

Surface-Water Quantity and Quality Data, Rocky Flats Environmental Technology Site Near Denver, Colorado, Water Year 1996

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
acre	0.4047	hectare
acre-foot (acre-ft)	1,233.5	cubic meter
cubic foot (ft ³)	0.02832	cubic meter
cubic foot per second (ft ³ /s)	0.02832	cubic meter per second
foot (ft)	0.3048	meter
gallon (gal)	0.003785	cubic meter
gallon per minute (gal/min)	3.785	liter per minute
gallon per second (gal/s)	3.785	liter per second
inch	25.4	millimeter (mm)
mile (mi)	1.609	kilometer
square mile (mi ²)	2.59	square kilometer

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

$$^{\circ}\text{F} = 9/5 (^{\circ}\text{C}) + 32$$

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

$$^{\circ}\text{C} = 5/9 (^{\circ}\text{F} - 32)$$

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

Collection of surface-water quantity and quality data at the Rocky Flats Environmental Technology Site is needed as part of the ongoing environmental cleanup of the facility, which is owned by the U.S. Department of Energy and operated by a private contractor. In May 1993, the U.S. Geological Survey, in cooperation with the U.S. Department of Energy, began a study to collect surface-water quantity (daily mean discharge and daily total precipitation) and quality (chemical and suspended-sediment) data at the Rocky Flats Environmental Technology Site. This report presents data collected at 16 surface-water gaging stations during water year 1996.

INTRODUCTION

The Rocky Flats Environmental Technology Site (hereinafter, the Site) is a former production facility for nuclear-weapons components. The Site is owned by the U.S. Department of Energy (DOE) and operated by a private contractor (Kaiser-Hill Company, L.L.C.). Production of nuclear-weapons components was discontinued in 1992, and environmental cleanup and restoration of the Site was begun. Collection of surface-water quantity and quality data is needed as part of ongoing cleanup operations.

In May 1993, the U.S. Geological Survey (USGS), in cooperation with the DOE, began collecting surface-water quantity and quality data at the Site. The USGS also operated and maintained the surface-water gaging stations used for data collection. Quantity data consist of daily mean discharge and, beginning

in April 1996, daily total precipitation. Quality data consist of analytical results for chemical and suspended-sediment samples. The USGS collected data at 16 surface-water gaging stations at the Site (fig. 1) during water year 1996. Water year 1996 began October 1, 1995, and ended September 30, 1996.

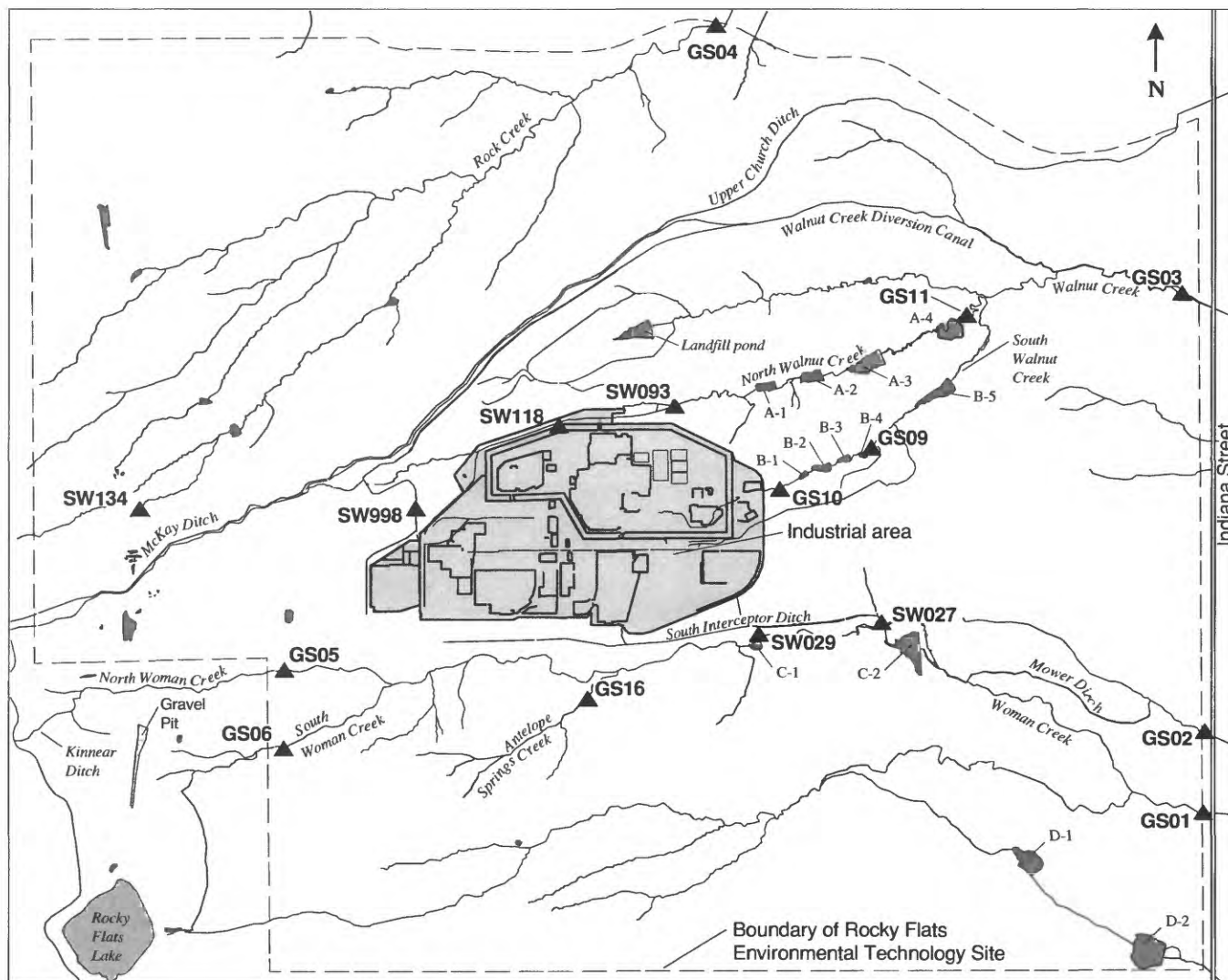
Surface-water quantity data can be used by the DOE and the operating contractor for making water-management decisions at the Site throughout the year. Surface-water quality data can be used by the DOE and the operating contractor to characterize and evaluate the quality of water flowing across the Site.

Purpose and Scope

This report presents surface-water hydrologic data collected by the USGS at the Site during water year 1996. These data include daily mean discharge, daily total precipitation, and the analytical results of water-quality and suspended-sediment samples collected at 16 surface-water gaging stations. Summary tables of the data collected at the Site are presented, but no interpretation of the data is provided beyond a qualitative rating of record quality (good, fair, or poor).

Description of the Study Area

The Site is situated on about 6,550 acres in northern Jefferson County, about 16 mi northwest of Denver, Colorado. Industrial facilities occupy about 384 acres near the center of the Site, and the remaining area serves as a buffer zone between these facilities and the Site boundary (EG&G Rocky Flats, Incorporated,



Base from
EG&G Rocky Flats, Inc., 1993

0 1/4 1/2 3/4 1 MILE
0 0.25 0.5 0.75 1 KILOMETER

EXPLANATION



- A-4  POND AND NUMBER
- GS03 or SW134  SURFACE-WATER GAGING STATION AND NUMBER



Figure 1. Location of surface-water gaging stations and selected surface-water features at the Rocky Flats Environmental Technology Site, water year 1996.

1993a). The USGS hydrologic data-collection network is in the area surrounding the industrial facilities of the Site (fig. 1).

EXPLANATION OF THE SURFACE-WATER DATA

The surface-water quantity data consist of daily mean discharge and daily total precipitation collected by the USGS in water year 1996. A detailed explanation of how the discharge data were collected, analyzed, computed, and arranged for presentation in this report is provided in Appendix 1 (“Discharge Data Collection and Computation”) at the back of this report. Definitions of hydrologic terms used in this report are provided in Appendix 2 (“Glossary”) at the back of this report.

The surface-water quality data consist of analytical results for all samples collected by the USGS in water year 1996. Field water-quality measurements (water temperature, pH, and specific conductance), chemical-quality samples, and suspended-sediment samples (concentrations and sand breaks) were collected by the USGS. Analyses of all chemical-quality samples were conducted by the National Water Quality Laboratory in Arvada, Colorado (or one of its contractors), according to standard USGS analytical methods. Analyses of all suspended-sediment samples were conducted by the Cascades Volcano Observatory Sediment Laboratory in Vancouver, Washington, according to standard USGS analytical methods.

Surface-Water Gaging-Station Identification Numbers

Each gaging station identified in this report was assigned a unique site number (for example, GS01) by EG&G Rocky Flats, Incorporated, as part of previous studies at the Site. The USGS also assigned a 15-digit station identification number to each gaging station for use in the USGS data base. The station identification number usually is the latitude and longitude of the gaging station with a sequence number (00) at the end.

Discharge

The USGS gaging stations are designed to provide continuous records of discharge at each gage. Gaging stations operated at the Site by the USGS in water year 1996 are listed in table 1, and their locations are shown in figure 1. Continuous records of discharge are obtained using a continuous stage-recording device and a rating curve to convert observed stage values to discharge. Records of stage, recorded at 15-minute intervals, can be used to compute instantaneous discharge (at a given 15-minute interval) or daily mean discharge (mean for 24 hours). Daily mean discharges are presented in this report.

Daily mean discharge data for each gaging station are listed in tables 2–17 in the “Surface-Water Data” section; data are ordered by site number (GS01, SW027, and so forth) as listed in table 1. Much of the gaging-station descriptive information at the beginning of each table was provided by EG&G Rocky Flats, Incorporated (1993b) and was reviewed by the USGS prior to publication in this report.

Precipitation

Precipitation gages were installed at seven gaging stations (GS02, GS03, GS04, GS05, GS10, SW029, and SW998) in water year 1996 to determine the areal distribution of rainfall at the Site. Because the precipitation gages were not heated, the period of data collection was April to September 1996; precipitation from snowfall was not recorded. Daily total precipitation data are listed in tables 18–24 in the “Surface-Water Data” section.

Water Quality

The USGS collected surface-water quality (chemical and suspended-sediment) data at seven gaging stations (GS01, GS02, GS03, GS04, GS05, GS06, and SW134) in water year 1996; some suspended-sediment samples also were collected at gaging stations GS10, GS11, and GS16. Chemical-quality constituents sampled by the USGS in water year 1996 were radionuclides (plutonium, americium,

Table 1. Surface-water gaging stations at the Rocky Flats Environmental Technology Site

[Locations of gaging stations are shown in figure 1; USGS, U.S. Geological Survey]

Site number	USGS station identification	Gaging-station name
GS01	395240105095500	Woman Creek at Indiana Street
GS02	395253105095500	Mower Ditch at Indiana Street
GS03	395407105095900	Walnut Creek at Indiana Street
GS04	395452105113800	Rock Creek at Highway 128
GS05	395306105131700	North Woman Creek at West Buffer Zone Fence Line
GS06	395253105131700	South Woman Creek at West Buffer Zone Fence Line
GS09	395342105110800	South Walnut Creek below Pond B-4
GS10	395335105112700	South Walnut Creek above B-Series Bypass
GS11	395403105104700	Walnut Creek below Pond A-4
GS16	395301105120800	Antelope Springs Creek above Woman Creek
SW027	395313105110500	South Interceptor Ditch above Pond C-2
SW029	395310105113300	Pond C-1
SW093	395349105114900	Walnut Creek below Portal 3
SW118	395347105120900	Walnut Creek above Portal 3
SW134	395331105134400	Gravel Pit at Rocky Flats
SW998	395332105124600	T-130 Ditch at McKay Bypass

uranium, tritium, gross beta, and gross alpha), metals (dissolved and total recoverable), major ions (dissolved and total recoverable), nutrients, and organics (volatile and semivolatile organics, and pesticides). The water temperature, pH, and specific conductance of each sample were measured directly at the time the sample was retrieved from the gaging station.

All suspended-sediment samples collected in water year 1996 were analyzed for concentration. Some suspended-sediment samples also were analyzed for sand break (percent sand and percent silt plus clay). Definitions of water-quality terms used in this report are provided in Appendix 2 ("Glossary") at the back of this report.

Sample Collection

Water-quality samples were collected manually (manual samples) or with automatic samplers (composite samples). Manual samples were collected at the midpoint of the flow using a grab (or dip) technique. Each sampling site was equipped with an automatic sampler that could collect composite water samples during periods of runoff. The samplers were operated

using a flow-paced sampling technique, in which the sampler electronics were programmed to pump discrete, equal-volume aliquots of water (usually 24) into a common collection vessel (Isco, Inc., 1990, p. 4–2). The timing for collection of each aliquot was a function of incremental changes in flow volume, as computed by the sampler electronics. This technique yields a discharge-weighted sample for which analytical results (constituent concentration) can be used to compute constituent loads for the sampled flow.

Most samples (with the exception of the organics and some suspended-sediment samples) were collected as composites with the automatic samplers. Following composite-sample collection, USGS personnel retrieved the samples and reset the automatic samplers for subsequent sampling. Individual chemical-quality and suspended-sediment samples then were split from the composite samples. Additional information concerning sampling methods used by the USGS at the Site is provided by Stevens and others (1975), Guy and Norman (1982), Wershaw and others (1987), Britton and Greeson (1989), Fishman and Friedman (1989), and EG&G Rocky Flats, Incorporated (1992).

Data Presentation

Analytical results for chemical-quality and suspended-sediment samples collected at gaging stations GS01–GS06 and SW134 in water year 1996 are listed in tables 25–31 in the “Surface-Water Data” section. Analytical results for miscellaneous suspended-sediment samples collected at gaging stations GS10, GS11, and GS16 are listed in table 32.

In each of the tables 25 to 32, the instantaneous collection time is reported for manual samples, and the interval collection time (start to end) is reported for automatic samples. The instantaneous discharge is reported for manual samples, and the weighted mean discharge (for the sampled time interval) is reported for composite samples.

Analytical results for plutonium-238, plutonium-239/240, and americium-241 are listed without rounding because Site regulatory standards for these constituents are lower than the normal USGS minimum reporting limits. All other radionuclide results are listed with standard USGS rounding and minimum reporting limits. The error associated with each radionuclide result is quantified in tables 25–31 by a value (2 SIGMA) that is defined as plus or minus the total propagated analytical uncertainty at the 95-percent confidence level (A.H. Mullin, U.S. Geological Survey, National Water Quality Laboratory, oral commun., 1996).

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Surface-Water Data

DAILY MEAN DISCHARGE AND DAILY TOTAL PRECIPITATION DATA

The following abbreviations are used in tables 2–24. An explanation of the information and data presented in these tables is in Appendix 1 (“Discharge Data Collection and Computation”).

Lat is latitude;

long is longitude;

sec. is section;

T. is township;

R. is range;

mi² is square miles;

ft is feet;

ft³/s is cubic feet per second;

MAX is the maximum daily mean discharge for a given month;

MIN is the minimum daily mean discharge for a given month;

AC-FT is acre-foot;

--- is a symbol used in place of daily mean discharge for periods of missing record or periods prior to gaging-station activation.

Table 2.--Daily mean discharge, GS01 (Woman Creek at Indiana Street), water year 1996

WOMAN CREEK AT INDIANA STREET

SITE NUMBER.--GS01

STATION IDENTIFICATION.--395240105095500

LOCATION.--Lat 39°52'40", long 105°09'55", in NE¹/₄NE¹/₄ sec.13, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, 100 feet upstream from Indiana Street.

DRAINAGE AREA.--2.16 mi².

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 5,622 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected by Mower Ditch diversion, approximately ¹/₄ mile upstream.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.01	.02	e.02	.07	.09	.04	.09	.00	.00	.00
2	.00	.00	.01	.02	e.04	.05	.09	.04	.06	.00	.00	.00
3	.00	.00	.01	.03	e.04	.05	.07	.04	.05	.00	.00	.00
4	.00	.00	.01	.03	e.04	.05	.11	.03	.04	.00	.00	.00
5	.00	.00	.01	.03	e.07	.05	.35	.03	.04	.00	.00	.00
6	.00	.00	.01	.04	e.07	.05	.29	.03	.03	.00	.00	.00
7	.00	.00	.01	.04	.17	e.04	.18	.03	.03	.00	.00	.00
8	.00	.00	.01	.06	.10	e.05	.14	.03	.03	.00	.00	.00
9	.00	.00	.01	.05	.09	e.06	.11	.03	.03	.00	.00	.00
10	.00	.00	.01	.05	.07	e.07	.10	.06	.02	.00	.00	.00
11	.00	.00	.01	.04	.05	e.07	.09	.04	.02	.00	.00	.00
12	.00	.00	.02	.04	.06	.06	.09	.04	.02	.00	.00	.00
13	.00	.00	.02	.04	.06	.07	.08	.03	.02	.00	.00	.00
14	.00	.00	.02	.04	.06	.15	.09	.03	.02	.00	.00	.00
15	.00	.00	.02	.04	.05	.27	.07	.03	.02	.00	.00	.00
16	.00	.00	.02	.04	.05	.25	.07	.02	.02	.00	.00	.00
17	.00	.00	.02	.05	.05	.17	.06	.02	.02	.00	.00	.00
18	.00	.00	.02	.05	.05	.13	.05	.02	.02	.00	.00	.00
19	.00	.00	.02	e.04	.05	.11	.04	.02	.02	.00	.00	.00
20	.00	.00	.02	e.00	.05	.10	.04	.02	.02	.00	.00	.00
21	.00	.00	.02	e.00	.05	.09	.04	.02	.02	.00	.00	.00
22	.00	.00	.02	e.00	.05	.09	.09	.02	.02	.00	.00	.00
23	.00	.00	.03	e.00	.04	.09	.07	.02	.02	.00	.00	.00
24	.00	.00	.03	e.00	.05	.09	.05	.02	.01	.00	.00	.00
25	.00	.00	.02	e.00	.05	.09	.04	.14	.01	.00	.00	.00
26	.00	.00	.02	e.00	.05	.17	.04	e3.9	.01	.00	.00	.00
27	.00	.00	.02	e.04	.05	.22	.04	1.6	.00	.00	.00	.00
28	.00	.00	.02	e.02	.05	.18	.03	.35	.00	.00	.00	.00
29	.00	.01	.02	e.00	.07	.12	.03	.25	.00	.00	.00	.00
30	.00	.01	.03	e.00	---	.11	.04	.17	.00	.00	.00	.00
31	.00	---	.03	e.00	---	.09	---	.13	---	.00	.00	---
TOTAL	0.00	0.02	0.55	0.81	1.70	3.26	2.68	7.25	0.71	0.00	0.00	0.00
MEAN	.000	.001	.018	.026	.059	.11	.089	.23	.024	.000	.000	.000
MAX	.00	.01	.03	.06	.17	.27	.35	3.9	.09	.00	.00	.00
MIN	.00	.00	.01	.00	.02	.04	.03	.02	.00	.00	.00	.00
AC-FT	.00	.04	1.1	1.6	3.4	6.5	5.3	14	1.4	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	.000	.000	.009	.013	.035	.066	.30	1.58	.80	.002	.002	.000
MAX	.000	.001	.018	.026	.059	.11	.65	4.46	2.39	.005	.007	.000
(WY)	1995	1996	1996	1996	1996	1996	1995	1995	1995	1995	1995	1994
MIN	.000	.000	.000	.000	.010	.027	.089	.048	.000	.000	.000	.000
(WY)	1995	1995	1995	1995	1995	1995	1996	1994	1994	1994	1994	1994

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1994 - 1996

ANNUAL TOTAL	231.60	16.98	
ANNUAL MEAN	.63	.046	
HIGHEST ANNUAL MEAN			.34
LOWEST ANNUAL MEAN			.63
HIGHEST DAILY MEAN	e76	May 17	1995
LOWEST DAILY MEAN	a.00	Jan 1	1996
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	
ANNUAL RUNOFF (AC-FT)	459		
10 PERCENT EXCEEDS	.40	.09	.13
50 PERCENT EXCEEDS	.00	.02	.00
90 PERCENT EXCEEDS	.00	.00	.00

a No flow many days
e Estimated

Table 3.--Daily mean discharge, GS02 (Mower Ditch at Indiana Street), water year 1996

MOWER DITCH AT INDIANA STREET

SITE NUMBER.--GS02

STATION IDENTIFICATION.--395253105095500

LOCATION.--Lat 39°52'53", long 105°09'55", in NE¹/₄NE¹/₄ sec. 13, T. 2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, 150 feet upstream from Indiana St.

DRAINAGE AREA.--1.66 mi².

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 5,678 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow in Mower Ditch diverted from Woman Creek, approximately ¹/₄ mile upstream from station GS01 (395240105095500).

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	.31	e.00	e.00	.08	.25	.03	.42	.00	.00	.00
2	.00	.03	.20	e.00	e.00	.08	.21	.03	.28	.00	.00	.00
3	.00	.07	.14	e.17	e.00	.07	.15	.02	.21	.00	.00	.00
4	.00	.11	.12	e.00	e.00	.13	.23	.01	.15	.00	.00	.00
5	.00	.10	.08	e.00	e.15	.15	.94	.02	.11	.00	.00	.00
6	.00	.08	.08	e.00	1.4	.13	1.2	.02	.10	.00	.00	.00
7	.00	.05	.08	e.00	1.2	.09	.71	.02	.09	.00	.00	.00
8	.00	.05	.08	e.39	.98	.06	.46	.02	.06	.00	.00	.00
9	.00	.05	e.08	.53	.71	.12	.33	.06	.02	.00	.00	.00
10	.00	.06	e.09	e.20	.50	.19	.26	.49	.01	.00	.00	.00
11	.00	.09	e.10	e.10	.24	.18	.21	.20	.01	.00	.00	.00
12	.00	.06	.12	e.10	.16	.12	.22	.09	.00	.00	.00	.00
13	.00	.03	.08	e.10	.17	.11	.21	.04	.00	.00	.00	.00
14	.00	.07	.05	e.20	.20	.38	.27	.03	.00	.00	.00	.00
15	.00	.06	.05	e.20	.17	.42	.26	.00	.06	.00	.00	.00
16	.00	.06	.05	.22	.14	.76	.18	.00	.25	.00	.00	.00
17	.00	.05	.05	e.15	.11	.76	.13	.00	.04	.00	.00	.00
18	.00	.06	.05	e.00	.13	.42	.07	.01	.00	.00	.00	.00
19	.00	.06	e.04	e.00	.11	.32	.06	.00	.00	.00	.00	.00
20	.00	.06	e.02	e.00	.08	.38	.04	.00	.00	.00	.00	.00
21	.00	.08	e.02	e.00	.12	.56	.06	.00	.00	.00	.00	.00
22	.00	.07	e.02	e.00	.13	.43	.16	.00	.00	.00	.00	.00
23	.00	.05	e.01	e.00	.07	.32	.40	.00	.00	.00	.00	.00
24	.00	.05	e.01	e.00	.05	.32	.16	.00	.00	.00	.00	.00
25	.00	.03	e.02	e.00	.05	.32	.08	1.3	.00	.00	.00	.00
26	.04	.01	e.06	e.00	.06	.32	.04	5.1	.00	.00	.00	.00
27	.01	.05	.04	e.00	.07	.68	.03	3.7	.00	.00	.00	.00
28	.01	.08	e.01	e.00	.08	.89	.04	1.4	.00	.00	.00	.18
29	.01	.29	e.01	e.00	.08	.54	.07	1.9	.00	.00	.00	.03
30	.01	.51	e.02	e.00	---	.42	.04	.86	.00	.00	.00	.00
31	.01	---	.01	e.00	---	.33	---	.60	---	.00	.00	---
TOTAL	0.09	2.43	2.10	2.36	7.16	10.08	7.47	15.95	1.81	0.00	0.00	0.21
MEAN	.003	.081	.068	.076	.25	.33	.25	.51	.060	.000	.000	.007
MAX	.04	.51	.31	.53	1.4	.89	1.2	5.1	.42	.00	.00	.18
MIN	.00	.01	.01	.00	.00	.06	.03	.00	.00	.00	.00	.00
AC-FT	.2	4.8	4.2	4.7	14	20	15	32	3.6	.00	.00	.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	1994	1995	1996	1994	1995	1996	1994	1995	1996	1994	1995	1996
MEAN	.001	.045	.036	.044	.16	.18	.93	1.25	.48	.18	.065	.002
MAX	.003	.081	.068	.076	.25	.33	2.06	3.05	1.39	.53	.19	.007
(WY)	1996	1996	1996	1996	1996	1996	1995	1995	1995	1995	1995	1996
MIN	.000	.008	.005	.012	.075	.041	.25	.19	.000	.000	.000	.000
(WY)	1995	1995	1995	1995	1995	1995	1996	1994	1994	1994	1994	1994

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1994 - 1996

ANNUAL TOTAL	228.80	49.66	
ANNUAL MEAN	.63	.14	.38
HIGHEST ANNUAL MEAN			.62
LOWEST ANNUAL MEAN			.14
HIGHEST DAILY MEAN	8.8 May 17	5.1 May 26	8.8 May 17 1995
LOWEST DAILY MEAN	a.00 Jan 1	a.00 Oct 1	a.00 Mar 24 1994
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 May 19 1994
ANNUAL RUNOFF (AC-FT)	454	99	272
10 PERCENT EXCEEDS	2.7	.32	.49
50 PERCENT EXCEEDS	.02	.02	.00
90 PERCENT EXCEEDS	.00	.00	.00

a No flow many days
e Estimated

Table 4.—Daily mean discharge, GS03 (Walnut Creek at Indiana Street), water year 1996

WALNUT CREEK AT INDIANA STREET

SITE NUMBER.--GS03

STATION IDENTIFICATION.--395407105095900

LOCATION.--Lat 39°54'07", long 105°09'59", in SE¹/₄SE¹/₄ sec.1, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, 300 feet upstream from Indiana Street.

DRAINAGE AREA.--2.70 mi², of which 0.91 mi² is noncontributing.

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder and parallel Parshall flumes. Elevation of gage is 5,635 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Most flow in lower Walnut Creek drainage regulated by the A-Series ponds.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.01	.70	.00	.00	.01	2.8	6.2	.01	.03	.00
2	.02	.00	.01	.02	.00	.00	.01	3.9	6.0	.00	.03	.00
3	.02	.00	.01	e.01	.01	.00	.00	3.4	5.4	.00	.03	.00
4	.00	.00	.01	e.00	.02	.00	.51	2.7	4.7	.00	.04	.00
5	.00	.00	.01	e.00	.04	.01	1.9	2.2	3.2	.00	.05	.00
6	.00	.00	.01	e.00	.00	.00	2.9	1.9	2.1	.00	.03	.00
7	.00	.00	.01	e.00	.00	.00	1.7	.06	2.1	.00	.01	.00
8	.00	.00	.01	e.00	1.7	.00	.96	.01	2.1	.00	.01	.00
9	.00	.00	.02	e.00	2.7	.00	.03	.02	1.9	.00	.01	.00
10	.00	.00	.01	e.00	2.6	.00	.01	.03	1.6	.00	.00	.00
11	.00	.00	.01	e.00	2.6	.01	.00	.01	1.3	.00	.00	.00
12	.00	.00	.01	e.00	2.0	.00	.00	.01	1.3	.00	.00	.00
13	.00	.62	.01	e.00	1.8	.00	.00	.01	1.2	.00	.00	.00
14	.00	3.6	.03	e.00	1.7	2.8	.00	.01	1.1	.00	.00	.00
15	.01	3.2	.04	e.00	1.4	2.4	.00	.01	1.1	.00	.00	.00
16	.01	2.1	.04	e.01	1.2	2.4	.00	.01	.06	.00	.00	.00
17	.01	2.1	.04	.01	1.2	2.4	.00	.01	.02	.01	.00	.00
18	.01	2.0	.04	.01	.98	2.0	.00	.04	.07	1.9	.00	.21
19	.01	1.9	.04	.01	.14	1.9	.00	.06	.10	2.2	.00	1.8
20	.01	1.9	.04	.00	.45	1.8	.00	.06	.14	2.2	.00	.26
21	.01	1.7	1.0	.00	.31	1.9	.01	.05	.03	2.2	.00	.01
22	.02	1.6	1.8	.00	.48	1.1	.03	.04	.03	1.8	.00	.01
23	.03	.67	1.7	.00	.40	.03	.03	.02	.03	1.6	.00	.62
24	.02	.01	1.6	.00	.33	.02	.03	.02	.02	1.5	.00	1.8
25	.00	.00	1.8	.00	.35	.01	.32	.49	.02	1.1	.00	1.7
26	.00	.00	1.6	.00	.41	.01	2.5	8.5	.02	1.1	.00	1.8
27	.00	.01	1.5	.00	.34	.03	2.4	3.5	.03	.42	.00	1.7
28	.00	.00	1.1	.00	.05	.05	2.7	.69	.03	.16	.00	1.6
29	.00	.00	1.3	.00	.01	.07	2.4	2.1	.01	1.2	.00	1.5
30	.00	.01	1.9	.00	---	.01	1.8	4.7	.01	2.5	.00	1.4
31	.00	---	1.5	.00	---	.00	---	6.4	---	1.8	.00	---
TOTAL	0.18	21.42	17.21	0.77	23.22	18.95	20.25	43.76	41.92	21.70	0.24	14.41
MEAN	.006	.71	.56	.025	.80	.61	.67	1.41	1.40	.70	.008	.48
MAX	.03	3.6	1.9	.70	2.7	2.8	2.9	8.5	6.2	2.5	.05	1.8
MIN	.00	.00	.01	.00	.00	.00	.00	.01	.01	.00	.00	.00
AC-FT	.4	42	34	1.5	46	38	40	87	83	43	.5	29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

MEAN	.29	.37	.62	.027	.59	.46	1.76	8.59	1.68	.38	.24	.59
MAX	.58	.71	.69	.029	.80	.61	2.84	15.8	3.19	.70	.70	.85
(WY)	1995	1996	1995	1995	1996	1996	1995	1995	1995	1996	1995	1995
MIN	.006	.018	.56	.025	.37	.30	.67	1.41	.47	.007	.002	.43
(WY)	1996	1995	1996	1996	1995	1995	1996	1996	1994	1995	1994	1994

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1994 - 1996

ANNUAL TOTAL	776.39	224.03	
ANNUAL MEAN	2.13	.61	1.37
HIGHEST ANNUAL MEAN			2.13
LOWEST ANNUAL MEAN			.61
HIGHEST DAILY MEAN	e60 May 17	8.5 May 26	e60 May 17 1995
LOWEST DAILY MEAN	a.00 Jan 25	a.00 Oct 1	a.00 Mar 18 1994
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 25	.00 Oct 4	.00 Jun 5 1994
ANNUAL RUNOFF (AC-FT)	1540	444	993
10 PERCENT EXCEEDS	9.1	2.1	2.4
50 PERCENT EXCEEDS	.01	.01	.01
90 PERCENT EXCEEDS	.00	.00	.00

a No flow many days

e Estimated

Table 5.--Daily mean discharge, GS04 (Rock Creek at Highway 128), water year 1996

ROCK CREEK AT HIGHWAY 128

SITE NUMBER.--GS04

STATION IDENTIFICATION.--395452105113800

LOCATION.--Lat 39°54'57", long 105°11'37", in SE¹/₄SW¹/₄ sec.35, T.1 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, about 300 feet upstream from Rock Creek intersection with State Highway 128.

DRAINAGE AREA.--2.56 mi².

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 5,725 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.05	.17	.38	.19	e.20	.23	.37	.19	.55	.00	.00	.00
2	e.05	.18	.30	.20	e.21	.20	.34	.15	.41	.00	.00	.00
3	e.05	.18	.24	.26	e.21	.22	.30	.14	.34	.00	.00	.00
4	e.05	.19	.22	.24	e.20	.24	.45	.13	.31	.00	.00	.00
5	e.05	.19	.24	.22	e.20	.23	1.1	.12	.33	.00	.00	.00
6	e.05	.18	.24	.25	e.20	.20	.98	.12	.23	.00	.00	.00
7	e.05	.17	.24	.27	e.40	.19	.63	.11	.18	.00	.00	.00
8	e.05	.17	.23	.32	.61	.18	.45	.11	.15	.00	.00	.00
9	e.05	.17	.22	.31	.44	.17	.37	.12	.12	.00	.00	.00
10	e.05	.19	.17	.36	.30	.22	.32	.26	.09	.00	.00	.00
11	e.05	.20	.24	.35	.21	.25	.31	.20	.07	.00	.00	.00
12	e.05	.20	.24	.32	.18	.25	.31	.15	.05	.00	.00	.00
13	e.05	.21	.23	.34	.20	.25	.33	.13	.04	.00	.00	.00
14	e.05	.22	.20	.33	.26	.50	.34	.11	.04	.00	.00	.00
15	e.05	.20	.20	.32	.24	.70	.30	.10	.04	.00	.00	.00
16	e.05	.21	.20	.33	.22	.89	.26	.08	.04	.00	.00	.00
17	.06	.20	.20	e.25	.23	.68	.24	.06	.07	.00	.00	.00
18	.08	.20	.20	e.23	.27	.50	.23	.05	.06	.00	.00	.00
19	.08	.20	.20	e.23	.25	.44	.21	.05	.04	.00	.00	.00
20	.09	.20	.18	e.20	.24	.45	.20	.05	.03	.00	.00	.00
21	.09	.21	.16	e.20	.28	.48	.21	.05	.02	.00	.00	.00
22	.12	.19	.16	e.25	.27	.43	.50	.05	.02	.00	.00	.00
23	.21	.18	.19	e.26	.22	.40	.47	.06	.01	.00	.00	.00
24	.23	.19	.20	.31	.20	.43	.32	.05	.01	.00	.00	.00
25	.23	.18	.19	e.20	.20	.39	.23	.83	.01	.00	.00	.00
26	.18	.19	.19	e.21	.20	.52	.20	4.8	.01	.00	.00	.00
27	.14	.25	.19	e.22	.20	.75	.19	3.4	.00	.00	.00	.17
28	.14	.27	.18	.31	.21	.83	.20	1.4	.00	.00	.00	.21
29	.14	.72	.16	.37	.23	.61	.20	1.6	.00	.00	.00	.13
30	.14	.57	.15	e.28	---	.50	.19	.97	.00	.00	.00	.10
31	.16	---	.16	e.20	---	.41	---	.84	---	.00	.00	---
TOTAL	2.89	6.78	6.50	8.33	7.28	12.74	10.75	16.48	3.27	0.00	0.00	0.61
MEAN	.093	.23	.21	.27	.25	.41	.36	.53	.11	.000	.000	.020
MAX	.23	.72	.38	.37	.61	.89	1.1	4.8	.55	.00	.00	.21
MIN	.05	.17	.15	.19	.18	.17	.19	.05	.00	.00	.00	.00
AC-FT	5.7	13	13	17	14	25	21	33	6.5	.00	.00	1.2

SUMMARY STATISTICS

FOR 1996 WATER YEAR

ANNUAL TOTAL	75.63
ANNUAL MEAN	.21
HIGHEST DAILY MEAN	4.8 May 26
LOWEST DAILY MEAN	a.00 Jun 27
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 27
ANNUAL RUNOFF (AC-FT)	150
10 PERCENT EXCEEDS	.40
50 PERCENT EXCEEDS	.18
90 PERCENT EXCEEDS	.00

a No flow many days
e Estimated

Table 6.--Daily mean discharge, GS05 (North Woman Creek at West Buffer Zone Fence Line), water year 1996

NORTH WOMAN CREEK AT WEST BUFFER ZONE FENCE LINE

SITE NUMBER.--GS05

STATION IDENTIFICATION.--395306105131700

LOCATION.--Lat 39°53'06", long 105°13'17", in NW¹/4NW¹/4 sec.15, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, about 200 feet downstream from west Site fence line.

DRAINAGE AREA.--0.20 mi².

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 6,039 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.03	.11	.04	e.00	e.10	.07	.04	.20	e.02	.03	.02
2	.01	.04	.09	.04	e.00	.12	.06	.03	.17	e.02	.03	.02
3	.01	.05	.04	e.05	e.00	.08	.05	.04	.15	e.02	.04	.02
4	.01	.04	.03	e.05	e.00	.06	.12	.09	.16	e.02	.04	.01
5	.01	.03	.05	e.04	e.00	.05	.49	.07	.18	e.02	.03	.01
6	.01	.03	.04	e.04	e.00	.06	.27	.07	.19	e.02	.04	.05
7	.01	.03	.04	e.04	e.00	.06	.14	.07	.17	e.02	.09	.03
8	.01	.03	.04	e.08	e.20	.06	.11	.07	.15	e.02	.07	.02
9	.01	.05	.04	e.10	.33	.08	.09	.16	.14	e.10	.06	.02
10	.01	.09	.06	e.09	.11	.04	.07	.10	.14	.02	.06	.02
11	.00	.08	.04	e.08	.08	.03	.05	.05	.12	.02	.05	.04
12	.00	.02	.03	e.08	.08	.03	.05	.05	.14	.02	.05	.06
13	.00	.04	.02	e.08	.08	.04	.07	.05	.15	.04	.05	.02
14	.00	.04	.01	e.08	.07	.09	.09	.06	.13	.05	.05	.02
15	.00	.05	.01	e.07	.06	.19	.06	.09	.17	.04	.06	.03
16	.00	.05	.01	e.07	.05	.25	.05	.08	.06	.04	.07	.02
17	.00	.06	.01	e.06	.05	.15	.04	.07	.04	.05	.02	.05
18	.00	.07	.02	e.05	.05	.11	.03	.06	.04	.06	.04	.22
19	.00	.07	.03	e.05	.04	.12	.03	.06	.06	.06	.01	.12
20	.00	.08	.04	e.04	.04	.15	.02	.08	.06	.05	.01	.03
21	.00	.07	.06	e.02	.06	.12	.03	.08	.06	.04	.01	.01
22	.00	.07	.06	e.01	.05	.09	.11	.09	.06	.03	.03	.01
23	.02	.07	.08	e.01	.04	.08	.06	.08	.03	.04	.04	.01
24	.03	.03	.12	e.01	.04	.12	.03	.10	.02	.05	.03	.01
25	.02	.02	.21	e.00	.04	.14	.02	.70	.02	.08	.03	.01
26	.01	.03	.20	e.00	.05	.23	.02	e6.3	.02	.04	.03	.04
27	.01	.07	.17	e.00	.09	.26	.02	1.3	.02	.03	.02	.14
28	.01	.06	.20	e.00	e.10	.18	.04	.92	.02	.03	.02	.06
29	.01	.21	.14	e.00	e.10	.12	.03	.84	.00	.06	.02	.03
30	.01	.16	.10	e.00	---	.11	.03	.37	.02	.04	.02	.02
31	.02	---	.05	e.00	---	.08	---	.26	---	.03	.03	---
TOTAL	0.24	1.77	2.15	1.28	1.81	3.40	2.35	12.43	2.89	1.18	1.18	1.17
MEAN	.008	.059	.069	.041	.062	.11	.078	.40	.096	.038	.038	.039
MAX	.03	.21	.21	.10	.33	.26	.49	6.3	.20	.10	.09	.22
MIN	.00	.02	.01	.00	.00	.03	.02	.03	.00	.02	.01	.01
AC-FT	.5	3.5	4.3	2.5	3.6	6.7	4.7	25	5.7	2.3	2.3	2.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	1994	1995	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996
MEAN	.011	.056	.046	.032	.046	.060	.49	.70	.29	.13	.036	.022
MAX	.014	.059	.069	.041	.062	.11	1.10	1.52	.65	.35	.063	.039
(WY)	1995	1996	1996	1996	1996	1996	1995	1995	1995	1995	1995	1996
MIN	.008	.052	.024	.023	.030	.011	.078	.19	.096	.014	.007	.000
(WY)	1996	1995	1995	1995	1995	1995	1996	1994	1996	1994	1994	1994

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1994 - 1996

ANNUAL TOTAL	119.18	31.85	
ANNUAL MEAN	.33	.087	.20
HIGHEST ANNUAL MEAN			.32
LOWEST ANNUAL MEAN			.087
HIGHEST DAILY MEAN	e21 May 17	6.3 May 26	e21 May 17 1995
LOWEST DAILY MEAN	a.00 Jan 2	a.00 Oct 11	a.00 Jun 22 1994
ANNUAL SEVEN-DAY MINIMUM	.00 Aug 22	.00 Oct 11	.00 Jun 25 1994
ANNUAL RUNOFF (AC-FT)	236	63	148
10 PERCENT EXCEEDS	1.0	.14	.26
50 PERCENT EXCEEDS	.03	.04	.04
90 PERCENT EXCEEDS	.00	.01	.00

a No flow many days
e Estimated

Table 7.--Daily mean discharge, GS06 (South Woman Creek at West Buffer Zone Fence Line), water year 1996

SOUTH WOMAN CREEK AT WEST BUFFER ZONE FENCE LINE

SITE NUMBER.--GS06

STATION IDENTIFICATION.--395253105131700

LOCATION.--Lat 39°52'53", long 105°13'17", in SW¹/₄NW¹/₄ sec.15, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, about 400 feet downstream from the west Site fence line.

DRAINAGE AREA.--0.28 mi².

PERIOD OF RECORD.--March 1994 to December 1994. March 1995 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 6,063 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Station discontinued December 22, 1994, to March 12, 1995.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.01	.00	.01	.00	.02	.01	.00	.00
2	.00	.00	.00	.00	.01	.00	.01	.00	.02	.00	.00	.00
3	.00	e.00	.00	.00	.01	.00	.01	.00	.02	.00	.00	.00
4	.00	e.00	.00	.00	.01	.03	.01	.00	.02	.00	.00	.00
5	.00	e.00	.00	.00	.02	.06	.02	.00	.02	.00	.00	.00
6	.00	e.00	.00	.00	.02	.07	.01	.00	.02	.00	.00	.00
7	.00	e.00	.00	.00	.02	.07	.01	.00	.01	.00	.00	.00
8	.00	.00	.00	.00	.00	.08	.01	.00	.01	.00	.00	.00
9	.00	.00	.00	.00	.00	.08	.01	.01	.01	.01	.00	.00
10	.00	.00	.00	.00	.00	.05	.01	.01	.01	.03	.00	.00
11	.00	.00	.00	.00	.00	.01	.01	.01	.01	.04	.00	.00
12	.00	.00	.00	.00	.00	.01	.01	.01	.01	.06	.00	.00
13	.00	.00	.00	.00	.01	.01	.01	.01	.01	.06	.00	.00
14	.00	.00	.00	.00	.00	.01	.01	.01	.01	.05	.00	.00
15	.00	.00	.00	.00	.00	.01	.00	.00	.02	.02	.00	.00
16	.00	.00	.00	.00	.01	.02	.00	.00	.02	.02	.00	.00
17	.00	.00	.00	.00	.00	.01	.00	.00	.02	.02	.02	.00
18	.00	.00	.00	.00	.00	.01	.00	.00	.02	.02	.00	.01
19	.00	.00	.00	.01	.00	.01	.00	.00	.02	.02	.00	.00
20	.00	.00	.01	.01	.00	.01	.00	.00	.02	.01	.00	.00
21	.00	.00	.02	.02	.00	.01	.00	.00	.02	.01	.00	.00
22	.00	.00	.02	.00	.00	.01	.01	.00	.02	.01	.00	.00
23	.00	.00	.02	.00	.00	.01	.01	.00	.01	.01	.00	.00
24	.00	.00	.02	.00	.00	.01	.01	.00	.01	.01	.01	.00
25	.00	.00	.00	.00	.00	.01	.01	.02	.01	.01	.00	.00
26	.00	.00	.00	.01	.00	.01	.01	.40	.01	.00	.01	.00
27	.00	.00	.00	.01	.00	.01	.00	.12	.01	.00	.00	.00
28	.00	.01	.00	.01	.00	.01	.00	.08	.01	.00	.00	.00
29	.00	.00	.00	.01	.00	.01	.00	.06	.01	.00	.00	.00
30	.00	.00	.00	.01	---	.01	.00	.03	.01	.00	.00	.00
31	.00	---	.00	.01	---	.01	---	.03	---	.00	.01	---
TOTAL	0.00	0.01	0.09	0.10	0.12	0.66	0.20	0.80	0.44	0.42	0.05	0.01
MEAN	.0000	.0000	.0003	.0003	.0004	.0021	.0007	.0026	.0015	.0014	.0002	.0000
MAX	.00	.01	.02	.02	.02	.08	.02	.40	.02	.06	.02	.01
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00
AC-FT	.00	.02	.2	.2	.2	1.3	.4	1.6	.9	.8	.1	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	1994	1995	1996	1994	1995	1996	1994	1995	1996	1994	1995	1996
MEAN	.0000	.0002	.0003	.0003	.0004	.0021	.0068	.019	.0054	.0019	.0003	.0000
MAX	.0001	.0005	.0003	.0003	.0004	.0021	.017	.052	.014	.0040	.0007	.0000
(WY)	1995	1995	1996	1996	1996	1996	1995	1995	1995	1995	1995	1996
MIN	.0000	.0000	.0003	.0003	.0004	.0021	.0007	.0024	.0008	.0003	.0000	.0000
(WY)	1996	1996	1996	1996	1996	1996	1996	1994	1994	1994	1994	1994

SUMMARY STATISTICS

FOR 1996 WATER YEAR

WATER YEARS 1994 - 1996

ANNUAL TOTAL	2.90		
ANNUAL MEAN	.008		
HIGHEST ANNUAL MEAN		.008	1996
LOWEST ANNUAL MEAN		.008	1996
HIGHEST DAILY MEAN	.40	May 26	
LOWEST DAILY MEAN	a.00	Oct 1	
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1	
ANNUAL RUNOFF (AC-FT)	5.8		
10 PERCENT EXCEEDS	.02		
50 PERCENT EXCEEDS	.00		
90 PERCENT EXCEEDS	.00		

a No flow many days
e Estimated

Table 8.--Daily mean discharge, GS09 (South Walnut Creek Below Pond B-4), water year 1996

SOUTH WALNUT CREEK BELOW POND B-4

SITE NUMBER.--GS09

STATION IDENTIFICATION.--395342105110800

LOCATION.--Lat 39°53'42", long 105°11'08", in SE¹/₄NE¹/₄ sec.11, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, just downstream from Pond B-4 dam.

DRAINAGE AREA.--0.33 mi².

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder and rectangular weir. Elevation of gage is 5,820 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow is regulated by B-Series ponds.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	.42	.27	.19	.10	.35	.54	.73	.69	.38	.23	.13
2	.20	.36	.05	.13	e.24	.31	.14	.34	.32	.35	.13	.24
3	.40	.24	.14	.26	e.26	.09	.57	.51	.41	.12	.12	.24
4	.25	.33	.28	.19	.28	.24	.40	.20	.54	.16	.14	.34
5	.25	.24	.32	.18	.10	.35	1.6	.25	.31	.20	.31	.03
6	.25	.14	.42	.24	.21	.42	.38	.44	.11	.24	.47	.58
7	.06	.29	.14	.40	.54	.13	.52	.28	.50	.24	.21	.19
8	.20	.40	.10	.31	.35	.09	.49	.41	.27	.38	.28	.11
9	.28	.30	.14	.14	.22	.26	.42	1.2	.25	.83	.04	.24
10	.26	.12	.25	.23	.13	.18	.57	.67	.46	.58	.13	.10
11	.21	.21	.26	.36	.23	.43	.80	.24	.58	.18	.17	.34
12	.27	.20	.17	.21	.53	.27	.52	.11	.45	.33	.21	.51
13	.34	.35	.15	.23	.26	.39	.28	.49	.19	.19	.12	.19
14	.21	.10	.33	.10	.38	.87	.35	.34	.21	.14	.23	.38
15	.21	.16	.14	.35	.13	.70	.28	.35	1.0	.29	.28	.12
16	.18	.19	.14	.31	.11	.29	.44	.23	.59	.30	.47	.27
17	.09	.19	.09	.27	.14	.40	.36	.42	.51	.37	.12	.45
18	.22	.10	.22	.24	.22	.59	.42	.12	.25	.30	.88	.52
19	.23	.39	.23	.33	.38	.46	.47	.19	.43	.07	.37	.00
20	.44	.10	.49	.05	.23	.40	.26	.44	.51	.35	.24	.00
21	.38	.36	.28	.27	.50	.19	.20	.12	.15	.02	.31	.00
22	.06	.20	.07	.19	.31	.42	.73	.45	.45	.39	.20	.04
23	.48	.04	.17	.10	.22	.18	.20	.43	.41	.16	.24	.48
24	.41	.04	.17	.20	.15	.78	.65	.80	.38	.18	.18	.38
25	.30	.13	.07	.39	.12	.50	.37	3.8	.18	.31	.12	.23
26	.10	.13	.18	.45	.14	.58	.44	6.0	.57	.17	.22	.73
27	.22	.57	.10	.06	.42	.43	.12	1.0	.28	.23	.29	.93
28	.21	.29	.40	.05	.13	.53	.27	1.1	.21	.11	.42	.37
29	.05	.27	.14	.24	.46	.11	.33	.78	.21	.60	.11	.25
30	.35	.34	.02	.39	---	.34	.43	.77	.21	.20	.09	.53
31	.06	---	.04	.21	---	.42	---	.15	---	.41	.12	---
TOTAL	7.44	7.20	5.97	7.27	7.49	11.70	13.55	23.36	11.63	8.78	7.45	8.92
MEAN	.24	.24	.19	.23	.26	.38	.45	.75	.39	.28	.24	.30
MAX	.48	.57	.49	.45	.54	.87	1.6	6.0	1.0	.83	.88	.93
MIN	.05	.04	.02	.05	.10	.09	.12	.11	.11	.02	.04	.00
AC-FT	15	14	12	14	15	23	27	46	23	17	15	18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996
MEAN	.25	.24	.16	.19	.23	.30	.60	.79	.45	.26	.25	.28
MAX	.25	.24	.19	.23	.26	.38	.80	1.19	.74	.32	.27	.30
(WY)	1995	1995	1996	1996	1996	1996	1995	1995	1995	1995	1995	1995
MIN	.24	.24	.13	.15	.19	.23	.45	.44	.24	.17	.24	.24
(WY)	1996	1996	1995	1995	1995	1995	1996	1994	1994	1994	1996	1994

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1994 - 1996

ANNUAL TOTAL	147.89	120.76	
ANNUAL MEAN	.41	.33	.37
HIGHEST ANNUAL MEAN			.40
LOWEST ANNUAL MEAN			.33
HIGHEST DAILY MEAN	e14	May 17	e14
LOWEST DAILY MEAN	.01	Jan 7	b.00
ANNUAL SEVEN-DAY MINIMUM	.12	Jan 1	.06
ANNUAL RUNOFF (AC-FT)	293	240	265
10 PERCENT EXCEEDS	.78	.54	.60
50 PERCENT EXCEEDS	.25	.26	.24
90 PERCENT EXCEEDS	.09	.10	.10

a also occurred Sep. 20-21

b No flow at times most years

e Estimated

Table 9.--Daily mean discharge, GS10 (South Walnut Creek above B-Series Bypass), water year 1996

SOUTH WALNUT CREEK ABOVE B-SERIES BYPASS

SITE NUMBER.--GS10

STATION IDENTIFICATION.--395335105112700

LOCATION.--Lat 39°53'35", long 105°11'27", in SW¹/₄NE¹/₄ sec.11, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, just upstream from the B-1 Bypass above Pond B-1.

DRAINAGE AREA.--0.28 mi².

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 5,882 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.04	.05	.04	.03	.08	.10	.09	.12	.09	.08	.05
2	.10	.06	.04	.04	.03	.08	.11	.08	.11	.09	.08	.05
3	e.10	.04	.04	.09	.04	.08	.12	.08	.11	.08	.07	.04
4	e.10	.04	.04	.04	.04	.08	.31	.07	.11	.08	.10	.04
5	e.10	.03	.04	.04	e.08	.08	1.4	.07	.11	.11	.08	.08
6	e.10	.03	.05	.04	e.11	.08	.20	.07	.10	.09	.07	.29
7	e.10	.04	.04	.05	e.15	.08	.14	.07	.10	.07	.07	.09
8	e.10	.03	.04	.12	.07	.08	.12	.07	.10	.08	.06	.07
9	e.10	.03	.04	.05	.07	.08	.11	1.1	.10	.87	.06	.07
10	e.10	.07	.05	.05	.07	.07	.15	.15	.10	.15	.06	.07
11	e.10	.04	.04	.05	.06	.08	.13	.08	.09	.10	.06	.28
12	e.10	.03	.04	.04	.06	.08	.11	.08	.09	.09	.06	.24
13	e.10	.08	.04	.04	.06	.10	.15	.08	.08	.09	.06	.08
14	e.10	.04	.04	.05	.06	.61	.11	.08	.08	.08	.06	.15
15	e.10	.03	.04	.04	.06	.50	.09	.07	.95	.08	.06	.19
16	e.10	.03	.03	.04	.06	.21	.08	.07	.16	.08	.27	.08
17	.05	.03	.03	.04	.06	.20	.09	.07	.11	.10	.07	.44
18	.06	.03	.04	.04	.06	.14	.10	.07	.10	.09	.92	3.4
19	.07	.03	.04	.05	.07	.10	.08	.07	.10	.07	.09	.44
20	.07	.03	.03	.03	.07	.10	.07	.07	.10	.07	.06	.10
21	.07	.03	.03	.03	.11	.10	.11	.07	.12	.06	.06	.08
22	.15	.03	.04	.03	.09	.10	.40	.08	.26	.07	.07	.08
23	.22	.03	.03	.02	.08	.11	.09	.11	.12	.08	.07	.08
24	.06	.03	.03	.02	.08	.61	.08	.69	.10	.06	.07	.07
25	.05	.03	.04	.02	.08	.15	.08	3.6	.10	.06	.08	.18
26	.04	.04	.04	.02	.09	.18	.07	5.8	.10	.08	.09	.39
27	.03	.36	.03	.02	.09	.20	.07	.37	.10	.07	.08	.88
28	.03	.07	.03	.03	.09	.14	.07	.54	.10	.10	.07	.13
29	.03	.13	.04	.03	.08	.13	.07	.24	.09	.29	.07	.09
30	.03	.07	.04	.02	---	.13	.07	.16	.09	.10	.06	.08
31	.03	---	.04	.03	---	.10	---	.14	---	.08	.06	---
TOTAL	2.61	1.60	1.19	1.25	2.10	4.86	4.88	14.39	4.10	3.61	3.22	8.31
MEAN	.084	.053	.038	.040	.072	.16	.16	.46	.14	.12	.10	.28
MAX	.22	.36	.05	.12	.15	.61	1.4	5.8	.95	.87	.92	3.4
MIN	.03	.03	.03	.02	.03	.07	.07	.07	.08	.06	.06	.04
AC-FT	5.2	3.2	2.4	2.5	4.2	9.6	9.7	29	8.1	7.2	6.4	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	.083	.076	.034	.030	.076	.13	.33	.44	.25	.10	.080	.15
MAX	.084	.099	.038	.040	.081	.16	.57	.72	.52	.15	.10	.28
(WY)	1996	1995	1996	1996	1995	1996	1995	1995	1995	1995	1996	1996
MIN	.082	.053	.030	.021	.072	.11	.16	.14	.088	.040	.047	.064
(WY)	1995	1996	1995	1995	1996	1995	1996	1994	1994	1994	1995	1994

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1994 - 1996

ANNUAL TOTAL	76.45	52.12	
ANNUAL MEAN	.21	.14	.18
HIGHEST ANNUAL MEAN			.21
LOWEST ANNUAL MEAN			.14
HIGHEST DAILY MEAN	e11	May 17	5.8
LOWEST DAILY MEAN	a.00	Jan 1	.02
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.02
ANNUAL RUNOFF (AC-FT)	152	103	128
10 PERCENT EXCEEDS	.44	.17	.31
50 PERCENT EXCEEDS	.07	.08	.07
90 PERCENT EXCEEDS	.02	.03	.03

a No flow at times most years
e Estimated

Table 10.--Daily mean discharge, GS11 (Walnut Creek below Pond A-4), water year 1996

WALNUT CREEK BELOW POND A-4

SITE NUMBER.--GS11

STATION IDENTIFICATION.--395403105104700

LOCATION.--Lat 39°54'03", long 105°10'47", in SW¹/₄SW¹/₄ sec.1, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, just below Pond A-4 dam.

DRAINAGE AREA.--0 mi² (isolated by detention ponds).

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 5,715 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.46	.00	.00	.00	1.0	2.1	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	1.5	1.8	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	1.1	1.9	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.59	.82	1.4	.00	.00	.00
5	.00	.00	.00	.00	.00	.01	1.3	.52	.98	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	1.7	.00	.39	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	1.1	.00	.33	.00	.00	.00
8	.00	.00	.00	.00	2.3	.01	.67	.00	.34	.00	.00	.00
9	.00	.00	.00	.00	2.6	.00	.01	.00	.26	.00	.00	.00
10	.00	.00	.00	.00	2.5	.00	.01	.00	.17	.00	.00	.00
11	.00	.00	.00	.00	2.3	.01	.01	.00	.14	.00	.00	.00
12	.00	.00	.00	.00	1.8	.00	.00	.00	.16	.00	.00	.00
13	.00	1.2	.00	.00	1.7	.00	.01	.00	.15	.00	.00	.00
14	.00	3.2	.00	.00	1.6	.00	.00	.00	.16	.00	.00	.00
15	.00	2.6	.00	.00	1.3	.00	.00	.00	.11	.00	.00	.00
16	.00	1.8	.00	.00	1.3	.03	.00	.00	.02	.00	.00	.00
17	.00	1.8	.00	.00	1.1	.03	.00	.00	.02	.00	.00	.00
18	.00	1.7	.00	.00	.90	.00	.00	.00	.16	.00	.00	.01
19	.00	1.6	.00	.00	.26	.00	.00	.00	.16	.00	.00	e.00
20	.00	1.5	.00	.00	.39	.00	.00	.00	.15	.00	.00	e.00
21	.00	1.3	1.3	.00	.28	.00	.00	.00	.02	.00	.00	e.00
22	.00	1.2	1.6	.00	.49	.05	.00	.00	.01	.00	.00	e.00
23	.00	e.40	1.5	.00	.37	.00	.00	.00	.02	.00	.00	e.00
24	.00	.00	1.4	.00	.26	.00	.00	.00	.01	.00	.00	e.00
25	.00	.00	1.5	.00	.33	.00	.00	.00	.01	.00	.00	e.00
26	.00	.00	1.4	.00	.37	.00	.00	.00	.01	.00	.00	e.00
27	.00	.00	1.3	.00	.26	.00	.00	.00	.00	.00	.00	e.00
28	.00	.00	.93	.00	.02	.00	.00	.00	.00	.00	.00	e.00
29	.00	.00	1.2	.00	.00	.03	.00	.74	.00	.00	.00	e.00
30	.00	.00	1.6	.00	---	.00	.00	1.7	.00	.00	.00	e.00
31	.00	---	1.2	.00	---	.00	---	2.2	---	.00	.00	---
TOTAL	0.00	18.30	14.93	0.46	22.43	0.17	5.40	9.58	10.98	0.00	0.00	0.01
MEAN	.000	.61	.48	.015	.77	.005	.18	.31	.37	.000	.000	.000
MAX	.00	3.2	1.6	.46	2.6	.05	1.7	2.2	2.1	.00	.00	.01
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	36	30	.9	44	.3	11	19	22	.00	.00	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	MEAN	.25	.30	.57	.007	.58	.19	.61	1.05	.80	.15	.24	.48
MAX	.50	.61	.65	.015	.77	.37	.95	2.44	1.43	.45	.71	.96	
(WY)	1995	1996	1995	1996	1996	1995	1995	1995	1995	1994	1995	1995	
MIN	.000	.000	.48	.000	.38	.005	.18	.31	.37	.000	.000	.000	
(WY)	1996	1995	1996	1995	1995	1996	1996	1996	1996	1995	1996	1996	

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1994 - 1996

ANNUAL TOTAL	253.14	82.26	
ANNUAL MEAN	.69	.22	.46
HIGHEST ANNUAL MEAN			.70
LOWEST ANNUAL MEAN			.22
HIGHEST DAILY MEAN	a3.9 May 18	3.2 Nov 14	a3.9 May 18 1995
LOWEST DAILY MEAN	b.00 Jan 1	b.00 Oct 1	b.00 Mar 16 1994
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Mar 16 1994
ANNUAL RUNOFF (AC-FT)	502	163	335
10 PERCENT EXCEEDS	2.7	1.2	1.9
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

a Also occurred May 19-20, 22-25

b No flow many days

e Estimated

Table 11.--Daily mean discharge, GS16 (Antelope Springs Creek above Woman Creek), water year 1996

ANTELOPE SPRINGS CREEK ABOVE WOMAN CREEK

SITE NUMBER.--GS16

STATION IDENTIFICATION.--395301105120800

LOCATION.--Lat 39°53'01", long 105°12'08", in NW¹/₄NW¹/₄ sec.14, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, 750 feet upstream from the confluence with Woman Creek.

DRAINAGE AREA.--0.21 mi².

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder and Parshall flume with weir plate. Elevation of gage is 5,900 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.05	.08	.14	e.09	.06	.10	.08	.09	.03	.03	.03
2	.03	.05	.06	.12	e.08	.03	.09	.07	.07	.03	.03	.03
3	.03	.07	.06	e.16	e.07	.03	.08	.07	.07	.03	.03	.03
4	.03	.06	.06	.14	e.07	.11	.15	.07	.06	.03	.03	.03
5	.02	.05	.06	.12	e.20	.11	.35	.07	.05	.03	.03	.03
6	.02	.05	.06	.12	e.40	.09	.22	.07	.05	.03	.03	.07
7	.02	.05	.07	e.12	e.60	.08	.14	.07	.05	.03	.03	.05
8	.02	.04	.07	e.24	.35	.07	.12	.07	.05	.03	.03	.04
9	.02	.05	.16	.20	.20	.06	.10	.23	.05	.06	.03	.03
10	.02	.07	.18	.12	.13	.09	.09	.14	.05	.05	.03	.03
11	.02	.05	.11	.10	.14	.11	.10	.09	.04	.03	.03	.06
12	.02	.04	.07	.11	.15	.10	.11	.07	.04	.03	.02	.08
13	.03	.08	.06	.13	.14	.13	.11	.06	.05	.04	.03	.06
14	.03	.08	.08	.13	.12	.14	.14	.06	.04	.03	.03	.07
15	.03	.06	.12	.13	.11	.21	.10	.05	.16	.03	.03	.08
16	.03	.03	.11	.11	.12	.26	.09	.05	.08	.03	.05	.06
17	.03	.03	.13	.11	.10	.15	.07	.04	.06	.03	.03	.09
18	.03	.03	.14	.11	.10	.13	.07	.04	.05	.04	.06	.38
19	.03	.04	e.13	e.11	.09	.18	.07	.04	.04	.03	.04	.17
20	.03	.05	e.10	e.11	.10	.26	.07	.04	.04	.03	.03	.07
21	.03	.05	e.20	e.10	.13	.17	.07	.04	.05	.02	.04	.06
22	.05	.04	e.18	e.11	.10	.13	.20	.04	.07	.03	.04	.06
23	.06	.04	e.00	e.11	.09	.12	.10	.07	.05	.03	.04	.06
24	.09	.03	e.00	e.10	.09	.14	.07	.12	.04	.03	.03	.07
25	.06	.03	e.10	e.11	.09	.13	.06	.65	.04	.03	.03	.09
26	.04	.04	e.10	e.11	.09	.10	.06	1.5	.04	.03	.03	.15
27	.04	.06	e.40	e.10	.09	.16	.06	.25	.04	.03	.04	.26
28	.04	.07	e.50	e.11	.10	.25	.08	.24	.04	.03	.04	.11
29	.04	.17	e.35	e.12	.09	.14	.07	.19	.04	.05	.04	.08
30	.04	.10	.40	e.12	---	.13	.07	.13	.04	.04	.04	.07
31	.04	---	.16	e.11	---	.11	---	.10	---	.03	.03	---
TOTAL	1.06	1.66	4.30	3.83	4.23	3.98	3.21	4.81	1.64	1.02	1.05	2.50
MEAN	.034	.055	.14	.12	.15	.13	.11	.16	.055	.033	.034	.083
MAX	.09	.17	.50	.24	.60	.26	.35	1.5	.16	.06	.06	.38
MIN	.02	.03	.00	.10	.07	.03	.06	.04	.04	.02	.02	.03
AC-FT	2.1	3.3	8.5	7.6	8.4	7.9	6.4	9.5	3.3	2.0	2.1	5.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	1994	1995	1996	1994	1995	1996	1994	1995	1996	1994	1995	1996
MEAN	.042	.065	.099	.10	.11	.10	.22	.24	.14	.022	.018	.041
MAX	.050	.074	.14	.12	.15	.13	.38	.50	.34	.033	.034	.083
(WY)	1995	1995	1996	1996	1996	1996	1995	1995	1995	1996	1996	1996
MIN	.034	.055	.058	.082	.077	.078	.11	.074	.024	.011	.010	.013
(WY)	1996	1996	1995	1995	1995	1995	1996	1994	1994	1994	1994	1994

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1994 - 1996

ANNUAL TOTAL	52.97	33.29	
ANNUAL MEAN	.15	.091	.12
HIGHEST ANNUAL MEAN			.14
LOWEST ANNUAL MEAN			.091
HIGHEST DAILY MEAN	e6.3 May 17	1.5 May 26	e6.3 May 17 1995
LOWEST DAILY MEAN	a.00 Dec 23	a.00 Dec 23	b.00 Nov 19 1994
ANNUAL SEVEN-DAY MINIMUM	.01 Jul 22	.02 Oct 5	.01 Jun 25 1994
ANNUAL RUNOFF (AC-FT)	105	66	84
10 PERCENT EXCEEDS	.31	.16	.17
50 PERCENT EXCEEDS	.05	.07	.05
90 PERCENT EXCEEDS	.01	.03	.01

a Also occurred Dec. 24

b No flow at times some years

e Estimated

Table 12.--Daily mean discharge, SW027 (South Interceptor Ditch above Pond C-2), water year 1996

SOUTH INTERCEPTOR DITCH ABOVE POND C-2

SITE NUMBER.--SW027

STATION IDENTIFICATION.--395313105110500

LOCATION.--Lat 39°53'12", long 105°11'04", in SE¹/₄SE¹/₄ sec.11, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, at entrance to dual 66-inch corrugated metal culverts (CMPs) that convey water in the South Interceptor Ditch under Woman Creek and into Pond C-2.

DRAINAGE AREA.--0.29 mi².

PERIOD OF RECORD.--October 1995 to current year. No daily discharge data for 1994 water year; 1994 daily stage data (for stage-activated water-quality sampling) reported by Rocky Mountain Remediation Services, L.L.C. (1995).

GAGE.--Water-stage recorder and 66-inch corrugated metal culverts with (starting April) V-notch weirs. Elevation of gage is 5,765 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.01	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.38	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.02	.00	.11	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.17	.00	.01	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.20	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.10	.00	.00	.01	.00	.00	.00	.00
10	.00	.00	.00	.00	.07	.00	.00	.22	.00	.00	.00	.00
11	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.27	.00	.00	.05	.00	.00	.00
16	.00	.00	.00	.00	.00	.20	.00	.00	.02	.00	.00	.00
17	.00	.00	.00	e.00	.00	.07	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	e.00	.00	.04	.00	.00	.00	.00	.01	.15
19	.00	.00	.00	e.00	.00	.01	.00	.00	.00	.00	.01	.70
20	.00	.00	.00	e.00	.00	.01	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.08	.00	1.1	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.01	.00	2.2	.00	.00	.00	.02
27	.00	.00	.00	.00	.00	.10	.00	.21	.00	.00	.00	.24
28	.00	.00	.00	.00	.00	.06	.00	.03	.00	.00	.00	.07
29	.00	.02	.00	.00	.00	.01	.00	.16	.00	.00	.00	.00
30	.00	.07	.00	.00	---	.01	.00	.01	.00	.00	.00	.00
31	.00	---	.00	.00	---	.01	---	.00	---	.00	.00	---
TOTAL	0.02	0.09	0.05	0.00	0.63	0.88	0.62	3.94	0.07	0.00	0.02	1.18
MEAN	.001	.003	.002	.000	.022	.028	.021	.13	.002	.000	.001	.039
MAX	.01	.07	.02	.00	.20	.27	.38	2.2	.05	.00	.01	.70
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.04	.2	.1	.00	1.2	1.7	1.2	7.8	.1	.00	.04	2.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1996, BY WATER YEAR (WY)

	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996
MEAN	.002	.060	.001	.000	.044	.030	.13	.28	.14	.001	.000	.030
MAX	.003	.12	.002	.000	.066	.031	.23	.44	.27	.003	.001	.039
(WY)	1995	1996	1996	1995	1995	1995	1995	1995	1995	1995	1996	1996
MIN	.001	.003	.000	.000	.022	.028	.021	.13	.002	.000	.000	.021
(WY)	1996	1996	1995	1995	1996	1996	1996	1996	1996	1996	1995	1995

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1995 - 1996
ANNUAL TOTAL	32.55	7.50	
ANNUAL MEAN	.089	.020	.059
HIGHEST ANNUAL MEAN			.099
LOWEST ANNUAL MEAN			.020
HIGHEST DAILY MEAN	e2.9 May 17	2.2 May 26	e2.9 May 17 1995
LOWEST DAILY MEAN	a.00 Jan 1	a.00 Oct 3	a.00 Oct 1 1994
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 3	.00 Oct 1 1994
ANNUAL RUNOFF (AC-FT)	65	15	43
10 PERCENT EXCEEDS	.24	.01	.11
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

a No flow many days
e Estimated

Table 13.--Daily mean discharge, SW029 (Pond C-1), water year 1996

POND C-1

SITE NUMBER.--SW029

STATION IDENTIFICATION.--395310105113300

LOCATION.--Lat 39°53'10", long 105°11'33", in SW¹/4SE¹/4 sec.11, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, pond outfall to Woman Creek.DRAINAGE AREA.--1.26 mi².

PERIOD OF RECORD.--May 1994 to current year.

GAGE.--Water-stage recorder and V-notch weir, with broad-crested weir and culvert for high flows. Elevation of gage is 5,830 ft above sea level.

REMARKS.--Records good for discharges less than 1.8 ft³/s. Records poor for discharges larger than 1.8 ft³/s. No estimated daily discharges.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.17	.36	.17	.12	.21	.49	.24	.52	.01	.00	.00
2	.11	.17	.29	.16	.10	.21	.44	.20	.39	.01	.00	.00
3	.10	.19	.23	.21	.08	.27	.37	.18	.34	.01	.00	.00
4	.10	.20	.20	.26	.08	.32	.55	.18	.29	.00	.00	.00
5	.09	.20	.18	.19	.28	.34	1.9	.20	.27	.00	.00	.00
6	.08	.18	.18	.17	.56	.29	1.8	.18	.28	.00	.00	.00
7	.09	.17	.16	.17	.78	.26	1.0	.17	.25	.00	.00	.00
8	.09	.17	.15	.33	.89	.27	.68	.16	.22	.00	.00	.00
9	.08	.17	.10	.39	.74	.32	.53	.30	.18	.00	.00	.00
10	.08	.19	.13	.38	.51	.40	.46	.61	.17	.01	.00	.00
11	.08	.19	.23	.33	.28	.38	.41	.28	.15	.01	.00	.00
12	.08	.16	.21	.32	.28	.33	.43	.20	.13	.01	.00	.00
13	.08	.18	.19	.34	.31	.32	.41	.17	.18	.01	.00	.00
14	.08	.20	.16	.35	.34	.59	.46	.16	.17	.02	.00	.00
15	.08	.19	.15	.32	.30	.72	.42	.15	.37	.02	.00	.00
16	.09	.20	.16	.33	.26	1.1	.38	.15	.34	.01	.00	.00
17	.09	.19	.16	.30	.27	.91	.35	.11	.16	.01	.00	.00
18	.09	.20	.16	.23	.29	.62	.33	.09	.11	.01	.00	.14
19	.09	.20	.13	.21	.24	.62	.37	.08	.07	.01	.00	.84
20	.10	.20	.11	.21	.22	.90	.46	.08	.05	.00	.00	.20
21	.10	.20	.10	.20	.30	.90	.53	.10	.05	.00	.00	.12
22	.13	.19	.12	.19	.29	.62	1.0	.10	.11	.00	.00	.10
23	.17	.18	.14	.14	.20	.51	.97	.15	.12	.00	.00	.10
24	.20	.17	.12	.13	.20	.52	.68	.17	.06	.00	.00	.11
25	.24	.14	.13	.14	.22	.46	.44	2.4	.04	.00	.00	.12
26	.20	.14	.13	.13	.21	.57	.31	12	.04	.00	.00	.23
27	.16	.18	.12	.12	.22	.80	.28	3.5	.03	.00	.00	.49
28	.15	.18	.09	.14	.21	1.1	.28	1.6	.03	.00	.00	.45
29	.15	.44	.10	.15	.21	.84	.26	2.1	.03	.00	.00	.24
30	.15	.52	.11	.15	---	.72	.21	.90	.02	.00	.00	.18
31	.16	---	.15	.13	---	.55	---	.67	---	.00	.00	---
TOTAL	3.64	6.06	4.95	6.99	8.99	16.97	17.20	27.58	5.17	0.15	0.00	3.32
MEAN	.12	.20	.16	.23	.31	.55	.57	.89	.17	.005	.000	.11
MAX	.24	.52	.36	.39	.89	1.1	1.9	12	.52	.02	.00	.84
MIN	.08	.14	.09	.12	.08	.21	.21	.08	.02	.00	.00	.00
AC-FT	7.2	12	9.8	14	18	34	34	55	10	.3	.00	6.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	MEAN	.090	.21	.20	.21	.39	.44	2.77	4.95	1.41	.24	.041	.046
MAX	.12	.22	.24	.23	.48	.55	4.97	9.02	4.05	.72	.12	.11	
(WY)	1996	1995	1995	1996	1995	1996	1995	1995	1995	1995	1995	1996	
MIN	.062	.20	.16	.20	.31	.34	.57	.89	.019	.000	.000	.000	
(WY)	1995	1996	1996	1995	1996	1995	1996	1996	1994	1994	1994	1994	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1994 - 1996

ANNUAL TOTAL	622.11	101.02		
ANNUAL MEAN	1.70	.28	.99	
HIGHEST ANNUAL MEAN			1.71	1995
LOWEST ANNUAL MEAN			.28	1996
HIGHEST DAILY MEAN	93	May 17	12	May 26
LOWEST DAILY MEAN	a.00	Jul 27	a.00	Jul 4
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 9	.00	Jul 20
ANNUAL RUNOFF (AC-FT)	1230	200	718	
10 PERCENT EXCEEDS	4.0	.54	.89	
50 PERCENT EXCEEDS	.19	.17	.15	
90 PERCENT EXCEEDS	.00	.00	.00	

a No flow many days

Table 14.--Daily mean discharge, SW093 (Walnut Creek below Portal 3), water year 1996

WALNUT CREEK BELOW PORTAL 3

SITE NUMBER.--SW093

STATION IDENTIFICATION.--395349105114900

LOCATION.--Lat 39°53'49", long 105°11'49", in NE¹/₄NW¹/₄ sec.11, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, 1,000 feet above the A-1 Bypass, and 15 feet below a 60-inch corrugated metal culvert.

DRAINAGE AREA.--0.36 mi².

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder and Parshall flume with weir plate. Elevation of gage is 5,895 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.05	.08	.05	.09	.05	.15	.11	.26	.08	.08	.05
2	.07	.10	.05	.05	.11	.05	.12	.09	.21	.08	.08	.04
3	.05	.09	.05	.05	.13	.04	.12	.08	.19	.07	.08	.06
4	.06	.06	.04	.05	.15	.04	.32	.08	.18	.07	.12	.07
5	.05	.05	.04	.08	.13	.03	1.9	.08	.16	.08	.01	.07
6	.03	.04	.03	.08	.11	.04	.52	.08	.14	.10	.01	.35
7	.03	.03	.03	.08	.08	.05	.33	.08	.14	.05	.02	.10
8	.03	.04	.03	.06	.01	.08	.26	.08	.13	.05	.01	.08
9	.03	.05	.03	.05	.04	.07	.21	1.0	.11	.55	.02	.08
10	.03	.10	.04	.04	.04	.06	.17	.24	.12	.18	.05	.08
11	.03	.04	.03	.02	.04	.06	.19	.13	.11	.10	.05	.32
12	.03	.03	.03	.01	.04	.05	.16	.10	.11	.09	.06	.22
13	.03	.06	.03	.02	.06	.17	.22	.10	.11	.09	.06	.11
14	.03	.03	.03	.07	.11	.68	.19	.09	.11	.09	.06	.13
15	.03	.03	.03	.06	.10	.82	.15	.08	.83	.08	.07	.20
16	.04	.03	.03	.03	.08	.37	.13	.08	.21	.08	.32	.10
17	.03	.03	.03	.03	.08	.31	.11	.07	.15	.09	.08	.40
18	.04	.03	.03	.03	.08	.22	.11	.07	.13	.08	.73	3.6
19	.04	.03	.03	.04	.08	.18	.11	.06	.10	.08	.11	.75
20	.05	.03	.03	.05	.08	.15	.11	.07	.11	.08	.08	.17
21	.05	.03	.04	.04	.09	.13	.13	.07	.13	.08	.07	.13
22	.21	.03	.05	.03	.07	.12	.69	.07	.31	.08	.05	.11
23	.31	.03	.05	.05	.03	.13	.20	.12	.13	.07	.05	.11
24	.06	.03	.05	.05	.04	.71	.14	.56	.11	.08	.05	.11
25	e.10	.03	.05	.05	.03	.56	.11	3.9	.10	.08	.06	.26
26	e.10	.03	.05	.06	.04	.52	.11	7.4	.09	.08	.07	.47
27	e.10	.36	.05	.08	.05	.50	.11	.82	.10	.07	.08	1.2
28	e.10	.10	.05	.08	.05	.27	.11	.94	.10	.13	.08	.29
29	e.10	.18	.05	.08	.05	.22	.11	.61	.10	.30	.08	.18
30	e.10	.09	.05	.08	---	.22	.11	.42	.08	.10	.07	.16
31	.05	---	.05	.08	---	.17	---	.34	---	.08	.07	---
TOTAL	2.11	1.86	1.26	1.63	2.09	7.07	7.40	18.02	4.86	3.32	2.83	10.00
MEAN	.068	.062	.041	.053	.072	.23	.25	.58	.16	.11	.091	.33
MAX	.31	.36	.08	.08	.15	.82	1.9	7.4	.83	.55	.73	3.6
MIN	.03	.03	.03	.01	.01	.03	.11	.06	.08	.05	.01	.04
AC-FT	4.2	3.7	2.5	3.2	4.1	14	15	36	9.6	6.6	5.6	20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	1994	1995	1996	1994	1995	1996	1994	1995	1996	1994	1995	1996
MEAN	.069	.095	.043	.041	.087	.16	.55	.75	.34	.074	.075	.18
MAX	.070	.13	.045	.053	.10	.23	.93	1.45	.77	.11	.091	.33
(WY)	1995	1995	1995	1996	1995	1996	1995	1995	1995	1996	1996	1996
MIN	.068	.062	.041	.030	.072	.086	.25	.21	.090	.054	.056	.040
(WY)	1996	1996	1996	1995	1996	1995	1996	1994	1994	1994	1995	1994

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1994 - 1996

ANNUAL TOTAL	115.69	62.45	
ANNUAL MEAN	.32	.17	.25
HIGHEST ANNUAL MEAN			.32
LOWEST ANNUAL MEAN			.17
HIGHEST DAILY MEAN	e11	May 17	e11
LOWEST DAILY MEAN	a.00	Jan 1	b.01
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.02
ANNUAL RUNOFF (AC-FT)	229		179
10 PERCENT EXCEEDS	.75	.30	.44
50 PERCENT EXCEEDS	.06	.08	.08
90 PERCENT EXCEEDS	.03	.03	.03

- a No flow many days
- b Also occurred Feb. 8
- c No flow at times most years
- e Estimated

Table 15.--Daily mean discharge, SW118 (Walnut Creek above Portal 3), water year 1996

WALNUT CREEK ABOVE PORTAL 3

SITE NUMBER.--SW118

STATION IDENTIFICATION.--395347105120900

LOCATION.--Lat 39°53'47", long 105°12'09", in SE¹/₄NE¹/₄ sec.10, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, 800 feet upstream from Portal 3 on south side of northwest access road.

DRAINAGE AREA.--Unknown.

PERIOD OF RECORD.--December 1996 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 5,950 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	e.00	e.00	.30	.02	.00	.02	.00	.00	.00
2	---	---	---	e.00	e.00	.20	.02	.00	.02	.00	.00	.00
3	---	---	---	e.00	e.00	.00	.01	.00	.01	.00	.00	.00
4	---	---	---	e.10	e.00	.00	.03	.00	.01	.00	.00	.00
5	---	---	---	e.00	e.00	.00	.19	.00	.01	.00	.00	.00
6	---	---	---	e.00	e.00	.06	.10	.00	.00	.00	.00	.00
7	---	---	---	e.10	e.03	.05	.06	.00	.00	.00	.00	.00
8	---	---	---	e.20	e.05	.03	.05	.00	.00	.00	.00	.00
9	---	---	---	e.30	e.10	.00	.04	.02	.00	.01	.00	.00
10	---	---	---	e.50	.07	.00	.03	.01	.00	.00	.00	.00
11	---	---	---	e.70	.12	.00	.03	.00	.00	.00	.00	.00
12	---	---	.01	e1.0	e.10	.00	.02	.00	.00	.00	.00	.00
13	---	---	.00	e1.0	e.10	.00	.02	.00	.00	.00	.00	.00
14	---	---	.00	.03	1.1	.05	.03	.00	.00	.00	.00	.00
15	---	---	.01	.03	.74	.09	.02	.00	.02	.00	.00	.00
16	---	---	e.01	.03	.53	.05	.01	.00	.01	.00	.00	.00
17	---	---	e.01	.03	.22	.04	.01	.00	.01	.00	.00	.01
18	---	---	e.01	e.00	.08	.03	.01	.00	.00	.00	.02	.20
19	---	---	e.00	e.00	.02	.02	.00	.00	.00	.00	.00	.05
20	---	---	e.00	e.01	.00	.02	.00	.00	.00	.00	.00	.01
21	---	---	e.00	e.10	.00	.01	.00	.00	.00	.00	.00	.00
22	---	---	e.00	e.00	.00	.01	.04	.00	.01	.00	.00	.00
23	---	---	e.00	e.00	.00	.01	.03	.00	.00	.00	.00	.00
24	---	---	e.00	e.00	.00	.11	.01	.01	.00	.00	.00	.00
25	---	---	e.00	e.00	.00	.37	.00	.23	.00	.00	.00	.00
26	---	---	e.01	e.00	.01	.10	.00	.53	.00	.00	.00	.02
27	---	---	e.00	e.00	.09	.08	.00	.09	.00	.00	.00	.10
28	---	---	e.00	e.00	.03	.06	.00	.08	.00	.00	.00	.03
29	---	---	e.00	e.00	.09	.04	.00	.07	.00	.00	.00	.01
30	---	---	e.00	e.00	---	.03	.00	.05	.00	.00	.00	.00
31	---	---	e.00	e.00	---	.03	---	.03	---	.00	.00	---
TOTAL	---	---	---	4.13	3.48	1.79	0.78	1.12	0.12	0.01	0.02	0.43
MEAN	---	---	---	.13	.12	.058	.026	.036	.004	.000	.001	.014
MAX	---	---	---	1.0	1.1	.37	.19	.53	.02	.01	.02	.20
MIN	---	---	---	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	---	---	---	8.2	6.9	3.6	1.5	2.2	.2	.02	.04	.9

e Estimated

Table 16.--Daily mean discharge, SW134 (Gravel Pit at Rocky Flats), water year 1996

GRAVEL PIT AT ROCKY FLATS

SITE NUMBER.--SW134

STATION IDENTIFICATION.--395331105134400

LOCATION.--Lat 39°53'31", long 105°13'44", in NE¹/₄SW¹/₄ sec.9, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, at discharge point for surface water ponded in gravel pits situated in upper Rock Creek Basin.

DRAINAGE AREA.--Unknown; pumped direct discharge from gravel pits.

PERIOD OF RECORD.--May 1994 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 6,150 ft above sea level.

REMARKS.--Records fair. No estimated daily discharges.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00
2	.00	.00	.08	.00	.00	.00	.12	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.01	.28	.00	.00	.00
4	.00	.00	.00	.00	.02	.00	.00	.00	.26	.00	.00	.00
5	.00	.00	.00	.00	.02	.00	.01	.00	.04	.08	.00	.00
6	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.09	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04
8	.00	.00	.00	.00	.27	.00	.00	.03	.00	.00	.00	.00
9	.00	.02	.00	.00	.00	.00	.10	.00	.00	.00	.00	.04
10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.12	.00	.00	.00	.04	.00	.00
12	.00	.00	.07	.00	.24	.00	.05	.00	.00	.00	.05	.00
13	.00	.00	.00	.00	.00	.00	.00	.04	.06	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.02	.00	.00	.01	.00	.00	.00	.00	.00	.00
16	.00	.06	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.08	.01	.00	.00	.00	.00	.00	.00	.00	.00	.02	.05
19	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.14
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00
21	.00	.00	.00	.00	.12	.00	.00	.00	.01	.00	.08	.00
22	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.08	.00	.00	.00	.00	.05
24	.00	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.08	.00	.03	.00	.00
27	.00	.00	.00	.00	.00	.19	.00	.00	.00	.00	.00	.01
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.14	.00	.00	.00	---	.00	.04	.17	.00	.00	.00	.15
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.37	0.22	0.17	0.00	0.67	0.32	0.40	0.37	0.70	0.19	0.23	0.53
MEAN	.012	.007	.005	.000	.023	.010	.013	.012	.023	.006	.007	.018
MAX	.14	.09	.08	.00	.27	.19	.12	.17	.28	.08	.08	.15
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.7	.4	.3	.00	1.3	.6	.8	.7	1.4	.4	.5	1.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	1994	1995	1996	1995	1996	1996	1995	1996	1996	1995	1996	1996
MEAN	.007	.006	.003	.002	.015	.010	.037	.075	.031	.005	.006	.010
MAX	.012	.007	.005	.004	.023	.010	.061	.14	.065	.006	.009	.018
(WY)	1996	1996	1996	1995	1996	1996	1995	1995	1995	1995	1995	1996
MIN	.002	.005	.000	.000	.006	.010	.013	.012	.005	.002	.002	.002
(WY)	1995	1995	1995	1996	1995	1995	1996	1996	1994	1994	1994	1994

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1994 - 1996

ANNUAL TOTAL	10.24	4.17	
ANNUAL MEAN	.028	.011	.019
HIGHEST ANNUAL MEAN			.027 1995
LOWEST ANNUAL MEAN			.011 1996
HIGHEST DAILY MEAN	.79 May 17	.28 Jun 3	.79 May 17 1995
LOWEST DAILY MEAN	a.00 Jan 1	a.00 Oct 1	a.00 May 4 1994
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 11	.00 May 10 1994
ANNUAL RUNOFF (AC-FT)	20	8.3	14
10 PERCENT EXCEEDS	.08	.04	.04
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

a No flow many days

Table 17.--Daily mean discharge, SW998 (T-130 Ditch at McKay Bypass), water year 1996

T-130 DITCH AT MCKAY BYPASS

SITE NUMBER.--SW998

STATION IDENTIFICATION.--395332105124600

LOCATION.--Lat 39°53'32", long 105°12'46", in SW¹/₄SW¹/₄ sec.10, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, on West Diversion Ditch downstream from the 130-building complex.

DRAINAGE AREA.--0.33 mi².

PERIOD OF RECORD.--May 1994 to current year.

GAGE.--Water-stage recorder and Parshall flume with weir plate. Elevation of gage is 6,047 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.00	.01	.01	.03	.00	.00	.01	.01	.00	.00	.00
2	e.00	.02	.01	.01	.03	.01	.00	.00	.01	.00	.00	.00
3	e.00	.00	.00	.01	.03	.01	.00	.00	.00	.00	.00	.00
4	e.00	.00	.00	.02	.03	.00	.11	.00	.00	.00	.02	.00
5	e.00	.00	.00	.02	.03	.00	.53	.00	.00	.05	.00	.00
6	e.00	.00	.00	.02	.04	.00	.05	.00	.00	.01	.00	.21
7	e.00	.00	.00	.02	e.03	.00	.02	.00	.00	.00	.00	.00
8	e.00	.00	.00	e.02	.05	.00	.01	.00	.00	.00	.00	.00
9	e.00	.00	.00	.02	.01	.00	.01	.37	.00	.22	.00	.00
10	e.00	.03	.00	.01	.00	.00	.00	.03	.00	.02	.00	.00
11	e.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.22
12	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05
13	e.00	.02	.00	.00	.00	.07	.07	.00	.00	.00	.00	.01
14	e.00	.00	.00	.00	.00	.31	.01	.00	.00	.00	.00	.04
15	e.00	.00	.00	.00	.00	.24	.00	.00	.33	.00	.00	.05
16	e.00	.00	.00	.00	.00	.05	.00	.00	.02	.00	.16	.00
17	e.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.23
18	e.10	.00	.00	.00	.00	.02	.00	.00	.00	.00	.36	.31
19	e.10	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.10
20	e.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	e.10	.00	.00	.00	.01	.00	.01	.00	.01	.00	.02	.00
22	e.19	.00	.00	.01	.00	.00	.25	.01	.13	.00	.00	.00
23	e.24	.00	.01	.01	.00	.02	.01	.02	.00	.00	.00	.00
24	e.10	.00	.01	.01	.00	.25	.00	.27	.00	.00	.00	.00
25	e.10	.00	.02	.02	.00	.06	.00	1.2	.00	.00	.00	.11
26	e.00	.00	.02	.02	.01	.07	.00	3.0	.00	.00	.00	.15
27	e.00	.22	.02	.02	.00	.08	.00	.31	.00	.00	.00	.41
28	e.00	.02	.02	.02	.00	.02	.00	.28	.01	.03	.00	.03
29	e.00	.11	.02	.02	.00	.03	.00	.19	.00	.16	.00	.01
30	e.00	.03	.01	.02	---	.02	.00	.05	.00	.01	.00	.00
31	e.00	---	.01	.02	---	.00	---	.03	---	.00	.00	---
TOTAL	1.03	0.45	0.16	0.33	0.30	1.36	1.11	5.77	0.52	0.50	0.56	1.93
MEAN	.033	.015	.005	.011	.010	.044	.037	.19	.017	.016	.018	.064
MAX	.24	.22	.02	.02	.05	.31	.53	3.0	.33	.22	.36	.41
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	2.0	.9	.3	.7	.6	2.7	2.2	11	1.0	1.0	1.1	3.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

	1994	1995	1996	1995	1996	1995	1996	1995	1996	1994	1995	1996
MEAN	.026	.034	.003	.015	.031	.037	.29	.54	.11	.008	.020	.069
MAX	.033	.054	.005	.018	.052	.044	.55	.90	.29	.016	.030	.13
(WY)	1996	1995	1996	1995	1995	1996	1995	1995	1995	1996	1995	1995
MIN	.019	.015	.000	.011	.010	.029	.037	.19	.017	.000	.013	.008
(WY)	1995	1996	1995	1996	1996	1995	1996	1996	1994	1994	1994	1994

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1994 - 1996

ANNUAL TOTAL	62.88	14.02	
ANNUAL MEAN	.17	.038	.11
HIGHEST ANNUAL MEAN			.17
LOWEST ANNUAL MEAN			.038
HIGHEST DAILY MEAN	e10 May 17	3.0 May 26	e10 May 17
LOWEST DAILY MEAN	a.00 Jan 1	a.00 Oct 1	a.00 May 21
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 May 21
ANNUAL RUNOFF (AC-FT)	125	28	77
10 PERCENT EXCEEDS	.52	.10	.19
50 PERCENT EXCEEDS	.01	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

a No flow many days
e Estimated

Table 18.--Daily total precipitation, GS02 (Mower Ditch at Indiana Street), water year 1996

MOWER DITCH AT INDIANA STREET

SITE NUMBER.--GS02

STATION IDENTIFICATION.--395253105095500

LOCATION.--Lat 39°52'53", long 105°09'55", in NE¹/₄NE¹/₄ sec. 13, T. 2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, 150 feet upstream from Indiana St.

DRAINAGE AREA.--1.66 mi².

PERIOD OF RECORD.--April 1996 to current year (no winter records).

GAGE.--Tipping-bucket precipitation gage. Elevation of gage is 5,678 ft above sea level.

REMARKS.--Records fair.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.01	.01	.00	.00	.00
2	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
3	---	---	---	---	---	---	.05	.00	.00	.00	.00	.00
4	---	---	---	---	---	---	.12	.00	.00	.00	.00	.00
5	---	---	---	---	---	---	.19	.00	.00	.26	.00	.00
6	---	---	---	---	---	---	.00	.00	.00	.00	.00	.29
7	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
8	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
9	---	---	---	---	---	---	.00	.77	.00	.40	.00	.00
10	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
11	---	---	---	---	---	---	.09	.00	.00	.00	.00	.41
12	---	---	---	---	---	---	.01	.00	.00	.21	.00	.29
13	---	---	---	---	---	---	.01	.00	.00	.01	.00	.02
14	---	---	---	---	---	---	.09	.00	.00	.00	.00	.12
15	---	---	---	---	---	---	.00	.00	.64	.01	.00	.02
16	---	---	---	---	---	---	.00	.00	.04	.00	.05	.00
17	---	---	---	---	---	---	.00	.00	.00	.35	.00	.26
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	1.11
19	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
20	---	---	---	---	---	---	.00	.01	.00	.00	.00	.00
21	---	---	---	---	---	---	.00	.01	.10	.00	.02	.00
22	---	---	---	---	---	---	.08	.20	.05	.00	.17	.00
23	---	---	---	---	---	---	.00	.01	.00	.01	.00	.01
24	---	---	---	---	---	---	.00	.50	.00	.00	.00	.02
25	---	---	---	---	---	---	.00	1.02	.00	.01	.00	.15
26	---	---	---	---	---	---	.00	1.41	.01	.00	.23	.27
27	---	---	---	---	---	---	.01	.00	.00	.00	.02	.26
28	---	---	---	---	---	---	.02	.14	.02	.00	.01	.00
29	---	---	---	---	---	---	.00	.01	.00	.00	.00	.00
30	---	---	---	---	---	---	.02	.00	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.01	---	.00	.00	---
TOTAL	---	---	---	---	---	---	0.69	4.10	0.87	1.26	0.50	3.23

Table 19.--Daily total precipitation, GS03 (Walnut Creek at Indiana Street), water year 1996**WALNUT CREEK AT INDIANA STREET**

SITE NUMBER.--GS03

STATION IDENTIFICATION.--395407105095900

LOCATION.--Lat 39°54'07", long 105°09'59", in SE¹/₄SE¹/₄ sec.1, T.2 S., R.70 W., Jefferson County,
Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, 300 feet upstream from
Indiana Street.

DRAINAGE AREA.--2.70 mi², of which 0.91 mi² is noncontributing.

PERIOD OF RECORD.--April 1996 to current year (no winter records).

GAGE.--Tipping-bucket precipitation gage. Elevation of gage is 5,635 ft above sea level.

REMARKS.--Records fair.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.01	.01	.00	.00	.00
2	---	---	---	---	---	---	.00	.00	.00	.00	.02	.00
3	---	---	---	---	---	---	.06	.00	.00	.00	.00	.00
4	---	---	---	---	---	---	.11	.00	.00	.00	.01	.00
5	---	---	---	---	---	---	.08	.00	.00	.11	.00	.00
6	---	---	---	---	---	---	.00	.00	.00	.01	.00	.29
7	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
8	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
9	---	---	---	---	---	---	.00	.71	.00	.47	.00	.00
10	---	---	---	---	---	---	.00	.00	.00	.01	.00	.00
11	---	---	---	---	---	---	.03	.00	.00	.00	.00	.27
12	---	---	---	---	---	---	.00	.00	.02	.53	.00	.70
13	---	---	---	---	---	---	.06	.00	.00	.00	.00	.01
14	---	---	---	---	---	---	.02	.00	.00	.00	.00	.08
15	---	---	---	---	---	---	.00	.00	.52	.00	.00	.04
16	---	---	---	---	---	---	.00	.00	.08	.00	.21	.00
17	---	---	---	---	---	---	.00	.00	.01	.04	.00	.24
18	---	---	---	---	---	---	.00	.00	.00	.01	.27	1.03
19	---	---	---	---	---	---	.00	.00	.00	.00	.00	.01
20	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	.01	.00	.08	.00	.03	.00
22	---	---	---	---	---	---	.32	.15	.16	.00	.00	.00
23	---	---	---	---	---	---	.00	.01	.00	.02	.00	.01
24	---	---	---	---	---	---	.00	.48	.00	.00	.00	.02
25	---	---	---	---	---	---	.00	.87	.00	.00	.01	.08
26	---	---	---	---	---	---	.00	1.22	.04	.00	.33	.26
27	---	---	---	---	---	---	.00	.00	.00	.00	.02	.25
28	---	---	---	---	---	---	.00	.16	.02	.05	.00	.00
29	---	---	---	---	---	---	.00	.00	.00	.24	.00	.00
30	---	---	---	---	---	---	.02	.00	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.01	---	.00	.00	---
TOTAL	---	---	---	---	---	---	0.71	3.62	0.94	1.49	0.90	3.29

Table 20.--Daily total precipitation, GS04 (Rock Creek at Highway 128), water year 1996

ROCK CREEK AT HIGHWAY 128

SITE NUMBER.--GS04

STATION IDENTIFICATION.--395452105113800

LOCATION.--Lat 39°54 '57", long 105°11'37", in SE¹/₄SW¹/₄ sec.35, T.1 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, about 300 feet upstream from Rock Creek intersection with State Highway 128.

DRAINAGE AREA.--2.56 mi².

PERIOD OF RECORD.--April 1996 to current year (no winter records).

GAGE.--Tipping-bucket precipitation gage. Elevation of gage is 5,725 ft above sea level.

REMARKS.--Records fair.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.01	.01	.00	.00	.00
2	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
3	---	---	---	---	---	---	.04	.00	.00	.00	.00	.00
4	---	---	---	---	---	---	.19	.00	.00	.00	.06	.00
5	---	---	---	---	---	---	.51	.00	.00	.05	.00	.05
6	---	---	---	---	---	---	.00	.00	.00	.00	.05	.32
7	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
8	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
9	---	---	---	---	---	---	.00	.44	.00	.96	.00	.00
10	---	---	---	---	---	---	.00	.01	.00	.00	.00	.00
11	---	---	---	---	---	---	.04	.00	.00	.00	.00	.33
12	---	---	---	---	---	---	.00	.00	.04	.08	.00	.17
13	---	---	---	---	---	---	.01	.00	.00	.01	.00	.01
14	---	---	---	---	---	---	.09	.00	.00	.00	.00	.09
15	---	---	---	---	---	---	.00	.00	.52	.00	.01	.03
16	---	---	---	---	---	---	.00	.00	.11	.00	.24	.00
17	---	---	---	---	---	---	.00	.00	.00	.01	.00	.26
18	---	---	---	---	---	---	.00	.00	.00	.01	.23	1.36
19	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
20	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	.00	.00	.06	.00	.02	.00
22	---	---	---	---	---	---	.46	.06	.32	.00	.04	.00
23	---	---	---	---	---	---	.00	.01	.00	.01	.00	.03
24	---	---	---	---	---	---	.00	.67	.00	.00	.00	.01
25	---	---	---	---	---	---	.00	.90	.00	.00	.04	.07
26	---	---	---	---	---	---	.00	1.34	.03	.09	.19	.31
27	---	---	---	---	---	---	.00	.00	.00	.00	.00	.32
28	---	---	---	---	---	---	.01	.17	.02	.09	.00	.00
29	---	---	---	---	---	---	.00	.00	.00	.24	.00	.00
30	---	---	---	---	---	---	.02	.01	.00	.01	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	---	---	1.37	3.62	1.11	1.56	0.88	3.36

Table 21.—Daily total precipitation, GS05 (North Woman Creek at West Buffer Zone Fence Line), water year 1996

NORTH WOMAN CREEK AT WEST BUFFER ZONE FENCE LINE

SITE NUMBER.--GS05

STATION IDENTIFICATION.--395306105131700

LOCATION.--Lat 39°53'06", long 105°13'17", in NW¹/₄NW¹/₄ sec.15, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, about 200 feet downstream from west Site fence line.

DRAINAGE AREA.--0.20 mi².

PERIOD OF RECORD.--April 1996 to current year (no winter records).

GAGE.--Tipping-bucket precipitation gage. Elevation of gage is 6,039 ft above sea level.

REMARKS.--Records fair except for estimated daily totals, which are poor.

 RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
 DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.03	.01	.00	.00	.00
2	---	---	---	---	---	---	.00	.00	.00	.00	.01	.00
3	---	---	---	---	---	---	.02	.00	.00	.00	.00	.00
4	---	---	---	---	---	---	.17	.00	.00	.00	.12	.00
5	---	---	---	---	---	---	.35	.00	.00	.17	.00	.03
6	---	---	---	---	---	---	.00	.00	.00	.00	.02	.41
7	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
8	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
9	---	---	---	---	---	---	.00	.64	.00	.43	.00	.00
10	---	---	---	---	---	---	.00	.01	.00	.00	.00	.00
11	---	---	---	---	---	---	.07	.00	.00	.00	.00	.33
12	---	---	---	---	---	---	.02	.00	.04	.01	.00	.06
13	---	---	---	---	---	---	.00	.00	.00	.00	.00	.03
14	---	---	---	---	---	---	.13	.00	.00	.03	.01	.13
15	---	---	---	---	---	---	.00	.00	.52	.03	.05	.03
16	---	---	---	---	---	---	.00	.00	.08	.00	.30	.00
17	---	---	---	---	---	---	.00	.00	.00	.02	.00	.32
18	---	---	---	---	---	---	.00	.00	.00	.04	.59	1.25
19	---	---	---	---	---	---	e.00	.00	.00	.00	.00	.00
20	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	.00	.00	.09	.00	.05	.00
22	---	---	---	---	---	---	.45	.13	.17	.00	.00	.00
23	---	---	---	---	---	---	.00	.01	.00	.00	.00	.01
24	---	---	---	---	---	---	.00	.58	.00	.00	.00	.02
25	---	---	---	---	---	---	.00	1.09	.00	.04	.06	.12
26	---	---	---	---	---	---	.00	1.52	.02	.01	.03	.36
27	---	---	---	---	---	---	.03	.00	.00	.00	.02	.43
28	---	---	---	---	---	---	.04	.22	.07	.08	.00	.00
29	---	---	---	---	---	---	.00	.00	.00	.33	.00	.00
30	---	---	---	---	---	---	.03	.00	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	---	---	1.31	4.23	1.00	1.19	1.26	3.53

e Estimated

Table 22.--Daily total precipitation, GS10 (South Walnut Creek above B-Series Bypass), water year 1996

SOUTH WALNUT CREEK ABOVE B-SERIES BYPASS

SITE NUMBER.--GS10

STATION IDENTIFICATION.--395335105112700

LOCATION.--Lat 39°53'35", long 105°11'27", in SW¹/₄NE¹/₄ sec.11, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, just upstream from the B-1 Bypass above Pond B-1.

DRAINAGE AREA.--0.28 mi².

PERIOD OF RECORD.--April 1996 to current year (no winter records).

GAGE.--Tipping-bucket precipitation gage. Elevation of gage is 5,882 ft above sea level.

REMARKS.--Records fair.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.01	.01	.00	.00	.00
2	---	---	---	---	---	---	.00	.00	.00	.00	.01	.00
3	---	---	---	---	---	---	.02	.00	.00	.00	.00	.00
4	---	---	---	---	---	---	.20	.00	.00	.00	.06	.00
5	---	---	---	---	---	---	.51	.00	.00	.12	.00	.05
6	---	---	---	---	---	---	.00	.00	.00	.00	.01	.34
7	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
8	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
9	---	---	---	---	---	---	.00	.68	.00	.51	.00	.00
10	---	---	---	---	---	---	.00	.00	.00	.01	.00	.00
11	---	---	---	---	---	---	.06	.00	.00	.00	.00	.28
12	---	---	---	---	---	---	.01	.00	.00	.09	.00	.06
13	---	---	---	---	---	---	.01	.00	.00	.01	.00	.01
14	---	---	---	---	---	---	.13	.00	.00	.00	.00	.20
15	---	---	---	---	---	---	.00	.00	.69	.02	.01	.04
16	---	---	---	---	---	---	.00	.00	.06	.00	.21	.00
17	---	---	---	---	---	---	.00	.00	.00	.02	.00	.29
18	---	---	---	---	---	---	.00	.00	.00	.02	.50	1.31
19	---	---	---	---	---	---	.00	.00	.00	.00	.00	.01
20	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	.00	.00	.13	.00	.03	.00
22	---	---	---	---	---	---	.35	.10	.13	.00	.04	.00
23	---	---	---	---	---	---	.00	.00	.00	.00	.00	.01
24	---	---	---	---	---	---	.00	.66	.00	.00	.00	.02
25	---	---	---	---	---	---	.00	.95	.00	.01	.10	.09
26	---	---	---	---	---	---	.00	1.37	.06	.00	.10	.05
27	---	---	---	---	---	---	.00	.00	.00	.00	.02	.33
28	---	---	---	---	---	---	.02	.18	.03	.08	.00	.01
29	---	---	---	---	---	---	.00	.00	.00	.28	.00	.00
30	---	---	---	---	---	---	.03	.00	.00	.01	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	---	---	1.34	3.95	1.11	1.18	1.09	3.10

Table 23.—Daily total precipitation, SW029 (Pond C-1), water year 1996

POND C-1

SITE NUMBER.--SW029

STATION IDENTIFICATION.--395310105113300

LOCATION.--Lat 39°53'10", long 105°11'33", in SW¹/₄SE¹/₄ sec.11, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, pond outfall to Woman Creek.

DRAINAGE AREA.--1.26 mi².

PERIOD OF RECORD.--April 1996 to current year (no winter records).

GAGE.--Tipping-bucket precipitation gage. Elevation of gage is 5,830 ft above sea level.

REMARKS.--Records fair except for estimated daily totals, which are poor.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.01	.01	.00	.00	.00
2	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
3	---	---	---	---	---	---	.03	.00	.00	.00	.00	.00
4	---	---	---	---	---	---	.13	.00	.00	.00	.01	.00
5	---	---	---	---	---	---	.25	.00	.00	.13	.00	.02
6	---	---	---	---	---	---	.00	.00	.00	.00	.00	.21
7	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
8	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
9	---	---	---	---	---	---	.00	.55	.00	.38	.00	.00
10	---	---	---	---	---	---	.00	.02	.00	.00	.00	.00
11	---	---	---	---	---	---	.06	.00	.00	.00	.00	.16
12	---	---	---	---	---	---	.02	.00	.00	.05	.00	.02
13	---	---	---	---	---	---	.00	.00	.00	.01	.00	.01
14	---	---	---	---	---	---	.06	.00	.00	.00	.00	.14
15	---	---	---	---	---	---	.00	.00	.52	.02	.02	.03
16	---	---	---	---	---	---	.00	.00	.01	.00	.01	.00
17	---	---	---	---	---	---	.00	.00	.00	.02	.00	.23
18	---	---	---	---	---	---	.00	.00	.00	.00	.38	.92
19	---	---	---	---	---	---	e .00	.00	.00	.00	.00	.00
20	---	---	---	---	---	---	.00	.00	.00	.00	.01	.00
21	---	---	---	---	---	---	.00	.00	.11	.00	.00	.00
22	---	---	---	---	---	---	.26	.08	.03	.00	.04	.00
23	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
24	---	---	---	---	---	---	.00	.50	.00	.00	.00	.02
25	---	---	---	---	---	---	.00	.77	.00	.00	.03	.08
26	---	---	---	---	---	---	.00	1.22	.04	.00	.08	.24
27	---	---	---	---	---	---	.01	.00	.00	.00	.01	.26
28	---	---	---	---	---	---	.01	.15	.02	.06	.00	.00
29	---	---	---	---	---	---	.00	.00	.00	.24	.00	.00
30	---	---	---	---	---	---	.02	.00	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	---	---	0.85	3.30	0.74	0.91	0.59	2.34

e Estimated

Table 24.--Daily total precipitation, SW998 (T-130 Ditch at McKay Bypass), water year 1996

T-130 DITCH AT MCKAY BYPASS

SITE NUMBER.--SW998

STATION IDENTIFICATION.--395332105124600

LOCATION.--Lat 39°53'32", long 105°12'46", in SW¹/₄SW¹/₄ sec.10, T.2 S., R.70 W., Jefferson County, Hydrologic Unit 10190003, Rocky Flats Environmental Technology Site, on West Diversion Ditch downstream from the 130-building complex.

DRAINAGE AREA.--0.33 mi².

PERIOD OF RECORD.--April 1996 to current year (no winter records).

GAGE.--Tipping-bucket precipitation gage. Elevation of gage is 6,047 ft above sea level.

REMARKS.--Records fair except for estimated daily totals, which are poor.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.02	.00	.00	.00	.00
2	---	---	---	---	---	---	.00	.00	.00	.00	.01	.00
3	---	---	---	---	---	---	.02	.00	.00	.00	.00	.00
4	---	---	---	---	---	---	.13	.00	.00	.00	.11	.00
5	---	---	---	---	---	---	.11	.00	.00	.16	.00	.04
6	---	---	---	---	---	---	.00	.00	.00	.00	.03	.33
7	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
8	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
9	---	---	---	---	---	---	.00	.56	.00	.36	.00	.00
10	---	---	---	---	---	---	.00	.01	.00	.01	.00	.00
11	---	---	---	---	---	---	.08	.00	.00	.00	.00	.35
12	---	---	---	---	---	---	.01	.00	.03	.00	.00	.03
13	---	---	---	---	---	---	.00	.00	.00	.01	.00	.03
14	---	---	---	---	---	---	.05	.00	.00	.01	.01	.12
15	---	---	---	---	---	---	.00	.00	.48	.03	.04	.04
16	---	---	---	---	---	---	.00	.00	.06	.00	.30	.00
17	---	---	---	---	---	---	.00	.00	.00	.03	.00	.28
18	---	---	---	---	---	---	.00	.00	.00	.03	.51	1.03
19	---	---	---	---	---	---	e.00	.00	.00	.00	.01	.01
20	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	.00	.00	.08	.00	.07	.00
22	---	---	---	---	---	---	.43	.11	.19	.00	.01	.00
23	---	---	---	---	---	---	.00	.01	.00	.00	.00	.01
24	---	---	---	---	---	---	.00	.49	.00	.00	.00	.01
25	---	---	---	---	---	---	.00	.87	.00	.01	.03	.13
26	---	---	---	---	---	---	.00	1.43	.02	.00	.04	.31
27	---	---	---	---	---	---	.01	.00	.00	.00	.02	.20
28	---	---	---	---	---	---	.02	.18	.06	.16	.01	.00
29	---	---	---	---	---	---	.00	.00	.00	.23	.00	.00
30	---	---	---	---	---	---	.03	.00	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.02	---	.00	.00	---
TOTAL	---	---	---	---	---	---	0.89	3.70	0.92	1.04	1.20	2.92

e Estimated

CHEMICAL-QUALITY AND SUSPENDED-SEDIMENT DATA

The following abbreviations are used in tables 25 to 32.

INST. is instantaneous;

-- is a symbol used to indicate no data for a particular constituent;

DEG C is degrees Celsius; DEG. C is degrees Celsius;

US/CM is microsiemens per centimeter at 25 degrees Celsius;

FLTRD is filtered;

PCI/L is picocuries per liter;

2 SIGMA is plus or minus the total propagated analytical uncertainty at the 95-percent confidence level;

DISSOLV is dissolved; DISS is dissolved; DIS is dissolved;

CS is cesium;

RADIO. is radioactivity;

TH is thorium;

WAT is water;

MG/L is milligrams per liter;

CA is calcium;

MG is magnesium;

NA is sodium;

UG/L is micrograms per liter;

SIO2 is silica dioxide;

BA is barium;

BE is beryllium;

CD is cadmium;

CR is chromium;

CO is cobalt;

CU is copper;

FE is iron;

PB is lead;

MN is manganese;

MO is molybdenum;

NI is nickel;

AG is silver;

SR is strontium;

V is vanadium;
ZN is zinc;
LI is lithium;
K is potassium;
AS is arsenic;
TL is thallium;
SB is antimony;
AL is aluminum;
SE is selenium;
HG is mercury;
CL is chloride;
SO4 is sodium;
F is fluoride;
LAB is laboratory;
CACO3 is calcium carbonate;
MM is millimeter
T/DAY is tons per day;
SED is sediment;
SUSP is suspended;
DIAM. is diameter;
% is percent;
NO2+NO3 is nitrite plus nitrate;
N is nitrogen;
P is phosphorus;
UNF is unfiltered; UNFILT is unfiltered; UNFLTRD is unfiltered;
REC is recoverable;
WH is whole;
TOT.REC is total recoverable.

Sampling methods codes:

70 is manual (grab) sample;
4033 is suction-lift peristaltic pump.

Sampler type codes:

8010 is bucket.

Table 25.—Chemical-quality and suspended-sediment data, GS01 (Woman Creek at Indiana Street), water year 1996

[TIME is instantaneous collection time for manual samples, or interval collection time (start-end) for automatic samples]

WOMAN CREEK AT INDIANA STREET

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		DIS-CHARGE, INST. CUBIC FEET PER SECOND	DIS-CHARGE, MEAN CUBIC FEET PER SECOND	TEMPER-ATURE WATER (DEG C)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SAM-PLING METHOD, CODES	PLUTON-IUM-238 WATER FLTRD (PCI/L)	PLUTON-IUM-238 WATER FLTRD 2 SIGMA (PCI/L)	PLUTON-IUM-239/240 WATER FLTRD (PCI/L)	PLUTON-IUM-239/240 WATER FLTRD 2 SIGMA (PCI/L)
MAY											
26-26	1328-1402	--	2.8	17.0	8.0	707	4033	0.004	0.014	0.012	0.019
26...	1328-1402	--	2.8	17.0	--	--	4033	--	--	--	--
28...	1230	0.33	--	10.5	--	--	70	--	--	--	--
28...	1235	0.33	--	10.5	--	--	70	--	--	--	--
	AMERI-CIUM-241 WATER FLTRD (PCI/L)	AMERIC-IUM-241 WATER FLTRD 2 SIGMA (PCI/L)	URANIUM-238 WATER DISSOLV (PCI/L)	U-238 2 SIGMA WATER DISS (PCI/L)	URANIUM-234 WATER DISSOLV (PCI/L)	U-234 2 SIGMA WATER DISS (PCI/L)	URANIUM-235 WATER DISS (PCI/L)	U-235 2 SIGMA WATER DISS (PCI/L)		TRITIUM 2 SIGMA WATER, WHOLE TOTAL (PCI/L)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)
DATE									TRITIUM TOTAL (PCI/L)		
MAY											
26-26	-0.001	0.002	3.2	0.46	4.0	0.6	0.1	0.05	51	26	13
26...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
	BETA, 2 SIGMA WATER, DISS AS CS-137 (PCI/L)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L)	ALPHA COUNT, 2 SIGMA WAT DISS AS TH-230 (PCI/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SILICA, DIS-SOLVED (MG/L AS SIO2)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
DATE											
MAY											
26-26	4.6	3.7	2.6	61	20	59	13	93	<0.5	1.0	<5
26...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
	COBAL-T, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
DATE											
MAY											
26-26	<3	<10	20	<10	<1	10	<10	<1.0	490	<6	13
26...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
	LITHIUM DIS-SOLVED (UG/L AS LI)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ARSENIC DIS-SOLVED (UG/L AS AS)	THAL-LIUM, DIS-SOLVED (UG/L AS TL)	ANTI-MONY, DIS-SOLVED (UG/L AS SB)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)
DATE											
MAY											
26-26	15	3.5	<1	<1	<1	20	<1	<0.1	66	22	54
26...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBAL-T, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
DATE											
MAY											
26-26	3.1	<1	100	<10	<1	<1	<1	2	210	<1	10
26...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ANTI-MONY, TOTAL RECOV-ERABLE (UG/L AS SB)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	
DATE											
MAY											
26-26	1	2	<1	480	<10	<1	190	10	<1	<0.10	
26...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--

Table 25.--Chemical-quality and suspended-sediment data, GS01 (Woman Creek at Indiana Street), water year 1996--Continued

WOMAN CREEK AT INDIANA STREET

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996										
DATE	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALKA- LITY LAB (MG/L CACO3)	SEDI- MENT, DIS- MENT, SUS- PENDE (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN (T/DAY)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	
MAY										
26-26	13	37	82	0.70	441	235	19	0.14	68	
26...	--	--	--	--	--	--	19	0.14	68	
28...	--	--	--	--	--	--	5	0.00	630	
28...	--	--	--	--	--	--	2	0.00	640	

Table 26.—Chemical-quality and suspended-sediment data, GS02 (Mower Ditch at Indiana Street), water year 1996

[TIME is instantaneous collection time for manual samples, or interval collection time (start-end) for automatic samples]

MOWER DITCH AT INDIANA STREET

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		DIS-CHARGE, INST. CUBIC FEET PER SECOND	DIS-CHARGE, MEAN CUBIC FEET PER SECOND	TEMPERATURE WATER (DEG C)	PH WATER WHOLE FIELD (STANDARD UNITS)	SPECIFIC CONDUCTANCE (US/CM)	SAMPLING METHOD, CODES	PLUTONIUM-238 WATER FLTRD (PCI/L)	PLUTONIUM-238 WATER FLTRD 2 SIGMA (PCI/L)	PLUTONIUM-239/240 WATER FLTRD (PCI/L)	PLUTONIUM-239/240 WATER FLTRD 2 SIGMA (PCI/L)
MAY											
26-26	1124-1151	--	3.5	18.0	8.1	407	4033	0.006	0.012	0.012	0.016
26...	1124-1151	3.5	--	18.0	--	--	4033	--	--	--	--
28...	1155	1.3	--	9.5	--	--	70	--	--	--	--
28...	1200	1.3	--	9.5	--	--	70	--	--	--	--
	AMERICIUM-241 WATER FLTRD (PCI/L)	AMERICIUM-241 WATER FLTRD 2 SIGMA (PCI/L)	URANIUM-238 DISSOLV (PCI/L)	U-238 2 SIGMA DISSOLV (PCI/L)	URANIUM-234 2 SIGMA DISSOLV (PCI/L)	U-234 2 SIGMA DISSOLV (PCI/L)	URANIUM-235 2 SIGMA DISSOLV (PCI/L)	U-235 2 SIGMA DISSOLV (PCI/L)	TRITIUM TOTAL (PCI/L)	TRITIUM WATER, WHOLE (PCI/L)	GROSS BETA, DIS-SOLVED (PCI/L) CS-137)
MAY											
26-26	0.009	0.015	0.80	0.14	1.0	0.2	<0.1	0.02	29	26	5.5
26...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SILICA, DISSOLVED (MG/L ASIO2)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)
MAY											
26-26	2.4	<3.0	2.0	45	8.9	24	16	83	<0.5	<1.0	<5
26...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
MAY											
26-26	<3	<10	32	<10	<1	<10	<10	<1.0	260	<6	9
26...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
	LITHIUM DISSOLVED (UG/L AS LI)	POTASSIUM, DISSOLVED (MG/L AS K)	ARSENIC DISSOLVED (UG/L AS AS)	THALLIUM, DISSOLVED (UG/L AS TL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ALUMINUM, DISSOLVED (UG/L AS AL)	SELENIUM, DISSOLVED (UG/L AS SE)	MERCURY DISSOLVED (UG/L AS HG)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA)
MAY											
26-26	7	2.2	<1	<1	<1	30	<1	<0.1	53	11	22
26...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K)	ARSENIC TOTAL RECOVERABLE (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
MAY											
26-26	2.3	<1	100	<10	<1	2	1	4	1900	3	60
26...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ANTIMONY, TOTAL RECOVERABLE (UG/L AS SB)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	SELENIUM, TOTAL RECOVERABLE (UG/L AS SE)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	
MAY											
26-26	<1	4	<1	440	20	<1	2200	10	<1	<0.10	
26...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--

Table 26.—Chemical-quality and suspended-sediment data, GS02 (Mower Ditch at Indiana Street), water year 1996--Continued

MOWER DITCH AT INDIANA STREET

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996										
DATE	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEDED (MG/L)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALKA- LINEITY LAB (MG/L AS CACO3)	SEDI- MENT, DIS- MENT, SUS- PENDEDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN (T/DAY)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	
MAY										
26-26	131	24	20	0.50	254	149	192	1.8	86	405
26...	--	--	--	--	--	--	192	1.8	86	407
28...	--	--	--	--	--	--	12	0.04	--	371
28...	--	--	--	--	--	--	11	0.04	--	366

Table 27.—Chemical-quality and suspended-sediment data, GS03 (Walnut Creek at Indiana Street), water year 1996

[TIME is instantaneous collection time for manual samples, or interval collection time (start-end) for automatic samples]

WALNUT CREEK AT INDIANA STREET

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		DIS- CHARGE, INST. CUBIC FEET PER SECOND	DIS- CHARGE, MEAN CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SAM- PLING METHOD, CODES	SAMPLER TYPE (CODE)	PLUTON- IUM-238 WATER FLTRD (PCI/L)	PLUTON- IUM-238 WATER FLTRD (PCI/L)	PLUTON- IUM- 239/240 WATER FLTRD (PCI/L)	PLUTON- IUM- 239/240 WATER FLTRD 2 SIGMA (PCI/L)
MAR												
15...	1210	2.1	--	7.0	--	--	70	--	--	--	--	--
15...	1215	2.1	--	7.0	--	--	70	--	--	--	--	--
MAY												
28...	1300	0.60	--	9.0	--	--	70	--	--	--	--	--
28...	1305	0.59	--	9.0	--	--	70	--	--	--	--	--
MAY 30-	1347											
JUN 15	2047	--	3.0	21.5	7.7	512	4033	--	0.00	0.020	0.0135	0.019
03...	0915	5.5	--	12.5	--	--	70	8010	--	--	--	--
03...	0920	5.5	--	12.5	--	--	70	--	--	--	--	--
03...	0925	5.5	--	12.5	--	--	70	--	--	--	--	--
07...	0847	2.3	--	13.0	--	--	70	--	--	--	--	--
07...	0850	2.3	--	13.0	--	--	70	--	--	--	--	--
10...	1205	1.4	--	19.5	--	--	70	--	--	--	--	--
10...	1210	1.4	--	19.5	--	--	70	--	--	--	--	--
14...	1015	1.1	--	17.0	--	--	70	--	--	--	--	--
14...	1020	1.1	--	17.0	--	--	70	--	--	--	--	--
JUL												
24...	0845	1.6	--	17.5	8.5	543	70	8010	-0.001	0.002	-0.001	0.002
24...	0850	1.6	--	17.0	--	--	4033	--	--	--	--	--
24...	0855	1.6	--	17.0	--	--	4033	--	--	--	--	--
	AMERI- CIUM- 241 WATER FLTRD (PCI/L)	AMERIC- IUM-241 WATER FLTRD 2 SIGMA (PCI/L)	URANIUM -238 WATER DISSOLV (PCI/L)	U-238 2 SIGMA WATER, DISS, (PCI/L)	URANIUM -234 WATER DISSOLV (PCI/L)	U-234 2 SIGMA WATER, DISS, (PCI/L)	URANIUM -235 WATER, DISS, (PCI/L)	U-235 2 SIGMA WATER, DISS, (PCI/L)	TRITIUM TOTAL (PCI/L)	TRITIUM 2 SIGMA WATER, WHOLE, AS (PCI/L)	GROSS BETA, DIS- SOLVED AS (PCI/L)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L)
DATE												
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	0.00229	0.008	0.80	0.11	0.90	0.1	<0.1	0.02	54	26	11	3.3
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	0.012	0.014	0.60	0.09	0.80	0.1	<0.1	0.01	58	26	9.2	1.7
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SILICA, DIS- SOLVED (MG/L AS SiO2)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)
DATE												
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	<3.0	1.8	41	8.6	42	5.9	55	<0.5	<1.0	<5	<3	<10
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	4.2	2.2	42	7.9	46	9.4	39	0.7	<1.0	7	<3	<10
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--

Table 27.--Chemical-quality and suspended-sediment data, GS03 (Walnut Creek at Indiana Street), water year 1996--Continued

WALNUT CREEK AT INDIANA STREET												
WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	LITHIUM DIS- SOLVED (UG/L AS LI)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ARSENIC DIS- SOLVED (UG/L AS AS)
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	11	10	<1	20	<10	<1.0	270	<6	8	16	5.8	<1
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	16	<10	13	20	<10	2.0	260	8	<3	45	7.4	3
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	THAL- LIUM, DIS- SOLVED (UG/L AS TL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	MERCURY DIS- SOLVED (UG/L AS HG)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K)	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	<1	4	<5	<1	<0.1	41	9.1	40	5.8	1	<100	<10
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	<1	3	20	<1	<0.1	43	8.3	46	6.5	3	<100	<10
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	<1	<1	<1	3	580	2	60	2	3	<1	200	20
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	<1	<1	1	3	280	<1	80	6	4	<1	280	20
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--

Table 27.—Chemical-quality and suspended-sediment data, GS03 (Walnut Creek at Indiana Street), water year 1996--Continued

WALNUT CREEK AT INDIANA STREET												
WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DATE	ANTI-MONY, TOTAL (UG/L AS SB)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	ALKA- LITY LAB (MG/L AS CACO3)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	3	520	10	<1	<0.10	75	61	35	0.50	299	106	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	3	1800	40	<1	<0.10	27	61	34	0.50	316	113	2.20
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	PHOS- PHORUS TOTAL (MG/L AS P)	DI-BROMO- METHANE WHOLE RECOVER (UG/L)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)	CHLORO- FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- ETHANE TOTAL (UG/L)
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	0.740	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	ETHYL- BENZENE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	METHYL- CHLO- RIDE TOTAL (UG/L)	METHYL- ENE- CHLO- RIDE TOTAL (UG/L)	TETRA- CHLORO- ETHANE TOTAL (UG/L)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L)	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC (UG/L)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L)
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	--	--	--	--	--	--	--	--	--	--	--	--
03...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<5.00
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
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14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--

Table 27.—Chemical-quality and suspended-sediment data, GS03 (Walnut Creek at Indiana Street), water year 1996--Continued

WALNUT CREEK AT INDIANA STREET												
WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
	1,2-DI- CHLORO- PROPANE TOTAL (UG/L)	1,2- TRANS DI- CHLORO- ETHENE TOTAL (UG/L)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L)	NAPHTH- ALENE TOTAL (UG/L)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	VINYL CHLO- RIDE TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L)
DATE												
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	--	--	--	--	--	--	--	--	--	--	--	--
03...	<0.200	<0.200	<5.00	<5.00	<5.00	<0.200	<5.00	<0.200	<0.200	<0.200	<0.200	<5.00
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
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14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L)	1,1-DI CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L)	2,2-DI CHLORO- PRO- PANE WAT, WH TOTAL (UG/L)	1,3-DI- CHLORO- PROPANE WAT, WH TOTAL (UG/L)	BENZENE 124-TRI METHYL UNFLTRD RECOVER (UG/L)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L)	METHANE BROMO CHLORO- WAT UNFLTRD REC (UG/L)	
DATE												
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	--	--	--	--	--	--	--	--	--	--	--	--
03...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
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14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L)	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (UG/L)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L)	1,2,3- TRI- CHLORO BENZENE WAT, WH TOTAL (UG/L)	1,2- DIBROMO ETHANE WATER WHOLE UNFLTRD REC (UG/L)	FREON- 113 WATER UNFLTRD REC (UG/L)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L)	XYLENE WATER UNFLTRD REC (UG/L)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L)
DATE												
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	--	--	--	--	--	--	--	--	--	--	--	--
03...	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--

Table 27.--Chemical-quality and suspended-sediment data, GS03 (Walnut Creek at Indiana Street), water year 1996--Continued

WALNUT CREEK AT INDIANA STREET												
WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DATE	DIBROMO CHLORO- PROPANE WATER TOT. REC (UG/L)	ACE- NAPHTH- YLENE TOTAL (UG/L)	ACE- NAPHTH- ENE TOTAL (UG/L)	ANTHRA- CENE TOTAL (UG/L)	BENZO B FLUOR- AN- THENE TOTAL (UG/L)	BENZO K FLUOR- AN- THENE TOTAL (UG/L)	BENZO- A- PYRENE TOTAL (UG/L)	BIS 2- CHLORO- ETHYL ETHER UNFLTRD RECOVER TOTAL (UG/L)	BIS (2- CHLORO- ETHOXY) METHANE TOTAL (UG/L)	BIS (2- CHLORO- ISO- PROPYL) ETHER TOTAL (UG/L)	N-BUTYL BENZYL PHTHAL- ATE TOTAL (UG/L)	CHRY- SENE TOTAL (UG/L)
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	--	--	--	--	--	--	--	--	--	--	--	--
03...	<1.00	<5.00	<5.00	<5.00	<10.0	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<10.0
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	DIETHYL PHTHAL- ATE TOTAL (UG/L)	DI- METHYL PHTHAL- ATE TOTAL (UG/L)	FLUOR- ANTHENE TOTAL (UG/L)	FLUOR- ENE TOTAL (UG/L)	CYCLOPE NTADIEN HEXA- CHLORO- UNFLTRD RECOVER TOTAL (UG/L)	ETHANE HEXA- CHLORO- WATER UNFLTRD RECOVER TOTAL (UG/L)	INDENO (1,2,3- CD) PYRENE TOTAL (UG/L)	ISO- PHORONE TOTAL (UG/L)	N- NITRO- SODI-N- PROPYL- AMINE TOTAL (UG/L)	N-NITRO -SODI- PHENY- LAMINE TOTAL (UG/L)	N-NITRO -SODI- METHY- LAMINE TOTAL (UG/L)	BENZENE NITRO- WATER UNFLTRD RECOVER TOTAL (UG/L)
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	--	--	--	--	--	--	--	--	--	--	--	--
03...	<70.0	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	PARA- CHLORO- META CRESOL TOTAL (UG/L)	PHENAN- THRENE TOTAL (UG/L)	PYRENE TOTAL (UG/L)	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE TOTAL (UG/L)	BENZO A ANTHRAC ENE1,2- BENZANT HRACENE TOTAL (UG/L)	2- CHLORO- NAPH- THALENE TOTAL (UG/L)	2- CHLORO- PHENOL TOTAL (UG/L)	2- NITRO- PHENOL TOTAL (UG/L)	2,4-DI- CHLORO- PHENOL TOTAL (UG/L)	2,4-DI- METHYL- PHENOL TOTAL (UG/L)	2,4-DI- NITRO- TOLUENE TOTAL (UG/L)	2,4,- DI- NITRO- PHENOL TOTAL (UG/L)
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	--	--	--	--	--	--	--	--	--	--	--	--
03...	<30.0	<5.00	<5.00	<10.0	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--

Table 27.--Chemical-quality and suspended-sediment data, GS03 (Walnut Creek at Indiana Street), water year 1996--Continued

WALNUT CREEK AT INDIANA STREET

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	2,4,6- TRI- CHLORO- PHENOL TOTAL (UG/L)	2,6-DI- NITRO- TOLUENE TOTAL (UG/L)	3,3'- DI- CHLORO- BENZI- DINE TOTAL (UG/L)	4- BROMO- PHENYL ETHER TOTAL (UG/L)	4- CHLORO- PHENYL ETHER TOTAL (UG/L)	4- NITRO- PHENOL TOTAL (UG/L)	4,6- DINITRO- -ORTHO- CRESOL TOTAL (UG/L)	PHENOL (C6H- 5OH) TOTAL (UG/L)	PENTA- CHLORO- PHENOL TOTAL (UG/L)	BIS(2- ETHYL HEXYL) PHTHAL- ATE TOTAL (UG/L)	DI-N- BUTYL PHTHAL- ATE TOTAL (UG/L)	BENZI- DINE TOTAL (UG/L)
	CHLORO- PHENOL TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	DINE TOTAL (UG/L)	ETHER TOTAL (UG/L)	ETHER TOTAL (UG/L)	PHENOL TOTAL (UG/L)	CRESOL TOTAL (UG/L)	5OH) TOTAL (UG/L)	PHENOL TOTAL (UG/L)	ATE TOTAL (UG/L)	ATE TOTAL (UG/L)	DINE TOTAL (UG/L)
MAR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 30-												
JUN 15	--	--	--	--	--	--	--	--	--	--	--	--
03...	<20.0	<5.00	<20.0	<5.00	<5.00	<30.0	<30.0	<5.00	<30.0	<5.00	<5.00	<40.0
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	HEXA- CHLORO- BENZENE TOTAL (UG/L)	1,2-DI- PHENYL- HYDRA- ZINE WATER TOT. REC (UG/L)	SAMPLE VOLUME SCHED- ULE 1383 (ML)	DELTA BENZENE HEXA- CHLOR- IDE TOTAL (UG/L)	ENDO- SULFAN SULFATE TOTAL (UG/L)	ENDO- SULFAN SULFAN II TOTAL (UG/L)	ENDO- SULFAN- I WATER WHOLE REC (UG/L)	ENDRIN ALDE- HYDE TOTAL (UG/L)	AROCLOR 1016 PCB TOTAL (UG/L)	CHLOR- DANE CIS WATER WHOLE TOTAL (UG/L)	CHLOR- DANE TRANS WATER WHOLE TOTAL (UG/L)
	CHLORO- BENZENE TOTAL (UG/L)	HYDRA- ZINE WATER TOT. REC (UG/L)	SCHED- ULE 1383 (ML)	CHLOR- IDE TOTAL (UG/L)	SULFAN SULFATE TOTAL (UG/L)	SULFAN SULFAN II TOTAL (UG/L)	I WATER WHOLE REC (UG/L)	ALDE- HYDE TOTAL (UG/L)	1016 PCB TOTAL (UG/L)	CIS WATER WHOLE TOTAL (UG/L)	TRANS WATER WHOLE TOTAL (UG/L)
MAR											
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
MAY											
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
MAY 30-											
JUN 15	--	--	--	--	--	--	--	--	--	--	--
03...	<5.00	<5.00	957	<0.090	<0.600	<0.040	<0.100	<0.200	<0.100	<0.100	<0.100
03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
JUL											
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--

DATE	P, P' DDT, TOTAL (UG/L)	P, P' DDD, TOTAL (UG/L)	P, P' DDE, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	ALPHA BHC TOTAL (UG/L)	BETA BENZENE HEXA- CHLOR- IDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	CHLOR- DANE, TECH- NICAL TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDRIN WATER UNFLTRD REC (UG/L)	TOX- APHENE, TOTAL (UG/L)
	DDT, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	ALPHA BHC TOTAL (UG/L)	BETA BENZENE HEXA- CHLOR- IDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	DANE, TECH- NICAL TOTAL (UG/L)	ELDRIN TOTAL (UG/L)	WATER UNFLTRD REC (UG/L)	APHENE, TOTAL (UG/L)
MAR											
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
MAY											
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
MAY 30-											
JUN 15	--	--	--	--	--	--	--	--	--	--	--
03...	<0.100	<0.100	<0.040	<0.040	<0.030	<0.030	<0.030	<0.100	<0.020	<0.060	<2.00
03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
JUL											
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--

Table 27.--Chemical-quality and suspended-sediment data, GS03 (Walnut Creek at Indiana Street), water year 1996--Continued

WALNUT CREEK AT INDIANA STREET											
WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996											
DATE	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	AROCLOR 1221 PCB TOTAL (UG/L)	AROCLOR 1232 PCB TOTAL (UG/L)	AROCLOR 1242 PCB TOTAL (UG/L)	AROCLOR 1248 PCB TOTAL (UG/L)	AROCLOR 1254 PCB TOTAL (UG/L)	AROCLOR 1260 PCB TOTAL (UG/L)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)
MAR											
15...	--	--	--	--	--	--	--	--	56	0.32	729
15...	--	--	--	--	--	--	--	--	163	0.92	635
MAY											
28...	--	--	--	--	--	--	--	--	8	0.01	332
28...	--	--	--	--	--	--	--	--	6	0.01	319
MAY 30-											
JUN 15	--	--	--	--	--	--	--	--	--	--	509
03...	<0.030	<0.800	<1.00	<0.100	<0.100	<0.100	<0.100	<0.100	--	--	--
03...	--	--	--	--	--	--	--	--	31	0.45	499
03...	--	--	--	--	--	--	--	--	29	0.43	517
07...	--	--	--	--	--	--	--	--	51	0.31	519
07...	--	--	--	--	--	--	--	--	51	0.32	523
10...	--	--	--	--	--	--	--	--	52	0.20	522
10...	--	--	--	--	--	--	--	--	16	0.06	525
14...	--	--	--	--	--	--	--	--	29	0.09	581
14...	--	--	--	--	--	--	--	--	29	0.09	591
JUL											
24...	--	--	--	--	--	--	--	--	--	--	538
24...	--	--	--	--	--	--	--	--	30	0.13	548
24...	--	--	--	--	--	--	--	--	32	0.14	551

Table 28.—Chemical-quality and suspended-sediment data, GS04 (Rock Creek at Highway 128), water year 1996

[TIME is instantaneous collection time for manual samples, or interval collection time (start-end) for automatic samples]

ROCK CREEK AT HIGHWAY 128

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		DIS-CHARGE, MEAN CUBIC FEET PER SECOND	TEMPERATURE WATER (DEG C)	PH WATER WHOLE FIELD (STANDARD UNITS)	SPECIFIC CONDUCTANCE (US/CM)	SAMPLING METHOD, CODES	PLUTONIUM-238 WATER FLTRD (PCI/L)	PLUTONIUM-238 WATER FLTRD 2 SIGMA (PCI/L)	PLUTONIUM-239/240 WATER FLTRD (PCI/L)	PLUTONIUM-239/240 WATER FLTRD 2 SIGMA (PCI/L)	AMERICIUM-241 WATER FILT (PCI/L)	
MAY												
26-26	0453-0628	2.9	19.5	7.9	358	4033	0.000	0.016	-0.002	0.003	0.015	
26...	0453-0628	0.72	19.5	--	--	4033	--	--	--	--	--	
		AMERICIUM-241 WATER FLTRD 2 SIGMA (PCI/L)	URANIUM-238 WATER DISSOLV (PCI/L)	URANIUM-234 WATER DISSOLV (PCI/L)	URANIUM-234 WATER DISS (PCI/L)	URANIUM-235 WATER DISS (PCI/L)	URANIUM-235 WATER DISS (PCI/L)		TRITIUM 2 SIGMA WATER, WHOLE, AS (PCI/L)	BETA, DIS-SOLVED, (PCI/L)	2 SIGMA WATER, DISS, AS CS-137 (PCI/L)	
DATE												
MAY												
26-26	0.017	0.80	0.13	1.1	0.2	<0.1	0.02	58	26	5.7	2.2	
26...	--	--	--	--	--	--	--	--	--	--	--	
		ALPHA RADIO. WATER DISS AS TH-230 (PCI/L)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SILICA, DIS-SOLVED (MG/L AS SIO2)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYLLIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)
DATE												
MAY												
26-26	<3.0	1.5	38	8.7	23	18	84	<0.5	<1.0	<5	<3	
26...	--	--	--	--	--	--	--	--	--	--	--	
		COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SILVER, DIS-SOLVED (UG/L AS AG)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	VANADIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	LITHIUM, DIS-SOLVED (UG/L AS LI)
DATE												
MAY												
26-26	<10	66	10	<1	10	<10	<1.0	230	<6	5	11	
26...	--	--	--	--	--	--	--	--	--	--	--	
		POTASSIUM, DIS-SOLVED (MG/L AS K)	ARSENIC, DIS-SOLVED (UG/L AS AS)	THALLIUM, DIS-SOLVED (UG/L AS TL)	ANTIMONY, DIS-SOLVED (UG/L AS SB)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	SELENIUM, DIS-SOLVED (UG/L AS SE)	MERCURY, DIS-SOLVED (UG/L AS HG)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K)
DATE												
MAY												
26-26	2.9	<1	<1	<1	40	<1	<0.1	40	9.5	22	2.6	
26...	--	--	--	--	--	--	--	--	--	--	--	
		ARSENIC TOTAL RECOVERABLE (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	
DATE												
MAY												
26-26	<1	<100	<10	<1	<1	<1	<1	3	320	<1	10	
26...	--	--	--	--	--	--	--	--	--	--	--	
		MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ANTIMONY, TOTAL RECOVERABLE (UG/L AS SB)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	SELENIUM, TOTAL RECOVERABLE (UG/L AS SE)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	
DATE												
MAY												
26-26	<1	2	<1	250	<10	<1	170	10	<1	<0.10		
26...	--	--	--	--	--	--	--	--	--	--	--	
		RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	SULFATE, DIS-SOLVED (MG/L AS SO4)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L)	ALKALINITY LAB (MG/L AS CACO3)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SEDIMENT, SIEVE DIAM. FINER THAN .062 MM	SPECIFIC CONDUCTANCE LAB (US/CM)	
DATE												
MAY												
26-26	11	8.4	23	0.50	226	149	15	0.12	90	359		
26...	--	--	--	--	--	--	15	0.03	90	358		

Table 29.—Chemical-quality and suspended-sediment data, GS05 (North Woman Creek at West Buffer Zone Fence Line), water year 1996

[TIME is instantaneous collection time for manual samples, or interval collection time (start-end) for automatic samples]

NORTH WOMAN CREEK AT WEST BUFFER ZONE FENCE LINE

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	DIS-CHARGE, MEAN CUBIC FEET PER SECOND	TEMPER-ATURE WATER (DEG C)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SAM-PLING METHOD, CODES	PLUTON-IUM-238 WATER FLTRD (PCI/L)	PLUTON-IUM-238 WATER FLTRD 2 SIGMA (PCI/L)	PLUTON-IUM-239/240 WATER FLTRD (PCI/L)	PLUTON-IUM-239/240 WATER FLTRD 2 SIGMA (PCI/L)
MAY 28...	0910	0.56	--	9.0	--	--	70	--	--	--	--
MAY 28...	0915	0.56	--	9.0	--	--	70	--	--	--	--
JUN 10...	1320	0.12	--	21.5	--	--	70	--	--	--	--
JUN 10...	1325	0.12	--	21.5	--	--	70	--	--	--	--
AUG 18-18	1529-1736	--	0.22	20.5	6.9	132	4033	0.00	0.018	0.00612	0.012
SEP 18-18	1817-1855	--	1.2	13.5	6.5	135	4033	0.000846	0.009	0.002	0.009
DATE	AMERI-CIUM-241 WATER FLTRD (PCI/L)	AMERIC-IUM-241 WATER FLTRD 2 SIGMA (PCI/L)	URANIUM-238 WATER DISSOLV (PCI/L)	U-238 2 SIGMA WATER DISS (PCI/L)	URANIUM-234 WATER DISSOLV (PCI/L)	U-234 2 SIGMA WATER DISS (PCI/L)	URANIUM-235 WATER DISS (PCI/L)	U-235 2 SIGMA WATER DISS (PCI/L)	TRITIUM TOTAL (PCI/L)	TRITIUM WATER, WHOLE, TOTAL (PCI/L)	GROSS BETA, DIS-SOLVED AS (CS-137)
MAY 28...	--	--	--	--	--	--	--	--	--	--	--
MAY 28...	--	--	--	--	--	--	--	--	--	--	--
JUN 10...	--	--	--	--	--	--	--	--	--	--	--
JUN 10...	--	--	--	--	--	--	--	--	--	--	--
AUG 18-18	-0.000771	0.002	<0.10	0.02	<0.10	0.0	<0.1	0.01	29	26	6.5
SEP 18-18	0.005	0.011	<0.10	0.02	<0.10	0.0	<0.1	0.01	32	26	6.0
DATE	BETA, 2 SIGMA WATER, DISS, AS (CS-137) (PCI/L)	ALPHA RADIO. WATER DISS AS (TH-230) (PCI/L)	ALPHA COUNT, 2 SIGMA WAT DISS AS (TH-230) (PCI/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SILICA, DIS-SOLVED (MG/L AS SIO2)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
MAY 28...	--	--	--	--	--	--	--	--	--	--	--
MAY 28...	--	--	--	--	--	--	--	--	--	--	--
JUN 10...	--	--	--	--	--	--	--	--	--	--	--
JUN 10...	--	--	--	--	--	--	--	--	--	--	--
AUG 18-18	1.6	<3.0	0.52	13	3.2	5.8	9.3	43	1	2.0	<5
SEP 18-18	1.8	<3.0	0.81	13	3.4	7.0	9.2	45	<0.5	<1.0	<5
DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY 28...	--	--	--	--	--	--	--	--	--	--	--
MAY 28...	--	--	--	--	--	--	--	--	--	--	--
JUN 10...	--	--	--	--	--	--	--	--	--	--	--
JUN 10...	--	--	--	--	--	--	--	--	--	--	--
AUG 18-18	3	<10	190	<10	9	<10	<10	1.0	81	<6	<3
SEP 18-18	3	10	230	<10	25	<10	<10	<1.0	77	<6	<3
DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	POTAS-SIUM, DIS-SOLVED (UG/L AS K)	ARSENIC DIS-SOLVED (UG/L AS AS)	THAL-IUM, DIS-SOLVED (UG/L AS TL)	ANTI-MONY, DIS-SOLVED (UG/L AS SB)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)
MAY 28...	--	--	--	--	--	--	--	--	--	--	--
MAY 28...	--	--	--	--	--	--	--	--	--	--	--
JUN 10...	--	--	--	--	--	--	--	--	--	--	--
JUN 10...	--	--	--	--	--	--	--	--	--	--	--
AUG 18-18	<4	3.6	<1	<1	<1	210	<1	<0.1	13	3.4	6.8
SEP 18-18	<4	2.6	<1	<1	2	130	<1	<0.1	12	3.5	7.4

Table 29.—Chemical-quality and suspended-sediment data, GS05 (North Woman Creek at West Buffer Zone Fence Line), water year 1996--Continued

NORTH WOMAN CREEK AT WEST BUFFER ZONE FENCE LINE										
WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996										
DATE	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
MAY										
28...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
JUN										
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
AUG										
18-18	9.6	<1	600	<10	<1	41	30	31	85000	76
SEP										
18-18	12	<1	700	<10	1	47	40	38	49000	85
DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ANTIMONY, TOTAL (UG/L AS SB)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	SELENIUM, TOTAL (UG/L AS SE)
MAY										
28...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
JUN										
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
AUG										
18-18	920	<1	42	<1	210	130	7	62000	30	2
SEP										
18-18	1800	<1	48	<1	220	150	11	63000	40	2
DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L)	CHLORIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	FLUORIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALKALINITY LAB (MG/L AS CACO3)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DIS- CHARGE, SUSPENDED (T/DAY)	SPECIFIC CONDUCTANCE LAB (US/CM)
MAY										
28...	--	--	--	--	--	--	--	4	0.01	282
28...	--	--	--	--	--	--	--	7	0.01	280
JUN										
10...	--	--	--	--	--	--	--	5	0.00	120
10...	--	--	--	--	--	--	--	5	0.00	112
AUG										
18-18	0.30	4080	8.7	3.6	0.20	90	47	--	--	137
SEP										
18-18	<0.10	2	11	6.1	0.20	73	43	--	--	137

Table 30.—Chemical-quality and suspended-sediment data, GS06 (South Woman Creek at West Buffer Zone Fence Line), water year 1996

[TIME is instantaneous collection time for manual samples, or interval collection time (start-end) for automatic samples]

SOUTH WOMAN CREEK AT WEST BUFFER ZONE FENCE LINE												
WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	DIS-CHARGE, MEAN CUBIC FEET PER SECOND	TEMPER-ATURE WATER (DEG C)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SAM-PLING METHOD, CODES	PLUTON-IUM-238 WATER FLTRD (PCI/L)	PLUTON-IUM-238 WATER FLTRD 2 SIGMA (PCI/L)	PLUTON-IUM-239/240 WATER FLTRD (PCI/L)	PLUTON-IUM-239/240 WATER FLTRD 2 SIGMA (PCI/L)	
MAY 28...	1005	0.06	--	10.0	--	--	70	--	--	--	--	
28...	1010	0.06	--	10.0	--	--	70	--	--	--	--	
SEP 18-18	1825-1853	--	0.38	12.0	6.2	70	4033	-0.002	0.003	0.004	0.010	
DATE		AMERI-CIUM-241 WATER FLTRD (PCI/L)	AMERIC-IUM-241 WATER FLTRD 2 SIGMA (PCI/L)	URANIUM-238 WATER DISSOLV (PCI/L)	U-238 2 SIGMA WATER, DISS, (PCI/L)	URANIUM-234 WATER, DISS, (PCI/L)	URANIUM-235 WATER, DISS (PCI/L)	U-235 2 SIGMA WATER, DISS, (PCI/L)	TRITIUM 2 SIGMA TOTAL (PCI/L)	TRITIUM 2 SIGMA TOTAL (PCI/L)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	
MAY 28...	--	--	--	--	--	--	--	--	--	--	--	
28...	--	--	--	--	--	--	--	--	--	--	--	
SEP 18-18	0.008	0.012	<0.10	0.01	<0.10	0.0	<0.1	0.01	<26	26	5.0	
DATE		BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L)	ALPHA RADIO, 2 SIGMA WATER, DISS, AS TH-230 (PCI/L)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SILICA, DIS-SOLVED (MG/L AS SIO2)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	
MAY 28...	--	--	--	--	--	--	--	--	--	--	--	
28...	--	--	--	--	--	--	--	--	--	--	--	
SEP 18-18	1.4	<3.0	0.50	5.3	1.5	2.6	5.5	29	<0.5	<1.0	<5	
DATE		COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY 28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 18-18	<3	10	240	20	12	<10	<10	<1.0	32	<6	<3	
DATE		LITHIUM DIS-SOLVED (UG/L AS LI)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ARSENIC DIS-SOLVED (UG/L AS AS)	THAL-LIUM, DIS-SOLVED (UG/L AS TL)	ANTI-MONY, DIS-SOLVED (UG/L AS SB)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)
MAY 28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 18-18	<4	4.0	<1	<1	<1	280	<1	<0.1	4.6	1.7	2.7	
DATE		POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	ARSENIC TOTAL RECOV-ERABLE (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	
MAY 28...	--	--	--	--	--	--	--	--	--	--	--	
28...	--	--	--	--	--	--	--	--	--	--	--	
SEP 18-18	8.7	<1	1100	<10	2	55	60	48	68000	110		
DATE		MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ANTI-MONY, TOTAL RECOV-ERABLE (UG/L AS SB)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE)	
MAY 28...	--	--	--	--	--	--	--	--	--	--	--	
28...	--	--	--	--	--	--	--	--	--	--	--	
SEP 18-18	4400	<1	53	<1	190	290	9	64000	40	2		

Table 30.—Chemical-quality and suspended-sediment data, GS06 (South Woman Creek at West Buffer Zone Fence Line), water year 1996--
Continued

SOUTH WOMAN CREEK AT WEST BUFFER ZONE FENCE LINE										
WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996										
DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	SULFATE DIS- SOLVED (MG/L) AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	ALKA- LITY LAB (MG/L) CACO3) (90410)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)
MAY										
28...	--	--	--	--	--	--	--	7	0.00	143
28...	--	--	--	--	--	--	--	11	0.00	141
SEP										
18-18	<0.10	116	6.2	5.5	<0.10	118	19	--	--	74

Table 31.--Chemical-quality and suspended-sediment data, SW134 (Gravel Pit at Rocky Flats), water year 1996

[TIME is instantaneous collection time for manual samples, or interval collection time (start-end) for automatic samples]

GRAVEL PIT AT ROCKY FLATS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DATE	TIME	DIS-CHARGE, MEAN CUBIC FEET PER SECOND	TEMPERATURE WATER (DEG C)	PH WATER WHOLE FIELD (STANDARD UNITS)	SPECIFIC CONDUCTANCE (US/CM)	SAMPLING METHOD, CODES	PLUTONIUM-238 WATER FLTRD 2 SIGMA (PCI/L)	PLUTONIUM-238 WATER FLTRD 2 SIGMA (PCI/L)	PLUTONIUM-239/240 WATER FLTRD 2 SIGMA (PCI/L)	PLUTONIUM-239/240 WATER FLTRD 2 SIGMA (PCI/L)	AMERICIUM-241 WATER FLTRD 2 SIGMA (PCI/L)	
MAY	25-26	2350-0015	0.17	20.0	6.9	75	4033	-0.001	0.002	0.000	0.017	0.008
25...		2353	0.11	20.0	--	--	4033	--	--	--	--	--
DATE		AMERICIUM-241 WATER FLTRD 2 SIGMA (PCI/L)	URANIUM-238 WATER DISSOLV (PCI/L)	U-238 2 SIGMA WATER, DISS, (PCI/L)	URANIUM-234 WATER DISSOLV (PCI/L)	U-234 2 SIGMA WATER, DISS, (PCI/L)	URANIUM-235 WATER, DISS, (PCI/L)	U-235 2 SIGMA WATER, DISS, (PCI/L)	TRITIUM TOTAL (PCI/L)	TRITIUM WHOLE, TOTAL (PCI/L)	GROSS BETA, DIS-SOLVED (PCI/L)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L)
MAY	25-26	0.013	<0.10	0.02	<0.10	0.0	<0.1	0.01	<26	26	<4.0	0.83
25...		--	--	--	--	--	--	--	--	--	--	--
DATE		ALPHA RADIO. WATER DISS AS TH-230 (PCI/L)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SILICA, DIS-SOLVED (MG/L AS SIO2)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYLLIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)
MAY	25-26	<3.0	0.36	6.5	1.3	4.1	6.2	20	<0.5	<1.0	<5	<3
25...		--	--	--	--	--	--	--	--	--	--	--
DATE		COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SILVER, DIS-SOLVED (UG/L AS AG)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	VANADIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	LITHIUM, DIS-SOLVED (UG/L AS LI)
MAY	25-26	<10	5	<10	<1	20	<10	1.0	36	<6	<3	<4
25...		--	--	--	--	--	--	--	--	--	--	--
DATE		POTASSIUM, DIS-SOLVED (MG/L AS K)	ARSENIC, DIS-SOLVED (UG/L AS AS)	THALLIUM, DIS-SOLVED (UG/L AS TL)	ANTIMONY, DIS-SOLVED (UG/L AS SB)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	SELENIUM, DIS-SOLVED (UG/L AS SE)	MERCURY, DIS-SOLVED (UG/L AS HG)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K)
MAY	25-26	0.80	<1	<1	<1	30	<1	<0.1	9.6	2.8	4.1	1.7
25...		--	--	--	--	--	--	--	--	--	--	--
DATE		ARSENIC TOTAL ERABLE (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	
MAY	25-26	<1	<100	<10	<1	8	4	8	6400	6	110	
25...		--	--	--	--	--	--	--	--	--	--	
DATE		MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ANTIMONY, TOTAL RECOVERABLE (UG/L AS SB)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)	SELENIUM, TOTAL RECOVERABLE (UG/L AS SE)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	
MAY	25-26	<1	8	<1	210	20	2	6700	<10	<1	<0.10	
25...		--	--	--	--	--	--	--	--	--	--	
DATE		RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	SULFATE, DIS-SOLVED (MG/L AS SO4)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALKALINITY LAB (MG/L AS CACO3)	SEDIMENT, DISCHARGE, SUSPENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SPECIFIC CONDUCTANCE LAB (US/CM)		
MAY	25-26	290	2.1	11	0.40	50	12	331	0.15	99	74	
25...		--	--	--	--	--	--	331	0.10	99	75	

Table 32.—Miscellaneous suspended-sediment data, water year 1996

[TIME is instantaneous collection time for manual samples]

GS10 (SOUTH WALNUT CREEK ABOVE B-SERIES BYPASS)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SAM- PLING METHOD, CODES (82398)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)
JUN							
14...	0940	0.11	14.0	70	3	0.00	600
14...	0945	0.11	14.0	70	3	0.00	607

GS11 (WALNUT CREEK BELOW POND A-4)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SAM- PLING METHOD, CODES (82398)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)
FEB							
23...	1145	0.33	4.0	70	277	0.25	567
23...	1150	0.31	4.0	70	454	0.38	528
JUN							
10...	1105	0.10	18.5	70	23	0.01	502
10...	1110	0.10	18.5	70	21	0.01	507
14...	1000	0.16	19.0	70	54	0.02	602
14...	1005	0.16	19.0	70	52	0.02	607

GS16 (ANTELOPE SPRINGS CREEK ABOVE WOMAN CREEK)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SAM- PLING METHOD, CODES (82398)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)
JUN							
28...	1045	0.04	16.0	70	15	0.00	375
28...	1050	0.04	16.0	70	13	0.00	375

APPENDIXES

Appendix 1: Discharge Data Collection and Computation

The data obtained at a continuous surface-water gaging station on a stream or conveyance, such as an irrigation ditch, consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that might affect the relation of stage to discharge. These data, together with supplemental information such as climatological records, are used to compute daily mean discharges.

Continuous records of stage are obtained with electronic recorders that store stage values at selected time intervals or with satellite data-collection platforms that transmit near real-time data at selected time intervals to processing computers. Measurements of discharge are made with current meters, using methods adapted by the USGS as a result of experience accumulated since 1880, or with flumes or weirs that are calibrated to provide a relation of observed stage to discharge. These methods are described by Carter and Davidian (1968) and by Rantz and others (1982).

In computing discharge records, results of individual measurements are plotted against the corresponding stage, and stage-discharge relation curves are constructed. From these curves, rating tables indicating the computed discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using:

(1) Logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-back-water techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic vegetation growth or debris on the control. For some gaging stations, formation of ice in the winter can obscure the stage-discharge relations so that daily mean discharges need to be estimated from other information, such as temperature and precipitation records, notes of observations, and records for other gaging stations in the same or nearby basins for comparable periods.

For most gaging stations, there might be periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily mean discharge or contents. This record loss occurs when recording instruments malfunction or otherwise fail to operate properly, intakes are plugged, the float is frozen in the stilling well, or various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, climatological records, and comparison with other gaging-station records from the same or nearby basins. Information explaining how estimated daily discharge values are identified in gaging-station records is provided in the "Identifying Estimated Daily Discharge" section of this appendix.

Data Presentation

The daily mean discharge tables published for each continuous-record surface-water gaging station consist of four parts: the station description; the table of daily mean discharge values for the water year with summary data; a tabular statistical summary of monthly mean discharge data for the water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous discharge, and summaries of 7-day low-flow minimums, annual runoff, and flow duration.

Station Description

The station description provides, under various headings, descriptive information including gaging-station location, drainage area, period of record, gage information, historical extremes outside the period of record, record accuracy, and other remarks pertinent to gaging-station operation and regulation. The following information is provided with each continuous record of daily mean discharge:

SITE NUMBER.--This entry provides the unique site identification number.

STATION IDENTIFICATION.--This entry provides the unique, 15-digit number assigned to a gaging station by the USGS for use in the Automated Data Processing System (ADAPS). This number generally is the latitude and longitude of the gage with a sequence number (00) at the end.

LOCATION.--This entry provides the gaging-station latitude and longitude (given in degrees, minutes, and seconds); a land-line location designation; the hydrologic unit number; county; and geographic location. Gaging-station latitudes, longitudes, and geographic locations were provided by EG&G Rocky Flats, Incorporated (1993b).

DRAINAGE AREA.--This entry provides the drainage area (in square miles) of the gaged basin. If, because of unusual natural conditions or artificial controls, some part of the basin does not contribute flow to the total flow measured at the gage, the noncontributing drainage area also is identified. Drainage area usually is measured using digital techniques and the most accurate maps available. Because the type of map available might vary from one drainage basin to another, the accuracy of digitized drainage areas also can vary. Drainage areas are updated as better maps become available. Some of the gaging stations included in this report measure stage and discharge in channels that convey water to or from reservoirs or other features; these channels might have little or no contributing drainage area. Drainage areas in this report were provided by EG&G Rocky Flats, Incorporated (1993b).

PERIOD OF RECORD.--This entry provides the period for which there are published records at the gage. This entry includes the month and year of the start of publication of hydrologic records by the USGS and the words "to current year" if the records are to be continued into the following year. Periods for which hydrologic records are available, but not published by the USGS, might be noted.

GAGE.--This entry provides the type of gage currently in use; the datum of the current gage referred to sea level; and a condensed history of the types, locations, and datums of previous gages. Gage datum for each gaging station was provided by EG&G Rocky Flats, Incorporated (1993b).

REMARKS.--This entry provides information concerning the accuracy of the records, any special methods of computation, and the conditions that affect natural flow at the gaging station. Other information might include average discharge data for the period of record, extremes in data for the period of record and the current year, and any other unusual or noteworthy conditions.

Daily Mean Discharge Values

The daily mean discharge values computed for each gaging station during a water year are listed in the body of the data table. In the monthly summary part of the table, the line headed "TOTAL" lists the sum of the daily figures for each month; the line headed "MEAN" lists the average discharge, in cubic feet per second, during the month; and the lines headed "MAX" and "MIN" list the maximum and minimum daily mean discharges for each month. Discharge for the month also is expressed in acre-feet (line headed "AC-FT"). Discharge, in cubic feet per second per square mile, and runoff, in inches or in acre-feet, are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the appropriate discharges are listed for the calendar and water years. Missing records or periods prior to start of data collection are indicated by three dashes in place of the discharge.

Summary Statistics

A section of the table titled SUMMARY STATISTICS follows the STATISTICS OF MONTHLY MEAN DATA section. This section consists of four columns, with the first column containing the statistics being reported. The section provides a statistical summary of annual and daily discharges, not only for the current water year, but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, WATER YEARS_____-_____, consists of all of the gaging-station records in the specified water years, inclusive, including complete months of record for partial water years, if any, and usually coincides with the period of record for the gaging station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the station description. All of the calculations for the statistical characteristics designated ANNUAL (these line headings are identified subsequently in this section), except for the ANNUAL SEVEN-DAY MINIMUM statistic, are for the designated period using complete water years.

The date or water year, as appropriate, of the first occurrence of each extreme discharge statistic is provided adjacent to the statistic. If the same extreme discharge occurs again, dates of repeated occurrence are noted in the REMARKS paragraph of the station description or in footnotes. Selected flow-duration-curve statistics and runoff data also are listed when a sufficient period of record is available. Runoff data are omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each table of daily mean discharge. Summary statistics are not computed if no discharges occur during the water year. The following comments clarify information presented under the various line headings of the SUMMARY STATISTICS section of the table.

ANNUAL TOTAL.--The total of all daily mean discharges for a given water year.

ANNUAL MEAN.--The annual mean discharge for a given water year.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL SEVEN-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the "Summary Statistics" section of the table is the initial date of the 7-day period. (The 7-day minimum flow statistic is different from the 7-day 10-year low-flow statistic.)

ANNUAL RUNOFF (AC-FT).--Indicates the total quantity of water in runoff for a drainage area for the year, in acre-feet. One acre-foot is the quantity of water needed to cover 1 acre to a depth of 1 ft and is equal to 43,560 ft³ or about 326,000 gal.

10 PERCENT EXCEEDS.--The discharge that is exceeded by 10 percent of the flow for the designated period.

50 PERCENT EXCEEDS.--The discharge that is exceeded by 50 percent of the flow for the designated period.

90 PERCENT EXCEEDS.--The discharge that is exceeded by 90 percent of the flow for the designated period.

Identifying Estimated Daily Discharge

Estimated daily discharges published in the water-discharge tables of annual USGS water-data reports are identified by flagging individual daily values with the letter "e" and printing a table footnote, "e Estimated."

Accuracy of the Records

The accuracy of discharge records depends primarily on: (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under REMARKS. Excellent means that about 95 percent of the daily discharges are within 5 percent of their true value; good, within 10 percent; and fair, within 15 percent. Records that do not meet the specified criteria are rated poor. Different accuracies might be attributed to different parts of a given record.

Daily mean discharges in this report are listed to the nearest hundredth of a cubic foot per second for daily values less than 1 ft³/s (a discharge of 0.01 ft³/s is the smallest quantified discharge); to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to three significant figures for more than 1,000 ft³/s.

Other Records Available

Information used in the preparation of the records in this report, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables, are on file with the USGS. Information on the availability of the unpublished information or on the published statistical analyses is available from USGS personnel involved with data collection at the Site.

Appendix 2: Glossary

Terms related to surface-water flow, water-quality, and other hydrologic data are defined below. Except where noted, definitions are from Uglund and others (1995).

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 ft and is equal to 43,560 ft³ or about 326,000 gal.

Cfs-day is the volume of water represented by flow of 1 ft³/s for 24 hours. It is equivalent to 86,400 ft³, about 1.9835 acre-ft, or about 646,000 gal.

Control designates a feature downstream from the gaging station that determines the stage-discharge relation at that gaging station. This feature might be a natural constriction of the channel; an artificial structure, such as a weir; or a uniform cross section over a long reach of the channel.

Control structure is a structure on a stream or canal that is used to regulate the flow or stage of the stream.

Cubic foot per second (ft³/s) is the rate of discharge representing a volume of 1 ft³ passing a given point during 1 second and is equivalent to 7.48 gal/s or 448.8 gal/min.

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

Instantaneous discharge is the discharge at a particular instant of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific time.

Dissolved refers to that material in a representative water sample that passes through a 0.45- μ m (micrometer) membrane filter. This definition is a convenient operational definition used by Federal agencies that collect water data. Determinations of dissolved constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the residue-on-evaporation method or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to indicate the change.

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

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

Gage height is the water-surface elevation referred to some arbitrary gage datum. Gage height often is used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by hydrologic unit maps of the State of Colorado (U.S. Geological Survey, 1976); each hydrologic unit is identified by an eight-digit number.

Mean concentration is the time-weighted concentration of a constituent passing a stream section during 24 hours.

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

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

Partial-record station is a particular site where limited flow or water-quality data, or both, are collected systematically over a period of years for use in hydrologic analyses.

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

Bedload (tons) is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it.

Bedload discharge (tons/d) is the quantity of bedload measured by dry weight that moves past a section as bedload in a given time.

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

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

Suspended-sediment discharge (tons/d) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (milligrams per liter) times discharge (cubic feet per second) times 0.0027.

Suspended-sediment load (tons) is a general term that refers to material in suspension. It is not synonymous with discharge or concentration.

Suspended-sediment sand break is the percentage by weight of a suspended-sediment sample that is greater than or equal to 0.0625 mm in diameter (sand). The percentage of the sample remaining is less than 0.0625 mm in diameter (silt and clay). (D.J. Gooding, U.S. Geological Survey, Cascades Volcano Observatory Sediment Laboratory, written commun., 1995).

Total-sediment discharge (tons/d) is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load, or total load, is a term that refers to the total mass of sediment (bedload plus suspended-sediment load) in transport. It is not synonymous with total-sediment discharge.

7-day 10-year low flow (7 Q10) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Empirical analysis of the relation between dissolved-solids concentration (in milligrams per liter) and specific conductance (in microsiemens per centimeter at 25°C) indicates that the magnitude of dissolved-solids concentration commonly is between 55 and 75 percent of the magnitude of specific conductance (Hem, 1985, p. 67). This relation is not constant from stream to stream, and it can vary in the same source with changes in the composition of the water.

Stage is a general term for the height of the water surface of a stream or lake above an established datum plane. Stage often is used interchangeably with the term "gage height" (Rantz and others, 1982).

Stage-discharge relation is the relation between gage height (stage) and the volume of water, per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" because streamflow might be applied to discharge whether or not it is affected by diversion or regulation.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water/sediment mixture. It is associated with the material retained on a 0.45- μ m filter.

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

Tons per day (T/DAY, tons/d) is the quantity of a substance in solution or suspension that passes a stream section during 24 hours.

Total is the total amount of a given constituent in a representative water/suspended-sediment sample, regardless of the physical or chemical form of the constituent. This term is used only when the analytical procedure ensures measurement of at least 95 percent of the constituent present in the dissolved and in suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, and of the analytical method used, is needed to judge when the results can be reported as total. (The word "total" does double duty here, indicating that the sample consists of a water/suspended-sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross section per unit of time. This term needs to be qualified, such as total sediment discharge, total chloride discharge, and so on.

Total recoverable is the filtrate (expressed as concentration in this report) of an inorganic constituent remaining from a specific volume of unfiltered water sample that is acidified with an inorganic acid, then held at an elevated temperature for a prescribed length of time (Hem, 1985).

Weighted average indicates the discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.