	65	0.018	--	<0.010	--	--	--
JUN											
06...	1.5	25	15	0.30	41	0.035	--	0.030	--	--	--
20...	1.5	27	17	1.6	43	0.032	--	<0.010	--	--	--
JUL											
18...	1.7	29	13	0.40	54	0.020	--	0.010	--	--	--
AUG											
29...	3.2	47	22	2.2	87	0.064	--	<0.010	--	<1	<1
OCT											
31...	4.2	59	23	2.3	102	0.033	--	0.020	--	--	--
DEC											
20...	3.8	43	28	8.2	96	0.146	--	0.016	--	--	--
JAN 1991											
16...	2.3	33	15	3.7	59	0.058	--	0.013	--	--	--
MAR											
26...	2.6	38	17	4.7	71	0.015	--	0.022	--	--	--
APR											
24...	2.4	34	18	1.5	65	0.035	--	0.018	--	--	--
MAY											
15...	1.9	27	14	0.60	57	0.026	--	0.012	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
19...	1.4	26	11	<0.10	44	0.036	--	0.013	--	<1	<1
JUL											
17...	2.0	35	17	1.4	68	0.040	--	0.005	--	--	--
AUG											
14...	2.6	45	22	0.50	90	0.050	--	<0.002	--	--	--
SEP											
03...	--	--	--	--	--	--	--	--	--	<1	<1
OCT											
23...	4.2	63	26	2.1	102	0.044	--	0.020	--	--	--
DEC											
17...	2.5	36	16	1.1	85	0.055	--	0.006	--	--	--
MAR 1992											
24...	2.9	36	18	1.3	62	0.020	--	0.010	--	--	--
APR											
22...	3.6	44	27	1.2	68	0.021	--	0.010	--	--	--
MAY											
21...	1.7	26	14	0.40	50	0.036	--	0.006	--	--	--
JUN											
25...	1.7	31	20	0.60	56	0.040	--	0.002	--	<1	<1
JUL											
14...	2.0	36	16	0.90	58	0.020	--	<0.002	--	--	--
AUG											
12...	2.2	35	15	1.3	66	0.026	--	0.003	--	<1	<1
25...	2.7	41	20	1.4	64	0.042	--	0.034	--	--	--
OCT											
28...	4.2	57	27	1.6	98	0.045	--	0.012	--	--	--
JAN 1993											
12...	2.8	38	18	0.90	73	--	0.094	--	0.011	--	--
MAR											
23...	2.2	28	13	0.70	34	--	0.040	--	0.002	--	--

Table 27. Onsite measurements and bacteriological and selected inorganic data for station 07087200, Arkansas River at Buena Vista--Continued

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
APR 1990											
18...	2	0.8	--	--	6	3	730	180	13	1.7	200
MAY											
23...	3	0.4	--	--	8	4	2000	28	42	<0.5	410
JUN											
06...	5	0.3	--	--	31	3	6900	46	110	0.9	750
20...	<1	0.4	--	--	14	4	440	20	23	6.8	50
JUL											
18...	<1	0.3	--	--	4	3	190	34	2	<0.5	40
AUG											
29...	<1	0.3	<1	<1	4	3	110	31	1	<0.5	30
OCT											
31...	<1	0.5	--	--	3	1	80	39	1	<0.5	20
DEC											
20...	<1	0.5	--	--	4	2	70	36	2	<0.5	30
JAN 1991											
16...	<1	0.2	--	--	7	1	590	18	9	<0.5	130
MAR											
26...	<1	0.4	--	--	4	3	70	24	1	<0.5	20
APR											
24...	<1	0.7	--	--	3	2	190	56	5	<0.5	40
MAY											
15...	2	0.7	--	--	21	13	870	88	43	2	160
30...	--	--	--	--	--	--	2300	50	--	--	--
JUN											
19...	<1	0.3	<1	<1	64	32	350	40	17	0.6	60
JUL											
17...	<1	0.3	--	--	4	2	160	50	24	<0.5	30
AUG											
14...	<1	0.3	--	--	3	1	200	41	5	<0.5	30
SEP											
03...	--	--	<1	<1	--	--	--	--	--	--	--
OCT											
23...	<1	0.4	--	--	6	<1	60	26	29	<0.5	20
DEC											
17...	<1	1.2	--	--	--	2	150	21	2	0.7	40
MAR 1992											
24...	<1	0.3	--	--	<1	2	80	23	<1	<0.5	50
APR											
22...	<1	0.5	--	--	<1	2	210	90	2	0.8	70
MAY											
21...	1	0.3	--	--	9	4	1300	41	28	<0.5	300
JUN											
25...	<1	0.3	<1	<1	31	17	300	55	7	0.6	50
JUL											
14...	<1	0.1	--	--	2	2	120	41	2	0.6	20
AUG											
12...	<1	0.2	<1	<1	3	2	160	32	2	0.7	30
25...	<1	0.3	--	--	3	3	440	98	13	1.3	80
OCT											
28...	<1	0.2	--	--	<1	<1	120	38	<1	<0.5	<10
JAN 1993											
12...	<1	0.1	--	--	2	2	120	23	2	<0.5	40
MAR											
23...	<1	0.3	--	--	1	2	170	26	4	<0.5	50

Table 27. Onsite measurements and bacteriological and selected inorganic data for station 07087200, Arkansas River at Buena Vista--Continued

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990											
18...	130	--	--	--	--	--	--	--	--	350	200
MAY											
23...	70	--	--	--	--	--	--	--	--	580	130
JUN											
06...	28	--	--	--	--	--	--	--	--	840	86
20...	14	--	--	--	--	--	--	--	--	110	66
JUL											
18...	15	--	--	--	--	--	--	--	--	80	53
AUG											
29...	11	<0.10	<0.1	2	<1	<1	<1	<1	<1.0	100	83
OCT											
31...	16	--	--	--	--	--	--	--	--	130	120
DEC											
20...	25	--	--	--	--	--	--	--	--	190	190
JAN 1991											
16...	7	--	--	--	--	--	--	--	--	170	72
MAR											
26...	18	--	--	--	--	--	--	--	--	120	110
APR											
24...	32	--	--	--	--	--	--	--	--	130	110
MAY											
15...	67	--	--	--	--	--	--	--	--	250	150
30...	--	--	--	--	--	--	--	--	--	140	60
JUN											
19...	11	<0.10	<0.1	5	3	<1	<1	<1	<1.0	90	64
JUL											
17...	11	--	--	--	--	--	--	--	--	60	62
AUG											
14...	12	--	--	--	--	--	--	--	--	60	51
SEP											
03...	--	<0.10	<0.1	<1	<1	<1	<1	<1	<1.0	--	--
OCT											
23...	10	--	--	--	--	--	--	--	--	130	120
DEC											
17...	14	--	--	--	--	--	--	--	--	130	85
MAR 1992											
24...	13	--	--	--	--	--	--	--	--	90	59
APR											
22...	63	--	--	--	--	--	--	--	--	160	130
MAY											
21...	23	--	--	--	--	--	--	--	--	240	58
JUN											
25...	13	<0.10	<0.1	<1	<1	<1	<1	<1	<1.0	80	50
JUL											
14...	7	--	--	--	--	--	--	--	--	40	30
AUG											
12...	7	<0.10	<0.1	<1	<1	<1	<1	<1	<1.0	60	38
25...	27	--	--	--	--	--	--	--	--	140	85
OCT											
28...	8	--	--	--	--	--	--	--	--	70	69
JAN 1993											
12...	9	--	--	--	--	--	--	--	--	90	64
MAR											
23...	12	--	--	--	--	--	--	--	--	70	51

Table 28. Onsite measurements and selected inorganic data for station 07089520, Cottonwood Creek at Buena Vista

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
APR 1990											
18...	1710	2.0	140	7.6	10.0	8.9	81	0.073	<0.010	<1	<0.1
JUN											
06...	1040	--	64	7.6	7.0	9.1	48	0.063	0.020	<1	0.2
JUL											
18...	1100	17	--	8.1	13.0	8.2	65	0.061	<0.010	<1	<0.1
AUG											
29...	0815	6.0	140	7.5	11.5	7.8	77	0.135	<0.010	<1	<0.1
OCT											
31...	1100	25	117	8.2	5.0	9.5	84	0.109	0.020	<1	<0.1
APR 1991											
24...	1100	0.95	140	7.3	9.5	9.3	90	0.141	0.018	<1	<0.1
JUN											
11...	0830	--	--	--	--	--	68	--	--	<1	0.4
19...	0830	41	81	7.7	9.0	8.6	27	0.062	0.022	<1	<0.1
JUL											
17...	0800	1.1	147	7.4	10.5	6.9	79	0.321	0.009	<1	<0.1
OCT											
23...	1000	5.6	136	7.9	7.0	9.2	85	0.103	0.017	<1	<0.1
APR 1992											
22...	1025	13	139	8.1	7.0	8.7	78	0.090	0.016	<1	<0.1
JUN											
25...	1145	18	100	8.1	12.5	7.7	70	0.056	0.010	<1	<0.1
AUG											
12...	0910	4.4	132	7.8	11.5	8.1	86	0.113	0.010	<1	<0.1
OCT											
28...	1120	25	139	8.1	7.5	9.1	88	0.074	0.013	<1	<0.1

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990										
18...	3	1	80	20	1	<0.5	<10	3	10	3
JUN										
06...	5	1	1500	68	5	0.7	60	5	<10	6
JUL										
18...	2	1	150	71	8	<0.5	10	7	30	35
AUG										
29...	1	<1	140	81	<1	<0.5	20	6	10	4
OCT										
31...	2	<1	130	59	<1	<0.5	<10	3	<10	7
APR 1991										
24...	1	1	90	46	2	<0.5	<10	5	<10	4
JUN										
11...	18	3	620	70	3	<0.5	10	6	<10	12
19...	2	2	180	57	2	<0.5	10	1	<10	<3
JUL										
17...	3	<1	10	42	3	0.5	10	7	<10	<3
OCT										
23...	3	<1	80	49	2	<0.5	10	3	<10	<3
APR 1992										
22...	1	<1	550	39	2	<0.5	30	7	20	5
JUN										
25...	<1	<1	160	65	<1	<0.5	<10	4	<10	<3
AUG										
12...	11	<1	140	69	5	<0.5	<10	4	1000	<3
OCT										
28...	<1	<1	100	61	<1	0.5	<10	4	<10	<3

Table 29. Onsite measurements and selected inorganic data for station 384427106040101, Chalk Creek at mouth, at Nathrop

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
APR 1990											
19...	1015	2.9	237	8.4	7.5	9.3	139	0.055	<0.010	<1	<0.1
JUN											
06...	0800	150	--	7.5	6.0	9.1	42	0.066	0.120	2	0.3
JUL											
18...	0810	69	123	7.7	12.5	8.6	82	0.089	0.010	<1	<0.1
AUG											
29...	0930	34	169	7.9	13.0	7.9	87	0.129	<0.010	<1	<0.1
OCT											
31...	1225	30	156	8.1	10.5	8.4	93	0.097	0.030	<1	0.1
APR 1991											
24...	1245	3.9	235	8.5	14.0	8.2	135	0.024	0.012	<1	<0.1
JUN											
11...	1200	--	--	--	--	--	52	--	--	<1	0.7
19...	1045	173	81	7.5	10.0	8.4	45	0.059	0.029	<1	0.5
JUL											
17...	1300	59	125	8.1	17.0	7.1	70	0.062	0.006	<1	0.2
OCT											
23...	1240	13	182	8.3	10.0	8.4	115	0.096	0.018	<1	<0.1
APR 1992											
22...	1255	2.7	224	8.6	11.5	8.2	148	0.047	0.019	<1	<0.1
JUN											
25...	0805	133	99	7.8	10.5	8.1	62	0.079	0.046	<1	0.1
AUG											
12...	1000	46	145	8.1	12.5	8.1	78	0.085	0.009	<1	0.1
OCT											
28...	1220	23	177	8.4	11.0	8.4	113	0.081	0.010	<1	0.1

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990										
19...	3	1	320	71	2	<0.5	60	27	20	7
JUN										
06...	35	5	12000	85	<1	3.1	620	21	360	45
JUL										
18...	3	2	200	58	3	0.8	30	20	60	50
AUG										
29...	2	<1	220	78	3	1.0	40	27	40	24
OCT										
31...	3	1	260	97	3	1.4	40	23	40	33
APR 1991										
24...	2	2	170	79	3	<0.5	20	12	20	7
JUN										
11...	6	4	1600	82	19	1.7	80	16	130	74
19...	6	4	690	60	14	1.2	60	13	90	76
JUL										
17...	3	1	120	65	7	0.8	20	12	30	44
OCT										
23...	2	<1	150	110	1	0.5	20	18	<10	14
APR 1992										
22...	1	<1	210	100	1	<0.5	40	24	20	6
JUN										
25...	2	2	270	44	4	<0.5	30	12	70	63
AUG										
12...	2	<1	380	83	5	0.6	50	22	80	30
OCT										
28...	<1	<1	160	97	<1	0.7	<10	11	<10	7

Table 30. Onsite measurements and bacteriological and selected inorganic data for station 07091200, Arkansas River near Nathrop

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 1990												
19...	0800	247	191	8.3	6.0	9.4	--	48	110	85	23	6.7
MAY												
23...	1210	615	125	8.0	12.5	8.2	--	K40	130	51	15	3.4
JUN												
06...	0830	2600	91	7.7	10.0	8.9	K1900	K48	260	37	11	2.2
20...	0925	1820	92	7.8	11.5	8.4	450	K12	82	40	12	2.5
JUL												
18...	0830	1060	108	7.8	14.0	7.8	>270	K14	K150	44	13	2.9
AUG												
29...	1040	373	184	8.1	13.0	7.9	K6	K10	30	82	24	5.3
OCT												
31...	1355	328	189	--	7.0	9.4	--	--	--	88	26	5.7
JAN 1991												
16...	1530	433	126	8.0	1.0	10.6	<3	<1	2	57	17	3.5
MAR												
26...	1030	343	157	8.6	4.5	9.7	--	<2	E8	61	18	3.9
APR												
24...	1420	441	130	7.7	9.0	8.7	E16	<1	E4	54	16	3.5
MAY												
15...	0830	988	113	7.7	7.5	8.8	400	E10	40	44	13	2.8
JUN												
11...	1300	2200	--	--	--	--	--	--	--	--	--	--
11...	1540	2180	--	--	--	--	--	--	--	--	--	--
19...	1315	2020	93	7.8	12.5	8.3	600	E19	E29	40	12	2.4
JUL												
17...	1530	771	126	8.3	18.0	7.0	96	E3	E16	57	17	3.5
AUG												
14...	1515	511	162	8.4	18.0	--	E4	E2	28	70	21	4.2
OCT												
23...	0730	208	218	8.3	7.0	9.1	E11	--	E11	97	28	6.5
MAR 1992												
24...	1030	311	136	8.1	3.5	11.0	--	--	--	57	17	3.5
APR												
22...	0815	244	171	8.1	10.0	9.2	E6	E3	E9	76	22	5.2
MAY												
21...	0800	1290	92	7.9	10.5	8.5	E43	E37	95	39	12	2.3
JUN												
25...	0800	1240	104	7.9	12.5	8.3	E41	E17	61	46	14	2.7
JUL												
14...	1120	733	130	8.2	13.5	8.2	E18	E4	31	57	17	3.6
AUG												
12...	1110	701	131	8.1	14.0	8.0	E18	E16	45	57	17	3.5
25...	1450	844	155	8.1	13.0	8.1	100	89	230	68	20	4.5
OCT												
28...	1330	283	202	8.6	8.5	9.4	E7	E3	E7	88	25	6.1
JAN 1993												
12...	1400	--	157	8.2	0.0	11.1	E4	<1	<1	62	18	4.1
MAR												
23...	0910	562	112	8.1	3.5	10.1	56	E2	--	44	13	2.8

Table 30. Onsite measurements and bacteriological and selected inorganic data for station 07091200, Arkansas River near Nathrop--Continued

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
APR 1990											
19...	5.7	66	26	3.7	125	0.089	--	<0.010	--	0.011	1
MAY											
23...	3.5	41	19	1.5	74	0.052	--	<0.010	--	0.036	3
JUN											
06...	1.8	28	13	0.30	55	0.051	--	0.020	--	0.016	3
20...	2.0	31	9.6	0.30	52	0.047	--	<0.010	--	0.016	1
JUL											
18...	2.7	38	14	0.40	66	0.059	--	<0.010	--	0.007	<1
AUG											
29...	5.5	70	19	2.1	105	0.146	--	0.010	--	0.007	1
OCT											
31...	6.5	77	21	2.7	114	0.121	--	0.020	--	0.008	<1
JAN 1991											
16...	4.0	47	14	1.3	61	0.119	--	0.008	--	0.006	<1
MAR											
26...	4.1	52	18	4.7	86	0.073	--	0.030	--	0.003	<1
APR											
24...	3.6	45	17	1.7	68	0.052	--	0.021	--	0.005	<1
MAY											
15...	2.5	34	14	1.2	58	0.041	--	0.023	--	0.013	4
JUN											
11...	--	--	--	--	--	--	--	--	--	--	2
11...	--	--	--	--	--	--	--	--	--	--	2
19...	1.9	30	9.4	0.20	49	0.045	--	0.017	--	0.019	<1
JUL											
17...	3.3	47	17	2.0	80	0.049	--	0.014	--	0.016	<1
AUG											
14...	4.3	61	20	0.60	102	0.085	--	0.005	--	0.010	<1
OCT											
23...	7.2	89	22	2.6	131	0.163	--	0.027	--	0.008	<1
MAR 1992											
24...	4.5	50	16	1.6	76	0.060	--	0.023	--	0.009	<1
APR											
22...	5.0	60	23	1.1	94	0.051	--	0.010	--	0.007	<1
MAY											
21...	2.3	29	13	0.50	64	0.057	--	0.018	--	0.051	2
JUN											
25...	2.4	36	14	0.70	68	0.044	--	<0.002	--	0.007	<1
JUL											
14...	3.1	47	16	0.80	76	0.041	--	<0.002	--	0.004	<1
AUG											
12...	3.9	47	16	1.3	88	0.076	--	0.017	--	0.013	<1
25...	4.2	54	21	1.7	82	0.091	--	0.024	--	0.013	1
OCT											
28...	6.5	78	22	1.8	113	0.135	--	0.010	--	0.005	<1
JAN 1993											
12...	5.0	57	18	1.2	91	--	0.161	--	0.016	--	<1
MAR											
23...	3.6	40	14	0.90	44	--	0.052	--	<0.002	0.006	<1

Table 30. Onsite measurements and bacteriological and selected inorganic data for station 07091200, Arkansas River near Nathrop--Continued

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990											
19...	0.6	4	2	540	130	6	1.1	100	73	270	190
MAY											
23...	0.1	8	2	3000	33	50	0.7	480	60	670	72
JUN											
06...	0.2	25	4	7300	38	85	2.5	580	23	520	65
20...	0.5	23	19	820	20	54	26	60	11	120	62
JUL											
18...	0.2	26	7	290	28	28	15	30	9	60	40
AUG											
29...	0.3	3	2	130	34	2	0.9	30	15	70	51
OCT											
31...	0.2	4	1	100	33	4	<0.5	20	10	70	54
JAN 1991											
16...	0.1	4	1	350	15	6	<0.5	60	7	100	54
MAR											
26...	0.2	3	2	90	27	2	<0.5	20	12	60	59
APR											
24...	0.3	3	2	170	48	4	0.5	40	23	90	74
MAY											
15...	0.4	11	2	1900	67	80	2.8	200	36	280	91
JUN											
11...	0.9	21	3	3000	30	44	1.2	240	<10	320	40
11...	0.6	13	4	2000	50	52	1.2	220	20	210	60
19...	0.3	60	49	480	40	18	<0.5	60	10	80	52
JUL											
17...	0.2	4	2	160	41	8	<0.5	20	8	40	28
AUG											
14...	0.2	4	1	260	42	4	1.1	20	10	50	29
OCT											
23...	0.1	11	<1	60	23	10	<0.5	20	8	70	48
MAR 1992											
24...	0.2	<1	2	120	23	<1	<0.5	70	11	50	37
APR											
22...	0.3	2	1	230	71	2	<0.5	70	48	130	100
MAY											
21...	0.2	<1	2	1900	53	43	0.8	330	20	310	49
JUN											
25...	0.2	50	41	460	32	8	<0.5	50	7	80	35
JUL											
14...	0.1	2	2	130	37	2	<0.5	20	7	50	23
AUG											
12...	<0.1	8	2	370	32	5	0.6	30	6	240	26
25...	0.3	10	3	1000	120	25	2	120	18	170	29
OCT											
28...	<0.1	<1	<1	70	34	<1	0.6	<10	7	30	28
JAN 1993											
12...	<0.1	2	1	120	21	2	<0.5	30	7	70	43
MAR											
23...	0.1	1	<1	150	23	3	<0.5	30	9	40	30

Table 31. Onsite measurements and bacteriological and selected inorganic data for station 07091500, Arkansas River at Salida

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
APR 1990								
19...	1200	205	203	8.3	10.0	9.1	--	E1
MAY								
23...	1430	515	140	8.1	16.0	7.5	--	K20
JUN								
06...	1525	2410	93	7.7	13.5	8.2	K60	K13
20...	1530	1260	101	7.7	15.5	8.2	<10	<2
JUL								
18...	1430	1040	118	8.0	18.0	7.5	>200	22
AUG								
29...	1300	323	211	8.0	18.0	7.4	K2	K7
OCT								
31...	1505	359	212	--	9.0	9.1	--	--
DEC								
20...	1100	283	226	--	0.0	10.1	E46	E1
MAR 1991								
26...	1245	317	162	8.2	8.0	9.0	--	<1
APR								
24...	1600	391	142	8.0	11.0	8.5	E5	E1
MAY								
15...	1400	886	121	7.7	12.0	7.9	26	E9
JUN								
19...	1645	1810	98	7.9	14.0	8.0	--	--
JUL								
17...	1925	655	139	8.3	19.0	7.1	E18	E12
AUG								
14...	1945	493	186	8.1	17.0	--	--	--
OCT								
23...	1010	225	242	8.3	8.5	9.1	E17	--
DEC								
17...	1515	442	162	8.3	1.5	10.6	E4	E7
MAR 1992								
24...	1200	351	156	8.4	7.0	9.6	--	--
APR								
22...	1015	225	180	8.2	8.5	8.9	E8	E3
MAY								
21...	1000	1160	97	7.8	12.0	8.3	E30	83
JUN								
25...	1215	1240	110	8.0	14.5	8.1	<2	E3
JUL								
14...	1730	702	141	8.3	17.0	7.2	--	E21
AUG								
12...	1230	655	139	8.2	16.5	7.6	E8	E10
25...	1300	905	162	8.3	13.0	8.4	--	160
OCT								
28...	1500	282	218	8.6	10.0	8.8	E3	E3
JAN 1993								
12...	1530	322	167	8.3	0.0	11.3	E6	E2
MAR								
23...	1030	570	110	8.1	6.0	10.4	--	E1

Table 31. Onsite measurements and bacteriological and selected inorganic data for station 07091500, Arkansas River at Salida--Continued

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SOLIDS, RESIDUE AT 180 DEG C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)
APR 1990							
19...	57	123	0.048	--	<0.010	--	0.013
MAY							
23...	280	90	0.080	--	0.040	--	0.144
JUN							
06...	190	52	0.059	--	0.030	--	0.028
20...	K38	52	0.047	--	<0.010	--	0.008
JUL							
18...	110	74	0.060	--	0.020	--	0.004
AUG							
29...	K9	129	0.129	--	0.020	--	0.012
OCT							
31...	--	132	0.109	--	--	--	0.014
DEC							
20...	E35	147	0.257	--	0.021	--	0.015
MAR 1991							
26...	E11	85	0.063	--	0.048	--	0.006
APR							
24...	E10	83	0.045	--	0.039	--	0.009
MAY							
15...	43	67	0.035	--	0.023	--	0.014
JUN							
19...	--	45	0.047	--	0.020	--	0.037
JUL							
17...	35	79	0.035	--	0.009	--	0.012
AUG							
14...	--	100	0.098	--	0.011	--	0.017
OCT							
23...	E13	147	0.133	--	0.029	--	0.009
DEC							
17...	E5	100	0.129	--	0.012	--	0.033
MAR 1992							
24...	--	94	0.029	--	0.030	--	0.018
APR							
22...	E10	101	0.026	--	0.010	--	0.009
MAY							
21...	140	50	0.059	--	0.027	--	0.024
JUN							
25...	33	62	0.039	--	0.003	--	0.006
JUL							
14...	48	89	0.024	--	0.022	--	0.009
AUG							
12...	E18	90	0.074	--	0.015	--	0.006
25...	E360	86	0.092	--	0.027	--	0.031
OCT							
28...	E11	133	0.111	--	0.012	--	0.006
JAN 1993							
12...	E5	95	--	0.168	--	0.007	0.009
MAR							
23...	--	64	--	0.024	--	<0.002	0.011

Table 32. Onsite measurements and selected inorganic data for station 07093500, South Arkansas River near Salida

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
APR 1990											
19...	1320	5.1	391	8.3	10.0	8.2	233	0.072	<0.010	<1	<0.1
JUN											
06...	1605	118	--	--	15.0	7.7	104	0.123	0.040	<1	<0.1
JUL											
18...	1250	5.2	408	8.7	20.5	6.5	220	0.033	<0.010	<1	<0.1
AUG											
29...	1115	5.8	433	8.0	16.5	10.4	271	0.184	<0.010	<1	<0.1
OCT											
31...	1600	29	331	8.6	11.0	8.3	198	0.019	0.020	<1	0.1
APR 1991											
24...	1730	2.9	449	8.2	14.0	9.2	260	0.461	0.036	<1	<0.1
JUN											
19...	1700	33	267	7.9	15.0	8.0	147	0.062	0.017	<1	0.1
JUL											
17...	2025	5.1	445	7.7	19.0	--	241	0.282	0.014	<1	0.2
OCT											
23...	1300	11	420	8.5	12.5	10.0	252	0.053	0.018	<1	<0.1
APR 1992											
22...	1300	11	337	8.7	9.5	10.5	184	0.075	0.014	<1	<0.1
JUN											
25...	1335	46	245	8.4	16.0	7.4	148	0.047	0.022	<1	<0.1
AUG											
12...	1340	9.7	392	8.2	18.0	8.1	236	0.181	0.032	<1	0.1
OCT											
28...	1555	19	400	8.6	10.5	8.5	217	0.087	0.022	<1	<0.1

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990										
19...	3	1	290	14	1	<0.5	40	18	20	5
JUN										
06...	15	2	12000	58	12	0.9	360	12	50	3
JUL										
18...	2	2	110	36	<1	<0.5	10	6	<10	4
AUG										
29...	2	1	120	33	2	<0.5	30	10	<10	6
OCT										
31...	1	1	220	59	<1	<0.5	20	8	<10	4
APR 1991										
24...	3	2	130	49	2	<0.5	30	26	<10	9
JUN										
19...	6	2	480	68	3	<0.5	40	15	80	<3
JUL										
17...	3	1	140	61	7	0.5	40	20	<10	5
OCT										
23...	3	<1	120	36	2	<0.5	30	10	<10	4
APR 1992										
22...	1	<1	190	34	<1	<0.5	30	9	<10	<3
JUN										
25...	2	1	570	62	<1	<0.5	40	10	<10	<3
AUG										
12...	2	1	320	44	<1	<0.5	50	12	<10	<3
OCT										
28...	<1	<1	100	44	<1	<0.5	<10	8	<10	<3

Table 33. Onsite measurements and bacteriological and selected inorganic data for station 07093700, Arkansas River near Wellsville

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 1990												
19...	1430	250	230	8.3	9.5	8.7	--	K15	68	110	31	7.5
MAY												
23...	1630	585	162	8.1	17.0	7.2	--	48	370	71	21	4.5
JUN												
06...	1700	2620	103	7.9	14.0	8.2	K180	K27	280	43	13	2.5
20...	1730	1690	105	7.9	16.5	8.0	<10	K4	96	46	14	2.8
JUL												
18...	1550	1160	131	8.1	18.0	7.2	72	K2	34	59	18	3.4
AUG												
29...	1400	404	236	8.2	19.0	7.2	<3	K3	60	100	31	6.1
NOV												
01...	0745	421	241	8.5	6.5	9.5	--	--	--	110	33	6.8
JAN 1991												
17...	0900	498	172	8.0	0.0	11.0	51	<1	10	76	23	4.6
MAR												
26...	1405	372	196	8.5	8.5	8.7	--	<1	21	77	23	4.7
APR												
25...	0745	405	168	7.8	7.0	9.0	47	25	73	69	21	4.1
MAY												
15...	1620	1030	132	7.7	13.5	8.0	E110	E6	80	53	16	3.1
JUN												
12...	0545	2290	--	--	--	--	--	--	--	--	--	--
19...	1845	1930	108	8.0	14.0	7.9	190	E4	78	46	14	2.6
JUL												
17...	2015	728	154	8.4	19.5	6.8	>330	E20	45	71	21	4.4
AUG												
15...	0615	547	206	7.9	15.0	--	E35	21	E120	91	28	5.0
SEP												
03...	1340	347	239	8.6	18.5	8.3	--	--	--	--	--	--
OCT												
23...	1420	270	266	8.8	10.5	9.5	E8	--	E5	130	38	7.5
DEC												
18...	0900	500	194	8.1	0.0	11.2	E33	E6	46	87	26	5.3
MAR 1992												
24...	1315	397	175	8.9	7.5	10.7	--	--	--	74	22	4.6
APR												
22...	1520	270	202	8.8	11.0	8.8	E1	E2	E10	92	27	5.9
MAY												
21...	1200	1400	101	8.0	12.0	8.1	56	92	150	46	14	2.8
JUN												
25...	1430	1330	127	8.3	15.5	7.6	E30	E4	90	56	17	3.3
JUL												
14...	2000	784	160	8.3	17.5	7.8	--	32	85	73	22	4.3
AUG												
12...	1450	742	163	8.4	17.5	7.4	E140	40	93	70	21	4.3
25...	1020	1180	178	8.2	11.0	8.6	--	E470	>560	81	24	5.1
OCT												
28...	1620	378	256	8.7	10.0	8.9	--	E6	39	110	34	7.1
JAN 1993												
12...	1640	408	195	8.3	0.0	11.0	150	<1	E4	81	24	5.0
MAR												
23...	1200	638	134	8.4	6.0	10.1	--	E2	--	53	16	3.2

Table 33. Onsite measurements and bacteriological and selected inorganic data for station 07093700, Arkansas River near Wellsville--Continued

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
APR 1990												
19...	7.6	85	26	2.8	139	0.133	--	0.030	--	0.011	--	--
MAY												
23...	5.1	59	21	2.2	99	0.129	--	0.010	--	--	--	--
JUN												
06...	2.3	33	13	0.40	64	0.069	--	0.030	--	0.023	--	--
20...	2.5	37	12	1.2	--	0.059	--	<0.010	--	0.006	--	--
JUL												
18...	3.5	50	14	0.70	77	0.060	--	0.020	--	0.012	--	--
AUG												
29...	7.4	94	18	2.9	132	0.193	--	0.020	--	0.032	<1	<1
NOV												
01...	8.2	103	20	4.5	146	0.139	--	0.030	--	0.015	--	--
JAN 1991												
17...	5.6	67	15	2.0	96	0.188	--	0.030	--	0.026	--	--
MAR												
26...	5.5	73	19	3.7	102	0.109	--	0.044	--	0.032	--	--
APR												
25...	4.7	61	17	2.1	93	0.075	--	0.021	--	0.026	--	--
MAY												
15...	3.5	44	18	1.4	68	0.052	--	0.027	--	0.020	--	--
JUN												
12...	--	--	--	--	--	--	--	--	--	--	--	--
19...	2.4	37	10	0.20	57	0.069	--	0.027	--	0.014	<1	<1
JUL												
17...	4.2	61	17	0.50	86	0.069	--	0.018	--	0.022	--	--
AUG												
15...	6.0	85	20	2.2	125	0.155	--	0.016	--	0.018	--	--
SEP												
03...	--	--	--	--	--	--	--	--	--	--	<1	<1
OCT												
23...	9.1	121	22	2.9	163	0.186	--	0.035	--	0.035	--	--
DEC												
18...	6.5	81	14	1.4	121	0.182	--	0.028	--	0.023	--	--
MAR 1992												
24...	6.0	70	18	2.1	111	0.053	--	0.023	--	0.035	--	--
APR												
22...	6.5	80	23	1.3	126	0.076	--	0.032	--	0.027	--	--
MAY												
21...	2.9	38	13	0.50	62	0.079	--	0.026	--	0.030	--	--
JUN												
25...	3.3	49	14	0.50	72	0.064	--	0.017	--	0.013	<1	<1
JUL												
14...	4.0	62	16	1.2	90	0.050	--	0.006	--	0.013	--	--
AUG												
12...	4.8	65	16	1.1	98	0.190	--	0.023	--	0.021	<1	<1
25...	5.1	70	14	1.9	110	0.141	--	0.056	--	0.026	--	--
OCT												
28...	8.4	107	22	2.5	146	0.201	--	0.029	--	0.031	--	--
JAN 1993												
12...	6.3	78	17	1.6	129	--	0.222	--	0.049	0.032	--	--
MAR												
23...	4.3	52	13	1.1	64	--	0.055	--	0.025	0.027	--	--

Table 33. Onsite measurements and bacteriological and selected inorganic data for station 07093700, Arkansas River near Wellsville--Continued

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
APR 1990											
19...	<1	0.1	--	--	4	2	350	54	4	<0.5	60
MAY											
23...	4	<0.1	--	--	9	3	4200	22	63	0.6	560
JUN											
06...	9	0.1	--	--	30	7	8000	64	92	1.2	610
20...	1	0.2	--	--	10	3	1200	26	11	0.8	70
JUL											
18...	<1	0.2	--	--	4	3	370	22	4	<0.5	40
AUG											
29...	<1	<0.1	<1	<1	3	2	150	25	1	<0.5	40
NOV											
01...	<1	0.1	--	--	2	2	130	33	<1	1.5	20
JAN 1991											
17...	<1	<0.1	--	--	4	2	210	18	2	<0.5	10
MAR											
26...	<1	0.1	--	--	3	2	140	25	1	<0.5	20
APR											
25...	<1	0.2	--	--	3	2	180	45	3	<0.5	40
MAY											
15...	2	0.1	--	--	9	2	1200	54	22	1.0	150
JUN											
12...	2	0.5	--	--	19	5	3100	70	90	2.5	270
19...	<1	0.2	<1	<1	27	16	740	38	12	<0.5	70
JUL											
17...	<1	0.1	--	--	7	1	250	34	7	<0.5	30
AUG											
15...	<1	0.2	--	--	4	1	360	35	5	<0.5	40
SEP											
03...	--	--	<1	<1	--	--	--	--	--	--	--
OCT											
23...	<1	0.1	--	--	5	<1	90	28	7	<0.5	20
DEC											
18...	<1	0.6	--	--	--	1	120	23	<1	<0.5	20
MAR 1992											
24...	<1	<0.1	--	--	2	1	120	23	3	<0.5	30
APR											
22...	<1	0.1	--	--	3	2	220	55	2	0.5	50
MAY											
21...	2	0.2	--	--	10	2	2600	43	38	<0.5	300
JUN											
25...	<1	0.2	<1	<1	61	39	350	38	6	<0.5	50
JUL											
14...	<1	<0.1	--	--	2	2	140	33	2	<0.5	20
AUG											
12...	<1	<0.1	1	<1	2	2	170	45	2	<0.5	30
25...	<1	<0.1	--	--	7	2	1500	70	13	0.9	130
OCT											
28...	<1	<0.1	--	--	2	2	130	36	1	0.6	<10
JAN 1993											
12...	<1	0.6	--	--	2	1	180	24	2	<0.5	40
MAR											
23...	<1	0.1	--	--	1	1	170	23	2	<0.5	30

Table 33. Onsite measurements and bacteriological and selected inorganic data for station 07093700, Arkansas River near Wellsville--Continued

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990											
19...	30	--	--	--	--	--	--	--	--	110	59
MAY											
23...	39	--	--	--	--	--	--	--	--	800	35
JUN											
06...	23	--	--	--	--	--	--	--	--	520	52
20...	12	--	--	--	--	--	--	--	--	100	35
JUL											
18...	8	--	--	--	--	--	--	--	--	60	24
AUG											
29...	16	<0.10	<0.1	<1	<1	<1	<1	<1	<1.0	50	26
NOV											
01...	14	--	--	--	--	--	--	--	--	60	52
JAN 1991											
17...	11	--	--	--	--	--	--	--	--	80	59
MAR											
26...	12	--	--	--	--	--	--	--	--	40	31
APR											
25...	26	--	--	--	--	--	--	--	--	80	73
MAY											
15...	23	--	--	--	--	--	--	--	--	170	41
JUN											
12...	10	--	--	--	--	--	--	--	--	240	50
19...	10	<0.10	<0.1	2	<1	<1	<1	<1	<1.0	90	42
JUL											
17...	9	--	--	--	--	--	--	--	--	30	26
AUG											
15...	15	--	--	--	--	--	--	--	--	60	41
SEP											
03...	--	<0.10	<0.1	<1	<1	<1	<1	<1	<1.0	--	--
OCT											
23...	12	--	--	--	--	--	--	--	--	30	23
DEC											
18...	13	--	--	--	--	--	--	--	--	80	44
MAR 1992											
24...	12	--	--	--	--	--	--	--	--	40	10
APR											
22...	22	--	--	--	--	--	--	--	--	70	30
MAY											
21...	17	--	--	--	--	--	--	--	--	280	31
JUN											
25...	7	<0.10	0.3	1	<1	<1	<1	<1	<1.0	60	23
JUL											
14...	9	--	--	--	--	--	--	--	--	30	16
AUG											
12...	7	<0.10	<0.1	<1	<1	<1	<1	<1	<1.0	30	16
25...	9	--	--	--	--	--	--	--	--	100	4
OCT											
28...	10	--	--	--	--	--	--	--	--	20	20
JAN 1993											
12...	10	--	--	--	--	--	--	--	--	60	33
MAR											
23...	10	--	--	--	--	--	--	--	--	30	18

Table 34. Onsite measurements and selected inorganic data for station 07093775, Badger Creek, Lower Station, near Howard

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
APR 1990											
19...	1610	12	850	8.7	7.0	9.4	510	0.014	<0.010	2	<0.1
JUN											
07...	0730	8.6	--	8.3	8.5	9.0	556	<0.010	0.010	<1	<0.1
JUL											
18...	1545	5.5	970	8.9	24.0	6.7	560	0.012	<0.010	<1	<0.1
AUG											
29...	1400	7.4	980	8.3	26.0	6.0	606	<0.010	0.010	<1	<0.1
NOV											
01...	0910	7.8	1020	8.7	7.0	9.3	572	<0.010	0.020	<1	<0.1
APR 1991											
25...	0900	14	808	8.4	1.5	10.8	456	0.018	0.016	<1	1.5
JUN											
19...	1815	7.4	978	8.7	16.5	7.4	544	0.008	0.017	<1	0.1
JUL											
18...	0810	4.6	1030	8.5	14.0	7.7	578	0.008	0.009	<1	<0.1
OCT											
23...	1620	5.9	1050	8.3	12.5	8.0	608	0.008	0.019	<1	<0.1
APR 1992											
22...	1710	12	920	8.7	13.0	8.0	540	0.015	0.011	<1	<0.1
JUN											
25...	1640	7.4	953	8.8	19.5	7.4	538	<0.005	0.021	<1	0.2
AUG											
13...	0730	8.2	971	8.5	12.0	8.5	564	0.008	0.026	<1	<0.1
OCT											
29...	0730	7.4	1020	8.6	6.0	9.5	708	<0.005	0.019	<1	<0.1

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990										
19...	4	1	1400	9	3	<0.5	60	5	30	12
JUN										
07...	4	1	280	7	1	<0.5	10	4	<10	4
JUL										
18...	3	2	1000	41	2	<0.5	60	5	<10	<3
AUG										
29...	4	<1	1400	64	2	<0.5	170	75	20	<3
NOV										
01...	4	<1	200	12	<1	<0.5	30	14	<10	7
APR 1991										
25...	3	1	1700	30	3	<0.5	50	4	10	6
JUN										
19...	13	1	390	14	2	<0.5	30	6	<10	<3
JUL										
18...	4	1	590	10	5	<0.5	160	140	<10	6
OCT										
23...	3	<1	190	7	2	0.8	30	8	<10	8
APR 1992										
22...	<1	<1	360	7	<1	<0.5	30	5	10	<3
JUN										
25...	3	2	200	10	<1	0.7	20	5	<10	4
AUG										
13...	2	<1	1000	10	1	0.6	40	6	<10	4
OCT										
29...	<1	<1	110	7	<1	<0.5	<10	4	<10	<3

Table 35. Onsite measurements and selected inorganic data for station 07094000, Texas Creek at Texas Creek

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
APR 1990									
19...	1800	7.8	370	8.8	8.5	9.4	233	0.087	<0.010
JUN									
07...	0930	33	399	8.4	12.5	8.0	215	0.131	0.020
JUL									
18...	1800	17	382	8.6	19.5	7.1	254	0.025	<0.010
AUG									
29...	1600	8.4	337	8.4	23.0	6.7	219	<0.010	<0.010
NOV									
01...	1130	18	343	8.8	7.5	9.5	205	<0.010	0.020
APR 1991									
25...	1115	9.8	392	8.5	10.5	9.0	230	0.014	0.021
JUN									
19...	2005	3.7	431	8.4	17.0	6.8	243	0.011	0.020
JUL									
18...	1025	5.5	444	8.6	18.0	7.3	254	0.007	0.018
OCT									
23...	1640	5.9	401	8.7	11.5	8.6	254	0.010	0.021
APR 1992									
22...	1740	2.1	365	8.8	14.5	7.6	219	0.012	0.020
JUN									
25...	1750	30	344	8.7	18.0	7.5	216	0.019	0.047
AUG									
13...	0805	15	416	8.6	14.0	8.5	256	0.005	0.022
OCT									
29...	0810	11	391	8.7	7.0	9.6	258	<0.005	0.011

Table 36. Onsite measurements and selected inorganic data for station 382917105225200, Tallahassee Creek near Parkdale

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
APR 1990											
20...	0730	0.54	708	8.3	8.0	8.6	451	0.104	<0.010	<1	<0.1
JUN											
07...	1000	2.7	600	8.5	20.0	7.4	365	0.062	0.030	<1	<0.1
JUL											
19...	0755	4.7	691	8.5	15.0	7.8	428	0.203	0.030	<1	0.1
AUG											
30...	0840	2.8	698	8.4	15.0	7.9	431	0.190	0.020	<1	<0.1
NOV											
01...	1300	3.6	689	8.7	11.5	8.6	416	0.020	0.020	<1	<0.1
APR 1991											
25...	1315	0.14	744	8.1	13.0	8.3	456	0.103	0.019	<1	<0.1
JUN											
20...	0905	0.40	806	8.3	15.0	8.5	488	0.018	0.019	<1	<0.1
JUL											
18...	0845	0.70	783	8.2	17.5	7.3	460	0.040	0.020	<1	<0.1
OCT											
24...	0825	3.8	734	8.5	8.0	8.7	428	0.034	0.029	<1	<0.1
APR 1992											
23...	0845	4.2	679	8.6	7.0	9.2	406	0.133	0.018	<1	0.1
JUN											
26...	0845	32	386	8.4	14.0	7.7	220	0.122	0.137	<1	<0.1
AUG											
13...	1010	0.68	682	8.4	17.0	7.8	402	0.055	0.017	<1	<0.1
OCT											
29...	0950	0.20	706	8.4	10.5	8.6	411	0.039	0.024	<1	<0.1

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990										
20...	3	1	370	11	1	<0.5	190	130	20	5
JUN										
07...	5	1	650	16	2	<0.5	100	69	<10	9
JUL										
19...	7	1	6300	10	5	<0.5	360	120	30	<3
AUG										
30...	2	1	510	15	1	<0.5	140	100	10	<3
NOV										
01...	1	1	120	18	<1	<0.5	60	39	<10	6
APR 1991										
25...	5	1	220	16	1	<0.5	50	38	10	8
JUN										
20...	3	1	150	13	1	<0.5	90	73	<10	<3
JUL										
18...	6	<1	160	18	5	<0.5	150	120	<10	<3
OCT										
24...	2	<1	170	31	1	0.6	80	62	<10	3
APR 1992										
23...	2	<1	870	8	<1	<0.5	120	60	20	4
JUN										
26...	20	2	7600	71	4	<0.5	1800	16	150	<3
AUG										
13...	1	<1	110	24	<1	<0.5	80	67	<10	<3
OCT										
29...	<1	<1	30	17	<1	<0.5	<10	29	<10	<3

Table 37. Onsite measurements and bacteriological and selected inorganic data for station 07094500, Arkansas River at Parkdale

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 1990												
20...	0845	343	306	8.4	9.0	9.4	--	K2	41	140	39	10
MAY												
24...	0900	674	242	8.2	15.0	7.9	--	62	K490	98	28	6.8
JUN												
07...	0815	3110	125	8.0	13.5	8.5	K40	K70	690	53	16	3.2
21...	0840	1990	135	8.0	15.0	8.0	<10	K16	200	56	16	3.8
JUL												
19...	0940	1110	181	8.2	17.5	7.7	K36	K23	62	75	22	4.8
AUG												
30...	1110	395	296	8.3	20.0	7.5	<2	K1	K6	120	36	8.0
NOV												
01...	1400	476	310	8.6	9.0	9.9	--	--	--	130	38	9.1
JAN 1991												
17...	1200	515	214	8.1	0.0	12.1	<5	<1	8	96	28	6.4
MAR												
26...	1610	410	259	8.8	7.5	9.4	--	<2	E6	100	30	6.8
APR												
25...	1400	443	229	8.1	11.5	9.0	120	E1	E8	90	26	6.0
MAY												
16...	0830	956	161	8.0	12.0	8.6	E17	E4	60	64	19	3.9
JUN												
12...	1700	2620	--	--	--	--	--	--	--	--	--	--
20...	0910	1970	133	7.8	14.0	--	E4	E2	E50	55	16	3.7
JUL												
18...	0945	848	199	8.4	19.5	7.5	<2	E6	36	91	27	5.8
AUG												
15...	1100	641	265	8.5	19.0	--	<3	E5	89	110	33	7.6
SEP												
03...	1625	410	307	8.7	20.5	7.7	--	--	--	--	--	--
OCT												
24...	0820	308	344	8.5	9.0	8.9	11	--	8	150	43	10
DEC												
18...	1120	524	254	8.3	0.5	12.0	<1	E7	E4	100	30	7.0
MAR 1992												
24...	1630	469	236	8.5	8.0	10.0	--	--	--	97	28	6.5
APR												
23...	0820	321	302	8.4	9.5	9.3	<2	E1	E9	110	32	8.2
MAY												
22...	0730	1550	139	8.1	12.0	8.7	E28	50	130	60	18	3.7
JUN												
26...	0900	1610	173	8.2	15.0	8.0	--	930	2700	76	22	5.0
JUL												
15...	0915	880	210	8.3	17.0	8.0	72	E7	E13	92	27	6.0
AUG												
13...	1000	843	213	8.4	17.0	7.9	E24	E15	33	92	27	6.0
25...	0700	1770	242	8.3	12.0	8.9	--	E3500	>3300	100	31	5.9
OCT												
29...	0920	438	312	8.6	9.5	9.7	E5	E4	--	130	38	9.1
JAN 1993												
13...	0815	459	255	8.2	0.0	11.3	<2	<1	E3	100	30	7.0
MAR												
23...	1410	732	179	8.5	10.0	9.3	--	<1	--	72	21	4.8

Table 37. Onsite measurements and bacteriological and selected inorganic data for station 07094500, Arkansas River at Parkdale--Continued

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
APR 1990											
20...	14	105	36	9.9	185	0.040	--	<0.010	--	--	--
MAY											
24...	9.2	81	26	7.0	140	0.166	--	0.020	--	--	--
JUN											
07...	3.2	41	16	1.2	73	0.088	--	0.060	--	--	--
21...	3.7	45	1.7	2.5	72	0.067	--	<0.010	--	--	--
JUL											
19...	5.8	63	20	4.0	102	0.013	--	<0.010	--	--	--
AUG											
30...	12	111	33	8.8	172	0.025	--	<0.010	--	<1	<1
NOV											
01...	13	118	28	9.9	179	0.030	--	0.020	--	--	--
JAN 1991											
17...	8.9	81	25	6.0	120	0.170	--	0.024	--	--	--
MAR											
26...	9.7	90	30	8.1	149	0.008	--	0.026	--	--	--
APR											
25...	9.1	78	27	8.7	127	0.006	--	0.013	--	--	--
MAY											
16...	5.5	54	21	3.7	93	0.052	--	0.021	--	--	--
JUN											
12...	--	--	--	--	--	--	--	--	--	--	--
20...	3.6	45	12	2.1	84	0.070	--	0.019	--	<1	<1
JUL											
18...	6.7	75	21	4.9	112	0.006	--	0.016	--	--	--
AUG											
15...	9.4	104	29	6.4	169	0.066	--	<0.002	--	--	--
SEP											
03...	--	--	--	--	--	--	--	--	--	<1	<1
OCT											
24...	14	136	37	8.4	201	0.028	--	0.024	--	--	--
DEC											
18...	9.9	97	26	6.6	149	0.141	--	0.007	--	--	--
MAR 1992											
24...	9.4	86	29	6.7	141	0.017	--	0.013	--	--	--
APR											
23...	12	101	36	12	168	0.010	--	0.011	--	--	--
MAY											
22...	4.3	50	17	2.6	88	0.104	--	0.031	--	--	--
JUN											
26...	5.1	69	20	2.8	96	0.044	--	0.008	--	<1	<1
JUL											
15...	6.5	77	23	4.0	118	0.024	--	0.018	--	--	--
AUG											
13...	7.7	80	22	4.3	118	0.196	--	0.013	--	1	<1
25...	10	105	26	5.2	148	0.190	--	0.075	--	--	--
OCT											
29...	12	120	32	7.7	192	0.057	--	0.015	--	--	--
JAN 1993											
13...	9.1	95	26	4.9	146	--	0.206	--	0.020	--	--
MAR											
23...	7.2	67	19	0.80	116	--	0.018	--	0.008	--	--

Table 37. Onsite measurements and bacteriological and selected inorganic data for station 07094500, Arkansas River at Parkdale--Continued

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
APR 1990											
20...	<1	<0.1	--	--	4	2	430	17	3	<0.5	60
MAY											
24...	3	<0.1	--	--	11	1	4400	17	32	<0.5	490
JUN											
07...	4	<0.1	--	--	80	4	15000	51	120	1.6	890
21...	1	0.3	--	--	25	3	2700	16	22	1.2	140
JUL											
19...	<1	<0.1	--	--	8	3	700	18	4	0.6	40
AUG											
30...	<1	<0.1	<1	<1	3	1	220	17	2	<0.5	30
NOV											
01...	<1	0.2	--	--	2	<1	190	18	<1	<0.5	20
JAN 1991											
17...	<1	<0.1	--	--	3	2	420	15	7	<0.5	10
MAR											
26...	<1	<0.1	--	--	14	1	160	16	1	<0.5	30
APR											
25...	<1	<0.1	--	--	4	2	240	35	3	<0.5	30
MAY											
16...	2	<0.1	--	--	19	3	1800	53	29	1.1	180
JUN											
12...	4	0.4	--	--	9	3	4600	100	39	0.9	260
20...	<1	0.1	1	<1	22	22	30	35	3	<0.5	<10
JUL											
18...	<1	<0.1	--	--	4	<1	510	20	8	<0.5	40
AUG											
15...	<1	<0.1	--	--	4	1	650	19	4	<0.5	50
SEP											
03...	--	--	<1	1	--	--	--	--	--	--	--
OCT											
24...	<1	<0.1	--	--	4	1	190	18	2	<0.5	40
DEC											
18...	<1	0.4	--	--	--	<1	260	19	<1	0.7	20
MAR 1992											
24...	<1	<0.1	--	--	<1	1	280	18	<1	<0.5	30
APR											
23...	<1	<0.1	--	--	<1	1	190	31	2	<0.5	30
MAY											
22...	5	<0.1	--	--	14	3	2900	50	34	0.7	320
JUN											
26...	<1	<0.1	2	<1	38	7	9200	43	15	<0.5	430
JUL											
15...	14	<0.1	--	--	2	2	420	22	3	0.8	40
AUG											
13...	<1	<0.1	3	<1	3	1	680	23	3	<0.5	50
25...	2	<0.1	--	--	45	2	27000	30	56	<0.5	1300
OCT											
29...	<1	<0.1	--	--	1	1	190	23	<1	0.6	<10
JAN 1993											
13...	<1	<0.1	--	--	1	1	110	21	1	<0.5	30
MAR											
23...	<1	<0.1	--	--	1	2	320	18	2	<0.5	40

Table 37. Onsite measurements and bacteriological and selected inorganic data for station 07094500, Arkansas River at Parkdale--Continued

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990											
20...	10	--	--	--	--	--	--	--	--	60	12
MAY											
24...	4	--	--	--	--	--	--	--	--	580	6
JUN											
07...	9	--	--	--	--	--	--	--	--	820	30
21...	3	--	--	--	--	--	--	--	--	150	25
JUL											
19...	4	--	--	--	--	--	--	--	--	50	12
AUG											
30...	7	<0.10	<0.1	<1	<1	<1	<1	<1	<1.0	30	7
NOV											
01...	5	--	--	--	--	--	--	--	--	40	20
JAN 1991											
17...	4	--	--	--	--	--	--	--	--	50	33
MAR											
26...	11	--	--	--	--	--	--	--	--	30	15
APR											
25...	10	--	--	--	--	--	--	--	--	50	23
MAY											
16...	5	--	--	--	--	--	--	--	--	200	30
JUN											
12...	<10	--	--	--	--	--	--	--	--	280	20
20...	6	<0.10	<0.1	3	2	<1	<1	<1	<1.0	<10	8
JUL											
18...	3	--	--	--	--	--	--	--	--	20	9
AUG											
15...	5	--	--	--	--	--	--	--	--	30	7
SEP											
03...	--	<0.10	<0.1	2	<1	2	1	<1	<1.0	--	--
OCT											
24...	7	--	--	--	--	--	--	--	--	20	14
DEC											
18...	6	--	--	--	--	--	--	--	--	60	30
MAR 1992											
24...	9	--	--	--	--	--	--	--	--	40	9
APR											
23...	12	--	--	--	--	--	--	--	--	40	13
MAY											
22...	5	--	--	--	--	--	--	--	--	280	16
JUN											
26...	4	<0.10	<0.1	<1	<1	<1	<1	<1	<1.0	130	3
JUL											
15...	4	--	--	--	--	--	--	--	--	40	9
AUG											
13...	4	<0.10	<0.1	<1	<1	<1	<1	<1	<1.0	50	10
25...	2	--	--	--	--	--	--	--	--	450	9
OCT											
29...	5	--	--	--	--	--	--	--	--	20	8
JAN 1993											
13...	9	--	--	--	--	--	--	--	--	50	27
MAR											
23...	7	--	--	--	--	--	--	--	--	30	9

Table 38. Onsite measurements and selected inorganic data for station 383113105160401, Grape Creek at mouth, at Canon City

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
APR 1990											
20...	1045	32	419	8.7	12.0	9.7	262	0.013	<0.010	--	--
JUN											
07...	1320	7.1	444	8.4	25.5	6.5	280	<0.010	0.020	--	--
JUL											
19...	0800	25	432	8.5	16.5	7.8	244	0.044	0.020	--	--
AUG											
30...	0940	16	351	8.0	16.5	8.6	207	--	<0.010	--	--
NOV											
01...	1525	44	350	8.4	10.0	8.8	197	0.012	0.030	--	--
APR 1991											
25...	1535	9.6	407	8.3	15.5	8.2	235	0.024	0.022	--	--
JUN											
20...	1200	5.5	420	8.6	20.5	8.2	226	<0.005	0.023	--	--
JUL											
18...	1125	24	382	8.6	22.5	6.9	232	0.009	0.018	--	--
OCT											
24...	1040	9.0	407	8.3	7.0	9.5	238	0.014	0.025	--	--
MAR 1992											
31...	1020	227	441	8.6	4.5	10.5	273	0.093	0.021	<1	<0.1
APR											
23...	1115	44	424	8.6	11.0	8.7	250	0.007	0.023	--	--
JUN											
26...	1235	59	391	8.8	21.0	7.1	230	<0.005	0.036	--	--
AUG											
13...	1210	46	312	8.7	20.0	7.3	184	0.165	0.031	--	--
OCT											
29...	1200	18	400	8.5	7.0	9.8	239	0.261	0.368	--	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990										
20...	--	--	--	--	--	--	--	--	--	--
JUN										
07...	--	--	--	--	--	--	--	--	--	--
JUL										
19...	--	--	--	--	--	--	--	--	--	--
AUG										
30...	--	--	--	--	--	--	--	--	--	--
NOV										
01...	--	--	--	--	--	--	--	--	--	--
APR 1991										
25...	--	--	--	--	--	--	--	--	--	--
JUN										
20...	--	--	--	--	--	--	--	--	--	--
JUL										
18...	--	--	--	--	--	--	--	--	--	--
OCT										
24...	--	--	--	--	--	--	--	--	--	--
MAR 1992										
31...	8	2	4400	46	18	<0.5	250	7	30	<3
APR										
23...	--	--	--	--	--	--	--	--	--	--
JUN										
26...	--	--	--	--	--	--	--	--	--	--
AUG										
13...	--	--	--	--	--	--	--	--	--	--
OCT										
29...	--	--	--	--	--	--	--	--	--	--

Table 39. Onsite measurements and selected inorganic data for station 07096000, Arkansas River at Canon City

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
APR 1990											
20...	1215	240	333	8.5	11.5	9.7	195	0.020	--	<0.010	--
MAY											
24...	1145	533	249	8.2	17.0	7.8	148	0.165	--	0.070	--
JUN											
07...	1200	2920	130	7.8	15.0	8.3	70	0.096	--	0.030	--
21...	1030	1650	142	7.9	16.0	8.5	75	0.064	--	<0.010	--
JUL											
19...	1215	843	185	8.2	19.5	7.8	103	0.035	--	0.020	--
AUG											
30...	1250	280	294	8.3	21.5	7.4	170	0.014	--	<0.010	--
NOV											
01...	1645	405	315	8.8	9.0	9.0	177	0.024	--	0.020	--
JAN 1991											
17...	1430	519	222	7.0	0.0	12.2	134	0.154	--	0.012	--
MAR											
27...	0815	387	276	8.3	5.0	9.8	154	0.007	--	0.020	--
APR											
25...	1655	296	238	8.3	13.0	8.7	126	0.007	--	0.014	--
MAY											
16...	1115	800	179	7.9	13.0	8.5	91	0.062	--	0.040	--
JUN											
20...	1130	1780	137	8.1	15.0	8.3	69	0.070	--	0.019	--
JUL											
18...	1245	663	206	8.3	21.5	7.4	117	0.005	--	<0.002	--
AUG											
15...	1300	655	270	8.4	19.0	--	154	0.048	--	0.003	--
OCT											
24...	1115	221	356	8.2	9.0	9.5	214	0.024	--	0.024	--
DEC											
18...	1320	464	255	8.3	0.5	12.2	179	0.137	--	0.008	--
MAR 1992											
25...	0820	519	297	8.5	5.5	10.8	177	0.043	--	0.012	--
APR											
23...	1040	275	332	8.4	11.5	8.7	186	0.013	--	0.012	--
MAY											
22...	1000	1380	144	8.1	13.5	8.6	84	0.108	--	0.024	--
JUN											
26...	1105	1530	190	8.3	17.0	7.6	112	0.045	--	0.008	--
JUL											
15...	1030	251	226	8.4	17.5	7.9	138	0.030	--	0.004	--
AUG											
13...	1115	743	221	8.4	18.5	7.8	182	0.126	--	0.024	--
24...	1810	1860	226	8.4	15.5	8.1	136	0.157	--	0.034	--
OCT											
29...	1050	306	320	8.5	8.5	9.5	195	0.075	--	0.039	--
JAN 1993											
13...	0935	381	268	8.3	0.0	12.1	156	--	0.196	--	0.022
MAR											
23...	1520	647	194	8.5	11.5	9.2	104	--	0.017	--	0.099

Table 40. Onsite measurements and selected inorganic data for station 07096500, Fourmile Creek near Canon City

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
APR 1990											
20...	1320	14	1020	8.3	17.5	9.2	740	0.326	0.040	<1	<0.1
JUN											
07...	1205	47	880	8.0	19.5	6.8	593	0.214	0.090	1	0.8
JUL											
19...	1045	28	800	8.1	19.5	7.7	550	0.135	<0.010	<1	<0.1
AUG											
30...	1100	25	906	8.0	19.0	8.5	709	0.180	0.010	<1	<0.1
NOV											
02...	0750	12	845	8.3	9.0	9.1	570	0.103	0.030	<1	0.3
APR 1991											
26...	0730	17	999	7.9	11.0	8.1	673	0.412	0.040	<1	<0.1
JUN											
20...	1230	39	916	8.4	20.5	8.6	621	0.130	0.030	<1	0.5
JUL											
18...	1205	22	1170	8.1	20.0	7.5	828	0.348	0.019	<1	<0.1
OCT											
24...	1210	37	749	8.2	11.0	8.6	499	0.213	0.038	<1	0.1
APR 1992											
23...	1215	70	557	8.2	12.0	8.9	376	0.227	0.036	<1	<0.1
JUN											
26...	1200	77	744	8.1	19.0	6.9	524	0.334	0.032	<1	0.2
AUG											
13...	1210	30	1090	8.1	20.5	7.4	816	0.537	0.023	<1	<0.1
OCT											
29...	1240	19	1220	8.2	12.0	8.7	860	0.657	0.018	<1	<0.1

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990										
20...	8	1	1900	7	5	<0.5	110	31	50	5
JUN										
07...	11	3	3500	14	10	0.6	220	35	50	9
JUL										
19...	5	2	750	13	5	0.9	80	24	40	7
AUG										
30...	4	2	660	120	3	<0.5	70	34	20	9
NOV										
02...	4	1	420	41	<1	<0.5	50	27	20	17
APR 1991										
26...	4	<1	530	36	3	<0.5	50	34	30	16
JUN										
20...	8	4	540	53	6	<0.5	60	30	10	<3
JUL										
18...	3	<1	400	15	5	<0.5	60	43	<10	10
OCT										
24...	9	<1	1800	21	9	0.5	110	27	40	4
APR 1992										
23...	4	2	3500	30	5	<0.5	310	31	40	4
JUN										
26...	12	2	7900	22	12	<0.5	390	23	50	<3
AUG										
13...	2	1	230	18	1	<0.5	40	22	10	4
OCT										
29...	1	<1	200	25	<1	<0.5	20	25	<10	<3

Table 41. Onsite measurements and selected inorganic data for station 382337105014600, Hardscrabble Creek at Highway 120, at Portland

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
APR 1990									
20...	1430	1.8	3170	8.7	21.0	15.6	3070	1.10	0.020
JUN									
07...	1510	1.2	3700	8.4	23.0	12.8	3560	0.834	0.030
JUL									
19...	1310	0.76	3770	8.1	26.0	11.4	3800	0.693	0.030
AUG									
30...	1255	0.67	--	8.0	24.5	9.3	3640	0.970	0.020
NOV									
02...	0905	2.4	3680	8.6	8.0	12.5	3370	1.60	0.030
APR 1991									
26...	0915	1.2	3760	8.2	10.0	12.4	3460	0.872	0.104
JUN									
20...	1400	1.1	3640	8.2	28.0	11.6	3350	0.574	0.081
JUL									
18...	1415	0.17	3910	8.1	30.0	9.3	3770	0.330	0.080
OCT									
24...	1415	1.4	3860	8.3	12.0	9.6	3710	0.909	0.120
APR 1992									
23...	1330	4.2	2550	8.6	16.5	11.0	2300	0.526	0.049
JUN									
26...	1450	1.4	3330	8.4	28.0	11.0	3140	0.365	0.120
AUG									
13...	1350	1.3	3090	8.3	22.5	6.5	2840	0.905	0.093
OCT									
29...	1410	1.8	3860	8.3	9.5	11.1	3640	0.530	0.212

Table 42. Onsite measurements and bacteriological and selected inorganic data for station 07097000, Arkansas River at Portland

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 1990												
20...	1530	314	555	8.9	15.5	11.4	--	K17	120	220	56	19
MAY												
24...	1345	509	471	8.2	19.5	7.7	--	570	600	190	51	14
JUN												
07...	1530	3210	173	7.9	18.5	7.4	K160	180	K1400	71	21	4.6
21...	1400	1820	199	8.1	18.0	7.4	--	<240	280	78	22	5.7
JUL												
19...	1345	1060	274	8.6	23.0	8.6	130	K16	130	110	31	7.9
AUG												
30...	1415	271	504	8.7	25.0	10.2	K2	K2	K12	210	58	15
NOV												
02...	1015	514	482	8.8	8.5	11.3	--	--	--	210	56	16
JAN 1991												
17...	1550	470	352	8.5	3.0	12.0	E52	<2	48	150	40	11
MAR												
27...	1010	400	394	8.6	8.5	--	--	E3	86	150	42	12
APR												
26...	1015	291	490	8.7	11.0	12.7	140	80	--	190	50	15
MAY												
16...	1315	728	320	8.8	14.0	8.2	110	57	340	120	33	9.0
JUN												
20...	1420	1920	197	8.0	18.5	7.9	140	63	82	78	22	5.5
JUL												
18...	1400	642	331	9.1	24.0	10.2	E100	45	61	140	41	9.7
AUG												
15...	1500	858	418	8.3	23.0	--	E3	290	380	180	51	13
SEP												
03...	1900	384	495	8.3	22.5	--	--	--	--	--	--	--
OCT												
24...	1315	339	581	8.5	11.0	10.5	E170	--	150	250	68	19
DEC												
18...	1500	460	413	8.4	1.0	12.2	75	E7	40	170	46	13
MAR 1992												
25...	1005	642	379	8.5	7.5	10.9	--	--	--	160	44	12
APR												
23...	1400	318	540	8.6	15.0	10.0	E32	E21	91	220	60	17
MAY												
22...	1230	1450	230	8.2	15.5	8.1	E56	160	220	94	27	6.5
JUN												
26...	1400	1730	269	8.3	20.0	7.5	--	310	780	110	32	7.8
JUL												
15...	1200	806	327	8.6	20.0	9.1	110	65	140	140	40	10
AUG												
13...	1330	800	351	8.6	21.0	7.6	--	150	270	150	41	11
24...	1500	917	435	8.2	16.5	7.9	>4000	>2400	>5000	170	48	13
OCT												
29...	1400	343	521	8.4	10.5	9.7	280	100	--	220	60	17
JAN 1993												
13...	1050	539	401	8.3	0.0	12.2	E26	E17	23	150	42	12
MAR												
24...	0855	587	278	8.2	8.0	9.9	--	32	--	110	29	8.0

Table 42. Onsite measurements and bacteriological and selected inorganic data for station 07097000, Arkansas River at Portland--Continued

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
APR 1990												
20...	32	135	120	13	352	0.143	--	<0.010	--	0.097	--	--
MAY												
24...	24	114	120	12	300	0.266	--	<0.010	--	--	--	--
JUN												
07...	5.8	49	31	1.9	109	0.131	--	0.080	--	--	--	--
21...	7.2	56	37	3.9	113	0.099	--	<0.010	--	--	--	--
JUL												
19...	12	81	45	5.8	164	0.033	--	0.030	--	0.028	--	--
AUG												
30...	26	140	98	0.26	408	0.040	--	<0.010	--	0.064	<1	<1
NOV												
02...	23	144	92	12	267	0.037	--	0.020	--	0.034	--	--
JAN 1991												
17...	17	101	68	11	216	0.249	--	0.009	--	0.030	--	--
MAR												
27...	18	111	70	9.0	231	0.032	--	0.041	--	0.024	--	--
APR												
26...	25	113	130	13	297	0.013	--	0.018	--	0.044	--	--
MAY												
16...	15	76	70	5.2	194	0.130	--	0.043	--	0.060	--	--
JUN												
20...	6.9	56	29	3.2	103	0.096	--	0.022	--	0.085	<1	<1
JUL												
18...	15	100	74	7.3	185	0.007	--	0.011	--	0.052	--	--
AUG												
15...	19	125	90	7.8	280	0.201	--	0.005	--	0.065	--	--
SEP												
03...	--	--	--	--	--	--	--	--	--	--	<1	<1
OCT												
24...	30	170	150	11	371	0.132	--	0.036	--	0.088	--	--
DEC												
18...	20	115	87	9.6	265	0.242	--	0.009	--	0.061	--	--
MAR 1992												
25...	17	122	70	11	230	0.090	--	0.020	--	0.032	--	--
APR												
23...	28	130	130	13	348	0.160	--	0.019	--	0.080	--	--
MAY												
22...	9.5	68	46	4.0	136	0.180	--	0.033	--	0.060	--	--
JUN												
26...	11	85	47	4.2	176	0.089	--	0.029	--	0.041	<1	<1
JUL												
15...	14	101	60	6.5	202	0.063	--	0.008	--	0.033	--	--
AUG												
13...	16	103	70	7.6	216	0.178	--	0.017	--	0.054	1	<1
24...	25	107	110	8.0	270	0.282	--	0.056	--	0.059	--	--
OCT												
29...	25	150	110	10	312	0.288	--	0.030	--	0.052	--	--
JAN 1993												
13...	18	114	85	8.0	238	--	0.304	--	0.014	0.032	--	--
MAR												
24...	12	80	53	--	148	--	0.049	--	0.019	0.054	--	--

Table 42. Onsite measurements and bacteriological and selected inorganic data for station 07097000, Arkansas River at Portland--Continued

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
APR 1990											
20...	<1	<0.1	--	--	4	2	700	10	3	<0.5	70
MAY											
24...	2	<0.1	--	--	10	2	12000	21	15	<0.5	510
JUN											
07...	5	0.1	--	--	70	2	19000	44	110	1.3	990
21...	<1	0.1	--	--	68	25	3300	17	32	1.2	150
JUL											
19...	<1	0.2	--	--	5	3	1100	17	4	<0.5	60
AUG											
30...	<1	<0.1	1	<1	3	1	180	17	1	<0.5	40
NOV											
02...	<1	<0.1	--	--	4	1	520	36	2	0.5	60
JAN 1991											
17...	<1	<0.1	--	--	4	1	640	24	2	<0.5	60
MAR											
27...	<1	<0.1	--	--	4	2	360	17	1	<0.5	40
APR											
26...	<1	<0.1	--	--	4	2	290	36	4	<0.5	60
MAY											
16...	2	<0.1	--	--	18	2	3100	37	24	1.4	210
JUN											
20...	<1	0.1	1	<1	22	11	1700	33	14	<0.5	110
JUL											
18...	<1	<0.1	--	--	6	<1	330	19	5	0.9	40
AUG											
15...	<1	0.4	--	--	6	1	3200	19	14	<0.5	150
SEP											
03...	--	--	<1	<1	--	--	--	--	--	--	--
OCT											
24...	<1	<0.1	--	--	11	<1	600	18	11	0.5	70
DEC											
18...	<1	<0.1	--	--	--	<1	440	22	<1	<0.5	50
MAR 1992											
25...	<1	0.1	--	--	2	1	770	21	2	<0.5	70
APR											
23...	<1	<0.1	--	--	2	1	640	37	2	0.7	100
MAY											
22...	2	<0.1	--	--	15	1	6800	54	40	<0.5	570
JUN											
26...	<1	<0.1	<1	<1	17	4	4600	25	13	<0.5	220
JUL											
15...	<1	<0.1	--	--	3	2	540	19	4	0.6	60
AUG											
13...	<1	<0.1	<1	<1	5	1	1400	17	6	0.6	90
24...	2	0.2	--	--	34	2	25000	23	43	0.5	680
OCT											
29...	<1	<0.1	--	--	4	1	2600	15	12	<0.5	90
JAN 1993											
13...	<1	<0.1	--	--	3	1	1200	16	4	1.0	80
MAR											
24...	<1	<0.1	--	--	2	1	650	22	3	<0.5	60

Table 42. Onsite measurements and bacteriological and selected inorganic data for station 07097000, Arkansas River at Portland--Continued

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990											
20...	17	--	--	--	--	--	--	--	--	40	5
MAY											
24...	7	--	--	--	--	--	--	--	--	250	10
JUN											
07...	14	--	--	--	--	--	--	--	--	790	25
21...	10	--	--	--	--	--	--	--	--	130	10
JUL											
19...	9	--	--	--	--	--	--	--	--	50	14
AUG											
30...	19	<0.10	<0.1	2	1	<1	1	<1	<1.0	10	4
NOV											
02...	18	--	--	--	--	--	--	--	--	30	17
JAN 1991											
17...	16	--	--	--	--	--	--	--	--	30	15
MAR											
27...	22	--	--	--	--	--	--	--	--	30	11
APR											
26...	34	--	--	--	--	--	--	--	--	30	10
MAY											
16...	14	--	--	--	--	--	--	--	--	170	18
JUN											
20...	13	<0.10	<0.1	4	4	<1	<1	<1	<1.0	90	7
JUL											
18...	8	--	--	--	--	--	--	--	--	<10	3
AUG											
15...	21	--	--	--	--	--	--	--	--	50	4
SEP											
03...	--	0.10	<0.1	<1	<1	<1	<1	<1	<1.0	--	--
OCT											
24...	31	--	--	--	--	--	--	--	--	20	7
DEC											
18...	22	--	--	--	--	--	--	--	--	60	13
MAR 1992											
25...	18	--	--	--	--	--	--	--	--	30	10
APR											
23...	33	--	--	--	--	--	--	--	--	30	4
MAY											
22...	12	--	--	--	--	--	--	--	--	300	6
JUN											
26...	9	<0.10	<0.1	5	<1	<1	<1	<1	<1.0	100	<3
JUL											
15...	14	--	--	--	--	--	--	--	--	40	<3
AUG											
13...	10	<0.10	<0.1	3	<1	<1	<1	<1	<1.0	50	6
24...	22	--	--	--	--	--	--	--	--	140	<3
OCT											
29...	23	--	--	--	--	--	--	--	--	30	3
JAN 1993											
13...	25	--	--	--	--	--	--	--	--	60	13
MAR											
24...	17	--	--	--	--	--	--	--	--	40	6

Table 43. Onsite measurements and selected inorganic data for station 07099100, Beaver Creek near Portland

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
APR 1990											
20...	1700	E0.22	2210	7.8	23.5	7.4	1990	0.014	<0.010	--	--
JUN											
07...	1625	E12	--	8.3	28.5	6.3	588	--	--	--	--
JUL											
19...	1440	E0.44	1650	7.9	29.0	7.4	1400	0.010	<0.010	--	--
AUG											
30...	1350	E3.9	1400	7.7	28.0	7.5	1250	0.045	<0.010	--	--
NOV											
02...	1130	E1.2	1720	8.1	11.0	9.2	1380	0.077	0.030	--	--
APR 1991											
26...	1130	E0.90	1410	8.1	9.5	9.5	1070	0.016	0.052	--	--
JUN											
20...	1445	E64	251	8.0	25.5	7.0	155	0.018	0.015	--	--
JUL											
18...	1525	E1.2	1770	8.1	30.5	6.5	1470	0.010	0.036	--	--
OCT											
24...	1510	E4.4	1940	8.0	14.5	8.4	1680	3.40	0.064	--	--
APR 1992											
23...	1430	E66	290	8.1	16.0	7.9	192	0.067	0.012	--	--
JUN											
11...	0805	E112	192	8.1	13.5	8.2	108	0.102	0.008	<1	<0.1
26...	1520	E130	175	8.2	23.0	7.3	110	0.055	0.007	<1	<0.1
AUG											
13...	1450	E2.2	979	8.2	22.0	6.7	726	0.104	0.042	--	--
OCT											
29...	1510	E0.80	1810	8.0	11.0	9.7	1570	0.817	0.104	--	--

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990										
20...	--	--	--	--	--	--	--	--	--	--
JUN										
07...	--	--	--	--	--	--	--	--	--	--
JUL										
19...	--	--	--	--	--	--	--	--	--	--
AUG										
30...	--	--	--	--	--	--	--	--	--	--
NOV										
02...	--	--	--	--	--	--	--	--	--	--
APR 1991										
26...	--	--	--	--	--	--	--	--	--	--
JUN										
20...	--	--	--	--	--	--	--	--	--	--
JUL										
18...	--	--	--	--	--	--	--	--	--	--
OCT										
24...	--	--	--	--	--	--	--	--	--	--
APR 1992										
23...	--	--	--	--	--	--	--	--	--	--
JUN										
11...	3	<1	1700	69	2	<0.5	110	4	<10	<3
26...	7	2	4500	42	6	<0.5	220	5	30	5
AUG										
13...	--	--	--	--	--	--	--	--	--	--
OCT										
29...	--	--	--	--	--	--	--	--	--	--

Table 44. Onsite measurements and bacteriological and selected inorganic data for station 07099400, Arkansas River above Pueblo

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 1990											
09...	1440	228	571	8.4	6.0	9.2	--	--	250	66	20
MAY											
14...	0825	360	--	8.3	10.0	11.6	K2	K12	270	70	22
JUN											
11...	0915	3180	603	8.3	15.0	9.0	K3	K9	240	63	20
JUL											
20...	1920	1260	355	8.0	20.0	--	--	--	150	42	11
24...	0950	695	377	8.2	20.5	7.9	K9	K35	160	45	11
AUG											
20...	1035	968	426	7.9	21.0	8.0	<5	K12	170	49	12
SEP											
28...	1510	328	478	8.1	19.5	--	<1	K6	200	54	15
OCT											
22...	0915	E555	553	8.5	14.0	9.2	E15	29	220	61	17
DEC											
17...	0910	112	569	8.5	4.5	10.9	E1	92	250	68	19
MAR 1991											
27...	1150	368	561	8.5	7.5	10.4	<1	23	240	65	19
APR											
15...	0820	292	574	7.7	8.5	10.2	<1	E1	230	63	18
MAY											
20...	0900	560	575	8.2	11.0	9.8	<1	E2	240	66	19
JUN											
10...	0930	1500	516	8.2	15.5	8.8	<1	E6	210	57	16
JUL											
22...	0830	1520	379	7.8	21.0	8.2	<1	E18	180	48	14
AUG											
15...	0740	1380	475	8.1	21.0	--	29	72	200	57	13
OCT											
28...	0935	196	656	8.4	13.0	9.3	E980	35	260	73	20
DEC											
16...	0920	133	643	8.3	4.5	10.6	E2	15	280	74	22
MAR 1992											
25...	1145	407	549	8.3	6.0	10.6	--	--	230	63	18
APR											
28...	0825	620	564	8.3	8.0	10.8	<1	<1	240	67	18
MAY											
18...	0855	670	562	8.2	11.0	11.3	<1	<1	230	63	18
JUN											
16...	0730	1660	472	8.2	16.0	8.8	E4	E3	190	53	15
JUL											
16...	0800	1140	396	8.2	19.5	8.2	E4	E7	160	45	12
AUG											
17...	0845	645	425	8.2	20.5	8.1	E1	E10	180	52	13
OCT											
20...	0830	288	511	8.3	14.0	9.3	E3	24	220	60	16
JAN 1993											
13...	1320	241	560	8.4	3.5	12.1	<1	E1	230	63	18
MAR											
24...	1000	253	517	8.4	7.0	10.8	<1	--	210	58	17

Table 44. Onsite measurements and bacteriological and selected inorganic data for station 07099400, Arkansas River above Pueblo--Continued

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)
APR 1990										
09...	29	127	180	11	380	0.300	--	0.040	--	0.040
MAY										
14...	32	133	190	9.1	411	0.300	--	0.060	--	0.040
JUN										
11...	29	126	170	11	369	0.200	--	0.080	--	0.020
JUL										
20...	15	87	81	6.1	220	0.200	--	0.050	--	0.060
24...	16	91	89	6.1	243	0.200	--	0.040	--	0.040
AUG										
20...	18	94	100	9.5	265	0.100	--	0.110	--	0.030
SEP										
28...	22	107	120	8.9	305	0.200	--	0.020	--	0.020
OCT										
22...	25	120	150	8.7	355	0.330	--	0.030	--	0.030
DEC										
17...	27	136	150	12	378	0.250	--	0.060	--	0.020
MAR 1991										
27...	26	128	150	9.0	360	0.210	--	0.030	--	0.020
APR										
15...	27	129	150	9.9	366	0.210	--	0.030	--	0.020
MAY										
20...	26	128	160	8.2	359	0.190	--	0.080	--	0.020
JUN										
10...	23	114	140	9.0	314	0.140	--	0.110	--	0.030
JUL										
22...	23	94	130	9.5	--	0.470	--	<0.010	--	0.310
AUG										
15...	19	99	130	7.5	308	0.340	--	0.070	--	0.050
OCT										
28...	28	139	220	9.9	429	0.240	--	0.030	--	0.570
DEC										
16...	32	141	190	12	464	0.320	--	0.040	--	0.020
MAR 1992										
25...	25	123	160	13	354	0.200	--	0.050	--	<0.010
APR										
28...	25	127	150	8.2	340	0.190	--	0.080	--	<0.010
MAY										
18...	26	128	150	9.2	356	0.160	--	0.110	--	0.020
JUN										
16...	20	107	110	8.0	286	0.140	--	0.080	--	0.010
JUL										
16...	16	99	90	7.1	232	0.150	--	0.040	--	<0.010
AUG										
17...	17	104	100	5.8	286	0.210	--	0.030	--	0.020
OCT										
20...	21	124	130	7.9	336	0.180	--	0.060	--	0.050
JAN 1993										
13...	25	133	170	8.8	372	--	0.290	--	0.040	0.030
MAR										
24...	22	125	140	8.2	300	--	0.220	--	0.040	0.120

Table 44. Onsite measurements and bacteriological and selected inorganic data for station 07099400, Arkansas River above Pueblo--Continued

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
APR 1990										
09...	<1	0.3	1	1	3	1	130	6	1	<0.5
MAY										
14...	<1	<0.1	1	<1	2	1	30	4	1	<0.5
JUN										
11...	1	0.6	<1	<1	430	3	220	16	25	1.8
JUL										
20...	<1	<0.1	1	<1	3	2	700	10	6	<0.5
24...	<1	<0.1	1	<1	3	1	630	3	2	<0.5
AUG										
20...	<1	0.5	2	<1	3	2	4700	19	8	<0.5
SEP										
28...	<1	<0.1	<1	<1	2	1	280	3	2	<0.5
OCT										
22...	<1	<0.1	2	<1	2	1	350	3	1	<0.5
DEC										
17...	<1	0.3	<1	<1	3	1	110	9	<1	<0.5
MAR 1991										
27...	<1	0.4	2	<1	2	2	100	<3	1	<0.5
APR										
15...	<1	0.9	<1	<1	2	1	60	5	2	<0.5
MAY										
20...	<1	<0.1	<1	<1	8	2	80	24	3	<0.5
JUN										
10...	<1	<0.1	<1	2	10	4	110	6	6	<0.5
JUL										
22...	<1	<0.1	10	<1	12	2	--	<10	23	<0.5
AUG										
15...	<1	2.9	<1	<1	12	6	500	<3	--	<0.5
OCT										
28...	<1	<0.1	1	<1	9	<1	260	<3	8	0.6
DEC										
16...	<1	0.8	<1	<1	--	1	130	5	5	<0.5
MAR 1992										
25...	<1	<0.1	1	<1	<1	1	40	28	<1	<0.5
APR										
28...	<1	<0.1	<1	<1	<1	1	60	15	<1	<0.5
MAY										
18...	<1	0.1	<1	<1	1	1	70	8	<1	1.5
JUN										
16...	<1	<0.1	<1	<1	4	3	110	5	1	<0.5
JUL										
16...	<1	<0.1	<1	<1	4	1	150	4	1	<0.5
AUG										
17...	<1	<0.1	<1	<1	2	<1	180	<3	1	<0.5
OCT										
20...	<1	0.3	1	<1	3	2	340	4	3	<0.5
JAN 1993										
13...	<1	<0.1	<1	<1	1	1	30	6	<1	<0.5
MAR										
24...	<1	<0.1	<1	<1	<1	<1	20	5	<1	<0.5

Table 44. Onsite measurements and bacteriological and selected inorganic data for station 07099400, Arkansas River above Pueblo--Continued

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990										
09...	20	3	--	1	4	4	<1	<1.0	10	<3
MAY										
14...	30	5	--	1	5	5	<1	<1.0	<10	<3
JUN										
11...	40	16	--	2	5	4	<1	<1.0	30	10
JUL										
20...	80	13	3	<1	--	--	<1	<1.0	10	<3
24...	50	10	2	1	--	--	<1	<1.0	<10	4
AUG										
20...	10	6	2	1	--	--	<1	<1.0	<10	<3
SEP										
28...	50	18	2	2	--	--	<1	--	20	7
OCT										
22...	80	18	4	1	--	--	<1	<1.0	20	<3
DEC										
17...	10	5	5	1	--	--	<1	<1.0	<10	<3
MAR 1991										
27...	<10	1	1	1	--	--	<1	<1.0	10	<3
APR										
15...	<10	3	2	2	--	--	<1	<1.0	<10	<3
MAY										
20...	20	5	5	1	--	--	<1	<1.0	<10	12
JUN										
10...	70	45	13	3	--	--	<1	<1.0	<10	9
JUL										
22...	270	<10	12	<1	--	--	<1	<1.0	50	<10
AUG										
15...	50	<1	5	4	--	--	<1	<1.0	10	<3
OCT										
28...	60	22	4	3	--	--	<1	<1.0	<10	3
DEC										
16...	30	6	4	3	--	--	<1	<1.0	40	<3
MAR 1992										
25...	10	2	2	2	--	--	<1	<1.0	10	5
APR										
28...	10	4	2	2	--	--	<1	<1.0	<10	<3
MAY										
18...	60	37	2	2	--	--	<1	<1.0	20	<3
JUN										
16...	60	37	2	2	--	--	<1	<1.0	30	4
JUL										
16...	30	4	1	<1	--	--	<1	<1.0	<10	<3
AUG										
17...	70	37	1	<1	--	--	<1	<1.0	10	<3
OCT										
20...	60	17	3	1	--	--	<1	<1.0	<10	<3
JAN 1993										
13...	20	4	3	2	--	--	<1	<1.0	20	3
MAR										
24...	10	3	3	<1	--	--	<1	<1.0	<10	<3

Table 45. Onsite measurements and bacteriological and selected inorganic data for station 07099970, Arkansas River at Moffat Street, at Pueblo

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 1990											
10...	0910	142	682	8.5	6.0	9.4	--	--	290	77	24
MAY											
14...	1045	283	692	8.4	12.0	9.7	K28	K35	300	78	25
JUN											
11...	1130	3800	602	8.4	17.0	7.9	93	310	250	64	21
JUL											
20...	1645	1460	353	8.1	22.5	--	--	--	140	41	10
24...	1135	629	427	8.4	21.5	7.8	98	K560	180	51	13
AUG											
20...	1215	863	445	8.3	22.5	7.9	52	110	180	52	13
SEP											
28...	1100	270	558	8.1	18.0	--	>190	>200	220	60	18
OCT											
22...	1030	316	614	8.5	12.5	9.7	E17	52	250	67	19
DEC											
17...	1030	33	841	8.3	4.0	11.2	E17	E71	360	98	28
MAR 1991											
27...	1320	321	605	--	10.5	--	E3	E30	250	69	20
APR											
15...	1005	232	639	8.1	8.0	9.9	E1	22	260	70	20
MAY											
20...	1115	502	607	8.2	12.5	9.4	46	97	250	68	20
JUN											
10...	1145	1590	520	8.6	17.5	8.9	E9	110	210	58	16
JUL											
22...	1040	1630	402	8.4	21.5	7.6	51	96	160	45	12
AUG											
15...	0955	1530	492	8.2	22.0	7.4	120	130	210	59	14
OCT											
28...	1140	94	758	8.4	10.5	9.9	E530	110	300	84	23
DEC											
16...	1115	54	892	8.3	4.5	12.2	E4	E10	360	98	29
MAR 1992											
25...	1340	353	587	8.5	10.5	10.1	--	--	240	65	19
APR											
28...	0955	496	599	8.4	9.0	10.2	E11	22	240	64	19
MAY											
18...	1100	567	584	8.6	13.0	9.9	E6	40	250	67	19
JUN											
16...	0930	1560	502	8.4	16.5	8.4	E13	41	210	56	16
JUL											
16...	1015	1020	423	8.4	19.5	8.1	26	33	170	48	13
AUG											
17...	0955	515	461	8.3	20.5	8.7	E75	64	200	56	14
OCT											
20...	1015	216	587	8.4	12.0	9.7	E110	71	250	69	18
JAN 1993											
14...	0835	181	702	8.2	0.5	12.4	E12	E7	280	74	22
MAR											
24...	1145	204	603	8.5	8.5	10.4	E2	--	240	66	19

Table 45. Onsite measurements and bacteriological and selected inorganic data for station 07099970, Arkansas River at Moffat Street, at Pueblo--Continued

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)
APR 1990										
10...	36	132	200	11	468	0.600	--	0.020	--	0.020
MAY										
14...	38	134	240	12	474	0.400	--	0.020	--	0.020
JUN										
11...	29	--	170	11	395	0.200	--	0.060	--	0.030
JUL										
20...	15	87	86	7.3	210	0.400	--	0.070	--	0.280
24...	19	93	110	6.2	252	0.400	--	0.020	--	0.060
AUG										
20...	20	96	120	7.2	287	0.200	--	0.060	--	0.030
SEP										
28...	29	109	150	11	369	0.700	--	0.030	--	0.030
OCT										
22...	28	126	180	9.8	392	0.500	--	0.020	--	0.010
DEC										
17...	46	150	290	22	591	1.40	--	0.040	--	0.030
MAR 1991										
27...	28	129	200	10	395	0.340	--	0.020	--	0.020
APR										
15...	31	134	180	10	423	0.500	--	<0.010	--	0.010
MAY										
20...	28	129	160	11	379	0.280	--	0.030	--	0.010
JUN										
10...	24	113	150	9.4	324	0.190	--	0.010	--	0.030
JUL										
22...	17	89	110	6.6	237	0.210	--	<0.010	--	0.060
AUG										
15...	20	101	130	8.3	308	0.410	--	0.050	--	0.060
OCT										
28...	31	146	250	12	503	0.630	--	0.010	--	<0.010
DEC										
16...	45	151	290	18	663	1.10	--	0.010	--	0.010
MAR 1992										
25...	28	123	180	14	390	0.110	--	0.020	--	<0.010
APR										
28...	27	126	170	12	404	0.310	--	0.030	--	<0.010
MAY										
18...	27	129	170	10	364	0.260	--	0.030	--	0.020
JUN										
16...	22	108	130	8.6	294	0.170	--	0.020	--	0.020
JUL										
16...	18	101	100	7.7	258	0.200	--	0.030	--	<0.010
AUG										
17...	19	108	120	6.7	276	0.290	--	0.030	--	0.030
OCT										
20...	25	129	160	10	393	0.440	--	0.030	--	0.030
JAN 1993										
14...	33	142	210	12	465	--	0.670	--	0.030	0.020
MAR										
24...	28	130	170	11	384	--	0.520	--	0.030	0.070

Table 45. Onsite measurements and bacteriological and selected inorganic data for station 07099970, Arkansas River at Moffat Street, at Pueblo--Continued

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
APR 1990										
10...	<1	<0.1	1	1	3	1	140	6	1	<0.5
MAY										
14...	<1	<0.1	<1	<1	2	1	80	4	1	<0.5
JUN										
11...	<1	0.3	<1	<1	22	4	700	6	16	1.2
JUL										
20...	2	--	6	<1	15	5	5400	14	33	<0.5
24...	<1	<0.1	1	<1	3	1	1000	4	3	<0.5
AUG										
20...	1	<0.1	4	<1	3	1	490	4	2	<0.5
SEP										
28...	<1	0.2	<1	<1	3	2	1000	7	4	<0.5
OCT										
22...	<1	<0.1	<1	<1	2	1	360	4	<1	<0.5
DEC										
17...	<1	0.2	<1	<1	3	1	--	--	1	<0.5
MAR 1991										
27...	<1	0.2	<1	<1	3	1	120	7	1	<0.5
APR										
15...	<1	0.4	<1	<1	2	1	80	7	1	0.7
MAY										
20...	<1	<0.1	<1	<1	2	1	110	13	3	<0.5
JUN										
10...	<1	<0.1	<1	<1	4	1	200	15	4	<0.5
JUL										
22...	<1	<0.1	6	<1	6	3	--	<3	9	<0.5
AUG										
15...	<1	0.3	1	<1	21	4	2300	<3	--	<0.5
OCT										
28...	<1	<0.1	1	<1	8	<1	260	6	3	0.6
DEC										
16...	<1	0.8	<1	<1	--	1	80	5	1	<0.5
MAR 1992										
25...	<1	<0.1	<1	<1	<1	<1	140	7	<1	<0.5
APR										
28...	--	<0.1	--	<1	--	<1	--	7	--	<0.5
MAY										
18...	<1	0.3	<1	<1	1	1	100	9	<1	<0.5
JUN										
16...	<1	<0.1	<1	<1	10	7	140	9	2	<0.5
JUL										
16...	<1	<0.1	<1	<1	8	5	690	5	3	<0.5
AUG										
17...	<1	<0.1	<1	<1	2	<1	290	8	1	<0.5
OCT										
20...	<1	0.5	<1	<1	2	1	310	5	1	<0.5
JAN 1993										
14...	<1	<0.1	<1	<1	1	1	140	8	<1	<0.5
MAR										
24...	<1	<0.1	<1	1	<1	1	20	5	<1	<0.5

Table 45. Onsite measurements and bacteriological and selected inorganic data for station 07099970, Arkansas River at Moffat Street, at Pueblo--Continued

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990										
10...	30	17	--	3	10	9	<1	<1.0	<10	<3
MAY										
14...	30	13	--	2	8	9	<1	<1.0	<10	5
JUN										
11...	70	9	--	2	6	5	<1	<1.0	<10	3
JUL										
20...	240	23	10	2	--	--	<1	<1.0	90	6
24...	50	7	2	1	--	--	<1	1.0	10	<3
AUG										
20...	10	6	3	1	--	--	<1	<1.0	<10	<3
SEP										
28...	80	26	4	1	--	--	<1	--	20	4
OCT										
22...	60	12	2	3	--	--	<1	<1.0	10	<3
DEC										
17...	30	16	3	2	--	8	<1	<1.0	<10	11
MAR 1991										
27...	20	8	1	2	--	<1	<1	<1.0	<10	3
APR										
15...	20	12	3	2	--	2	<1	<1.0	<10	5
MAY										
20...	30	9	2	2	6	6	<1	<1.0	<10	9
JUN										
10...	40	19	10	2	--	3	<1	<1.0	<10	5
JUL										
22...	20	3	7	<1	--	3	<1	<1.0	<10	5
AUG										
15...	130	26	5	3	6	5	<1	<1.0	10	<3
OCT										
28...	60	22	4	1	10	11	<1	<1.0	10	3
DEC										
16...	30	17	3	2	24	20	<1	<1.0	40	<3
MAR 1992										
25...	40	9	2	2	8	6	<1	<1.0	<10	<3
APR										
28...	--	6	--	2	6	6	<1	<1.0	--	<3
MAY										
18...	40	20	5	2	6	5	<1	<1.0	<10	3
JUN										
16...	50	18	2	2	4	3	<1	<1.0	10	5
JUL										
16...	50	4	2	2	3	3	<1	1.0	<10	4
AUG										
17...	50	14	2	<1	4	4	<1	<1.0	10	<3
OCT										
20...	60	15	2	1	5	7	<1	<1.0	<10	<3
JAN 1993										
14...	50	11	3	1	10	10	<1	<1.0	<10	<3
MAR										
24...	20	9	3	1	8	8	<1	<1.0	<10	<3

Table 46. Onsite measurements and bacteriological and selected inorganic data for station 07106500, Fountain Creek at Pueblo

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 1990											
10...	1140	90	1160	8.3	13.0	7.0	--	--	360	91	32
MAY											
14...	1300	88	1130	8.3	19.5	7.7	K66	K140	360	92	32
JUN											
11...	1345	77	1250	8.2	25.0	6.5	420	K2800	380	98	33
JUL											
24...	1300	97	1230	8.3	25.5	6.3	700	K2000	390	98	35
AUG											
20...	1400	97	1070	8.1	26.0	6.1	1000	2800	340	88	29
SEP											
05...	1825	9.0	1390	8.5	--	--	--	--	440	86	54
OCT											
22...	1205	90	1230	8.5	10.5	9.4	190	560	370	94	33
DEC											
17...	1220	119	1310	8.1	4.0	10.4	E15	840	400	100	36
MAR 1991											
28...	0825	68	1320	7.8	4.0	10.6	15	330	430	110	37
APR											
15...	1140	64	1370	8.3	15.0	8.8	E23	E110	420	110	36
MAY											
20...	1305	50	1420	8.4	21.0	7.4	42	250	440	110	40
JUN											
10...	1320	190	941	8.3	24.5	6.7	E200	1400	280	74	23
JUL											
22...	1300	253	909	8.3	21.0	7.2	E110	E2600	270	73	22
AUG											
15...	1145	119	1140	8.3	24.5	6.7	1100	1700	350	89	31
OCT											
28...	1250	76	1440	8.3	7.0	10.0	240	870	440	110	39
DEC											
16...	1315	114	1280	8.2	4.5	10.0	E33	150	380	96	33
MAR 1992											
26...	0745	160	1090	8.4	6.0	9.8	--	--	330	84	28
APR											
28...	1110	96	1120	8.4	17.5	7.8	E9	E77	320	82	29
MAY											
18...	1220	32	1480	8.4	24.5	6.8	68	79	460	110	44
JUN											
16...	1100	96	1160	8.4	18.0	7.7	180	230	350	90	30
JUL											
16...	1115	21	1530	8.4	20.5	6.9	340	330	480	110	50
AUG											
17...	1110	34	1500	8.4	23.5	6.9	140	450	510	120	50
OCT											
20...	1145	80	1410	8.4	11.0	9.4	200	310	440	110	41
JAN 1993											
14...	1000	100	1380	8.2	0.0	--	E24	64	400	100	37
MAR											
25...	0745	96	1230	8.3	5.0	10.3	E26	55	360	91	32

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)
APR 1990										
10...	120	169	310	53	828	6.40	--	0.030	--	1.60
MAY										
14...	120	165	370	51	796	5.10	--	0.020	--	1.10
JUN										
11...	130	181	390	51	854	4.40	--	0.010	--	0.820
JUL										
24...	120	194	400	47	856	4.00	--	0.020	--	0.510
AUG										
20...	110	165	310	40	724	3.60	--	0.060	--	0.530
SEP										
05...	150	151	550	42	1010	6.90	--	0.200	--	0.330
OCT										
22...	120	192	330	53	820	4.50	--	0.020	--	0.830
DEC										
17...	130	200	400	61	904	6.50	--	0.090	--	1.60

Table 46. Onsite measurements and bacteriological and selected inorganic data for station 07106500, Fountain Creek at Pueblo--Continued

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)
MAR 1991										
28...	140	202	400	62	936	5.30	--	0.010	--	1.30
APR										
15...	130	206	380	56	942	4.90	--	<0.010	--	0.960
MAY										
20...	140	210	470	55	998	4.00	--	<0.010	--	0.860
JUN										
10...	95	147	280	35	624	3.40	--	0.070	--	0.830
JUL										
22...	87	146	270	34	586	2.80	--	<0.010	--	3.00
AUG										
15...	110	179	330	41	755	3.60	--	0.030	--	0.700
OCT										
28...	130	223	460	52	988	4.70	--	0.010	--	0.640
DEC										
16...	120	195	350	59	910	5.20	--	0.400	--	2.00
MAR 1992										
26...	110	159	310	52	728	5.30	--	0.030	--	1.40
APR										
28...	100	162	320	46	750	4.30	--	0.010	--	1.00
MAY										
18...	150	206	430	59	1040	4.50	--	0.020	--	0.640
JUN										
16...	110	176	310	48	764	4.80	--	0.020	--	1.10
JUL										
16...	160	220	490	57	1070	4.70	--	0.030	--	0.640
AUG										
17...	150	215	500	57	1060	4.70	--	0.030	--	0.660
OCT										
20...	140	220	440	56	1020	5.20	--	0.030	--	1.20
JAN 1993										
14...	140	207	370	63	934	--	6.60	--	--	1.40
MAR										
25...	120	185	330	55	818	--	6.80	--	0.020	1.40

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
APR 1990										
10...	<1	0.2	10	<1	10	3	14000	7	15	<0.5
MAY										
14...	<1	0.1	6	<1	8	2	8900	4	10	<0.5
JUN										
11...	<1	0.2	18	<1	25	4	20000	9	19	<0.5
JUL										
24...	<1	<0.1	11	<1	15	2	18000	4	16	<0.5
AUG										
20...	1	<0.1	16	1	24	2	20000	6	17	<0.5
SEP										
05...	1	<0.1	9	<1	14	5	9000	16	64	<0.5
OCT										
22...	<1	<0.1	8	<1	14	2	12000	7	16	<0.5
DEC										
17...	1	0.2	6	<1	14	2	10000	37	13	<0.5
MAR 1991										
28...	<1	0.3	4	<1	11	2	4500	8	4	<0.5
APR										
15...	<1	0.5	3	<1	8	2	6400	17	8	<0.5
MAY										
20...	<1	0.1	4	<1	6	2	2900	39	7	<0.5
JUN										
10...	<1	<0.1	14	<1	5	2	18000	19	2	<0.5
JUL										
22...	3	<0.1	18	<1	100	2	--	9	140	<0.5
AUG										
15...	<1	<0.1	6	<1	15	2	11000	<3	--	<0.5
OCT										
28...	<1	<0.1	7	<1	19	1	10000	6	19	<0.5
DEC										
16...	<1	0.5	5	<1	--	2	1100	10	19	0.8

Table 46. Onsite measurements and bacteriological and selected inorganic data for station 07106500, Fountain Creek at Pueblo--Continued

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
MAR 1992										
26...	<1	0.1	5	<1	8	2	8500	12	15	<0.5
APR										
28...	--	<0.1	--	<1	--	2	--	4	--	0.7
MAY										
18...	<1	<0.1	<1	<1	4	4	940	<3	2	0.5
JUN										
16...	<1	<0.1	1	<1	6	3	3400	5	8	<0.5
JUL										
16...	<1	<0.1	<1	<1	3	2	690	<3	2	0.6
AUG										
17...	<1	<0.1	<1	2	3	1	230	4	4	0.7
OCT										
20...	<1	<0.1	2	<1	9	2	5800	7	20	0.8
JAN 1993										
14...	<1	<0.1	14	<1	8	2	3000	13	8	<0.5
MAR										
25...	<1	0.1	3	2	8	3	4700	14	6	<0.5

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990										
10...	350	2	--	4	20	19	<1	1.0	80	9
MAY										
14...	250	3	--	3	11	10	<1	<1.0	50	4
JUN										
11...	370	5	--	4	21	20	<1	<1.0	100	5
JUL										
24...	480	4	14	3	--	--	<1	<1.0	100	4
AUG										
20...	460	3	21	3	--	--	<1	<1.0	120	9
SEP										
05...	310	48	16	5	--	--	<1	--	110	8
OCT										
22...	410	3	14	4	--	--	<1	<1.0	80	8
DEC										
17...	390	6	11	3	--	11	1	<1.0	70	14
MAR 1991										
28...	150	5	7	3	--	19	<1	<1.0	40	14
APR										
15...	180	3	9	3	--	6	<1	<1.0	40	10
MAY										
20...	90	4	6	4	24	23	<1	<1.0	30	22
JUN										
10...	460	4	19	4	--	12	<1	<1.0	100	7
JUL										
22...	2000	2	78	2	--	12	1	<1.0	420	8
AUG										
15...	300	<1	14	4	16	5	<1	<1.0	50	4
OCT										
28...	390	9	12	2	29	33	<1	<1.0	80	8
DEC										
16...	360	3	12	3	16	24	<1	<1.0	100	11
MAR 1992										
26...	270	3	9	4	17	17	<1	<1.0	50	12
APR										
28...	--	2	--	2	22	17	<1	<1.0	--	3
MAY										
18...	50	3	4	3	42	33	<1	<1.0	20	4
JUN										
16...	180	2	5	3	25	14	<1	<1.0	30	3
JUL										
16...	40	6	3	3	32	31	<1	<1.0	<10	3
AUG										
17...	50	11	4	2	56	53	<1	<1.0	40	3
OCT										
20...	240	5	7	2	31	31	<1	<1.0	40	6
JAN 1993										
14...	160	7	5	3	21	17	<1	<1.0	10	9
MAR										
25...	200	3	7	3	19	17	<1	<1.0	40	11

Table 47. Onsite measurements and bacteriological and selected inorganic data for station 381510104350601, Arkansas River below Highway 227, at Pueblo

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 1990											
10...	1500	376	850	8.4	18.0	7.7	--	--	310	81	27
MAY											
14...	1500	552	796	8.3	19.5	8.3	K8	K100	310	80	27
JUN											
11...	1515	--	643	8.4	17.0	8.0	35	330	250	66	21
JUL											
24...	1430	800	537	8.5	25.0	7.1	230	K1100	210	57	16
AUG											
20...	1540	--	527	8.4	24.0	7.7	310	500	210	57	16
OCT											
22...	1350	680	724	8.7	15.0	9.3	E25	110	270	72	22
DEC											
17...	1345	184	1110	8.9	5.5	10.3	12	500	390	100	34
MAR 1991											
28...	1000	421	712	8.2	8.0	10.2	<2	44	280	74	22
APR											
15...	1345	322	801	8.3	15.0	8.5	<2	44	290	78	24
MAY											
20...	1450	653	652	8.6	14.0	9.2	78	350	270	71	22
JUN											
10...	1530	--	562	8.5	18.0	8.7	70	320	220	60	17
JUL											
22...	1545	E1900	461	8.4	22.0	7.6	<3	E510	150	43	11
AUG											
15...	1440	1390	556	8.4	24.0	7.5	170	160	220	62	16
OCT											
28...	1430	233	931	8.5	9.5	9.8	150	180	340	90	28
DEC											
16...	1505	227	1140	8.5	6.0	9.9	E31	150	390	100	33
MAR 1992											
26...	0915	552	748	8.3	7.0	10.4	--	--	270	73	22
APR											
28...	1300	676	660	8.7	12.0	10.2	E10	E33	250	66	21
MAY											
18...	1400	668	612	8.8	15.5	10.2	E10	46	250	66	20
JUN											
16...	1300	1610	526	8.9	18.0	9.1	46	86	210	57	16
JUL											
16...	1330	957	443	8.8	20.5	8.2	E13	50	180	49	14
AUG											
17...	1340	675	520	8.7	22.0	8.5	45	68	210	59	16
OCT											
20...	1300	324	783	8.5	14.5	10.1	42	110	300	79	24
JAN 1993											
14...	1140	E280	909	8.4	0.0	13.0	E3	E13	320	82	28
MAR											
25...	0850	372	910	8.4	6.0	10.8	E8	E18	310	78	27

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)
APR 1990										
10...	63	143	250	28	588	2.30	--	0.020	--	0.570
MAY										
14...	57	137	270	21	546	1.40	--	0.020	--	0.290
JUN										
11...	35	130	190	12	422	0.400	--	0.070	--	0.060
JUL										
24...	33	108	140	11	350	0.800	--	0.020	--	0.090
AUG										
20...	31	104	140	11	354	0.500	--	0.070	--	0.100
OCT										
22...	47	136	230	18	480	1.10	--	0.020	--	0.170
DEC										
17...	97	180	330	42	766	4.10	--	0.050	--	0.670
MAR 1991										
28...	41	141	200	16	468	0.990	--	0.010	--	0.150
APR										
15...	50	145	220	18	517	1.20	--	<0.010	--	0.220

Table 47. Onsite measurements and bacteriological and selected inorganic data for station 381510104350601, Arkansas River below Highway 227, at Pueblo--Continued

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)
MAY 1991										
20...	35	132	190	13	425	0.460	--	0.020	--	0.060
JUN										
10...	30	118	160	9.2	351	0.450	--	0.040	--	0.110
JUL										
22...	16	98	99	6.0	213	0.190	--	<0.010	--	0.050
AUG										
15...	27	107	150	11	348	0.640	--	0.040	--	0.110
OCT										
28...	55	163	310	22	627	1.50	--	0.020	--	0.030
DEC										
16...	94	176	350	46	760	3.90	--	0.210	--	1.10
MAR 1992										
26...	51	136	220	22	500	1.90	--	0.030	--	0.410
APR										
28...	37	129	200	17	384	0.800	--	0.020	--	0.160
MAY										
18...	32	125	180	13	400	0.360	--	0.020	--	0.040
JUN										
16...	26	111	140	11	328	0.390	--	0.020	--	0.060
JUL										
16...	21	103	110	9.0	274	0.250	--	0.030	--	0.030
AUG										
17...	26	112	140	9.0	356	0.410	--	0.020	--	0.060
OCT										
20...	50	148	230	19	536	1.40	--	0.030	--	0.280
JAN 1993										
14...	69	161	270	28	630	--	2.70	--	0.240	0.430
MAR										
25...	74	158	270	32	598	--	3.60	--	0.020	0.650

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
APR 1990										
10...	<1	<0.1	4	2	5	2	3400	4	5	<0.5
MAY										
14...	<1	<0.1	1	<1	1	2	<10	<3	<1	<0.5
JUN										
11...	<1	<0.1	2	<1	5	1	2600	7	9	<0.5
JUL										
24...	<1	<0.1	2	<1	6	2	3000	11	5	<0.5
AUG										
20...	<1	<0.1	5	<1	8	2	20000	9	17	0.9
OCT										
22...	<1	<0.1	3	<1	5	2	3100	33	5	<0.5
DEC										
17...	<1	0.1	4	<1	10	2	6200	14	13	<0.5
MAR 1991										
28...	<1	0.1	1	<1	4	1	1900	9	1	<0.5
APR										
15...	<1	0.3	<1	<1	3	1	940	5	2	<0.5
MAY										
20...	<1	<0.1	<1	<1	3	1	380	11	2	<0.5
JUN										
10...	<1	<0.1	2	2	8	3	2600	360	1	<0.5
JUL										
22...	<1	0.2	4	<1	39	5	--	34	7	<0.5
AUG										
15...	<1	0.2	<1	<1	7	3	940	<3	--	<0.5
OCT										
28...	<1	<0.1	2	<1	10	1	2500	6	6	<0.5
DEC										
16...	<1	<0.1	2	<1	--	2	5700	12	10	<0.5
MAR 1992										
26...	<1	<0.1	2	<1	4	1	2700	6	3	<0.5
APR										
28...	<1	<0.1	<1	<1	2	1	500	5	2	<0.5
MAY										
18...	<1	<0.1	<1	<1	2	1	200	15	2	<0.5

Table 47. Onsite measurements and bacteriological and selected inorganic data for station 381510104350601, Arkansas River below Highway 227, at Pueblo--Continued

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
JUN 1992										
16...	<1	0.1	<1	<1	19	7	160	10	3	<0.5
JUL										
16...	<1	0.2	<1	<1	18	14	170	8	2	0.5
AUG										
17...	<1	<0.1	<1	<1	10	7	290	7	10	0.8
OCT										
20...	<1	<0.1	<1	<1	3	1	1500	4	5	<0.5
JAN 1993										
14...	<1	<0.1	11	<1	2	1	60	6	<1	<0.5
MAR										
25...	<1	<0.1	<1	2	3	2	1600	7	2	<0.5

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990										
10...	120	9	--	3	12	11	<1	<1.0	30	10
MAY										
14...	<10	8	--	2	11	11	<1	<1.0	<10	<3
JUN										
11...	100	11	--	2	7	6	<1	<1.0	30	<3
JUL										
24...	100	7	4	1	--	--	<1	<1.0	20	<3
AUG										
20...	90	5	5	1	--	--	<1	<1.0	30	8
OCT										
22...	140	6	5	2	--	--	<1	<1.0	30	<3
DEC										
17...	240	8	17	4	--	--	1	<1.0	30	5
MAR 1991										
28...	70	9	4	2	--	--	<1	<1.0	20	6
APR										
15...	50	10	5	1	--	--	<1	<1.0	<10	3
MAY										
20...	40	8	2	2	--	--	<1	<1.0	<10	6
JUN										
10...	120	19	7	2	--	--	<1	<1.0	20	4
JUL										
22...	20	23	12	2	--	--	<1	<1.0	10	8
AUG										
15...	70	<1	5	3	--	--	<1	<1.0	<10	4
OCT										
28...	120	13	5	2	--	--	<1	<1.0	20	4
DEC										
16...	220	7	8	3	--	--	<1	<1.0	70	5
MAR 1992										
26...	80	7	4	2	--	--	<1	<1.0	20	7
APR										
28...	30	5	3	2	--	--	<1	<1.0	10	<3
MAY										
18...	40	14	2	2	--	--	<1	<1.0	10	3
JUN										
16...	50	13	2	2	--	--	<1	<1.0	10	<3
JUL										
16...	30	4	3	<1	--	--	<1	<1.0	10	4
AUG										
17...	50	10	2	<1	--	--	<1	<1.0	10	<3
OCT										
20...	90	9	4	1	--	--	<1	<1.0	10	<3
JAN 1993										
14...	50	9	3	1	--	--	<1	<1.0	<10	<3
MAR										
25...	90	7	4	2	--	--	<1	<1.0	20	7

Table 48. Onsite measurements and bacteriological and selected inorganic data for station 07109500, Arkansas River near Avondale

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 1990												
10...	1840	445	955	8.3	14.5	6.5	--	--	360	93	31	68
MAY												
14...	1750	634	933	8.1	18.5	7.3	K5	94	380	96	33	64
JUN												
12...	0920	4000	648	8.1	16.0	7.9	K28	K550	270	70	22	35
JUL												
24...	1700	960	649	8.2	23.0	6.3	230	K670	250	69	20	39
AUG												
20...	1800	1170	610	8.2	24.5	6.7	460	K1000	230	63	18	34
OCT												
22...	1615	628	871	8.5	14.5	8.8	E31	160	320	85	27	55
DEC												
17...	1550	286	1120	8.4	5.5	11.0	<2	420	420	110	36	77
MAR 1991												
28...	1150	510	803	8.8	8.5	10.2	<3	E32	330	86	27	48
APR												
15...	1615	430	852	8.4	16.0	--	<2	E15	320	85	27	51
MAY												
20...	1650	670	698	8.4	16.0	8.2	E12	110	300	79	25	43
JUN												
10...	1800	2320	604	8.4	21.0	6.8	230	1000	230	62	18	33
JUL												
22...	1830	1950	547	8.2	22.5	6.5	390	E640	210	58	16	30
AUG												
15...	1715	1750	607	8.2	25.5	6.1	270	590	230	66	17	29
SEP												
04...	0935	740	617	8.0	20.0	--	--	--	--	--	--	--
OCT												
28...	1630	330	1050	8.8	9.0	10.3	E52	110	410	110	34	59
DEC												
17...	0805	299	1230	8.2	3.5	10.2	E28	140	470	120	41	87
MAR 1992												
26...	1115	654	813	8.4	9.0	9.8	--	--	310	83	25	52
APR												
28...	1500	810	765	8.3	16.0	8.7	E7	20	290	75	24	42
MAY												
18...	1615	828	717	8.6	19.5	9.4	E15	22	300	80	24	38
JUN												
16...	1500	1720	593	8.4	19.5	8.0	E16	75	230	64	18	30
JUL												
16...	1520	1270	518	8.3	23.0	7.2	33	90	210	56	16	25
AUG												
17...	1530	733	617	8.3	24.0	6.8	58	69	260	70	20	30
OCT												
20...	1430	433	854	8.5	15.0	10.2	E26	82	350	92	28	50
JAN 1993												
14...	1330	444	973	8.2	0.0	11.5	E1	E8	360	93	30	64
MAR												
25...	1100	428	844	8.4	9.0	10.8	E4	E6	330	85	28	55

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
APR 1990											
10...	146	350	30	685	3.10	--	0.150	--	0.840	--	--
MAY											
14...	148	330	25	672	2.10	--	0.050	--	0.510	--	--
JUN											
12...	131	190	12	417	0.500	--	0.050	--	0.080	2	1
JUL											
24...	121	190	14	439	1.20	--	0.030	--	0.150	--	--
AUG											
20...	109	180	13	388	0.800	--	0.080	--	0.290	2	2
OCT											
22...	148	290	23	581	1.70	--	0.020	--	0.340	--	--
DEC											
17...	175	390	33	780	3.10	--	0.210	--	0.550	--	--
MAR 1991											
28...	144	290	18	547	1.40	--	0.040	--	0.270	--	--

Table 48. Onsite measurements and bacteriological and selected inorganic data for station 07109500, Arkansas River near Avondale--Continued

DATE	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)
APR 1991											
15...	146	260	21	582	1.50	--	0.020	--	0.310	--	--
MAY											
20...	137	230	16	487	1.10	--	0.030	--	0.230	--	--
JUN											
10...	119	180	11	372	0.660	--	0.040	--	0.420	3	2
JUL											
22...	102	160	10	335	0.680	--	<0.010	--	0.170	--	--
AUG											
15...	112	170	13	397	0.910	--	0.060	--	0.210	--	--
SEP											
04...	--	--	--	--	--	--	--	--	--	4	2
OCT											
28...	165	380	24	714	2.10	--	0.040	--	<0.010	--	--
DEC											
17...	173	370	37	975	3.60	--	0.610	--	0.840	--	--
MAR 1992											
26...	139	250	24	548	2.10	--	0.030	--	0.450	--	--
APR											
28...	136	230	19	512	1.30	--	0.030	--	0.230	--	--
MAY											
18...	135	200	18	472	0.790	--	0.020	--	0.140	--	--
JUN											
16...	116	150	12	366	0.660	--	0.040	--	0.090	1	1
JUL											
16...	108	140	11	322	0.560	--	0.050	--	0.120	--	--
AUG											
17...	119	180	11	398	0.830	--	0.020	--	0.160	2	<1
OCT											
20...	150	260	19	609	1.60	--	0.030	--	0.340	--	--
JAN 1993											
14...	159	300	27	669	--	2.70	--	0.480	0.440	--	--
MAR											
25...	148	270	23	584	--	2.40	--	0.040	0.420	--	--

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
APR 1990											
10...	1	<0.1	3	<1	6	2	3600	6	5	<0.5	130
MAY											
14...	<1	<0.1	2	<1	6	3	2900	5	21	--	120
JUN											
12...	1	0.2	8	<1	22	3	8800	8	30	<0.5	250
JUL											
24...	<1	<0.1	5	<1	8	1	6400	22	9	<0.5	210
AUG											
20...	<1	<0.1	8	<1	14	2	10000	4	10	<0.5	230
OCT											
22...	<1	<0.1	3	<1	7	2	2700	4	4	<0.5	150
DEC											
17...	<1	<0.1	<1	<1	5	2	1900	18	3	<0.5	110
MAR 1991											
28...	<1	<0.1	2	<1	4	2	1200	10	1	<0.5	70
APR											
15...	<1	0.1	<1	<1	3	1	890	10	5	<0.5	50
MAY											
20...	<1	0.5	<1	<1	4	1	910	11	3	<0.5	60
JUN											
10...	<1	<0.1	2	2	12	3	7700	10	35	<0.5	210
JUL											
22...	<1	<0.1	13	<1	25	3	--	12	45	<0.5	380
AUG											
15...	<1	0.2	3	<1	11	4	4000	<3	--	<0.5	130
SEP											
04...	--	--	--	--	--	--	--	--	--	--	--
OCT											
28...	<1	<0.1	<1	<1	9	<1	1200	21	4	<0.5	90
DEC											
17...	<1	0.4	3	<1	--	2	3200	18	11	<0.5	150

Table 48. Onsite measurements and bacteriological and selected inorganic data for station 07109500, Arkansas River near Avondale--Continued

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
MAR 1992											
26...	<1	<0.1	2	<1	5	1	2900	9	4	<0.5	130
APR											
28...	--	<0.1	--	<1	--	1	--	6	--	<0.5	--
MAY											
18...	<1	<0.1	<1	<1	3	1	960	12	2	0.5	60
JUN											
16...	<1	<0.1	<1	<1	46	16	1400	12	5	<0.5	90
JUL											
16...	<1	<0.1	<1	<1	15	10	1600	7	4	<0.5	120
AUG											
17...	<1	<0.1	2	<1	2	<1	830	7	3	<0.5	80
OCT											
20...	<1	<0.1	<1	<1	3	1	1300	5	5	<0.5	100
JAN 1993											
14...	<1	<0.1	13	<1	5	2	1100	35	2	<0.5	100
MAR											
25...	<1	<0.1	<1	<1	2	1	610	12	1	<0.5	50

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990											
10...	6	--	--	--	2	12	12	<1	<1.0	30	<3
MAY											
14...	9	--	--	--	3	13	16	<1	<1.0	30	<3
JUN											
12...	5	<0.10	<0.1	--	3	7	7	1	<1.0	70	<3
JUL											
24...	4	--	--	7	1	--	--	<1	<1.0	40	<3
AUG											
20...	3	<0.10	<0.1	10	1	--	--	<1	<1.0	60	5
OCT											
22...	4	--	--	5	1	--	--	<1	<1.0	30	4
DEC											
17...	23	--	--	6	3	--	20	<1	1.0	30	11
MAR 1991											
28...	10	--	--	3	3	--	9	<1	1.0	<10	<3
APR											
15...	6	--	--	2	2	--	6	<1	<1.0	<10	5
MAY											
20...	5	--	--	3	2	8	9	<1	<1.0	<10	9
JUN											
10...	4	<0.10	<0.1	12	1	--	4	<1	<1.0	30	3
JUL											
22...	2	--	--	27	<1	--	5	<1	<1.0	100	<3
AUG											
15...	<1	--	--	7	3	6	7	<1	<1.0	20	5
SEP											
04...	--	0.10	<0.1	--	--	--	--	--	--	--	--
OCT											
28...	9	--	--	4	3	18	17	<1	<1.0	20	5
DEC											
17...	21	--	--	8	3	25	22	<1	<1.0	70	11
MAR 1992											
26...	6	--	--	5	2	9	9	<1	<1.0	20	7
APR											
28...	5	--	--	--	3	9	10	<1	<1.0	--	<3
MAY											
18...	4	--	--	3	2	9	8	<1	<1.0	10	5
JUN											
16...	3	<0.10	<0.1	3	2	5	4	<1	<1.0	20	<3
JUL											
16...	3	--	--	5	1	6	5	<1	<1.0	10	<3
AUG											
17...	3	<0.10	<0.1	2	<1	8	7	<1	<1.0	30	<3
OCT											
20...	5	--	--	4	1	13	12	<1	<1.0	10	<3
JAN 1993											
14...	14	--	--	5	2	14	12	<1	<1.0	<10	4
MAR											
25...	8	--	--	4	2	12	12	<1	<1.0	<10	5

Table 49. Onsite measurements and selected inorganic data for station 07116500, Huerfano River near Boone

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
APR 1990											
11...	1135	0.35	5780	8.2	17.5	8.4	5640	0.900	--	0.010	--
JUN											
12...	1340	1.3	2540	8.2	35.5	5.2	2140	<0.100	--	0.020	--
JUL											
25...	0830	25	3040	8.2	17.0	7.8	2700	0.900	--	0.020	--
AUG											
21...	1000	0.28	5000	8.2	24.0	7.7	4540	<0.100	--	0.080	--
OCT											
23...	0845	4.4	2440	8.5	6.5	10.3	1790	0.200	--	0.020	--
APR 1991											
16...	0820	3.6	4050	--	6.0	10.3	3570	0.080	--	<0.010	--
SEP											
04...	1150	107	1080	8.0	20.0	7.0	774	2.10	--	0.240	--
DEC											
17...	1000	27	3120	8.4	0.0	10.5	2560	0.860	--	0.030	--
APR 1992											
28...	1610	2.1	5570	8.3	28.0	7.4	5480	0.290	--	0.030	--
JUN											
16...	1610	7.7	3280	8.4	24.0	6.7	2840	0.270	--	0.030	--
AUG											
18...	0730	--	5250	8.4	15.5	8.0	4530	0.091	--	0.040	--
MAR 1993											
25...	1230	27	1700	8.4	17.0	8.3	1340	--	0.330	--	0.030

Table 50. Onsite measurements and selected inorganic data for station 07117000, Arkansas River near Nepesta

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
APR 1990											
11...	1300	360	1010	8.2	17.5	7.7	721	3.00	--	<0.010	--
MAY											
15...	0830	498	977	8.4	14.5	7.9	703	2.10	--	<0.010	--
JUN											
12...	1500	2720	674	8.3	20.0	7.4	431	0.500	--	0.020	--
JUL											
25...	0940	216	768	8.2	19.5	7.2	539	1.20	--	0.010	--
AUG											
21...	1130	675	653	8.1	23.0	6.8	447	0.900	--	0.060	--
OCT											
23...	0950	675	883	8.6	11.0	8.8	590	1.60	--	0.010	--
DEC											
18...	0825	93	1290	8.3	0.0	11.8	926	3.30	--	0.100	--
MAR 1991											
28...	1445	345	897	8.5	13.5	8.8	606	5.60	--	0.010	--
APR											
16...	0945	250	1000	8.3	10.0	9.4	660	1.90	--	<0.010	--
MAY											
21...	0910	516	797	8.4	16.0	7.6	541	1.20	--	0.010	--
JUN											
11...	1000	1820	629	8.3	17.5	7.8	383	0.750	--	0.020	--
JUL											
23...	1050	1380	536	8.3	21.0	6.9	348	0.790	--	<0.010	--
AUG											
16...	0820	1170	645	8.2	22.0	6.8	415	1.10	--	0.030	--
OCT											
29...	0915	156	1170	8.3	4.0	10.8	786	2.40	--	0.020	--
DEC											
17...	1130	172	1410	8.4	2.5	11.2	1080	3.40	--	0.040	--
MAR 1992											
26...	1305	505	902	8.4	13.5	8.8	621	2.30	--	0.010	--
APR											
29...	0915	617	832	8.4	14.0	8.6	500	1.30	--	0.020	--
MAY											
18...	1750	582	758	8.2	23.5	7.2	496	0.880	--	0.010	--
JUN											
17...	0815	1530	650	8.5	16.0	8.2	384	0.730	--	0.020	--
JUL											
16...	1700	971	554	8.3	23.0	6.8	638	0.670	--	0.060	--
AUG											
18...	0845	624	691	8.4	20.0	7.2	466	1.10	--	0.020	--
OCT											
20...	1555	280	984	8.5	17.0	8.8	717	2.10	--	0.030	--
JAN 1993											
14...	1510	479	1210	8.2	0.0	11.6	842	--	2.80	--	0.300
MAR											
25...	1315	410	977	8.4	16.0	8.8	684	--	2.90	--	0.030

Table 51. Onsite measurements and selected inorganic data for station 380715103564701, Apishapa River at Highway 50, near Fowler

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
APR 1990									
11...	1630	7.0	2320	8.0	21.0	8.0	2110	2.70	0.030
JUN									
12...	1715	26	1380	8.0	25.5	6.1	1040	1.10	0.080
JUL									
25...	1130	55	1200	7.9	19.0	6.7	942	1.00	0.030
AUG									
21...	1300	31	1640	7.8	24.5	6.5	1340	1.70	0.090
OCT									
23...	1225	27	2100	8.4	12.5	9.7	1750	2.60	0.020
APR 1991									
16...	1200	12	2430	8.2	13.0	12.2	1980	2.50	0.020
JUN									
11...	1145	31	1150	7.8	23.5	5.9	789	1.50	0.190
JUL									
02...	1645	E800	1020	--	--	--	--	--	--
23...	1345	17	1590	8.2	23.0	8.4	1280	1.60	<0.010
OCT									
29...	1040	16	2230	8.1	6.0	--	1780	3.10	0.060
APR 1992									
29...	1110	30	1490	8.2	16.5	9.2	1110	2.10	0.040
JUN									
17...	1200	25	1450	8.1	20.0	7.8	1110	1.60	0.040
AUG									
18...	1100	E400	814	8.0	9.0	8.4	586	<0.050	0.140
OCT									
21...	0855	14	2460	8.0	9.5	9.2	2190	3.80	0.060

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990								
11...	--	--	--	--	--	--	--	--
JUN								
12...	--	--	--	--	--	--	--	--
JUL								
25...	--	--	--	--	--	--	--	--
AUG								
21...	--	--	--	--	--	--	--	--
OCT								
23...	--	--	--	--	--	--	--	--
APR 1991								
16...	--	--	--	--	--	--	--	--
JUN								
11...	--	--	--	--	--	--	--	--
JUL								
02...	300	--	270000	--	5800	--	1300	--
23...	--	--	--	--	--	--	--	--
OCT								
29...	--	--	--	--	--	--	--	--
APR 1992								
29...	--	--	--	--	--	--	--	--
JUN								
17...	--	--	--	--	--	--	--	--
AUG								
18...	260	<1	180000	24	6400	45	850	<3
OCT								
21...	--	--	--	--	--	--	--	--

Table 52. Onsite measurements and bacteriological and selected inorganic data for station 07119700, Arkansas River at Catlin Dam, near Fowler

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR 1990												
12...	0845	112	1120	8.5	8.5	9.8	93	190	440	110	40	80
MAY												
15...	1010	241	1050	8.3	16.5	8.0	94	210	400	100	37	73
JUN												
13...	0920	2920	673	8.3	18.0	8.0	180	K1100	280	73	24	39
JUL												
25...	1320	83	927	7.8	23.0	6.4	1700	2000	370	100	28	52
AUG												
21...	1600	445	721	8.1	26.0	6.7	690	1700	280	77	22	42
OCT												
23...	1315	308	1080	8.4	13.0	9.0	88	540	420	110	35	67
DEC												
18...	0945	258	1510	--	0.0	11.8	30	200	660	170	57	100
MAR 1991												
28...	1630	112	1020	8.1	13.5	8.8	E6	210	400	100	36	68
APR												
16...	1340	109	1210	8.4	13.0	9.7	E8	110	470	120	41	73
MAY												
21...	1110	222	902	8.5	18.0	7.5	93	280	350	90	30	53
JUN												
11...	1430	1850	676	8.2	23.0	6.6	670	1600	250	67	19	37
JUL												
02...	1835	1750	646	--	--	--	--	--	--	--	--	--
23...	1600	948	594	8.3	23.0	8.0	680	1500	230	66	17	32
AUG												
16...	1130	1480	636	8.2	23.0	6.9	--	>3300	250	68	19	32
SEP												
04...	1445	1420	719	8.1	21.0	7.4	--	--	--	--	--	--
OCT												
29...	1200	77	1320	8.4	5.5	12.0	96	84	530	140	45	80
DEC												
17...	1335	161	1500	8.4	3.0	11.4	57	160	600	150	55	100
MAR 1992												
26...	1505	291	963	8.5	14.5	8.6	--	--	370	96	32	63
APR												
17...	1515	690	868	8.3	19.0	7.9	--	--	--	--	--	--
29...	1220	300	914	8.4	18.5	7.9	54	130	350	89	30	54
MAY												
19...	0730	314	842	8.5	18.0	7.4	69	92	340	88	28	48
JUN												
17...	1030	1150	648	8.4	17.0	8.2	96	190	250	66	20	32
JUL												
17...	0740	581	634	8.2	19.5	7.5	490	870	250	68	20	31
AUG												
18...	1230	613	781	8.1	14.5	8.2	5900	10000	320	94	21	38
OCT												
21...	1010	128	1140	8.4	11.0	9.2	47	180	460	120	39	75
JAN 1993												
14...	1605	339	1360	8.2	0.5	11.4	E8	39	530	130	49	93
MAR												
25...	1430	269	1040	8.4	16.0	8.9	E18	86	400	100	37	72

Table 52. Onsite measurements and bacteriological and selected inorganic data for station 07119700, Arkansas River at Catlin Dam, near Fowler--Continued

DATE	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)
APR 1990											
12...	166	360	29	833	2.70	--	0.040	--	0.480	--	--
MAY											
15...	159	400	26	768	2.00	--	0.020	--	0.440	--	--
JUN											
13...	130	230	10	430	0.600	--	0.030	--	0.160	3	1
JUL											
25...	120	320	14	693	1.30	--	0.090	--	0.050	--	--
AUG											
21...	119	230	13	494	0.800	--	0.080	--	0.140	4	2
OCT											
23...	164	380	23	732	1.70	--	0.020	--	0.210	--	--
DEC											
18...	217	560	34	1180	2.90	--	0.080	--	0.130	--	--
MAR 1991											
28...	165	390	23	728	1.80	--	0.020	--	0.250	--	--
APR											
16...	176	440	28	810	1.80	--	0.030	--	0.230	--	--
MAY											
21...	149	280	21	615	1.20	--	0.020	--	0.340	--	--
JUN											
11...	122	210	11	426	0.780	--	0.050	--	0.170	3	1
JUL											
02...	--	--	--	--	--	--	--	--	--	--	--
23...	106	190	10	371	0.710	--	<0.010	--	0.450	--	--
AUG											
16...	108	200	12	413	0.890	--	0.020	--	0.570	--	--
SEP											
04...	--	--	--	--	--	--	--	--	--	4	1
OCT											
29...	192	440	28	874	2.10	--	0.030	--	0.210	--	--
DEC											
17...	207	600	37	1160	3.00	--	0.060	--	0.350	--	--
MAR 1992											
26...	151	320	26	690	2.20	--	0.020	--	0.490	--	--
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
29...	150	290	21	572	1.60	--	0.030	--	0.240	--	--
MAY											
19...	144	250	19	550	0.920	--	0.020	--	0.150	--	--
JUN											
17...	126	190	17	416	0.650	--	0.030	--	0.380	3	1
JUL											
17...	118	180	13	400	0.760	--	0.020	--	0.660	--	--
AUG											
18...	115	290	12	544	0.930	--	0.080	--	0.970	4	1
OCT											
21...	171	410	25	858	1.90	--	0.020	--	0.180	--	--
JAN 1993											
14...	199	510	30	972	--	2.80	--	0.190	0.250	--	--
MAR											
25...	165	340	27	754	--	2.70	--	0.030	0.370	--	--

Table 52. Onsite measurements and bacteriological and selected inorganic data for station 07119700, Arkansas River at Catlin Dam, near Fowler--Continued

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
APR 1990											
12...	--	--	--	--	6	1	3900	6	--	--	30
MAY											
15...	--	--	--	--	6	1	7800	3	--	--	300
JUN											
13...	1	<1.0	12	<1	19	2	15000	4	26	<1	400
JUL											
25...	--	--	--	--	42	1	40000	47	--	--	1000
AUG											
21...	1	<1.0	20	<1	17	2	23000	4	21	<1	500
OCT											
23...	--	--	--	--	7	2	4300	4	--	--	200
DEC											
18...	--	--	--	--	8	1	1000	<3	--	--	60
MAR 1991											
28...	--	--	--	--	4	1	2100	8	--	--	80
APR											
16...	--	--	--	--	6	2	3100	<3	--	--	180
MAY											
21...	--	--	--	--	9	2	3500	6	--	--	150
JUN											
11...	1	<1.0	13	<1	21	2	18000	7	31	<1	490
JUL											
02...	--	--	--	--	88	--	91000	--	--	--	1900
23...	--	--	--	--	34	2	--	7	--	--	570
AUG											
16...	--	--	--	--	42	2	40000	8	--	--	780
SEP											
04...	5	<1.0	170	<1	--	--	--	--	280	<1	--
OCT											
29...	--	--	--	--	7	1	980	4	--	--	70
DEC											
17...	--	--	--	--	--	1	1900	7	--	--	90
MAR 1992											
26...	--	--	--	--	4	1	3900	<3	--	--	120
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	4	<1	2400	<3	--	--	130
MAY											
19...	--	--	--	--	5	1	2300	5	--	--	110
JUN											
17...	<1	<1.0	3	<1	8	1	3400	6	9	<1	220
JUL											
17...	--	--	--	--	14	2	9800	10	--	--	270
AUG											
18...	5	<1.0	58	<1	130	1	84000	9	120	<1	2700
OCT											
21...	--	--	--	--	3	2	480	<3	--	--	50
JAN 1993											
14...	--	--	--	--	2	<1	1200	<10	--	--	80
MAR											
25...	--	--	--	--	2	1	1300	6	--	--	60

Table 52. Onsite measurements and bacteriological and selected inorganic data for station 07119700, Arkansas River at Catlin Dam, near Fowler--Continued

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990											
12...	8	--	--	--	--	12	12	--	--	--	5
MAY											
15...	5	--	--	--	--	12	14	--	--	60	6
JUN											
13...	7	<0.10	<0.1	16	1	9	6	<1	1.0	110	<3
JUL											
25...	45	--	--	--	--	12	10	--	--	230	5
AUG											
21...	5	<0.10	<0.1	21	2	21	8	<1	<1.0	130	<3
OCT											
23...	6	--	--	--	--	10	11	--	--	40	4
DEC											
18...	25	--	--	--	--	20	15	--	--	20	6
MAR 1991											
28...	9	--	--	--	--	11	11	--	--	30	6
APR											
16...	23	--	--	--	--	15	13	--	--	30	<3
MAY											
21...	9	--	--	--	--	10	10	--	--	30	6
JUN											
11...	7	<0.10	<0.1	25	7	4	7	<1	<1.0	110	<3
JUL											
02...	--	--	--	--	--	--	--	--	--	390	--
23...	2	--	--	--	--	6	5	--	--	150	4
AUG											
16...	<1	--	--	--	--	9	6	--	--	200	<3
SEP											
04...	--	0.50	<0.1	260	2	--	--	2	<1.0	--	--
OCT											
29...	16	--	--	--	--	19	15	--	--	10	3
DEC											
17...	11	--	--	--	--	25	23	--	--	40	<3
MAR 1992											
26...	5	--	--	--	--	11	11	--	--	20	7
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
29...	4	--	--	--	--	9	11	--	--	20	<3
MAY											
19...	3	--	--	--	--	10	8	--	--	20	<3
JUN											
17...	3	<0.10	<0.1	7	1	6	6	<1	<1.0	50	<3
JUL											
17...	<1	--	--	--	--	7	4	--	--	60	<3
AUG											
18...	27	<0.10	<0.1	160	1	20	8	<1	<1.0	430	<3
OCT											
21...	9	--	--	--	--	16	14	--	--	10	4
JAN 1993											
14...	20	--	--	--	--	15	16	--	--	<10	<10
MAR											
25...	3	--	--	--	--	13	11	--	--	<10	4

Table 53. Onsite measurements and selected inorganic data for station 380111103382101, Timpas Creek at Highway 50, at Swink

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
APR 1990										
12...	1115	54	1950	8.1	10.0	8.3	1660	0.500	--	0.400
MAY										
15...	1220	86	1710	7.8	19.0	7.0	1420	3.10	--	0.020
JUN										
13...	1315	--	1620	8.0	21.0	7.1	1280	2.70	--	0.090
JUL										
26...	0900	140	1460	7.9	20.0	6.9	1170	2.40	--	0.120
AUG										
22...	0830	102	1620	7.8	19.0	6.5	1300	2.60	--	0.080
OCT										
23...	1525	133	1560	7.9	12.5	8.7	964	2.80	--	0.060
APR 1991										
16...	1540	50	2230	8.1	17.0	8.6	1800	3.90	--	0.020
JUN										
11...	1745	65	1790	8.0	24.0	6.4	1380	3.20	--	0.050
JUL										
23...	1905	70	1750	8.1	22.0	7.1	1430	2.90	--	<0.010
OCT										
29...	1330	97	1980	8.0	7.0	10.6	1540	3.40	--	0.030
DEC										
17...	1530	19	3230	8.2	8.0	11.2	2790	6.30	--	0.030
APR 1992										
29...	1435	65	1890	8.0	21.5	7.0	1480	3.00	--	0.350
JUN										
17...	1415	101	1410	8.0	21.5	7.1	1050	2.20	--	0.310
JUL										
17...	0900	181	1160	8.1	19.5	7.1	832	1.70	--	0.040
AUG										
18...	1530	E300	950	7.9	19.5	5.7	692	1.30	--	0.110
OCT										
21...	1200	66	2080	8.0	13.0	9.4	1800	3.70	--	0.020
JAN 1993										
15...	0820	E30	3310	7.9	3.0	11.0	2890	--	6.60	--
MAR										
26...	0710	124	1430	8.2	11.0	9.1	1040	--	2.80	--

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 1990									
12...	--	--	--	--	--	--	--	--	--
MAY									
15...	--	--	--	--	--	--	--	--	--
JUN									
13...	--	--	--	--	--	--	--	--	--
JUL									
26...	--	--	--	--	--	--	--	--	--
AUG									
22...	--	--	--	--	--	--	--	--	--
OCT									
23...	--	--	--	--	--	--	--	--	--
APR 1991									
16...	--	--	--	--	--	--	--	--	--

Table 53. Onsite measurements and selected inorganic data for station 380111103382101, Timpas Creek at Highway 50, at Swink--Continued

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
JUN 1991									
11...	--	--	--	--	--	--	--	--	--
JUL									
23...	--	--	--	--	--	--	--	--	--
OCT									
29...	--	--	--	--	--	--	--	--	--
DEC									
17...	--	--	--	--	--	--	--	--	--
APR 1992									
29...	--	--	--	--	--	--	--	--	--
JUN									
17...	--	--	--	--	--	--	--	--	--
JUL									
17...	--	--	--	--	--	--	--	--	--
AUG									
18...	--	180	1	140000	18	3800	23	700	<3
OCT									
21...	--	--	--	--	--	--	--	--	--
JAN 1993									
15...	0.010	--	--	--	--	--	--	--	--
MAR									
26...	0.050	--	--	--	--	--	--	--	--

Table 54. Onsite measurements and selected inorganic data for station 07122500, Crooked Arroyo near La Junta

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
APR 1990									
12...	1340	12	1800	8.3	12.0	8.7	1500	2.40	0.040
JUN									
13...	1425	13	1500	8.1	22.5	6.8	1140	2.50	0.100
JUL									
26...	1045	19	1950	7.9	19.5	7.4	1660	2.40	0.050
AUG									
22...	1030	15	2040	7.9	19.0	7.3	1730	2.60	0.100
OCT									
24...	0820	11	2270	8.3	10.0	8.8	1770	3.80	0.040
APR 1991									
16...	1715	7.5	2110	8.1	16.0	8.1	1660	2.50	0.070
JUN									
12...	0820	14	1590	8.0	18.0	7.4	1170	1.90	0.060
JUL									
24...	0835	24	1530	8.0	17.5	7.6	1210	2.00	0.020
OCT									
29...	1500	25	1940	8.2	8.5	10.8	1510	3.30	0.020
APR 1992									
29...	1600	9.8	2240	8.1	22.0	6.7	1860	2.90	0.090
JUN									
17...	1525	11	1920	8.0	22.0	6.6	1540	3.70	0.170
AUG									
18...	1645	13	1730	8.0	21.5	7.1	1400	3.40	0.160
OCT									
21...	1325	19	1730	8.2	14.0	8.8	1450	2.80	0.030

Table 55. Onsite measurements and selected inorganic data for station 07123000, Arkansas River at La Junta

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
APR 1990											
12...	1510	38	2260	8.3	16.0	9.8	2000	3.70	--	0.030	--
MAY											
15...	1350	364	1530	8.0	21.0	7.2	1210	2.00	--	0.010	--
JUN											
13...	1630	1310	848	8.3	22.5	6.9	590	0.900	--	0.020	--
JUL											
26...	1215	244	1410	8.0	24.0	6.7	1080	2.00	--	0.040	--
AUG											
22...	1200	331	1380	8.2	21.5	6.9	1050	1.90	--	0.100	--
OCT											
24...	0930	474	1420	8.6	9.5	9.3	1030	2.30	--	<0.010	--
DEC											
18...	1110	113	2570	8.1	3.0	11.7	2140	4.50	--	0.070	--
MAR 1991											
29...	0735	75	2150	8.1	5.0	10.9	1770	3.20	--	0.250	--
APR											
17...	0810	40	2580	8.1	7.5	10.1	2110	4.60	--	0.050	--
MAY											
21...	1330	100	1970	8.3	23.5	7.2	1570	3.00	--	0.040	--
JUN											
12...	0945	1020	978	8.1	21.5	6.8	672	1.30	--	0.040	--
JUL											
24...	0940	511	999	8.2	19.5	7.2	712	1.40	--	0.160	--
AUG											
16...	1420	410	944	8.2	26.0	6.5	645	1.40	--	0.030	--
OCT											
29...	1610	123	1980	8.4	7.5	10.2	1530	3.30	--	0.020	--
DEC											
17...	1705	84	2530	8.5	4.0	11.6	2010	4.40	--	0.120	--
MAR 1992											
26...	1720	27	2360	8.4	14.5	8.7	2020	3.80	--	0.050	--
APR											
29...	1730	348	1450	8.3	23.0	7.0	1080	2.00	--	0.070	--
MAY											
19...	0930	260	1450	8.4	18.5	7.9	1050	2.20	--	0.020	--
JUN											
17...	1630	492	925	8.3	22.5	7.2	622	1.30	--	0.060	--
JUL											
17...	1050	324	1080	8.3	22.0	7.1	766	1.60	--	0.020	--
AUG											
18...	1745	309	1510	8.3	24.0	6.7	1160	2.60	--	0.030	--
OCT											
21...	1430	66	1890	8.3	17.5	8.7	1600	3.00	--	0.020	--
JAN 1993											
15...	0905	145	2550	8.3	0.0	11.9	2120	--	4.80	--	0.050
MAR											
26...	0825	25	2230	8.3	10.0	10.3	1810	--	3.90	--	0.040

Table 56. Onsite measurements and selected inorganic data for station 380421103193101, Horse Creek at mouth, near Las Animas

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
APR 1990									
12...	1700	1.0	4360	8.1	14.5	8.9	4130	0.100	0.020
JUN									
13...	1840	2.0	3920	8.1	25.0	7.7	3520	<0.100	0.040
JUL									
26...	1340	5.9	2540	8.0	25.5	7.9	2110	0.700	0.030
AUG									
22...	1330	0.88	2850	7.9	23.5	10.1	2530	0.300	0.080
OCT									
24...	1110	0.48	4290	8.1	11.0	10.8	3610	0.400	0.020
APR 1991									
17...	1000	0.83	4440	8.1	10.0	10.8	3790	0.150	<0.010
JUN									
12...	1125	0.16	4340	8.0	26.0	11.0	3780	<0.050	0.040
SEP									
05...	1215	0.97	3400	8.0	20.0	8.3	2910	0.580	0.140
OCT									
30...	0935	0.67	3880	8.1	--	--	3390	0.640	0.040
APR 1992									
30...	0905	0.48	4040	7.7	14.5	5.7	3450	0.410	0.070
JUN									
17...	1800	2.4	3270	8.2	23.0	8.1	2760	0.063	0.060
AUG									
19...	0705	4.0	3620	7.9	18.0	5.2	3060	0.430	0.040
OCT									
21...	1540	1.7	3620	8.2	13.0	9.9	3170	0.670	0.040

Table 57. Onsite measurements and bacteriological and selected inorganic data for station 07124000, Arkansas River at Las Animas

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 1990												
13...	0810	24	3420	8.3	8.5	9.2	36	E460	1400	330	130	370
MAY												
16...	1110	230	1890	8.2	17.0	7.5	K150	650	740	180	70	160
JUN												
14...	0830	961	915	8.0	20.5	7.0	200	K1700	360	93	31	58
JUL												
26...	1500	203	1710	8.0	28.0	6.4	1300	3200	630	170	50	140
AUG												
23...	0800	287	1580	8.3	21.0	6.9	700	3100	610	160	52	130
OCT												
24...	1320	362	1620	8.4	12.0	9.3	180	E1400	620	160	53	110
DEC												
18...	1220	111	2710	8.3	3.0	11.9	E2	E110	1100	270	100	250
MAR 1991												
29...	1005	23	3310	8.1	9.0	12.5	E14	260	1300	300	130	350
APR												
17...	1215	19	3760	8.2	14.5	10.6	E16	--	1300	300	140	400
MAY												
21...	1515	17	3730	8.2	26.5	8.2	120	240	1400	330	140	400
JUN												
12...	1300	538	1140	8.3	24.5	6.9	290	1200	420	110	36	82
JUL												
24...	1230	375	1100	8.4	21.5	7.1	960	750	420	110	36	80
AUG												
16...	1620	374	1110	8.3	27.0	6.8	E2900	E1800	420	110	35	77
SEP												
04...	1815	207	1340	8.2	23.5	6.4	--	--	--	--	--	--
OCT												
30...	0940	77	2430	8.2	1.0	11.9	100	340	1000	260	88	210
DEC												
18...	0915	113	2730	8.3	0.0	11.5	E5	E55	1100	290	100	240
MAR 1992												
27...	0840	28	3480	8.2	9.0	10.7	--	--	1200	300	120	380
APR												
17...	1230	22	3610	8.2	23.0	9.6	--	--	--	--	--	--
30...	1015	264	1660	8.3	18.5	7.8	E180	570	600	150	55	120
MAY												
19...	1125	174	1790	8.4	22.0	7.5	130	360	700	180	61	140
JUN												
18...	0800	412	1130	8.3	19.0	7.6	E1700	1100	440	110	39	77
JUL												
17...	1215	391	1290	8.2	23.0	6.7	>2000	>3300	500	130	42	98
AUG												
19...	1000	264	1680	8.4	19.0	7.6	E1200	1700	680	180	57	120
OCT												
22...	0745	63	2620	8.2	12.0	8.3	48	86	1100	260	99	240
JAN 1993												
15...	1140	395	2760	8.3	0.0	11.6	<1	40	1100	270	98	240
MAR												
26...	1030	24	3210	8.2	15.0	9.3	E10	E6	1200	300	120	340

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
APR 1990											
13...	252	1600	120	3120	1.30	--	<0.010	--	0.020	--	--
MAY											
16...	186	1000	48	1530	1.80	--	0.030	--	0.360	--	--
JUN											
14...	145	350	17	633	1.50	--	0.010	--	0.520	3	1
JUL											
26...	166	680	48	1330	1.40	--	0.010	--	0.050	--	--
AUG											
23...	169	570	42	1230	1.80	--	0.080	--	0.100	4	2
OCT											
24...	194	650	41	1190	2.20	--	0.020	--	0.100	--	--
DEC											
18...	245	1200	81	2210	3.40	--	0.050	--	0.020	--	--
MAR 1991											
29...	250	2100	100	2850	1.50	--	0.010	--	0.020	--	--

Table 57. Onsite measurements and bacteriological and selected inorganic data for station 07124000, Arkansas River at Las Animas--Continued

DATE	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)
APR 1991											
17...	219	1600	120	3100	1.60	--	0.040	--	0.030	--	--
MAY											
21...	255	2000	100	3210	1.20	--	0.020	--	0.040	--	--
JUN											
12...	146	430	27	792	1.40	--	0.040	--	0.250	5	2
JUL											
24...	138	420	27	752	1.40	--	<0.010	--	0.360	--	--
AUG											
16...	146	420	27	789	1.40	--	0.020	--	0.440	--	--
SEP											
04...	--	--	--	--	--	--	--	--	--	3	1
OCT											
30...	251	800	62	2000	2.80	--	0.040	--	0.150	--	--
DEC											
18...	235	1100	76	2570	3.30	--	0.090	--	0.070	--	--
MAR 1992											
27...	265	1600	110	2970	1.30	--	0.020	--	0.040	--	--
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
30...	181	590	47	1180	2.00	--	0.030	--	0.140	--	--
MAY											
19...	198	660	49	1370	2.10	--	0.020	--	0.120	--	--
JUN											
18...	152	360	29	756	1.40	--	0.010	--	0.530	7	1
JUL											
17...	142	470	35	910	1.50	--	0.020	--	1.80	--	--
AUG											
19...	192	690	54	1310	2.30	--	0.020	--	0.220	3	2
OCT											
22...	129	1100	82	2290	1.80	--	0.040	--	0.020	--	--
JAN 1993											
15...	264	1200	81	1170	--	3.80	--	0.100	0.100	--	--
MAR											
26...	271	930	100	2700	--	1.50	--	0.030	0.020	--	--

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
APR 1990											
13...	--	--	--	--	2	<1	200	20	--	--	150
MAY											
16...	--	--	--	--	9	5	8100	5	--	--	350
JUN											
14...	1	<1.0	17	<1	21	1	18000	5	72	<1	670
JUL											
26...	--	--	--	--	33	1	28000	14	--	--	740
AUG											
23...	1	<1.0	29	2	25	2	34000	7	33	<1	740
OCT											
24...	--	--	--	--	12	2	14000	<3	--	--	620
DEC											
18...	--	--	--	--	2	1	1000	10	--	--	60
MAR 1991											
29...	--	--	--	--	4	1	440	10	--	--	160
APR											
17...	--	--	--	--	3	2	190	30	--	--	220
MAY											
21...	--	--	--	--	4	1	90	30	--	--	80
JUN											
12...	1	<1.0	2	<1	24	2	27000	11	19	<1	870
JUL											
24...	--	--	--	--	37	1	--	7	--	--	960
AUG											
16...	--	--	--	--	35	2	29000	6	--	--	940
SEP											
04...	2	<1.0	21	<1	--	--	--	--	47	<1	--
OCT											
30...	--	--	--	--	9	1	1500	<10	--	--	130
DEC											
18...	--	--	--	--	--	<1	920	60	--	--	70

Table 57. Onsite measurements and bacteriological and selected inorganic data for station 07124000, Arkansas River at Las Animas--Continued

DATE	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
MAR 1992											
27...	--	--	--	--	<1	2	90	<10	--	--	100
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	10	1	6600	<3	--	--	370
MAY											
19...	--	--	--	--	7	1	4700	4	--	--	200
JUN											
18...	<1	<1.0	7	<1	19	3	15000	<10	20	1	520
JUL											
17...	--	--	--	--	39	2	26000	8	--	--	890
AUG											
19...	<1	<1.0	6	<1	9	2	9900	6	13	<1	380
OCT											
22...	--	--	--	--	1	1	200	<10	--	--	50
JAN 1993											
15...	--	--	--	--	<1	<1	710	4	--	--	90
MAR											
26...	--	--	--	--	<1	<1	140	<10	--	--	130

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	MERCURY, DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990											
13...	140	--	--	--	--	12	13	--	--	10	<10
MAY											
16...	5	--	--	--	--	12	14	--	--	60	6
JUN											
14...	4	0.10	<0.1	22	1	10	8	<1	--	120	<3
JUL											
26...	4	--	--	--	--	10	11	--	--	150	11
AUG											
23...	1	<0.10	<0.1	33	1	13	11	<1	<1.0	170	<3
OCT											
24...	2	--	--	--	--	13	12	--	--	100	5
DEC											
18...	20	--	--	--	--	19	18	--	--	10	<10
MAR 1991											
29...	140	--	--	--	--	12	12	--	--	<10	10
APR											
17...	230	--	--	--	--	20	18	--	--	<10	<10
MAY											
21...	40	--	--	--	--	13	13	--	--	<10	<10
JUN											
12...	2	0.10	<0.1	28	4	12	11	<1	<1.0	140	5
JUL											
24...	<1	--	--	--	--	7	9	--	--	180	4
AUG											
16...	<1	--	--	--	--	10	10	--	--	160	<3
SEP											
04...	--	0.10	<0.1	48	1	--	--	<1	<1.0	--	--
OCT											
30...	40	--	--	--	--	5	4	--	--	20	<10
DEC											
18...	20	--	--	--	--	8	8	--	--	40	<10
MAR 1992											
27...	<10	--	--	--	--	14	14	--	--	<10	<10
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
30...	2	--	--	--	--	14	5	--	--	60	<3
MAY											
19...	3	--	--	--	--	16	14	--	--	40	<3
JUN											
18...	70	<0.10	<0.1	15	5	11	8	<1	<1.0	110	<10
JUL											
17...	<1	--	--	--	--	10	7	--	--	170	<3
AUG											
19...	2	<0.10	<0.1	13	2	13	12	<1	<1.0	110	<3
OCT											
22...	30	--	--	--	--	16	16	--	--	<10	<10
JAN 1993											
15...	38	--	--	--	--	18	18	--	--	<10	<3
MAR											
26...	120	--	--	--	--	15	16	--	--	<10	<10

Table 58. Onsite measurements and selected inorganic data for station 07128500, Purgatoire River near Las Animas

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
APR 1990								
13...	0940	11	3780	8.1	11.0	8.8	3690	0.100
MAY								
16...	0930	9.5	3350	7.9	15.0	8.9	3060	0.100
JUN								
14...	1100	26	2050	7.9	23.0	7.9	1710	0.300
JUL								
26...	1620	331	1050	7.9	27.0	6.1	798	0.400
AUG								
22...	1500	5.8	3260	8.1	24.5	8.2	2960	<0.100
OCT								
24...	1215	13	2960	8.3	11.5	12.3	2340	0.600
DEC								
18...	1330	45	3990	8.4	4.5	11.4	3730	<0.100
MAR 1991								
29...	0905	7.5	4260	7.9	6.5	9.8	4120	0.200
APR								
17...	1105	5.8	4950	8.0	11.0	8.2	4610	0.240
MAY								
21...	1635	1.1	5140	8.1	22.5	7.1	5010	0.130
JUN								
12...	1435	5.4	4280	8.0	28.5	8.0	3750	0.058
JUL								
24...	1415	53	3640	8.1	20.0	7.0	3340	0.051
AUG								
16...	1745	40	1080	8.2	28.0	6.2	774	0.410
OCT								
30...	0820	31	2460	8.2	2.5	11.6	1970	2.60
DEC								
18...	0730	12	3620	8.1	0.0	10.6	3350	0.100
MAR 1992								
27...	0755	24	3260	8.2	9.5	9.3	2880	0.610
APR								
30...	0840	8.5	4530	8.1	16.5	7.7	4060	<0.050
MAY								
19...	1130	4.6	4430	8.1	23.5	8.6	4130	<0.050
JUN								
18...	0735	6.6	3200	8.0	18.0	7.2	2740	0.980
JUL								
17...	1235	48	2760	8.2	23.5	7.3	2400	<0.050
AUG								
19...	0840	53	2370	8.1	16.5	7.6	2000	0.670
OCT								
21...	1700	33	2660	8.3	16.0	10.6	2350	1.20
JAN 1993								
15...	1015	48	4010	8.1	0.0	11.9	3900	--
MAR								
26...	0940	76	2680	8.3	13.0	9.3	2250	--

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
APR 1990								
13...	--	0.020	--	--	--	--	--	--
MAY								
16...	--	0.020	--	--	--	--	--	--
JUN								
14...	--	0.030	--	--	--	--	--	--
JUL								
26...	--	0.020	--	200	250000	5300	17	1000
AUG								
22...	--	0.080	--	--	--	--	--	--
OCT								
24...	--	0.020	--	--	--	--	--	--
DEC								
18...	--	0.040	--	--	--	--	--	--
MAR 1991								
29...	--	0.030	--	--	--	--	--	--
APR								
17...	--	0.050	--	--	--	--	--	--

Table 58. Onsite measurements and selected inorganic data for station 07128500, Purgatoire River near Las Animas--Continued

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
MAY 1991								
21...	--	0.140	--	--	--	--	--	--
JUN								
12...	--	0.030	--	--	--	--	--	--
JUL								
24...	--	<0.010	--	--	--	--	--	--
AUG								
16...	--	0.050	--	--	--	--	--	--
OCT								
30...	--	0.030	--	--	--	--	--	--
DEC								
18...	--	0.030	--	--	--	--	--	--
MAR 1992								
27...	--	0.010	--	--	--	--	--	--
APR								
30...	--	0.040	--	--	--	--	--	--
MAY								
19...	--	0.040	--	--	--	--	--	--
JUN								
18...	--	0.050	--	--	--	--	--	--
JUL								
17...	--	0.090	--	--	--	--	--	--
AUG								
19...	--	0.030	--	--	--	--	--	--
OCT								
21...	--	0.030	--	--	--	--	--	--
JAN 1993								
15...	0.420	--	0.040	--	--	--	--	--
MAR								
26...	0.620	--	0.030	--	--	--	--	--

Table 59. Onsite measurements and bacteriological and selected inorganic data for station 07130500, Arkansas River below John Martin Reservoir

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR 1990												
13...	1115	1.7	2860	7.9	13.0	8.6	K1	K17	1200	270	130	260
MAY												
16...	1330	403	2670	8.4	16.0	9.6	K11	110	1100	230	120	270
JUN												
14...	1300	595	2430	8.2	22.0	8.7	K26	K24	910	200	100	260
JUL												
27...	0850	402	1530	8.1	23.0	8.4	84	--	530	120	56	130
AUG												
23...	1130	444	1490	8.2	23.0	8.0	K85	89	560	130	58	130
OCT												
24...	1515	268	1880	8.8	10.5	11.4	E2	E34	680	160	67	150
DEC												
18...	1510	2.8	2590	7.9	3.5	--	E18	52	1100	240	110	240
MAR 1991												
29...	1120	3.4	2460	8.3	10.0	14.7	E2	E3	1000	230	110	230
APR												
17...	1400	500	2580	8.2	12.0	9.3	E5	E10	910	200	100	240
MAY												
22...	0810	53	2710	8.3	18.5	8.4	130	150	980	210	110	250
JUN												
13...	0840	575	2530	8.1	21.0	8.2	E20	E29	910	200	100	240
JUL												
25...	1305	539	1450	8.2	23.0	8.2	74	47	540	130	52	120
SEP												
05...	0905	304	1530	8.0	23.0	7.9	110	43	550	130	55	120
OCT												
30...	1130	115	2330	8.3	7.0	11.7	100	110	900	210	90	220
DEC												
18...	1045	1.8	2600	7.9	3.5	12.1	<7	E6	1100	250	120	240
MAR 1992												
27...	1005	1.6	2780	8.0	10.5	8.9	--	--	1100	240	120	260
APR												
30...	1200	610	2680	8.3	14.0	9.9	E13	E2	1000	230	110	250
MAY												
19...	1400	490	2560	8.2	19.5	8.7	E19	E12	1100	240	120	240
JUN												
18...	1100	411	2060	8.3	20.5	8.2	30	35	800	190	79	170
JUL												
17...	1445	845	1550	8.1	23.5	7.8	26	58	580	140	57	130
AUG												
19...	1145	389	1700	8.1	22.5	8.4	110	77	620	140	65	140
OCT												
22...	0930	120	2070	8.5	11.5	10.8	86	160	770	170	84	180
JAN 1993												
15...	1315	89	2710	7.7	2.5	10.7	<3	E13	1100	260	120	240
MAR												
26...	1130	3.1	2750	8.0	14.0	10.2	E2	<1	1100	250	120	250

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
APR 1990											
13...	369	1300	80	2490	--	--	0.130	--	0.310	--	--
MAY											
16...	122	1500	66	2340	0.400	--	0.020	--	0.060	--	--
JUN											
14...	133	1400	68	2080	0.200	--	0.080	--	0.070	1	1
JUL											
27...	97	660	40	1190	<0.100	--	0.120	--	0.040	--	--
AUG											
23...	94	670	37	1160	<0.100	--	0.100	--	0.050	1	1
OCT											
24...	137	820	47	1420	0.600	--	0.050	--	0.030	--	--
DEC											
18...	456	1000	36	2080	0.200	--	1.70	--	<0.010	--	--
MAR 1991											
29...	237	1300	62	2050	0.690	--	0.150	--	0.030	--	--
APR											
17...	145	1300	75	2040	0.600	--	0.060	--	0.050	--	--

Table 59. Onsite measurements and bacteriological and selected inorganic data for station 07130500, Arkansas River below John Martin Reservoir--Continued

DATE	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)
MAY 1991											
22...	146	1500	83	2260	<0.050	--	0.040	--	0.070	--	--
JUN											
13...	137	1300	69	2080	0.130	--	0.230	--	0.050	1	1
JUL											
25...	127	660	35	1090	0.200	--	0.410	--	0.070	--	--
SEP											
05...	72	750	38	1110	0.120	--	0.260	--	0.120	2	1
OCT											
30...	151	970	74	1900	0.160	--	0.090	--	0.060	--	--
DEC											
18...	426	910	81	2350	0.270	--	0.530	--	0.060	--	--
MAR 1992											
27...	452	1100	80	2230	0.330	--	0.560	--	0.080	--	--
APR											
30...	175	1100	89	2210	0.520	--	0.140	--	<0.010	--	--
MAY											
19...	176	1100	77	2060	0.480	--	0.270	--	0.020	--	--
JUN											
18...	168	880	54	1490	0.520	--	0.250	--	0.070	2	1
JUL											
17...	138	620	39	1160	0.430	--	0.200	--	0.070	--	--
AUG											
19...	114	760	51	1300	0.650	--	0.120	--	1.80	2	1
OCT											
22...	140	920	58	1730	0.140	--	0.090	--	0.070	--	--
JAN 1993											
15...	392	1200	74	2260	--	0.830	--	0.720	0.080	--	--
MAR											
26...	380	1100	74	2240	--	0.490	--	0.550	0.030	--	--

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
APR 1990											
13...	--	--	--	--	2	1	1300	30	--	--	2500
MAY											
16...	--	--	--	--	3	1	550	30	--	--	160
JUN											
14...	<1	<1.0	1	<1	6	1	440	20	43	1	140
JUL											
27...	--	--	--	--	3	1	330	6	--	--	170
AUG											
23...	<1	<1.0	2	<1	6	1	290	5	7	<1	110
OCT											
24...	--	--	--	--	3	1	250	<3	--	--	110
DEC											
18...	--	--	--	--	1	1	720	30	--	--	3000
MAR 1991											
29...	--	--	--	--	3	1	470	10	--	--	710
APR											
17...	--	--	--	--	3	1	380	20	--	--	110
MAY											
22...	--	--	--	--	3	1	400	<10	--	--	220
JUN											
13...	<1	<1.0	1	<1	4	1	350	<10	4	<1	140
JUL											
25...	--	--	--	--	4	<1	--	5	--	--	240
SEP											
05...	<1	<1.0	<1	<1	4	1	1400	9	3	<1	230
OCT											
30...	--	--	--	--	8	2	10	<10	--	--	150
DEC											
18...	--	--	--	--	--	<1	630	20	--	--	2200
MAR 1992											
27...	--	--	--	--	<1	1	1400	90	--	--	1900
APR											
30...	--	--	--	--	5	2	510	<10	--	--	130
MAY											
19...	--	--	--	--	1	<1	280	<10	--	--	120

Table 59. Onsite measurements and bacteriological and selected inorganic data for station 07130500, Arkansas River below John Martin Reservoir--Continued

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
JUN 1992											
18...	<1	<1.0	<1	<1	10	2	620	<3	1	<1	130
JUL											
17...	--	--	--	--	5	2	710	<3	--	--	130
AUG											
19...	<1	<1.0	<1	<1	7	<1	700	13	3	<1	10
OCT											
22...	--	--	--	--	2	<1	490	<10	--	--	120
JAN 1993											
15...	--	--	--	--	1	<1	2400	30	--	--	2400
MAR											
26...	--	--	--	--	<1	<1	770	10	--	--	2100

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990											
13...	2000	--	--	--	--	4	4	--	--	10	<10
MAY											
16...	30	--	--	--	--	8	9	--	--	10	<10
JUN											
14...	40	<0.10	<0.1	4	2	9	9	<1	<1.0	20	<10
JUL											
27...	76	--	--	--	--	6	7	--	--	<10	4
AUG											
23...	20	<0.10	<0.1	3	2	5	6	<1	<1.0	10	<3
OCT											
24...	32	--	--	--	--	9	9	--	--	10	6
DEC											
18...	3000	--	--	--	--	<1	2	--	--	10	<10
MAR 1991											
29...	640	--	--	--	--	8	8	--	--	<10	10
APR											
17...	20	--	--	--	--	11	9	--	--	<10	<10
MAY											
22...	70	--	--	--	--	7	7	--	--	<10	<10
JUN											
13...	90	<0.10	<0.1	12	7	--	6	<1	<1.0	30	<10
JUL											
25...	170	--	--	--	--	7	6	--	--	<10	5
SEP											
05...	64	<0.10	<0.1	4	1	8	8	<1	<1.0	<10	7
OCT											
30...	60	--	--	--	--	8	8	--	--	<10	<10
DEC											
18...	2100	--	--	--	--	2	3	--	--	30	<10
MAR 1992											
27...	1400	--	--	--	--	3	3	--	--	<10	<10
APR											
30...	60	--	--	--	--	9	11	--	--	30	<10
MAY											
19...	80	--	--	--	--	10	9	--	--	10	<10
JUN											
18...	76	<0.10	<0.1	4	4	8	8	<1	<1.0	10	<3
JUL											
17...	49	--	--	--	--	8	8	--	--	20	5
AUG											
19...	49	<0.10	<0.1	2	2	6	7	<1	<1.0	40	<3
OCT											
22...	20	--	--	--	--	8	8	--	--	10	<10
JAN 1993											
15...	2100	--	--	--	--	7	6	--	--	<10	<10
MAR											
26...	1800	--	--	--	--	5	5	--	--	<10	<10

Table 60. Onsite measurements and selected inorganic data for station 07134100, Big Sandy Creek near Lamar

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
APR 1990									
13...	1130	6.8	4580	8.3	17.0	13.0	4170	1.30	0.010
JUN									
14...	1530	5.0	4230	8.3	29.0	13.4	3750	1.00	0.060
JUL									
27...	1200	4.5	3980	8.4	24.5	15.9	3700	1.90	0.020
AUG									
23...	1430	8.7	3960	8.3	21.5	10.5	3560	1.50	0.080
OCT									
24...	1630	5.9	4250	8.3	15.0	11.0	3580	2.10	0.020
APR 1991									
17...	1640	6.5	4620	8.2	21.0	9.4	4000	0.840	0.050
JUN									
13...	1030	6.1	3480	8.1	22.0	10.0	2800	1.00	0.020
JUL									
25...	0905	5.9	4350	8.1	16.5	9.2	4070	2.10	0.150
OCT									
30...	1315	4.7	4160	8.4	5.0	11.4	3720	3.00	0.040
APR 1992									
30...	1415	7.8	4410	8.3	22.0	12.2	3960	1.50	0.040
JUN									
18...	1230	4.9	4610	8.3	20.0	16.0	4070	1.80	0.040
AUG									
19...	1350	13	4070	8.4	20.0	13.0	3540	2.00	0.040
OCT									
22...	1115	7.1	4050	8.2	14.0	9.6	3700	2.30	0.050

Table 61. Pesticide data for selected surface-water stations on the Arkansas River, 1990–92

DATE	TIME	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALACHLOR TOTAL RECOVER (UG/L)	ALDICARB WATER WHOLE TOT.REC (UG/L)	ALDICARB SULFONE WATER WHOLE TOT.REC (UG/L)	ALDRIN, TOTAL (UG/L)	AMETRYNE TOTAL (UG/L)	ATRAZINE WATER UNFLTRD REC (UG/L)	BROMACIL WATER WHLREC (UG/L)	BUTACHLOR WATER WHLREC (UG/L)	BUTYLATE WATER WHLREC (UG/L)
07097000	ARKANSAS RIVER AT PORTLAND											
AUG 1990												
30...	1415	<0.1	<0.1	<0.10	--	--	<0.010	<0.10	<0.1	--	--	--
JUL 1991												
18...	1400	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	<0.20	<0.10	<0.10
SEP												
03...	1900	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	<0.20	<0.10	<0.10
APR 1992												
17...	0935	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	<0.20	<0.10	<0.10
AUG												
13...	1330	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	<0.20	<0.10	<0.10
07109500	ARKANSAS RIVER NEAR AVONDALE											
AUG 1990												
20...	1800	<0.1	<0.1	<0.10	--	--	<0.010	<0.10	<0.1	--	--	--
JUL 1991												
22...	1830	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	<0.20	<0.10	<0.10
SEP												
04...	0935	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	0.70	<0.10	<0.10
APR 1992												
17...	1650	--	--	<0.10	<0.5	<0.5	--	<0.10	<0.1	<0.20	<0.10	<0.10
AUG												
17...	1530	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	<0.20	<0.10	<0.10
07119700	ARKANSAS RIVER AT CATLIN DAM, NEAR FOWLER											
AUG 1990												
21...	1600	<0.1	<0.1	<0.10	--	--	<0.010	<0.10	<0.1	--	--	--
JUL 1991												
23...	1600	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	<0.20	<0.10	<0.10
SEP												
04...	1445	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	<0.20	<0.10	<0.10
APR 1992												
17...	1515	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	<0.20	<0.10	<0.10
AUG												
18...	1230	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	<0.20	<0.10	<0.10
07124000	ARKANSAS RIVER AT LAS ANIMAS											
AUG 1990												
23...	0800	<0.1	<0.1	<0.10	--	--	<0.010	<0.10	<0.1	--	--	--
JUL 1991												
24...	1230	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	<0.20	<0.10	<0.10
SEP												
04...	1815	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	0.70	<0.10	<0.10
APR 1992												
17...	1230	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	<0.20	<0.10	<0.10
JUL												
17...	1215	<0.1	<0.1	<0.10	<0.5	<0.5	<0.010	<0.10	<0.1	<0.20	<0.10	<0.10
07130500	ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR											
AUG 1990												
23...	1130	<0.1	<0.1	<0.10	--	--	<0.010	<0.10	<0.1	--	--	--

Table 61. Pesticide data for selected surface-water stations on the Arkansas River, 1990–92--Continued

DATE	CARBOFURAN WATER WHOLE TOT.REC (UG/L)	CARBOXIN WATER WHOLE RECOVERABLE (UG/L)	CHLORDYRIFOS TOTAL RECOVER (UG/L)	CHLORDANE, TOTAL (UG/L)	CYANAZINE TOTAL (UG/L)	CYCLOATE WATER WHOLE RECOVERABLE (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DEF TOTAL (UG/L)	DEETHYL ATRAZINE, WATER, WHOLE, TOTAL (UG/L)	DE-ISO PROPYL ATRAZIN WATER, WHOLE, TOTAL (UG/L)
07097000 ARKANSAS RIVER AT PORTLAND												
AUG 1990												
30...	--	--	<0.01	<0.1	<0.10	--	<0.010	<0.010	<0.010	<0.01	--	--
JUL 1991												
18...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
SEP												
03...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
APR 1992												
17...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
AUG												
13...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
07109500 ARKANSAS RIVER NEAR AVONDALE												
AUG 1990												
20...	--	--	<0.01	<0.1	<0.10	--	<0.010	<0.010	<0.010	<0.01	--	--
JUL 1991												
22...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
SEP												
04...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
APR 1992												
17...	<0.5	<0.20	<0.01	--	<0.20	<0.10	--	--	--	<0.01	<0.20	<0.20
AUG												
17...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
07119700 ARKANSAS RIVER AT CATLIN DAM, NEAR FOWLER												
AUG 1990												
21...	--	--	<0.01	<0.1	<0.10	--	<0.010	<0.010	<0.010	<0.01	--	--
JUL 1991												
23...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
SEP												
04...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
APR 1992												
17...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
AUG												
18...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
07124000 ARKANSAS RIVER AT LAS ANIMAS												
AUG 1990												
23...	--	--	<0.01	<0.1	0.10	--	<0.010	<0.010	<0.010	<0.01	--	--
JUL 1991												
24...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
SEP												
04...	<0.5	<0.20	0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
APR 1992												
17...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
JUL												
17...	<0.5	<0.20	<0.01	<0.1	<0.20	<0.10	<0.010	<0.010	<0.010	<0.01	<0.20	<0.20
07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR												
AUG 1990												
23...	--	--	<0.01	<0.1	<0.10	--	<0.010	<0.010	<0.010	<0.01	--	--

Table 61. Pesticide data for selected surface-water stations on the Arkansas River, 1990–92--Continued

DATE	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	DIPHEN-AMID WATER WHOLE RECOV-ERABLE (UG/L)	DI-SYSTON TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN WATER UNFLTRD REC (UG/L)	ETHION, TOTAL (UG/L)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	HEXAZI-NONE WATER WHOLE RECOV-ERABLE (UG/L)	LINDANE TOTAL (UG/L)
07097000 ARKANSAS RIVER AT PORTLAND												
AUG 1990												
30...	<0.01	<0.010	--	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	--	<0.010
JUL 1991												
18...	<0.01	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
SEP												
03...	<0.01	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
APR 1992												
17...	<0.01	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
AUG												
13...	<0.01	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
07109500 ARKANSAS RIVER NEAR AVONDALE												
AUG 1990												
20...	0.01	<0.010	--	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	--	<0.010
JUL 1991												
22...	0.01	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
SEP												
04...	0.16	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
APR 1992												
17...	0.01	--	<0.1	<0.01	--	--	<0.01	<0.01	--	--	<0.20	--
AUG												
17...	0.03	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
07119700 ARKANSAS RIVER AT CATLIN DAM, NEAR FOWLER												
AUG 1990												
21...	0.01	<0.010	--	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	--	<0.010
JUL 1991												
23...	--	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
SEP												
04...	0.01	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
APR 1992												
17...	0.01	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
AUG												
18...	<0.01	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
07124000 ARKANSAS RIVER AT LAS ANIMAS												
AUG 1990												
23...	<0.01	<0.010	--	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	--	<0.010
JUL 1991												
24...	--	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
SEP												
04...	0.02	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
APR 1992												
17...	<0.01	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
JUL												
17...	<0.01	<0.010	<0.1	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.20	<0.010
07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR												
AUG 1990												
23...	<0.01	<0.010	--	<0.01	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	--	<0.010

Table 61. Pesticide data for selected surface-water stations on the Arkansas River, 1990–92--Continued

DATE	MALA-THION, TOTAL (UG/L)	METHIO-CARB WATER WHOLE RECOV. (UG/L)	METHO-MYL TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METOLA-CHLOR WATER WHOLE TOT.REC (UG/L)	METRI-BUZIN WATER WHOLE TOT.REC (UG/L)	MIREX, TOTAL (UG/L)	1-NAPH-THOL WATER WHOLE REC (UG/L)	OXYAMYL WATER WHOLE TOT.REC (UG/L)
07097000	ARKANSAS RIVER AT PORTLAND									
AUG 1990										
30...	<0.01	--	<0.5	<0.01	<0.01	<0.10	<0.10	<0.01	--	--
JUL 1991										
18...	<0.01	<0.5	<0.5	<0.01	<0.01	<0.10	<0.10	<0.01	<0.5	<0.5
SEP										
03...	<0.01	<0.5	<0.5	<0.01	<0.01	<0.10	<0.10	<0.01	<0.5	<0.5
APR 1992										
17...	<0.01	<0.5	<0.5	<0.01	<0.01	<0.20	<0.10	<0.01	<0.5	<0.5
AUG										
13...	<0.01	<0.5	<0.5	<0.01	<0.01	<0.20	<0.10	<0.01	<0.5	<0.5
07109500	ARKANSAS RIVER NEAR AVONDALE									
AUG 1990										
20...	<0.01	--	<0.5	<0.01	<0.01	<0.10	<0.10	<0.01	--	--
JUL 1991										
22...	<0.01	<0.5	<0.5	<0.01	<0.01	<0.10	<0.10	<0.01	<0.5	<0.5
SEP										
04...	0.04	<0.5	<0.5	<0.01	<0.01	<0.20	<0.10	<0.01	<0.5	<0.5
APR 1992										
17...	<0.01	<0.5	<0.5	--	<0.01	<0.20	<0.10	--	<0.5	<0.5
AUG										
17...	<0.01	<0.5	<0.5	<0.01	<0.01	<0.20	<0.10	<0.01	<0.5	<0.5
07119700	ARKANSAS RIVER AT CATLIN DAM, NEAR FOWLER									
AUG 1990										
21...	<0.01	--	<0.5	<0.01	<0.01	<0.10	<0.10	<0.01	--	--
JUL 1991										
23...	<0.01	<0.5	<0.5	<0.01	<0.01	<0.10	<0.10	<0.01	<0.5	<0.5
SEP										
04...	<0.01	<0.5	<0.5	<0.01	<0.01	<0.10	<0.10	<0.01	<0.5	<0.5
APR 1992										
17...	<0.01	<0.5	<0.5	<0.01	<0.01	<0.20	<0.10	<0.01	<0.5	<0.5
AUG										
18...	<0.01	<0.5	<0.5	<0.01	<0.01	<0.20	<0.10	<0.01	<0.5	<0.5
07124000	ARKANSAS RIVER AT LAS ANIMAS									
AUG 1990										
23...	<0.01	--	<0.5	<0.01	<0.01	<0.10	<0.10	<0.01	--	--
JUL 1991										
24...	<0.01	<0.5	<0.5	<0.01	<0.01	<0.10	<0.10	<0.01	<0.5	<0.5
SEP										
04...	0.01	<0.5	<0.5	<0.01	<0.01	<0.20	<0.10	<0.01	<0.5	<0.5
APR 1992										
17...	<0.01	<0.5	<0.5	<0.01	<0.01	<0.20	<0.10	<0.01	<0.5	<0.5
JUL										
17...	<0.01	<0.5	<0.5	<0.01	<0.01	<0.20	<0.10	<0.01	<0.5	<0.5
07130500	ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR									
AUG 1990										
23...	<0.01	--	<0.5	<0.01	<0.01	<0.10	<0.10	<0.01	--	--

Table 61. Pesticide data for selected surface-water stations on the Arkansas River, 1990–92--Continued

DATE	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	PHORATE TOTAL (UG/L)	PROME-TONE TOTAL (UG/L)	PROME-TRYNE TOTAL (UG/L)	PROPA-CHLOR WATER WHOLE RECOV. (UG/L)	PRO-PAZINE TOTAL (UG/L)	PROPHAM TOTAL (UG/L)	PROPO-XUR WATER WHOLE RECOV. (UG/L)	SEVIN, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
07097000	ARKANSAS RIVER AT PORTLAND										
AUG 1990											
30...	<0.01	<0.1	<0.01	<0.10	<0.10	--	<0.10	<0.5	--	<0.5	<0.01
JUL 1991											
18...	<0.01	<0.1	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
SEP											
03...	<0.01	<0.1	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
APR 1992											
17...	<0.01	<0.1	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
AUG											
13...	<0.01	<0.1	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
07109500	ARKANSAS RIVER NEAR AVONDALE										
AUG 1990											
20...	<0.01	<0.1	<0.01	0.10	<0.10	--	<0.10	<0.5	--	<0.5	<0.01
JUL 1991											
22...	<0.01	<0.1	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
SEP											
04...	<0.01	<0.1	<0.01	0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
APR 1992											
17...	<0.01	--	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
AUG											
17...	<0.01	<0.1	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
07119700	ARKANSAS RIVER AT CATLIN DAM, NEAR FOWLER										
AUG 1990											
21...	<0.01	<0.1	<0.01	0.10	<0.10	--	<0.10	<0.5	--	<0.5	--
JUL 1991											
23...	<0.01	<0.1	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
SEP											
04...	<0.01	<0.1	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
APR 1992											
17...	<0.01	<0.1	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
AUG											
18...	<0.01	<0.1	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
07124000	ARKANSAS RIVER AT LAS ANIMAS										
AUG 1990											
23...	<0.01	<0.1	<0.01	0.10	<0.10	--	<0.10	<0.5	--	<0.5	<0.01
JUL 1991											
24...	<0.01	<0.1	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
SEP											
04...	<0.01	<0.1	<0.01	0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
APR 1992											
17...	<0.01	<0.1	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
JUL											
17...	<0.01	<0.1	<0.01	<0.20	<0.10	<0.10	<0.10	<0.5	<0.5	<0.5	<0.01
07130500	ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR										
AUG 1990											
23...	<0.01	<0.1	<0.01	0.10	<0.10	--	<0.10	<0.5	--	<0.5	<0.01

Table 61. Pesticide data for selected surface-water stations on the Arkansas River, 1990–92--Continued

DATE	SIMAZINE TOTAL (UG/L)	SIMETRYNE TOTAL (UG/L)	TERBACIL WATER WHOLE RECOV. (UG/L)	TRIFLURALIN TOTAL RECOVER (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	3-HYDRX CARBOFURAN WATER WHOLE TOT.REC (UG/L)	VERNOLATE WATER WHOLE RECOV. (UG/L)
07097000	ARKANSAS RIVER AT PORTLAND										
AUG 1990											
30...	<0.10	<0.10	--	<0.10	<1	<0.01	<0.01	<0.01	<0.01	--	--
JUL 1991											
18...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	<0.01	<0.01	<0.01	<0.5	<0.10
SEP											
03...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	0.05	<0.01	<0.01	<0.5	<0.10
APR 1992											
17...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	<0.01	<0.01	<0.01	<0.5	<0.10
AUG											
13...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	0.01	<0.01	<0.01	<0.5	<0.10
07109500	ARKANSAS RIVER NEAR AVONDALE										
AUG 1990											
20...	<0.10	<0.10	--	<0.10	<1	<0.01	0.04	<0.01	<0.01	--	--
JUL 1991											
22...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	0.04	<0.01	<0.01	<0.5	<0.10
SEP											
04...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	0.33	0.01	<0.01	<0.5	<0.10
APR 1992											
17...	<0.10	<0.10	<0.20	<0.10	--	<0.01	0.16	0.01	<0.01	<0.5	<0.10
AUG											
17...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	0.01	<0.01	<0.01	<0.5	<0.10
07119700	ARKANSAS RIVER AT CATLIN DAM, NEAR FOWLER										
AUG 1990											
21...	<0.10	<0.10	--	<0.10	<1	<0.01	--	--	--	--	--
JUL 1991											
23...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	<0.01	<0.01	<0.01	<0.5	<0.10
SEP											
04...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	<0.01	<0.01	<0.01	<0.5	<0.10
APR 1992											
17...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	0.04	<0.01	<0.01	<0.5	<0.10
AUG											
18...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	0.02	<0.01	<0.01	<0.5	<0.10
07124000	ARKANSAS RIVER AT LAS ANIMAS										
AUG 1990											
23...	<0.10	<0.10	--	<0.10	<1	<0.01	0.01	<0.01	<0.01	--	--
JUL 1991											
24...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	0.08	<0.01	<0.01	<0.5	<0.10
SEP											
04...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	0.30	<0.01	<0.01	<0.5	<0.10
APR 1992											
17...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	<0.01	<0.01	<0.01	<0.5	<0.10
JUL											
17...	<0.10	<0.10	<0.20	<0.10	<1	<0.01	0.26	<0.01	<0.01	<0.5	<0.10
07130500	ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR										
AUG 1990											
23...	<0.10	<0.10	--	<0.10	<1	<0.01	0.04	<0.01	<0.01	--	--

Table 62. Radiochemical data for selected surface-water stations on the Arkansas River, 1990–92

	DATE	TIME	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)
07087200	ARKANSAS RIVER AT BUENA VISTA								
	JUN 1990								
	20...	1240	0.8	<0.6	1.0	<0.6	0.9	<0.6	<1.0
	AUG								
	12...	0830	0.7	<0.6	1.1	<0.6	0.9	<0.6	<1.0
	29...	0820	1.0	<0.6	1.5	<0.6	1.2	<0.6	1.0
	APR 1991								
	24...	0945	--	--	--	--	--	--	<1.0
	JUN								
	19...	0830	0.9	0.6	0.8	<0.6	0.7	<0.6	<1.0
	SEP								
	03...	1045	8.6	<0.6	3.6	1.6	2.9	1.5	6.3
	JUN 1992								
	25...	1020	0.6	0.7	1.0	0.7	0.9	0.7	<1.0
	AUG								
	12...	0830	0.7	<0.6	1.1	<0.6	0.9	<0.6	<1.0
07093700	ARKANSAS RIVER NEAR WELLSVILLE								
	JUN 1990								
	20...	1730	1.7	1.2	1.5	1.5	1.3	1.2	<1.0
	AUG								
	12...	1450	3.2	0.7	2.9	0.8	2.4	0.8	2.2
	29...	1400	7.0	<0.6	2.6	0.6	2.0	<0.6	3.7
	APR 1991								
	25...	0745	--	--	--	--	--	--	2.3
	JUN								
	19...	1845	1.5	1.0	1.5	1.2	1.3	1.2	1.7
	SEP								
	03...	1340	6.0	1.4	2.5	3.0	2.1	2.8	6.9
	JUN 1992								
	25...	1430	2.1	<0.6	1.6	1.0	1.4	0.9	3.4
	AUG								
	12...	1450	3.2	0.7	2.9	0.8	2.4	0.8	2.2
07094500	ARKANSAS RIVER AT PARKDALE								
	JUN 1990								
	21...	0840	4.0	1.9	5.0	2.9	4.0	2.3	<1.0
	AUG								
	30...	1110	4.7	<0.6	4.8	0.7	3.6	<0.6	4.0
	APR 1991								
	25...	1400	--	--	--	--	--	--	3.7
	JUN								
	20...	0910	1.8	2.4	1.8	2.6	1.5	2.4	2.2
	SEP								
	03...	1625	12	0.7	5.2	2.3	4.0	2.2	7.5
	JUN 1992								
	26...	0900	2.0	26	1.9	13	1.6	12	2.5
	AUG								
	13...	1000	3.8	1.3	3.1	2.0	2.3	1.9	2.1
07097000	ARKANSAS RIVER AT PORTLAND								
	JUN 1990								
	21...	1400	2.7	4.9	3.3	4.1	2.6	3.4	1.5
	AUG								
	30...	1415	10	<0.6	5.3	<0.6	4.0	<0.6	5.4
	APR 1991								
	26...	1015	--	--	--	--	--	--	5.0
	JUN								
	20...	1420	1.8	1.7	1.6	2.4	1.3	2.2	2.0
	SEP								
	03...	1900	1.6	<0.6	1.7	0.8	1.4	0.8	1.2
	JUN 1992								
	26...	1400	3.7	12	2.9	8.6	2.3	8.0	4.3
	AUG								
	13...	1330	4.9	2.0	3.6	3.2	2.6	3.0	3.8

Table 62. Radiochemical data for selected surface-water stations on the Arkansas River, 1990–92--Continued

	DATE	TIME	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)
07109500	ARKANSAS RIVER NEAR AVONDALE								
	AUG 1990								
	20...	1800	7.4	14	9.0	12	6.7	9.4	--
	APR 1991								
	15...	1615	--	--	--	--	--	--	8.0
	JUN								
	10...	1800	8.0	32	6.5	20	4.9	19	7.0
	SEP								
	04...	0935	8.9	50	9.0	27	6.8	25	4.8
	JUN 1992								
	16...	1500	11	2.9	5.3	3.0	4.0	2.8	7.0
	AUG								
	17...	1530	8.1	0.7	4.8	2.7	3.9	2.6	5.5
07119700	ARKANSAS RIVER AT CATLIN DAM, NEAR FOWLER								
	AUG 1990								
	21...	1600	15	62	9.9	32	7.5	29	--
	APR 1991								
	16...	1340	--	--	--	--	--	--	11
	JUN								
	11...	1430	9.3	59	5.8	35	4.3	32	8.5
	SEP								
	04...	1445	12	430	8.6	590	6.6	550	4.8
	JUN 1992								
	17...	1030	10	9.5	5.8	8.4	4.3	7.6	7.4
	AUG								
	18...	1230	8.9	550	7.3	330	6.0	310	5.2
07124000	ARKANSAS RIVER AT LAS ANIMAS								
	AUG 1990								
	23...	0800	28	460	18	410	14	390	--
	APR 1991								
	17...	1215	--	--	--	--	--	--	36
	JUN								
	12...	1300	16	51	5.6	33	4.3	30	12
	SEP								
	04...	1815	20	320	12	160	9.1	150	13
	JUN 1992								
	18...	0800	19	28	9.3	26	7.1	24	13
	AUG								
	19...	1000	30	47	11	34	8.7	31	15
07130500	ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR								
	AUG 1990								
	23...	1130	14	0.7	13	1.7	9.6	1.4	--
	JUN 1991								
	13...	0840	28	1.7	12	5.7	8.8	5.5	29
	SEP								
	05...	0905	19	2.2	13	5.0	9.8	4.7	14
	JUN 1992								
	18...	1100	21	0.8	18	4.1	13	3.9	29
	AUG								
	19...	1145	20	1.4	12	7.1	9.2	6.8	11

Table 63. Suspended-sediment data for selected surface-water stations on or near the Arkansas River, 1990–93

	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
07081200	ARKANSAS RIVER NEAR LEADVILLE					
	APR 1990					
	17...	1315	--	6	--	--
	MAY					
	22...	1230	128	14	4.8	58
	JUN					
	05...	1135	493	245	326	18
	19...	1200	271	28	20	52
	JUL					
	17...	1100	70	15	2.8	75
	AUG					
	28...	1030	32	2	0.17	82
	OCT					
	29...	1445	27	8	0.60	--
	DEC					
	19...	1210	18	1	0.04	--
	MAR 1991					
	25...	1350	17	1	0.05	--
	APR					
	23...	0755	27	181	13	--
	MAY					
	14...	0820	94	11	2.8	61
	JUN					
	18...	0945	325	37	32	24
	JUL					
	16...	0945	89	5	1.1	--
	AUG					
	13...	0615	73	13	2.5	--
	OCT					
	22...	0850	20	4	0.22	79
	DEC					
	16...	1445	16	6	0.24	--
	MAR 1992					
	23...	1340	32	4	0.38	--
	APR					
	20...	1850	39	4	0.42	59
	MAY					
	20...	1100	249	33	22	48
	JUN					
	24...	1330	229	19	12	--
	JUL					
	13...	1200	124	12	3.9	--
	AUG					
	11...	1000	58	3	0.49	--
	26...	0750	67	7	1.3	70
	OCT					
	26...	1310	31	2	0.17	--
	JAN 1993					
	11...	1200	E26	2	--	87
	MAR					
	22...	1000	E26	2	--	69
07083710	ARKANSAS RIVER BELOW EMPIRE GULCH, NEAR MALTA					
	APR 1990					
	17...	1720	91	10	2.5	64
	MAY					
	22...	1615	140	16	6.0	52
	JUN					
	05...	1430	512	73	101	59
	19...	1510	360	34	33	47
	JUL					
	17...	1420	139	24	9.0	7
	AUG					
	28...	1245	72	3	0.58	79
	OCT					
	30...	1300	99	1	0.37	--
	DEC					
	19...	1415	48	5	0.65	54

Table 63. Suspended-sediment data for selected surface-water stations on or near the Arkansas River, 1990–93--Continued

	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
07083710	ARKANSAS RIVER BELOW EMPIRE GULCH, NEAR MALTA--Continued					
	MAR 1991					
	25...	1550	57	3	0.49	--
	APR					
	23...	1325	79	10	2.2	--
	MAY					
	14...	1400	156	14	5.9	70
	JUN					
	18...	1345	427	75	86	11
	JUL					
	16...	1600	137	6	2.2	62
	AUG					
	13...	1315	132	4	1.3	--
	OCT					
	22...	1430	71	63	12	8
	DEC					
	17...	0900	77	2	0.42	--
	MAR 1992					
	23...	1530	61	2	0.35	--
	APR					
	21...	1030	95	5	1.3	75
	MAY					
	20...	1520	297	27	22	74
	JUN					
	24...	1710	350	13	13	--
	JUL					
	13...	1615	219	10	5.9	--
	AUG					
	11...	1330	134	3	0.90	--
	26...	1000	180	5	2.4	74
	OCT					
	26...	1515	95	8	2.1	66
	JAN 1993					
	11...	1440	45	4	0.49	94
	MAR					
	22...	1330	58	4	0.63	96
07086000	ARKANSAS RIVER AT GRANITE					
	JUN 1990					
	19...	1920	1220	12	40	72
07087200	ARKANSAS RIVER AT BUENA VISTA					
	APR 1990					
	18...	1530	171	8	3.7	--
	MAY					
	23...	0900	519	39	55	58
	JUN					
	06...	1100	2240	187	1130	42
	20...	1240	1690	17	77	--
	JUL					
	18...	1110	970	6	16	67
	AUG					
	29...	0820	227	2	1.2	82
	OCT					
	31...	1000	167	2	0.77	--
	DEC					
	20...	0900	219	2	0.95	--
	JAN 1991					
	16...	1310	517	11	15	--
	MAR					
	26...	0830	252	1	0.75	--
	APR					
	24...	0945	E378	5	--	--
	MAY					
	15...	1130	868	14	33	76
	JUN					
	19...	0830	1780	27	130	25
	JUL					
	17...	0730	648	4	6.5	--
	AUG					
	14...	0800	423	3	3.1	--
	OCT					
	23...	0825	114	2	0.52	--
	DEC					
	17...	1320	254	5	3.6	--

Table 63. Suspended-sediment data for selected surface-water stations on or near the Arkansas River, 1990–93--Continued

	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
07087200	ARKANSAS RIVER AT BUENA VISTA--Continued					
	MAR 1992					
	24...	0830	219	2	1.4	--
	APR					
	22...	0815	192	2	0.93	--
	MAY					
	21...	0840	1210	42	137	50
	JUN					
	25...	1020	1250	10	34	72
	JUL					
	14...	0715	634	7	12	--
	AUG					
	12...	0830	595	3	5.1	--
	25...	1745	462	46	57	21
	OCT					
	28...	0950	154	3	1.0	--
	JAN 1993					
	12...	1200	229	4	2.5	68
	MAR					
	23...	0730	450	4	4.9	79
07093700	ARKANSAS RIVER NEAR WELLSVILLE					
	APR 1990					
	19...	1430	250	8	5.4	--
	MAY					
	23...	1630	585	120	190	58
	JUN					
	06...	1700	2620	498	3520	20
	20...	1730	1690	45	205	27
	JUL					
	18...	1550	1160	13	41	40
	AUG					
	29...	1400	404	4	4.4	77
	NOV					
	01...	0745	421	3	3.4	--
	JAN 1991					
	17...	0900	498	3	3.9	--
	MAR					
	26...	1405	372	5	5.0	37
	APR					
	25...	0745	405	5	5.9	--
	MAY					
	15...	1620	1030	44	122	59
	JUN					
	19...	1845	1930	50	261	22
	JUL					
	17...	2015	728	3	5.9	--
	AUG					
	15...	0615	547	7	10	51
	OCT					
	23...	1420	270	4	2.9	93
	DEC					
	18...	0900	500	4	5.3	--
	MAR 1992					
	24...	1315	397	6	6.4	73
	APR					
	22...	1520	270	5	3.6	83
	MAY					
	21...	1200	1400	168	635	34
	JUL					
	14...	2000	784	5	9.5	--
	AUG					
	12...	1450	742	12	23	--
	25...	1020	1180	70	223	60
	OCT					
	28...	1620	378	3	3.0	--
	JAN 1993					
	12...	1640	408	23	2.5	38
	MAR					
	23...	1200	638	5	8.6	73

Table 63. Suspended-sediment data for selected surface-water stations on or near the Arkansas River, 1990–93--Continued

		DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
07094500	ARKANSAS RIVER AT PARKDALE						
		APR 1990					
		20...	0845	343	18	17	--
		MAY					
		24...	0900	674	195	355	64
		JUN					
		07...	0815	3110	650	5470	27
		21...	0840	1990	197	1060	--
		JUL					
		19...	0940	1110	35	105	35
		AUG					
		30...	1110	395	7	7.5	77
		NOV					
		01...	1400	476	6	7.5	--
		JAN 1991					
		17...	1200	515	27	38	--
		APR					
		25...	1400	443	8	9.9	--
		MAY					
		16...	0830	956	79	204	50
		JUN					
		20...	0910	1970	98	521	23
		JUL					
		18...	0945	848	27	61	--
		AUG					
		15...	1100	641	25	43	72
		OCT					
		24...	0820	308	14	12	86
		DEC					
		18...	1120	524	11	15	--
		MAR 1992					
		24...	1630	469	201	255	4
		APR					
		23...	0820	321	2	1.9	--
		MAY					
		22...	0730	1550	253	1060	45
		JUN					
		26...	0900	1610	266	1160	73
		JUL					
		15...	0915	880	15	35	--
		AUG					
		13...	1000	843	33	75	--
		25...	0700	1770	1650	7890	84
		OCT					
		29...	0920	438	7	8.8	--
		JAN 1993					
		13...	0815	459	5	6.2	77
		MAR					
		23...	1410	732	15	30	63
07097000	ARKANSAS RIVER AT PORTLAND						
		APR 1990					
		20...	1530	314	26	22	76
		MAY					
		24...	1345	509	524	720	68
		JUN					
		07...	1530	3210	897	7770	40
		21...	1400	1820	230	1130	24
		JUL					
		19...	1345	1060	51	146	44
		AUG					
		30...	1415	271	5	3.7	81
		NOV					
		02...	1015	514	39	54	43
		JAN 1991					
		17...	1550	470	52	66	--
		MAR					
		27...	1010	400	14	15	63
		APR					
		26...	1015	291	12	9.0	--
		MAY					
		16...	1315	728	130	256	40

Table 63. Suspended-sediment data for selected surface-water stations on or near the Arkansas River, 1990–93--Continued

	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
07097000	ARKANSAS RIVER AT PORTLAND--Continued					
	JUN 1991					
	20...	1420	1920	129	669	30
	JUL					
	18...	1400	642	15	27	--
	AUG					
	15...	1500	858	158	366	57
	OCT					
	24...	1315	339	34	31	72
	MAR 1992					
	25...	1005	642	58	101	43
	APR					
	23...	1400	318	28	24	85
	MAY					
	22...	1230	1450	641	2510	31
	JUN					
	26...	1400	1730	228	1060	63
	JUL					
	15...	1200	806	34	74	65
	AUG					
	13...	1330	800	81	175	65
	24...	1500	917	1390	3440	81
	OCT					
	29...	1400	343	65	60	86
	JAN 1993					
	13...	1050	539	56	81	52
	MAR					
	24...	0855	587	32	51	63
07099400	ARKANSAS RIVER ABOVE PUEBLO					
	APR 1990					
	09...	1440	228	16	9.8	54
	JUL					
	24...	0950	695	33	62	98
	AUG					
	20...	1035	968	18	47	99
07099970	ARKANSAS RIVER AT MOFFAT STREET, AT PUEBLO					
	APR 1990					
	10...	0910	142	9	3.5	82
	MAY					
	14...	1045	283	11	8.4	64
	JUN					
	11...	1130	3800	152	1560	21
	JUL					
	24...	1135	629	60	102	97
	AUG					
	20...	1215	863	23	54	85
	SEP					
	28...	1100	270	44	32	97
	OCT					
	22...	1030	316	19	16	97
	DEC					
	17...	1030	33	18	1.6	--
	MAR 1991					
	27...	1320	321	8	7.2	--
	APR					
	15...	1005	232	14	8.8	66
	MAY					
	20...	1115	502	14	19	--
	JUN					
	10...	1145	1590	27	116	53
	JUL					
	22...	1040	1630	27	119	90
	AUG					
	15...	0955	1530	162	669	44
	OCT					
	28...	1140	94	17	4.3	88
	DEC					
	16...	1115	54	28	4.1	46

Table 63. Suspended-sediment data for selected surface-water stations on or near the Arkansas River, 1990–93--Continued

	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
07099970	ARKANSAS RIVER AT MOFFAT STREET, AT PUEBLO--Continued					
	MAR 1992					
	25...	1340	353	10	9.5	75
	APR					
	28...	0955	496	14	19	--
	MAY					
	18...	1100	567	46	71	--
	JUN					
	16...	0930	1560	17	72	74
	JUL					
	16...	1015	1020	85	234	15
	AUG					
	17...	0955	515	23	32	60
	OCT					
	20...	1015	216	16	9.3	92
	JAN 1993					
	14...	0835	181	19	9.3	64
	MAR					
	24...	1145	204	10	5.5	71
07106500	FOUNTAIN CREEK AT PUEBLO					
	APR 1990					
	10...	1140	90	674	164	51
	MAY					
	14...	1300	88	407	97	53
	JUN					
	11...	1345	77	663	138	90
	JUL					
	24...	1300	97	925	242	74
	AUG					
	20...	1400	97	924	242	83
	SEP					
	05...	1825	9.0	548	13	76
	OCT					
	22...	1205	90	736	179	58
	DEC					
	17...	1220	119	688	221	60
	MAR 1991					
	28...	0825	68	289	53	48
	APR					
	15...	1140	64	271	47	70
	MAY					
	20...	1305	50	152	21	66
	JUN					
	10...	1320	190	1020	523	63
	JUL					
	22...	1300	253	3930	2680	85
	AUG					
	15...	1145	119	541	174	74
	OCT					
	28...	1250	76	238	49	28
	DEC					
	16...	1315	114	663	204	50
	MAR 1992					
	26...	0745	160	581	251	47
	APR					
	28...	1110	96	239	62	54
	MAY					
	18...	1220	32	45	3.9	83
	JUN					
	16...	1100	96	223	58	62
	JUL					
	16...	1115	21	69	3.9	58
	AUG					
	17...	1110	34	72	6.6	87
	OCT					
	20...	1145	80	365	79	63
	JAN 1993					
	14...	1000	100	436	118	15
	MAR					
	25...	0745	96	254	66	54

Table 63. Suspended-sediment data for selected surface-water stations on or near the Arkansas River, 1990–93--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
07109500 ARKANSAS RIVER NEAR AVONDALE					
APR 1990					
10...	1840	445	132	159	72
MAY					
14...	1750	634	154	264	58
JUN					
12...	0920	4000	501	5410	44
JUL					
24...	1700	960	345	894	82
AUG					
20...	1800	1170	408	1290	68
OCT					
22...	1615	628	1040	1760	10
DEC					
17...	1550	286	76	59	63
MAR 1991					
28...	1150	510	102	140	45
APR					
15...	1615	430	59	68	43
MAY					
20...	1650	E670	79	--	36
JUN					
10...	1800	2320	849	5320	45
JUL					
22...	1830	1950	2160	11400	36
AUG					
15...	1715	1750	249	1180	55
OCT					
28...	1630	330	304	271	96
DEC					
17...	0805	299	819	661	14
MAR 1992					
26...	1115	654	232	410	35
APR					
28...	1500	810	265	580	22
MAY					
18...	1615	828	113	253	32
JUN					
16...	1500	1720	163	757	38
JUL					
16...	1520	1270	2090	7170	3
AUG					
17...	1530	733	246	487	16
OCT					
20...	1430	433	765	894	7
JAN 1993					
14...	1330	444	848	1020	5
MAR					
25...	1100	428	74	85	50
380715103564701 APISHAPA RIVER AT HIGHWAY 50, NEAR FOWLER					
JUL 1991					
02...	1645	E800	20200	--	96
07119700 ARKANSAS RIVER AT CATLIN DAM, NEAR FOWLER					
APR 1990					
12...	0845	112	120	36	82
MAY					
15...	1010	241	1520	989	7
JUN					
13...	0920	2920	789	6220	54
JUL					
25...	1320	83	3370	759	52
AUG					
21...	1600	445	829	996	98
OCT					
23...	1315	308	375	312	45
DEC					
18...	0945	258	147	102	44
MAR 1991					
28...	1630	112	88	27	66
APR					
16...	1340	109	730	215	6

Table 63. Suspended-sediment data for selected surface-water stations on or near the Arkansas River, 1990–93--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
07119700 ARKANSAS RIVER AT CATLIN DAM, NEAR FOWLER--Continued					
MAY 1991					
21...	1110	222	216	129	74
JUN					
11...	1430	1850	959	4790	78
JUL					
02...	1835	1750	4770	22500	93
23...	1600	948	1400	3580	94
AUG					
16...	1130	1480	2260	9030	85
OCT					
29...	1200	77	122	25	60
DEC					
17...	1335	161	156	68	64
MAR 1992					
26...	1505	291	204	160	68
APR					
29...	1220	300	143	116	82
MAY					
19...	0730	314	1110	941	9
JUN					
17...	1030	1150	1350	4190	17
JUL					
17...	0740	581	724	1140	88
AUG					
18...	1230	613	9460	15700	94
OCT					
21...	1010	128	41	14	62
JAN 1993					
14...	1605	339	165	151	22
MAR					
25...	1430	269	124	90	50
07124000 ARKANSAS RIVER AT LAS ANIMAS					
APR 1990					
13...	0810	24	43	2.8	--
MAY					
16...	1110	230	1450	900	25
JUN					
14...	0830	961	967	2510	59
JUL					
26...	1500	203	1650	904	97
AUG					
23...	0800	287	2070	1600	62
OCT					
24...	1320	362	717	701	81
DEC					
18...	1220	111	158	47	57
MAR 1991					
29...	1005	23	90	5.6	66
APR					
17...	1215	19	42	2.1	--
MAY					
21...	1515	17	10	0.48	--
JUN					
12...	1300	538	4540	6590	21
JUL					
24...	1230	375	2200	2230	64
AUG					
16...	1620	374	1520	1530	90
OCT					
30...	0940	77	207	43	62
DEC					
18...	0915	113	230	70	36
MAR 1992					
27...	0840	28	26	1.9	--
APR					
30...	1015	264	491	350	79
MAY					
19...	1125	174	1260	592	22
JUN					
18...	0800	412	1730	1920	44

Table 63. Suspended-sediment data for selected surface-water stations on or near the Arkansas River, 1990–93--Continued

		DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
07124000	ARKANSAS RIVER AT LAS ANIMAS--Continued						
		JUL 1992					
		17...	1215	391	3930	4150	52
		AUG					
		19...	1000	264	797	568	81
		OCT					
		22...	0745	63	106	18	17
		JAN 1993					
		15...	1140	395	126	134	44
		MAR					
		26...	1030	24	58	3.8	27
07130500	ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR						
		APR 1990					
		13...	1115	1.7	231	1.1	38
		MAY					
		16...	1330	403	51	55	31
		JUN					
		14...	1300	595	34	55	62
		JUL					
		27...	0850	402	30	33	90
		AUG					
		23...	1130	444	9	11	79
		OCT					
		24...	1515	268	14	10	51
		MAR 1992					
		27...	1005	1.6	298	1.3	52
		APR					
		30...	1200	610	242	399	8
		MAY					
		19...	1400	490	56	74	75
		JUN					
		18...	1100	411	276	306	62
		JUL					
		17...	1445	845	204	465	30
		AUG					
		19...	1145	389	44	46	94
		OCT					
		22...	0930	120	32	10	94
		JAN 1993					
		15...	1315	89	253	61	54
		MAR					
		26...	1130	3.1	170	1.4	28

Table 64. Quality-assurance data for source-solution blanks of deionized water for the Arkansas River Basin water-quality study, 1990–93

DATE	TIME	SPECIFIC CONDUCTANCE LAB (US/CM)	PH WATER WHOLE LAB (STANDARD UNITS)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
APR 1990										
10...	1752	7	6.3	0.03	0.02	1.1	<1.0	<0.10	11	<0.100
JUN										
21...	1140	4	8.9	0.03	0.05	<0.20	<1.0	<0.10	<1	<0.100
JUL										
18...	1241	2	6.3	0.08	<0.02	<0.20	<1.0	0.30	<1	0.015
AUG										
28...	1121	2	6.4	<0.02	0.06	<0.20	<1.0	0.20	<1	<0.010
NOV										
02...	1111	4	5.9	0.33	<0.01	<0.20	<1.0	0.70	1	<0.010
JAN 1991										
17...	1243	24	4.4	<0.02	<0.01	<0.20	<1.0	<0.10	<1	--
MAR										
26...	1111	2	6.8	0.28	<0.01	<0.20	<1.0	<0.10	1	<0.005
APR										
23...	0933	2	7.9	<0.02	0.11	<0.20	<0.10	0.30	1	<0.005
MAY										
14...	1503	2	8.0	0.02	<0.01	<0.20	<0.10	<0.10	--	<0.005
JUN										
19...	1059	1	7.1	0.03	0.02	<0.20	0.20	<0.10	2	<0.005
19...	1331	1	6.3	0.25	<0.01	<0.20	0.30	<0.10	2	<0.005
JUL										
18...	1547	1	7.9	0.03	<0.01	<0.20	0.20	<0.10	1	<0.005
AUG										
14...	1607	3	6.6	0.11	0.08	0.40	0.10	<0.10	2	<0.005
OCT										
24...	0949	1	6.4	<0.02	<0.01	<0.20	0.20	0.10	<1	<0.005
DEC										
18...	1047	2	6.4	<0.02	<0.01	<0.20	<0.10	<0.10	1	--
MAR 1992										
24...	1057	1	6.7	<0.02	<0.01	<0.20	<0.10	<0.10	2	0.014
APR										
23...	1449	2	8.2	<0.02	<0.01	<0.20	<0.10	0.70	<1	<0.005
MAY										
22...	0951	1	8.1	0.16	<0.01	<0.20	<0.10	0.30	<1	0.015
JUN										
26...	1047	1	8.1	<0.02	<0.01	<0.20	0.20	0.30	<1	<0.005
JUL										
13...	1333	4	8.0	<0.02	<0.01	<0.20	<0.10	0.10	2	<0.005
AUG										
11...	1423	2	7.5	<0.02	<0.01	<0.20	<0.10	<0.10	<1	<0.005
OCT										
28...	0952	2	7.9	<0.02	<0.01	<0.20	<0.10	0.10	1	<0.005
JAN 1993										
13...	1149	2	5.3	<0.02	<0.01	<0.20	0.30	0.30	<1	--
MAR										
23...	1051	2	5.9	0.02	<0.01	<0.20	<0.10	<0.10	<1	--

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990									
10...	--	<0.010	--	<0.1	<10	4	<1	<1	<3
JUN									
21...	--	<0.010	--	<0.1	2	3	<1	<1	5
JUL									
18...	--	0.020	--	<0.1	1	<3	<1	<1	<3
AUG									
28...	--	<0.010	--	<0.1	<1	7	<1	<1	<3
NOV									
02...	--	0.150	--	<0.1	--	6	<1	<1	4
JAN 1991									
17...	--	--	--	<0.1	1	<3	<1	<1	<3
MAR									
26...	--	0.018	--	<0.1	1	5	<1	<1	10
APR									
23...	--	0.010	--	<0.1	<1	<3	<1	<1	<3
MAY									
14...	--	0.007	--	<0.1	<1	<3	<1	<1	<3

Table 64. Quality-assurance data for source-solution blanks of deionized water for the Arkansas River Basin water-quality study, 1990–93--Continued

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, DISSOLVED (UG/L AS ZN)
JUN 1991									
19...	--	0.016	--	<0.1	1	<3	<1	<1	6
19...	--	0.014	--	<0.1	2	<3	<1	<1	5
JUL									
18...	--	0.002	--	<0.1	12	5	4	<1	6
AUG									
14...	--	<0.002	--	<0.1	<1	5	<1	<1	<3
OCT									
24...	--	0.013	--	<0.1	<1	<3	<1	<1	<3
DEC									
18...	--	--	--	<0.1	<1	<3	<1	<1	<3
MAR 1992									
24...	--	0.010	--	<0.1	<1	<3	<1	<1	<3
APR									
23...	--	0.005	--	<0.1	<1	<3	<1	<1	<3
MAY									
22...	--	0.003	--	<0.1	<1	<3	<1	<1	<3
JUN									
26...	--	<0.002	--	<0.1	<1	<3	<1	<1	<3
JUL									
13...	--	<0.002	--	<0.1	<1	<3	<1	<1	<3
AUG									
11...	--	0.003	--	<0.1	<1	<3	<1	<1	<3
OCT									
28...	--	0.004	--	<0.1	<1	<3	<1	<1	<3
JAN 1993									
13...	<0.005	--	0.011	<0.1	<1	<3	<1	<1	<3
MAR									
23...	<0.005	--	<0.002	<0.1	<1	<3	<1	<1	<3

Table 65. Quality-assurance data for field-equipment blanks for the Arkansas River Basin water-quality study, 1990–93

DATE	TIME	SPECIFIC CONDUCTANCE LAB (US/CM)	PH WATER WHOLE LAB (STANDARD UNITS)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
APR 1990										
09...	0600	6	7.4	0.42	0.05	0.80	<1.0	<0.10	<1	<0.100
10...	1803	7	6.8	0.09	0.05	1.1	<1.0	0.80	5	<0.100
MAY										
16...	1703	12	7.9	0.57	0.25	0.60	2.1	0.50	<1	<0.100
24...	1018	42	4.5	0.10	0.08	<0.20	<1.0	5.3	<1	<0.100
JUN										
07...	1717	7	7.2	0.10	0.03	<0.20	<1.0	1.4	<1	<0.100
21...	1120	18	4.9	0.32	0.04	<0.20	<1.0	3.0	1	<0.100
JUL										
18...	1213	8	6.7	0.17	0.02	<0.20	<1.0	1.4	<1	0.018
AUG										
28...	1117	13	6.1	0.11	0.08	<0.20	<1.0	2.9	<1	<0.010
NOV										
02...	1112	11	5.8	0.15	0.05	<0.20	<1.0	2.1	<1	<0.010
JAN 1991										
17...	1239	1	7.6	0.03	<0.01	<0.20	<1.0	2.4	<1	--
MAR										
26...	1117	50	4.2	0.17	0.14	<0.20	0.10	5.4	4	<0.005
APR										
23...	0937	0	3.7	0.09	<0.01	<0.20	<0.10	9.1	1	0.006
MAY										
14...	1507	5	6.7	0.03	<0.01	<0.20	1.0	0.60	1	<0.005
JUN										
19...	1057	3	5.8	0.03	<0.01	<0.20	<0.10	0.20	6	<0.005
19...	1344	56	4.0	0.31	0.05	<0.20	0.10	6.4	6	<0.005
JUL										
18...	1401	4	8.0	0.05	<0.01	<0.20	0.60	0.20	1	0.011
AUG										
14...	1611	8	5.6	0.25	<0.01	0.40	0.20	1.2	3	0.011
OCT										
24...	0947	4	6.6	0.06	<0.01	<0.20	0.20	0.50	<1	0.005
DEC										
18...	1051	15	5.6	0.05	0.04	<0.20	<0.10	1.2	3	--
MAR 1992										
24...	0909	6	6.4	0.09	0.05	<0.20	0.20	1.1	4	0.019
APR										
23...	1447	3	7.5	0.02	<0.01	<0.20	<0.10	0.60	<1	<0.005
MAY										
22...	0949	5	6.3	0.04	<0.01	<0.20	<0.10	2.0	<1	0.009
JUN										
26...	1049	2	7.6	0.03	<0.01	<0.20	0.20	0.50	<1	<0.005
JUL										
13...	1337	--	--	0.20	<0.10	<0.10	--	--	--	<0.005
AUG										
11...	1417	28	4.6	0.03	<0.01	<0.20	<0.10	3.5	<1	<0.005
26...	1047	2	6.3	<0.02	<0.01	<0.20	0.10	0.60	<1	<0.005
OCT										
28...	0957	4	8.1	0.03	<0.01	<0.20	<0.10	0.50	<1	0.005
JAN 1993										
13...	1151	24	4.3	0.05	<0.01	<0.20	--	--	<1	0.009
MAR										
23...	1113	34	4.1	0.14	<0.01	<0.20	<0.10	3.2	6	--

Table 65. Quality-assurance data for field-equipment blanks for the Arkansas River Basin water-quality study, 1990–93--Continued

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 1990									
09...	--	<0.010	--	0.4	<10	13	<1	2	16
10...	--	0.030	--	0.6	<10	50	1	<1	18
MAY									
16...	--	0.020	--	--	2	4	--	<1	14
24...	--	<0.010	--	<0.1	2	13	<1	2	14
JUN									
07...	--	0.020	--	0.2	200	58	390	3	35
21...	--	<0.010	--	1.1	260	24	160	2	100
JUL									
18...	--	0.040	--	0.3	7	10	4	<1	39
AUG									
28...	--	0.020	--	0.4	2	19	2	1	30
NOV									
02...	--	0.160	--	0.2	--	4	<1	<1	23
JAN 1991									
17...	--	--	--	<0.1	<1	<3	<1	<1	5
MAR									
26...	--	0.036	--	<0.1	1	10	<1	2	13
APR									
23...	--	0.011	--	<0.1	1	10	<1	3	39
MAY									
14...	--	0.020	--	<0.1	3	7	<1	1	5
JUN									
19...	--	0.007	--	0.1	100	4	12	<1	10
19...	--	0.015	--	<0.1	14	21	1	<1	17
JUL									
18...	--	0.009	--	<0.1	<1	4	<1	<1	7
AUG									
14...	--	<0.002	--	<0.1	<1	<3	<1	<1	6
OCT									
24...	--	0.016	--	<0.1	<1	3	1	<1	5
DEC									
18...	--	--	--	0.2	<1	<3	1	<1	<3
MAR 1992									
24...	--	0.012	--	0.2	<1	<3	<1	<1	5
APR									
23...	--	0.005	--	<0.1	<1	<3	<1	<1	<3
MAY									
22...	--	0.008	--	0.3	<1	<3	3	<1	<3
JUN									
26...	--	<0.002	--	<0.1	14	<3	<1	<1	4
JUL									
13...	--	0.010	--	<0.1	<1	10	<1	<10	<10
AUG									
11...	--	0.002	--	<0.1	<1	<3	1	<1	4
26...	--	0.006	--	<0.1	<1	<3	<1	<1	3
OCT									
28...	--	0.007	--	<0.1	<1	<3	1	<1	<3
JAN 1993									
13...	0.009	--	0.011	0.3	<1	<3	<1	<1	<3
MAR									
23...	<0.005	--	<0.002	<0.1	<1	<3	<1	<1	3

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