SELECTED HYDROLOGIC DATA FOR THE SOUTH PLATTE RIVER THROUGH DENVER, COLORADO

by Norman E. Spahr, Steven R. Blakely, and Stephen E. Hammond

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METRIC CONVERSION FACTORS

Inch-pound units in this report may be expressed as metric units by use of the following conversion factors:

To convert inch-pound units	*Multiply by*	*To obtain metric units*
cubic foot per second (ft^3/s)	0.02832	cubic meter per second
foot (ft)	0.3048	meter
foot squared (ft^2)	0.0929	meter squared
foot per second (ft/s)	0.3048	meter per second
mile (mi)	1.609	kilometer

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ABSTRACT

The U.S. Geological Survey, in cooperation with the cities of Littleton and Englewood, Colorado, studied the effects of the discharge of treated effluent from the Bi-City Waste Water Treatment Plant on low-flow conditions of the South Platte River. An 18-mile reach of the South Platte River beginning below Chatfield Reservoir and continuing through the Denver metropolitan area was studied. Chatfield Reservoir was used to regulate the flow of the South Platte River on four occasions between October 1982 and January 1984. Each flow-regulation period was used to achieve a stable low-flow condition. Data collection during low flow allowed for the study of waste assimilation during both warm- and cold-water conditions.

Water-quality, streamflow, channel geometry, traveltime, mixing-zone, reaeration, and benthic-oxygen demand data were collected at selected instream, tributary, and effluent sites. This report presents data collected during four periods of low flow along the South Platte River.

INTRODUCTION

The U.S. Geological Survey, in cooperation with the cities of Littleton and Englewood, entered into an agreement to study the effects of the discharge of treated effluent from the Bi-City Waste Water Treatment Plant (WWTP) on the quality of water in the South Platte River during low-flow conditions. This report presents data collected during four periods of low flow on the South Platte River.

SCOPE

The reach of the South Platte River studied ranges from approximately 1.0 mile below Chatfield Reservoir downstream for about 18 miles to the streamflow-gaging station 06714130, South Platte River at 50th Avenue, at Denver. The WWTP effluent enters the study reach approximately 8 miles downstream from the first sampling point.

DESCRIPTION OF HYDROLOGIC DATA

Data were collected during four periods of low flow on the South Platte River. During each of these periods, flow from Chatfield Reservoir was regulated at a constant discharge for 5 days. Flow regulation was required to achieve a stable condition in the study reach. Flow-regulation periods or data-collection periods were scheduled to study waste assimilation during both cold- and warm-water conditions. The data-collection effort during March 1983 was aborted due to unstable flow created by a rain-and-snow storm.

During the flow-regulation periods, water-quality and streamflow data were collected at the 18 instream sites shown in figure 1. Tributary, industrial effluent, and municipal effluent sites at which water-quality and streamflow data were collected are shown in figure 2. A listing of instream and tributary sites and their corresponding study reference code names is given in table 1. Study reference codes for instream sites are prefixed with an 'SP'; study reference codes for tributary sites are prefixed with a 'TR'. Numbers following the 'SP' for instream sites were incremented by 100, starting with the upstream site of SP-100. Site SP-1100A was added to the study after the initial site reference codes were established. The number following the 'TR' prefix represents the relative position the tributary site has with respect to instream sites and other tributary sites. For example, TR-310 is located downstream from SP-300 and upstream from TR-320.

Water-quality samples at instream sites were collected from the surface to the bottom at several verticals across the stream using a composite sampler. Grab samples were collected at other sites. Phosphorus and suspended-sediment samples were collected at only seven instream sites. After the flow-regulation period of October 1982, flow from site TR-1120 (Lakewood WWTP effluent) was rerouted and did not enter the South Platte River within the study reach.

Discharge measurements were made at water-quality sampling sites. At most sites, staff gages were installed for the flow-regulation period. Staff readings from one flow-regulation period cannot be related to staff readings from another period, because shifting of the staffs occurred between data-collection periods; therefore, staff readings are only usable during an individual data-collection period. Discharge values of 0.0 ft^3/s represent no flow.

Channel-geometry measurements were made at 54 sites on the South Platte River. Locations of these sites are shown in figure 3; the sites are listed in table 2. Channel-geometry measurements consist of setting up a cross section and measuring the width of the river. Depths of the water are then measured at approximately 20 equally spaced verticals in the cross section. The type of bottom material also was noted for each cross section and is listed in table 3.

Traveltime and reaeration measurements were made during three of the flow-regulation periods. Traveltime and reaeration measurement sites are shown in figure 4.

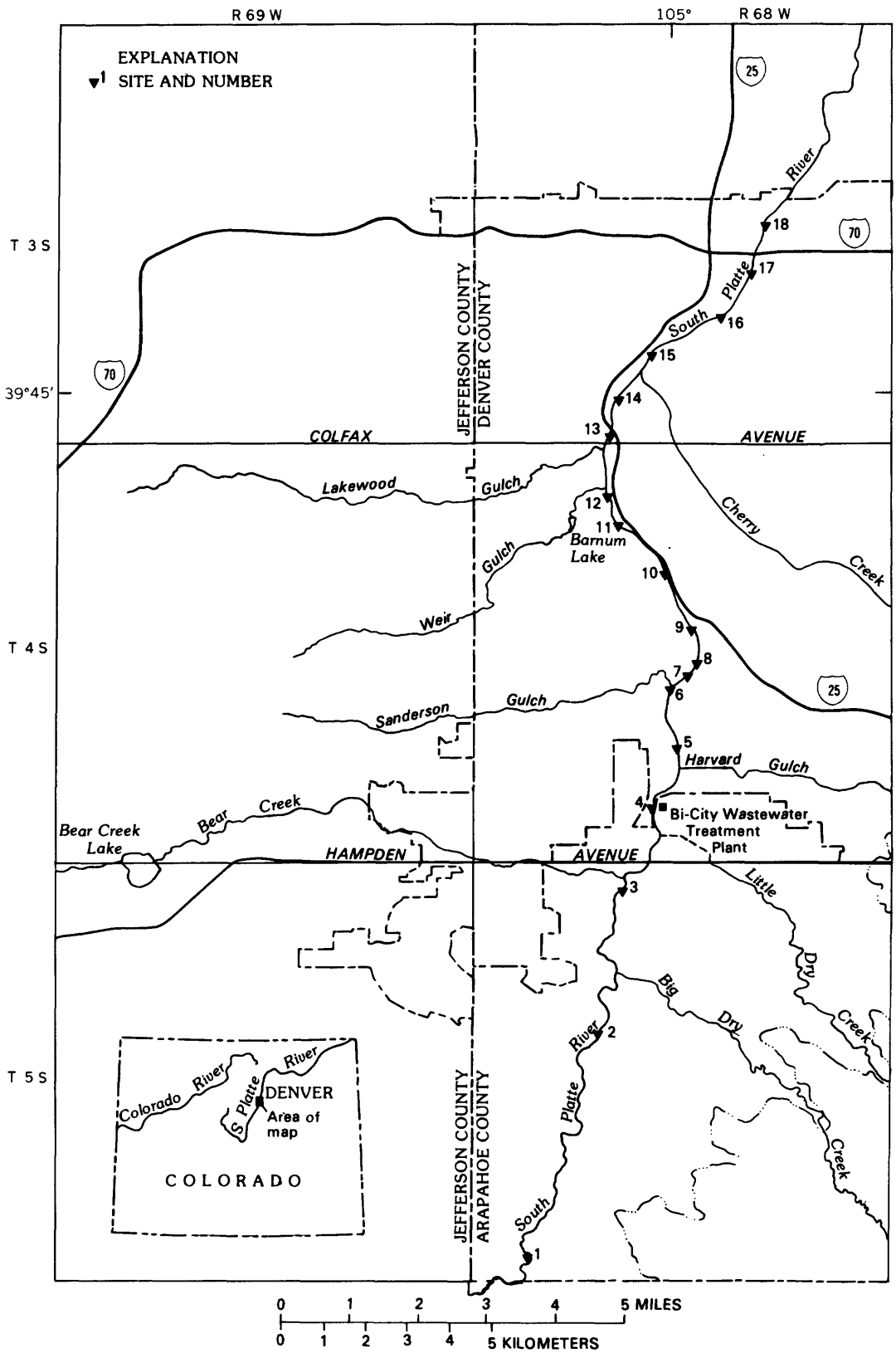

Figure 1.--Locations of South Platte River water-quality and discharge-measurement sites.

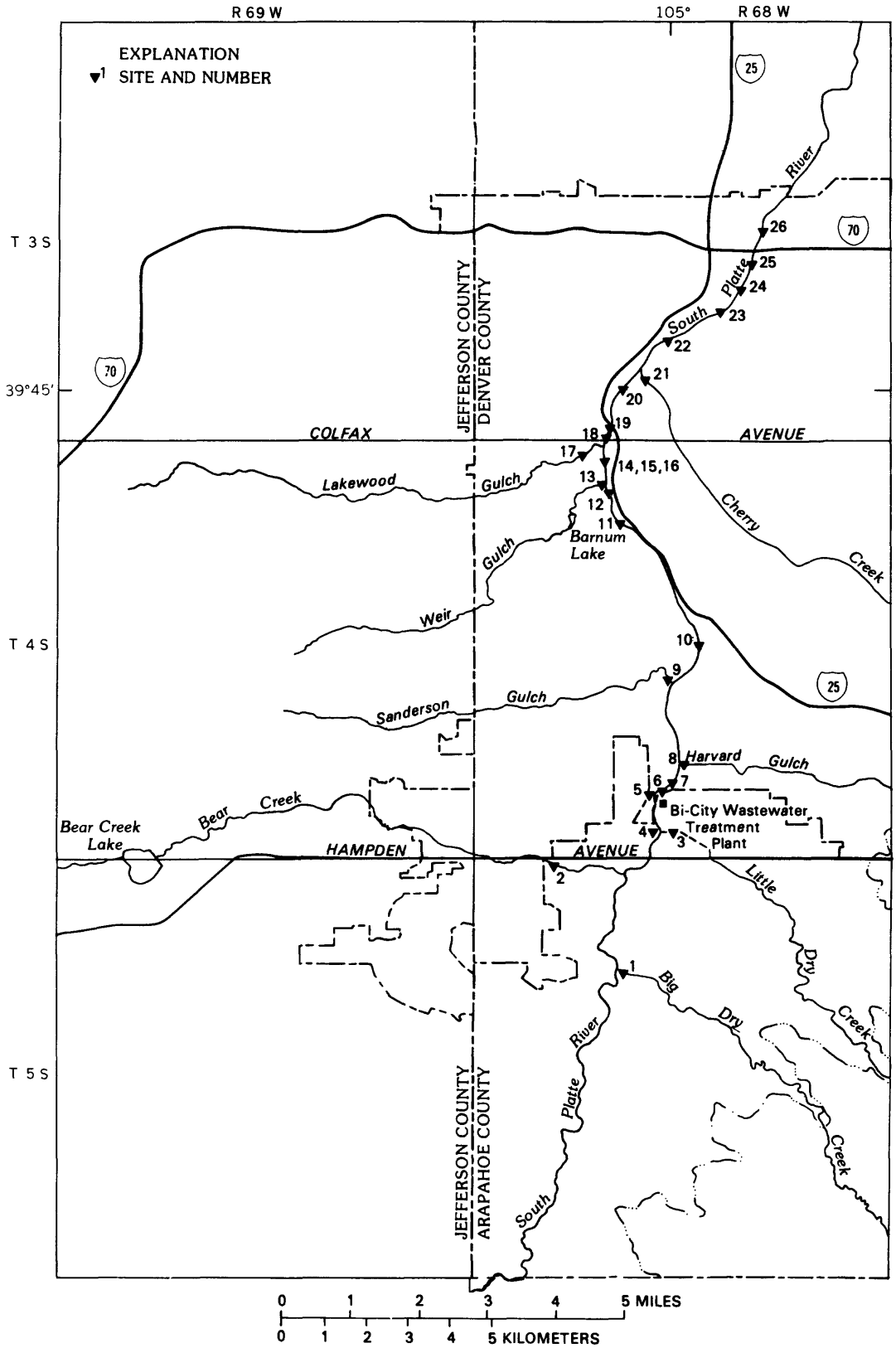

Figure 2.--Locations of tributary, municipal, and industrial water-quality and discharge-measurement sites.

Table 1.--Water-quality sampling and discharge sites for the South Platte River, tributaries, and other inflows

Figure	and site number	Study reference code	U.S. Geological Survey station code	Distance above SP-1700 (miles)	Site name
1	1	SP-100	393418105022300	18.67	South Platte River near C-470
1	2	SP-200	06710000	14.51	South Platte River at Littleton
2	1	TR-210	393750105005100	13.40	Big Dry Creek at mouth
1	3	SP-300	393855105004800	11.89	South Platte River above Bear Creek
2	2	TR-310	06711500	11.82	Bear Creek at mouth, at Sheridan
2	3	TR-320	393935105000500	10.84	Little Dry Creek at mouth
2	4	TR-330	393936105000600	10.78	Storm sewer at Dartmouth Ave. (west bank)
1	4	SP-400	06711565	10.44	South Platte River at Englewood
2	5	TR-410	394003105001300	10.25	Unnamed creek above PSCO dam (west bank)
2	6	TR-420	394005105000300	10.13	Bi-City WWTP effluent (east bank)
2	7	TR-440	394016104595100	9.82	Arapahoe PSCO effluent (west bank)
2	8	TR-460	394029104594800	9.56	Harvard Bulch at mouth
1	5	SP-500	394042104595100	9.32	South Platte River at Evans Ave.
1	6	SP-600	06711590	8.48	South Platte River at Florida Ave., at Denver
2	9	TR-610	06711610	8.44	Sanderson Gulch at mouth, at Denver
1	7	SP-700	394128104594700	8.27	South Platte River below footbridge, below Florida Ave.
1	8	SP-800	394141104593300	7.94	South Platte River above Mississippi Ave.
2	10	TR-810	394149104592900	7.79	Storm sewer at Mississippi Ave. (east bank)
1	9	SP-900	394210104594100	7.33	South Platte River above Santa Fe overpass
1	10	SP-1000	394241104595900	6.68	South Platte River below Alameda Ave.
1	11	SP-1100	394321105000500	5.59	South Platte River above Vallejo St.
2	11	TR-1110	394321105000600	5.59	Storm sewer at Vallejo St.
1	12	SP-1100A	394345105005800	5.29	South Platte River above 8th Ave. bridge
2	12	TR-1120	394352105010000	4.96	Lakewood WWTP effluent above Weir Gulch
2	13	TR-1130	06711622	4.95	Weir Gulch at mouth
2	14	TR-1135	394405105010000	4.78	Zuni St. power plant #1 (west bank)
2	15	TR-1140	394414105010200	4.53	Zuni St. power plant #2 (east bank trough)
2	16	TR-1145	394416105010400	4.56	Zuni St. power plant #3 (west bank)
2	17	TR-1150	06711800	4.38	Lakewood Gulch at mouth, at Denver
2	18	TR-1160	394424105010200	4.33	Sloans Lake outfall (old 15th Ave. bridge)
1	13	SP-1200	394433105005800	4.15	South Platte River above 17th Ave. underpass
2	19	TR-1210	394434105005800	4.14	Ellis Foods effluent
1	14	SP-1300	394502105004700	3.63	South Platte River at 7th St., near Confluence Park
2	20	TR-1305	394503105004800	3.62	Storm sewer at 7th St. above Confluence Park
2	21	TR-1310	394513105002600	3.14	Cherry Creek at mouth
1	15	SP-1400	06714000	2.73	South Platte River at Denver
2	22	TR-1420	394543104595400	2.38	Storm sewer at 23rd St. bridge
1	16	SP-1500	394602104590500	1.54	South Platte River above 31st St. bridge
2	23	TR-1510	394603104590400	1.53	Ice plant effluent at 31st St. bridge
2	24	TR-1520	06714100	1.06	Thirty-sixth Street storm sewer at Denver
1	17	SP-1600	394634104583800	0.80	South Platte River below 38th St. bridge
2	25	TR-1610	394635104583800	0.79	Storm sewer below 38th Street bridge
2	26	TR-1620	394709104583000	0.12	Storm sewer 200 yards above SP-1700
1	18	SP-1700	06714130	0.00	South Platte River at 50th Ave. at Denver

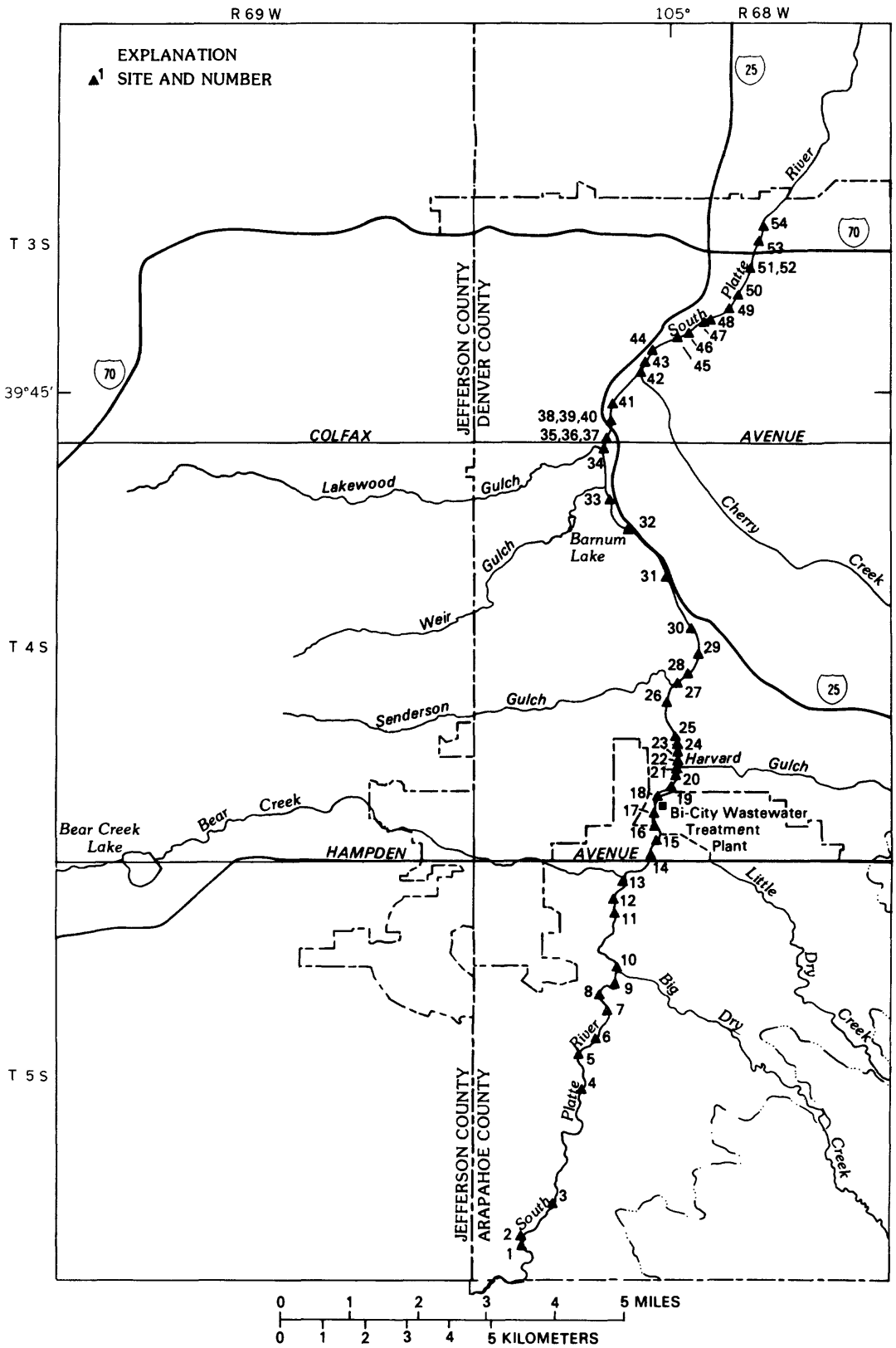

Figure 3.--Locations of channel-geometry measurement sites.

Table 2.--Channel-geometry and cross-section measurement sites for the South Platte River

Figure and site number	Study reference code	Latitude (degrees, minutes, and seconds)	Longitude (degrees, minutes, and seconds)	Figure and site number	Study reference code	Latitude (degrees, minutes, and seconds)	Longitude (degrees, minutes, and seconds)
3 1	SP-100-A	39 34 27	105 02 16	3 28	SP-700-A	39 41 29	104 59 46
3 2	SP-100-B	39 34 33	105 02 12	3 29	SP-800-A	39 41 48	104 59 30
3 3	SP-100-C	39 34 55	105 01 51	3 30	SP-900-A	39 42 11	104 59 42
3 4	SP-100-CC	39 36 19	105 01 25	3 31	SP-1000-A	39 42 46	105 00 02
3 5	SP-100-D	39 36 49	105 01 28	3 32	SP-1000-B	39 43 20	105 00 41
3 6	SP-100-E	39 37 02	105 01 09	3 33	SP-1100-A	39 43 42	105 00 56
3 7	SP-200-A	39 37 21	105 00 58	3 34	SP-1100A-A	39 44 25	105 01 02
3 8	SP-200-B	39 37 34	105 01 06	3 35	SP-1100A-B	39 44 29	105 01 00
3 9	SP-200-C	39 37 45	105 00 52	3 36	SP-1100A-C	39 44 31	105 00 58
3 10	SP-200-D	39 37 54	105 00 50	3 37	SP-1200-A	39 44 33	105 00 58
3 11	SP-200-E	39 38 34	105 00 52	3 38	SP-1200-AA	39 44 35	105 00 57
3 12	SP-200-F	39 38 47	105 00 51	3 39	SP-1200-B	39 44 40	105 00 55
3 13	SP-300-A	39 38 59	105 00 46	3 40	SP-1200-BB	39 44 43	105 00 55
3 14	SP-300-B	39 39 15	105 00 20	3 41	SP-1200-C	39 45 00	105 00 52
3 15	SP-300-C	39 39 28	105 00 10	3 42	SP-1300-A	39 45 20	105 00 24
3 16	SP-300-D	39 39 40	105 00 13	3 43	SP-1300-B	39 45 23	105 00 20
3 17	SP-400-A	39 39 55	105 00 15	3 44	SP-1300-C	39 45 31	105 00 15
3 18	SP-400-B	39 40 07	104 59 57	3 45	SP-1400-A	39 45 43	104 59 55
3 19	SP-400-C	39 40 13	104 59 52	3 46	SP-1400-B	39 45 53	104 59 34
3 20	SP-400-D	39 40 17	104 59 51	3 47	SP-1400-C	39 45 58	104 59 25
3 21	SP-400-E	39 40 23	104 59 48	3 48	SP-1400-D	39 45 59	104 59 14
3 22	SP-400-F	39 40 29	104 59 49	3 49	SP-1500-A	39 46 12	104 58 57
3 23	SP-400-G	39 40 36	104 59 50	3 50	SP-1500-B	39 46 19	104 58 50
3 24	SP-400-H	39 40 42	104 59 51	3 51	SP-1600-A	39 46 38	104 58 39
3 25	SP-500-A	39 40 43	104 59 51	3 52	SP-1600-B	39 46 43	104 58 39
3 26	SP-500-B	39 41 08	105 00 01	3 53	SP-1600-C	39 46 49	104 58 37
3 27	SP-600-A	39 41 23	104 59 55	3 54	SP-1600-D	39 47 07	104 58 29

Table 3.--Bottom-type data for cross-section locations

[A=rocky bottom, pool and riffle, light vegetation; D=rocky bottom, channel control, light vegetation; E=rocky bottom, channel control, medium vegetation; C=cobble; G=gravel; M=mud (silt and organics); R=rocks; S=sand; s=silt; SH=shale]

Figure and site number	Study reference code	Bottom-type code	Bottom description	Figure and site number	Study reference code	Bottom-type code	Bottom description
1	SP-100-A	A	CS	28	SP-700-A	A	CR
2	SP-100-B	A	GS	29	SP-800-A	A	CGR
3	SP-100-C	A	S	30	SP-000-A	A	CG
4	SP-100-CC	A	G	31	SP-1000-A	A	CSH
5	SP-100-D	A	CS	32	SP-1000-B	A	R
6	SP-100-E	A	S	33	SP-1000-A	A	CSH
7	SP-200-A	A	GS	34	SP-1100A-A	A	R
8	SP-200-B	A	CSs	35	SP-1100A-B	A	CGS
9	SP-200-C	A	Ss	36	SP-1100A-C	A	CGS
10	SP-200-D	A	SMs	37	SP-1200-A	A	RS
11	SP-200-E	A	GS	38	SP-1200-AA	A	CGS
12	SP-200-F	A	CGS	39	SP-1200-B	A	S
13	SP-300-A	A	GSs	40	SP-1200-B	E	RS
14	SP-300-B	A	GSSH	41	SP-1200-C	E	RS
15	SP-300-C	A	S	42	SP-1300-A	A	CRSs
16	SP-300-D	A	RSs	43	SP-1300-B	A	RSs
17	SP-400-A	A	SSHs	44	SP-1300-C	A	CR
18	SP-400-B	A	SM	45	SP-1400-A	A	CRSs
19	SP-400-C	A	RSs	46	SP-1400-B	A	C
20	SP-400-D	A	RSSHs	47	SP-1400-C	A	Ss
21	SP-400-E	A	RSH	48	SP-1400-D	A	RS
22	SP-400-F	A	CRSH	49	SP-1500-A	A	RS
23	SP-400-G	A	CRS	50	SP-1500-B	D	SSH
24	SP-400-H	A	RSs	51	SP-1600-A	D	CRSSH
25	SP-500-A	A	CGRS	52	SP-1600-B	A	C
26	SP-500-B	A	CRSs	53	SP-1600-C	A	RSs
27	SP-600-A	A	CRSs	54	SP-1600-D	A	CSs

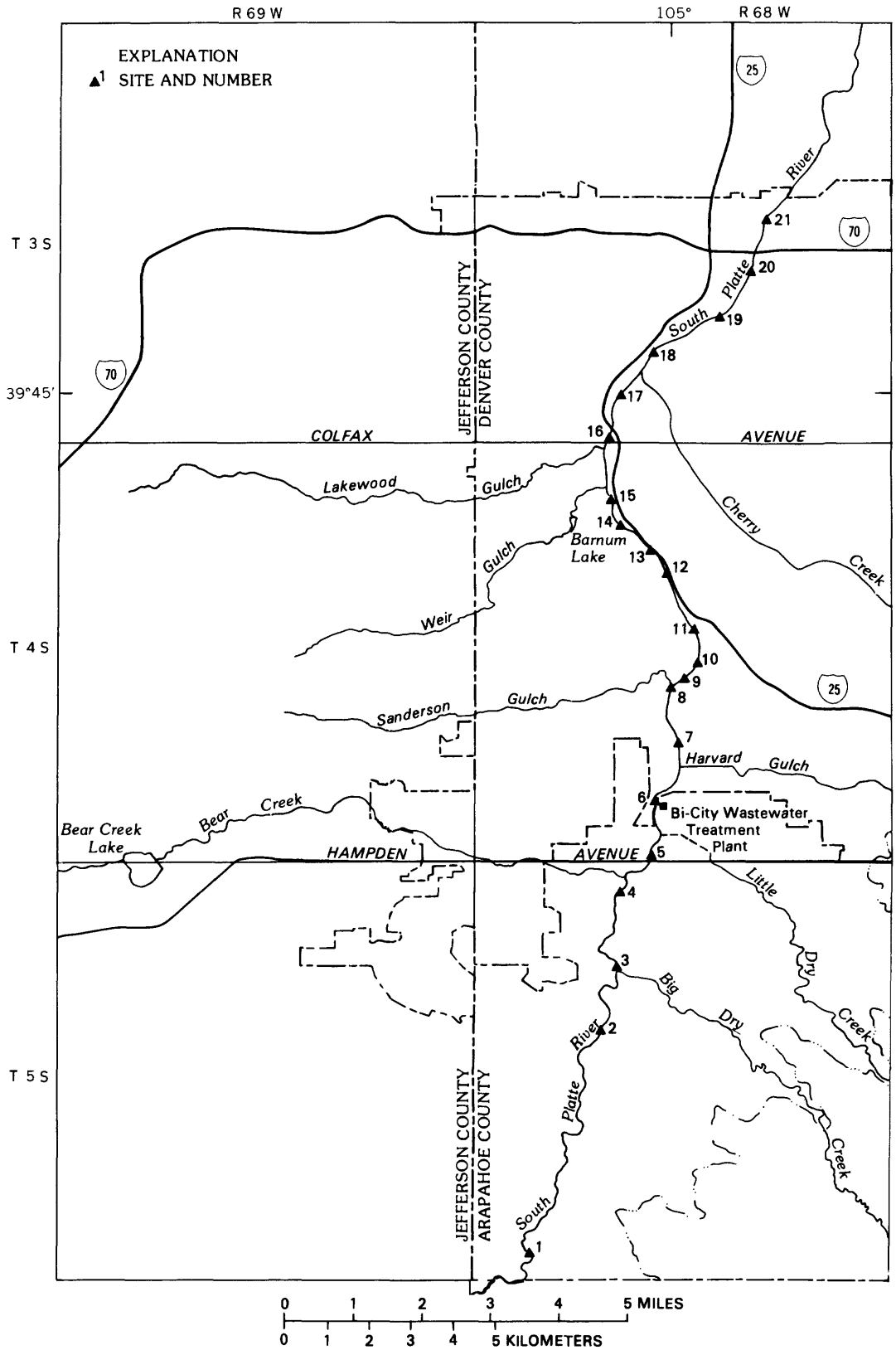

Figure 4.--Locations of traveltime and reaeration measurement sites.

Mixing-zone measurements were made on the South Platte River downstream from the effluent of the Bi-City WWTP during three of the flow-regulation periods. These measurements were made by injecting rhodamine WT dye into the effluent, and subsequently measuring dye concentrations in the South Platte River downstream from the effluent. At cross sections downstream from the effluent, and at a control section upstream from the effluent, dye samples were collected at eight equally spaced verticals (A-H) across the river. Vertical A was near the east bank and vertical H was near the west bank. Effluent-dye samples were collected at three equally spaced verticals in the outfall. In addition to dye samples, total ammonia and residual chlorine samples were collected, and measurements of pH, dissolved oxygen, specific conductance, and temperature were made at each vertical. A listing of the measurement sites for the mixing-zone studies is given in table 4.

Table 4.--Mixing-zone measurement sites for the South Platte River
[Site numbers and locations are the same as for channel-geometry sites; negative distance designates downstream]

Study reference code	Distance from waste-water treatment plant effluent (miles)	Distance upstream from SP-1700 (miles)
SP-400-A----------	0.32	10.45
SP-400-B----------	-.08	10.05
SP-400-C----------	-.23	9.90
SP-400-D----------	-.32	9.81
SP-400-E----------	-.45	9.68
SP-400-F----------	-.56	9.57
SP-400-G----------	-.70	9.43
SP-400-H----------	-.80	9.33

Data for each flow-regulation period are presented in separate sections because each regulation period represents different flow and temperature conditions. Traveltime, reaeration, and benthic oxygen-demand data are presented in the last sections of the report. All nitrogen species concentrations are reported in the form milligrams per liter as N. Abbreviations used in the data tables in this report are:

acre-ft = acre foot;
CBOD = carbonaceous biochemical oxygen demand;
deg C = degree Celsius;
mg/L = milligrams per liter;
mo = month;
µg/L = microgram per liter;
µmho = micromho;
yr = year;
--- = missing data.

FLOW-REGULATION PERIOD OF OCTOBER 1982

The first flow-regulation period was during October 1982. Flow from Chatfield Reservoir was regulated at 30 ft^3/s. Water-quality data collected during this period are given in table 5; streamflow measurements and channel-geometry measurements are given in tables 6 and 7. Measurements made during the mixing-zone study are listed in table 8.

FLOW-REGULATION PERIOD OF MARCH 1983

The second flow-regulation period was during March 1983. Flow from Chatfield Reservoir was regulated at 30 ft^3/s. After data collection had begun, a rain-and-snow storm developed and created runoff to the South Platte River from tributaries and storm sewers. This runoff resulted in an unsteady flow condition, and data collection was aborted. Water-quality data collected during this period are listed in table 9; stream-flow and channel-geometry measurements are given in tables 10 and 11. No mixing-zone data were collected during this period.

FLOW-REGULATION PERIOD OF SEPTEMBER 1983

Flow was regulated from Chatfield Reservoir at 10 ft^3/s for the third period during September 1983. Water-quality data collected during this period are listed in table 12. Streamflow and channel-geometry measurements are listed in tables 13 and 14. Mixing-zone data collected in September 1983 are given in table 15.

FLOW-REGULATION PERIOD OF JANUARY 1984

The fourth flow-regulation period occurred during January 1984, with flow from Chatfield Reservoir regulated at 10 ft^3/s. Water-quality data collected are given in table 16. Streamflow and channel-geometry measurements are listed in tables 17 and 18. Mixing-zone data are listed in table 19.

TRAVELTIME AND REAERATION DATA

Traveltime data were collected during the October 1982, September 1983, and January 1984 flow-regulation periods. Reaeration data were collected during the September 1983 and January 1984 periods. Sites at which traveltime and reaeration data were collected are shown in figure 4 and listed in table 20. Reference codes for some sites in table 20 are not given because these sites did not correspond to any other data-collection phase. Basic dye-curve characteristics for the traveltime and reaeration measurements are listed in tables 21 and 22.

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982

South Platte River near C-470
Reference code SP-100 USGS station number 393418105022300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0630	11.0	380	379	6.9	7.9	7.9	85	0.080	1.30	1.2
10 07 82	1110	14.5	370	375	8.7	8.3	8.6	91	<.060	1.30	---
10 07 82	1530	18.5	380	369	7.6	8.3	7.8	82	<.060	3.00	---
10 07 82	1910	15.0	339	394	7.5	8.2	7.8	82	.100	1.20	1.1
10 07 82	2230	12.5	370	373	7.4	7.9	8.4	82	<.060	.70	---
10 08 82	0200	13.0	370	375	7.6	8.0	8.5	82	<.060	.80	---
10 08 82	0505	12.5	370	377	7.2	8.0	8.3	81	<.060	.80	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0630	<0.020	----	0.20	1.5	274	0.37	0.050	12	1.6
10 07 82	1110	<.020	----	.10	1.4	275	.37	.060	2	2.8
10 07 82	1530	<.020	----	.10	3.1	223	.30	.050	<1	5.1
10 07 82	1910	<.020	----	.20	1.4	273	.37	.110	<1	4.8
10 07 82	2230	<.020	----	.10	.80	207	.28	.070	15	2.6
10 08 82	0200	<.020	----	.20	1.0	198	.27	.060	8	1.9
10 08 82	0505	.020	.18	.20	1.0	208	.28	.050	6	1.5

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River at Littleton
Reference code SP-200 USGS station number 06710000

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0730	10.0	480	487	7.7	7.8	7.8	112	.070	.90	.83
10 07 82	1145	13.0	470	484	10.6	8.1	8.4	118	.060	.60	.54
10 07 82	1610	17.0	480	474	8.7	8.4	8.0	100	<.060	.70	----
10 07 82	1755	15.5	480	482	7.7	8.1	8.2	109	<.060	.80	----
10 07 82	2300	14.0	470	481	7.1	7.8	8.6	109	<.060	.80	----
10 08 82	0230	12.5	475	479	6.8	7.9	8.3	109	.080	.80	.72
10 08 82	0535	11.5	470	482	7.8	7.8	8.3	109	<.060	1.00	----

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0730	<0.020	----	0.40	1.3	345	0.47	---	---	2.2
10 07 82	1145	<.020	----	<.10	---	344	.47	---	---	2.1
10 07 82	1610	<.020	----	.30	1.0	282	.38	---	---	2.5
10 07 82	1755	<.020	----	.30	1.1	275	.37	---	---	3.1
10 07 82	2300	<.020	----	.30	1.1	281	.38	---	---	2.4
10 08 82	0230	<.020	----	.30	1.1	276	.38	---	---	1.8
10 08 82	0535	.020	.28	.30	1.3	277	.38	---	---	1.5

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Big Dry Creek at mouth
Reference code TR-210 USGS station number 393750105005100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0625	8.0	1100	1340	8.3	8.2	8.2	284	0.070	1.90	1.8
10 07 82	1635	15.5	1230	1370	8.0	7.9	7.9	281	<.060	2.10	---
10 08 82	0040	12.0	1200	1380	8.0	7.9	8.0	290	<.060	1.10	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0625	0.020	4.6	4.6	6.5	868	1.2	---	---	1.8
10 07 82	1635	.020	4.6	4.6	6.7	892	1.2	---	---	2.4
10 08 82	0040	<.020	4.9	4.9	6.0	897	1.2	---	---	.7

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River above Bear Creek
Reference code SP-300 USGS station number 393855105004800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0815	10.0	550	567	7.8	7.8	7.8	130	0.100	0.80	0.70
10 07 82	1240	14.5	590	563	---	8.0	8.3	126	.090	.60	.51
10 07 82	1640	17.0	580	557	7.9	8.0	8.0	126	.090	.60	.51
10 07 82	2020	14.5	550	556	7.2	7.9	8.0	126	.100	.70	.60
10 07 82	2320	14.0	550	561	7.2	7.7	8.5	126	.060	1.10	1.0
10 08 82	0255	13.0	555	558	7.5	7.8	7.8	126	.080	.70	.62
10 08 82	0600	12.0	550	558	7.7	7.8	8.9	137	<.060	1.10	----

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0815	<0.020	---	0.50	1.3	415	0.56	---	---	2.1
10 07 82	1240	<.020	---	.40	1.0	340	.46	---	---	2.6
10 07 82	1640	<.020	---	.50	1.1	330	.45	---	---	2.3
10 07 82	2020	<.020	---	.40	1.1	328	.45	---	---	3.2
10 07 82	2320	<.020	---	.40	1.5	328	.45	---	---	1.6
10 08 82	0255	<.020	---	.40	1.1	326	.44	---	---	2.7
10 08 82	0600	<.020	---	.40	1.5	318	.43	---	---	1.5

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Bear Creek at mouth, at Sheridan
Reference code TR-310 USGS station number 06711500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0715	9.5	235	274	8.0	8.8	7.7	76	0.090	0.80	0.71
10 07 82	1550	16.0	280	254	10.6	7.9	8.4	63	<.060	.80	----
10 07 82	1700	15.5	240	252	7.9	8.6	8.4	63	<.060	1.00	----
10 07 82	2015	14.0	270	258	7.5	7.5	7.9	72	<.060	.90	----
10 07 82	2235	14.0	265	262	7.8	6.8	8.3	72	<.060	.80	----
10 08 82	0110	12.5	260	266	8.0	7.5	8.3	72	<.060	.90	----
10 08 82	0400	12.0	280	265	8.3	7.6	8.3	78	<.060	1.20	----

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0715	<.020	---	.20	1.0	168	.23	---	---	---
10 07 82	1550	<.020	---	.10	.90	159	.22	---	---	2.9
10 07 82	1700	<.020	---	.20	1.2	156	.21	---	---	2.5
10 07 82	2015	<.020	---	.20	1.1	154	.21	---	---	2.2
10 07 82	2235	<.020	---	.20	1.0	163	.22	---	---	3.1
10 08 82	0110	<.020	---	.30	1.2	172	.23	---	---	3.9
10 08 82	0400	<.020	---	.20	1.4	152	.21	---	---	1.5

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Little Dry Creek at mouth
Reference code TR-320 USGS station number 393935105000500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0740	8.5	1390	1670	9.1	8.1	8.1	303	0.100	1.40	1.3
10 07 82	1525	14.0	1460	1620	8.6	8.0	8.1	281	<.060	.90	----
10 08 82	0115	12.5	1500	1710	8.2	7.9	8.1	272	.080	.80	.72

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0740	0.020	2.8	2.8	4.2	1070	1.5	---	---	0.8
10 07 82	1525	<.020	---	2.6	3.5	1190	1.6	---	---	2.3
10 08 82	0115	<.020	---	2.9	3.7	1120	1.5	---	---	1.2

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Storm sewer at Dartmouth Ave. (west bank)
Reference code TR-330 USGS station number 393936105000600

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0830	12.0	320	352	6.9	5.6	7.9	85	0.130	1.30	1.2
10 07 82	1830	12.5	180	217	8.0	7.9	7.6	36	.070	2.00	1.9
10 08 82	0130	7.5	180	197	9.2	7.5	8.2	36	.060	2.70	2.6

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0830	<0.020	----	<0.10	---	235	0.32	---	---	1.2
10 07 82	1830	.020	.08	.10	2.1	130	.18	---	---	5.8
10 08 82	0130	<.020	----	<.10	---	124	.17	---	---	1.8

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River at Englewood
Reference code SP-400 USGS station number 06711565

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0900	10.5	480	492	8.1	7.8	7.9	121	0.150	1.30	1.1
10 07 82	1310	12.5	480	479	10.2	8.0	7.7	109	.100	.70	.60
10 07 82	1710	15.0	460	471	9.3	8.2	8.1	109	.070	.70	.63
10 07 82	2040	14.5	465	464	7.6	8.1	8.4	109	<.060	.80	----
10 07 82	2340	14.0	410	462	7.1	7.9	8.2	109	.070	1.00	.93
10 08 82	0320	12.8	460	471	7.2	7.9	7.5	109	<.060	.80	----
10 08 82	0620	12.0	470	476	7.6	7.8	8.3	109	<.060	1.10	----

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0900	<0.020	---	0.50	1.8	352	0.48	0.030	2	1.3
10 07 82	1310	<.020	---	.50	1.2	292	.40	.060	2	3.2
10 07 82	1710	<.020	---	.50	1.2	281	.38	.070	5	2.5
10 07 82	2040	<.020	---	.50	1.3	272	.37	.050	10	1.7
10 07 82	2340	<.020	---	.50	1.5	270	.37	.070	10	1.8
10 08 82	0320	<.020	---	.40	1.2	276	.38	.070	6	1.5
10 08 82	0620	<.020	---	.40	1.5	274	.37	.060	12	1.1

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Unnamed creek above PSCO dam (west bank)
Reference code TR-410 USGS station number 394003105001300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0855	10.0	1300	1540	8.1	7.9	8.2	411	0.100	2.20	2.1
10 07 82	1910	13.0	1300	1590	7.2	7.9	8.4	426	.080	2.50	2.4
10 08 82	0150	12.0	1350	736	7.5	7.9	8.3	435	.080	1.20	1.1

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0855	0.030	6.9	6.9	9.1	926	1.3	---	---	2.5
10 07 82	1910	.030	6.6	6.6	9.1	1030	1.4	---	---	1.7
10 08 82	0150	.500	5.1	5.6	6.8	1010	1.4	---	---	---

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Bi-City WWTP effluent (east bank)
Reference code TR-420 USGS station number 394005105000300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0635	20.0	830	1060	9.2	7.0	7.3	230	17.0	26.0	9.0
10 07 82	0940	20.0	1000	1050	7.6	6.5	7.4	226	15.0	23.0	8.0
10 07 82	1215	20.5	1080	1070	9.8	6.8	7.3	226	14.0	22.0	8.0
10 07 82	1500	20.5	1100	1140	8.8	6.9	7.8	236	17.0	25.0	8.0
10 07 82	1815	20.0	1000	1150	6.2	6.6	8.2	254	21.0	35.0	14.
10 07 82	2030	20.0	1100	1140	6.2	6.8	8.1	245	21.0	30.0	9.0
10 07 82	2255	19.5	1100	1120	6.3	6.6	8.7	245	20.0	24.0	4.0
10 08 82	0125	20.0	1100	1100	6.2	6.7	8.4	236	19.0	27.0	8.0
10 08 82	0415	19.5	1100	1080	6.3	6.8	7.8	163	17.0	31.0	14.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0635	0.040	---	<0.10	---	589	0.80	---	---	16.6
10 07 82	0940	<.020	---	<.10	---	655	.89	---	---	20.2
10 07 82	1215	.030	---	<.10	---	604	.82	---	---	9.8
10 07 82	1500	.020	---	<.10	---	646	.88	---	---	12.3
10 07 82	1815	<.030	---	<.10	---	641	.87	---	---	22.1
10 07 82	2030	.030	---	<.10	---	636	.86	---	---	41.1
10 07 82	2255	.030	---	<.10	---	621	.84	---	---	14.1
10 08 82	0125	.030	---	<.10	---	622	.85	---	---	16.1
10 08 82	0415	.060	---	<.10	---	617	.84	---	---	20.1

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Arapahoe PSCO effluent (west bank)
Reference code TR-440 USGS station number 394016104595100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0750	17.0	3100	3310	11.0	6.8	7.2	19	0.180	3.50	3.3
10 07 82	1040	17.5	3400	3310	9.2	6.8	7.5	18	.200	4.50	4.3
10 07 82	1300	18.0	3400	3340	10.0	6.9	7.0	9	.110	7.00	6.9
10 07 82	1635	14.5	1300	3360	9.8	8.1	7.2	9	.180	3.00	2.8
10 07 82	1855	18.0	5900	3360	9.1	6.8	7.1	9	.130	5.20	5.1
10 07 82	2100	18.0	4900	3370	8.3	7.0	6.9	9	.130	3.30	3.2
10 07 82	2320	17.5	4900	3390	8.6	6.7	7.2	9	.170	6.20	6.0
10 08 82	0200	18.0	4600	3390	8.3	6.8	7.3	9	.140	2.30	2.2
10 08 82	0440	17.5	4700	3420	8.3	7.0	7.6	9	.120	5.10	5.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0750	0.070	5.5	5.6	9.1	2560	3.5	---	---	0.9
10 07 82	1040	.070	1.0	1.1	5.6	2800	3.8	---	---	2.5
10 07 82	1300	.070	5.7	5.8	13.	2940	4.0	---	---	1.6
10 07 82	1635	.060	5.2	5.3	8.3	2770	3.8	---	---	1.6
10 07 82	1855	<.060	---	5.8	11.	3010	4.1	---	---	2.4
10 07 82	2100	.060	5.7	5.8	9.1	3090	4.2	---	---	1.8
10 07 82	2320	.060	5.6	5.7	12.	3090	4.2	---	---	2.0
10 08 82	0200	.070	5.5	5.6	7.9	3080	4.2	---	---	2.5
10 08 82	0440	.080	5.9	6.0	11.	2980	4.1	---	---	.8

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Harvard Gulch at mouth
Reference code TR-460 USGS station number 394029104594800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0725	13.5	1080	1150	10.0	7.4	8.2	284	0.100	2.50	2.4
10 07 82	1015	13.5	1170	1170	9.8	7.8	8.4	290	.080	3.00	2.9
10 07 82	1240	14.0	1200	1200	10.5	7.9	8.4	290	<.020	1.80	---
10 07 82	1525	14.5	1300	1180	10.4	8.1	8.5	290	<.060	1.10	---
10 07 82	1840	14.0	1250	1140	7.6	7.8	8.4	272	<.060	2.00	---
10 07 82	2045	13.5	1200	1150	7.0	8.0	8.3	272	.090	2.20	2.1
10 07 82	2305	14.0	1100	1160	7.0	7.9	8.6	272	<.060	3.50	---
10 08 82	0140	14.0	1200	1150	7.4	7.9	8.8	272	<.060	1.50	---
10 08 82	0425	14.0	1270	1190	7.4	7.9	8.5	136	<.060	1.80	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0725	0.060	3.0	3.1	5.6	680	0.92	---	---	1.9
10 07 82	1015	.040	3.0	3.0	6.0	848	1.2	---	---	1.8
10 07 82	1240	.030	3.1	3.1	4.9	774	1.1	---	---	2.3
10 07 82	1525	.030	3.0	3.0	4.1	838	1.1	---	---	2.5
10 07 82	1840	<.020	---	3.0	5.0	753	1.0	---	---	2.7
10 07 82	2045	.040	2.8	2.8	5.0	749	1.0	---	---	---
10 07 82	2305	.030	2.6	2.6	6.1	750	1.0	---	---	4.7
10 08 82	0140	.020	2.6	2.6	4.1	701	.95	---	---	2.0
10 08 82	0425	.040	2.9	2.9	4.7	610	.83	---	---	1.3

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River at Evans Ave.
Reference code SP-500 USGS station number 394042104595100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0930	12.0	610	619	7.6	7.5	7.6	140	3.20	8.30	5.1
10 07 82	1340	15.5	670	655	9.5	7.4	7.7	144	3.60	6.20	2.6
10 07 82	1735	16.0	670	647	7.9	7.5	7.4	136	4.00	7.70	3.7
10 07 82	2120	15.5	640	630	6.9	7.5	8.1	136	5.10	5.50	.40
10 07 82	2355	15.5	645	647	6.4	7.4	7.8	144	4.40	5.40	1.0
10 08 82	0340	14.0	610	600	6.6	7.5	8.3	126	2.90	5.10	2.2
10 08 82	0630	13.0	585	581	7.0	7.6	8.3	126	1.80	2.80	1.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0930	0.030	0.57	0.60	8.9	419	0.57	1.40	4	6.4
10 07 82	1340	.040	.46	.50	6.7	389	.53	1.40	4	8.6
10 07 82	1735	.040	.46	.50	8.2	383	.52	1.50	2	8.6
10 07 82	2120	<.020	----	.48	6.0	366	.50	1.70	<1	9.4
10 07 82	2355	.030	.47	.50	5.9	376	.51	2.10	11	9.1
10 08 82	0340	.030	.47	.50	5.6	344	.47	1.20	6	5.6
10 08 82	0630	.040	.46	.50	3.3	338	.46	.870	8	3.4

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River at Florida Ave., at Denver
Reference code SP-600 USGS station number 06711590

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	1000	12.5	570	582	8.1	7.8	8.1	136	1.80	2.90	1.1
10 07 82	1430	17.0	670	644	8.5	7.5	8.0	136	3.30	6.20	2.9
10 07 82	1800	15.5	650	639	7.8	7.8	7.8	136	3.40	6.20	2.8
10 07 82	2137	14.5	640	635	6.9	7.6	7.9	144	4.50	7.20	2.7
10 08 82	0010	15.0	640	645	6.5	7.5	7.8	144	5.20	6.00	.80
10 08 82	0405	14.0	640	619	6.4	7.6	8.2	136	3.50	6.40	2.9
10 08 82	0650	13.0	580	586	6.9	7.7	8.7	126	2.00	4.70	2.7

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1000	0.040	0.66	0.70	3.6	406	0.55	---	---	---
10 07 82	1430	.050	.55	.60	6.8	382	.52	---	---	7.7
10 07 82	1800	.060	.54	.60	6.8	373	.51	---	---	6.3
10 07 82	2137	.050	.45	.50	7.7	368	.50	---	---	7.0
10 08 82	0010	.050	.45	.50	6.5	375	.51	---	---	9.7
10 08 82	0405	.050	.45	.50	6.9	355	.48	---	---	5.6
10 08 82	0650	.050	.55	.60	5.3	332	.45	---	---	4.7

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Sanderson Gulch at mouth
Reference code TR-610 USGS station number 06711610

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0820	8.0	550	559	12.6	7.4	8.2	158	0.080	1.70	1.6
10 07 82	1100	12.0	580	556	10.2	7.7	8.5	163	.070	1.30	1.2
10 07 82	1325	17.0	560	547	9.6	7.9	8.7	154	<.060	1.30	---
10 07 82	1655	17.5	550	548	8.6	7.7	8.3	154	.070	2.30	2.2
10 07 82	1915	15.5	560	555	7.1	8.0	8.2	154	<.060	1.50	---
10 07 82	2115	14.0	560	554	7.1	7.9	7.7	154	<.060	1.30	---
10 07 82	2340	13.0	540	555	7.8	7.7	8.7	163	.060	1.20	1.1
10 08 82	0215	12.0	570	572	8.0	7.7	8.5	154	<.060	1.20	---
10 08 82	0450	11.0	600	565	8.3	7.9	8.2	163	<.060	1.70	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0820	.020	1.1	1.1	2.8	357	.49	---	---	2.2
10 07 82	1100	.020	1.1	1.1	2.4	415	.56	---	---	3.3
10 07 82	1325	.030	1.1	1.1	2.4	320	.44	---	---	3.4
10 07 82	1655	.020	.98	1.0	3.3	329	.45	---	---	4.2
10 07 82	1915	.020	.98	1.0	2.5	339	.46	---	---	4.0
10 07 82	2115	.030	.87	.90	2.2	348	.47	---	---	---
10 07 82	2340	.020	.98	1.0	2.2	332	.45	---	---	3.0
10 08 82	0215	<.020	----	1.0	2.2	344	.47	---	---	2.2
10 08 82	0450	.020	.98	1.0	2.7	350	.48	---	---	1.9

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River below footbridge, below Florida
Reference code SP-700 USGS station number 394128104594700

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0615	15.0	600	603	6.4	7.9	7.7	136	2.00	4.10	2.1
10 07 82	1215	14.3	700	647	8.3	7.8	8.1	144	3.50	5.10	1.6
10 07 82	1530	15.5	660	656	9.7	7.6	8.0	136	3.00	5.60	2.6
10 07 82	1810	15.5	660	647	8.9	7.7	7.3	136	3.10	6.70	3.6
10 07 82	2215	15.0	650	641	6.5	7.7	7.8	136	4.20	7.70	3.5
10 08 82	0050	15.0	670	647	6.3	7.5	8.4	136	4.90	7.20	2.3
10 08 82	0350	14.5	650	636	6.0	7.6	8.6	181	4.00	7.20	3.2

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0615	0.050	0.65	0.70	4.8	451	0.61	---	---	3.2
10 07 82	1215	<.020	----	.70	5.8	462	.63	---	---	7.9
10 07 82	1530	.060	.64	.70	6.3	468	.64	---	---	4.6
10 07 82	1810	.060	.64	.70	7.4	392	.53	---	---	4.0
10 07 82	2215	.050	.55	.60	8.3	379	.52	---	---	8.5
10 08 82	0050	.050	.55	.60	7.8	378	.51	---	---	6.2
10 08 82	0350	.050	.55	.60	7.8	346	.47	---	---	5.8

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River above Mississippi Ave.
Reference code SP-800 USGS station number 394141104593300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0730	12.0	---	604	7.0	7.5	8.1	136	1.90	4.10	2.2
10 07 82	1250	14.5	650	655	8.2	7.5	7.8	144	3.60	4.90	1.3
10 07 82	1610	15.5	660	658	8.3	7.5	8.2	136	3.30	4.00	.70
10 07 82	1835	15.5	680	659	7.6	7.7	8.0	136	2.90	5.80	2.9
10 07 82	2230	15.0	650	652	6.4	7.6	8.0	136	4.30	5.60	1.3
10 08 82	0115	15.0	680	651	6.1	7.6	8.0	136	4.60	9.00	4.4
10 08 82	0400	14.5	650	637	6.0	7.5	8.7	139	4.20	5.30	1.1

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0730	0.050	0.75	0.80	4.9	430	0.58	---	---	---
10 07 82	1250	.050	.65	.70	5.6	454	.62	---	---	6.7
10 07 82	1610	.060	.64	.70	4.7	385	.52	---	---	2.5
10 07 82	1835	<.060	----	.70	6.5	387	.53	---	---	6.3
10 07 82	2230	.050	.65	.70	6.3	374	.51	---	---	8.5
10 08 82	0115	.050	.55	.60	9.6	383	.52	---	---	6.6
10 08 82	0400	.070	.53	.60	5.9	359	.49	---	---	5.3

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Storm Sewer at Mississippi Ave. (east bank)
Reference code TR-810 USGS station number 394149104592900

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0855	18.0	950	971	9.6	7.8	8.5	321	0.080	2.80	2.7
10 07 82	1135	18.5	940	953	9.4	7.8	8.4	308	<.060	3.30	---
10 07 82	1355	20.5	950	941	9.1	7.7	8.3	300	<.060	1.70	---
10 07 82	1715	21.5	900	961	8.0	7.5	8.1	299	<.060	1.70	---
10 07 82	1930	19.0	950	947	7.2	7.6	8.2	300	<.060	2.20	---
10 07 82	2125	18.0	975	969	7.1	7.8	8.0	308	<.060	2.00	---
10 07 82	2400	17.5	950	943	7.5	7.8	8.5	308	<.060	2.50	---
10 08 82	0235	17.0	1000	952	7.8	7.9	8.5	308	<.060	1.60	---
10 08 82	0505	18.5	960	960	7.5	7.9	8.4	308	<.060	1.50	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0855	<0.020	---	5.0	7.8	543	0.74	---	---	1.6
10 07 82	1135	<.020	---	4.7	8.0	708	.96	---	---	2.3
10 07 82	1355	<.020	---	4.8	6.5	585	.80	---	---	3.0
10 07 82	1715	<.020	---	4.8	6.5	698	.95	---	---	4.6
10 07 82	1930	<.020	---	5.0	7.2	592	.81	---	---	17.1
10 07 82	2125	<.020	---	4.9	6.9	615	.84	---	---	5.2
10 07 82	2400	<.020	---	5.0	7.5	594	.81	---	---	2.0
10 08 82	0235	<.020	---	4.8	6.4	597	.81	---	---	.5
10 08 82	0505	<.020	---	5.1	6.6	593	.81	---	---	1.1

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River above Santa Fe overpass
Reference code SP-900 USGS station number 394210104594100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0830	12.0	610	612	7.0	7.6	8.0	136	2.00	4.00	2.0
10 07 82	1312	15.0	630	628	10.6	7.6	7.8	144	2.80	5.50	2.7
10 07 82	1630	15.5	650	654	8.6	7.5	7.5	136	3.10	6.40	3.3
10 07 82	1850	15.0	670	653	6.9	7.7	7.8	136	3.00	5.40	2.4
10 07 82	2250	14.5	680	647	6.5	7.7	8.0	136	4.10	7.40	3.3
10 08 82	0130	15.0	660	659	6.5	7.6	8.2	136	4.90	8.20	3.3
10 08 82	0420	14.0	670	652	6.1	7.6	8.5	117	4.20	6.80	2.6

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0830	0.060	0.14	0.20	4.2	445	0.61	---	---	---
10 07 82	1312	.060	.74	.80	6.3	446	.61	---	---	6.6
10 07 82	1630	.070	.73	.80	7.2	390	.53	---	---	4.4
10 07 82	1850	.080	.82	.90	6.3	388	.53	---	---	4.5
10 07 82	2250	.070	.63	.70	8.1	365	.50	---	---	8.3
10 08 82	0130	.060	.64	.70	8.9	378	.51	---	---	4.7
10 08 82	0420	.070	.53	.60	7.4	365	.50	---	---	4.7

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River below Alameda Ave.
Reference code SP-1000 USGS station number 394241104595900

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0930	13.5	615	627	7.6	7.7	7.9	136	2.10	5.30	3.2
10 07 82	1230	14.5	520	601	9.4	7.7	7.8	126	1.50	3.40	1.9
10 07 82	1500	16.0	650	668	9.4	7.6	8.3	144	3.10	5.10	2.0
10 07 82	1925	15.5	520	660	6.9	7.7	8.0	136	2.90	6.10	3.2
10 07 82	2335	14.0	660	656	6.8	7.7	7.5	144	3.80	7.30	3.5
10 08 82	0150	14.0	660	658	6.3	7.7	8.5	136	4.40	5.90	1.5
10 08 82	0440	14.0	680	667	6.0	7.6	8.1	144	4.50	4.60	.10

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0930	0.070	0.84	0.91	6.2	458	0.62	---	---	3.4
10 07 82	1230	.070	.83	.90	4.3	358	.49	---	---	3.1
10 07 82	1500	.100	.80	.90	6.0	458	.62	---	---	4.8
10 07 82	1925	.090	.91	1.0	7.1	394	.54	---	---	2.1
10 07 82	2335	.080	.72	.80	8.1	375	.51	---	---	5.3
10 08 82	0150	.080	.72	.80	6.7	370	.50	---	---	4.9
10 08 82	0440	.100	.70	.80	5.4	363	.49	---	---	3.7

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River above Vallejo St.
Reference code SP-1100 USGS station number 394321105000500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	1000	14.0	690	639	8.0	7.6	8.3	136	2.20	3.40	1.2
10 07 82	1300	15.0	625	609	12.8	8.0	8.5	126	1.50	3.40	1.9
10 07 82	1600	16.0	690	642	11.6	7.9	8.3	136	2.40	5.30	2.9
10 07 82	2030	15.5	690	671	7.3	7.7	7.8	136	2.90	5.10	2.2
10 07 82	2355	14.0	690	664	7.0	7.7	7.9	136	3.00	5.00	2.0
10 08 82	0215	14.0	685	655	6.5	7.8	8.4	136	3.80	5.70	1.9
10 08 82	0500	14.0	650	671	5.8	7.6	8.2	281	3.60	5.00	1.4

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1000	0.080	0.92	1.0	4.4	463	0.63	0.940	2	2.7
10 07 82	1300	.080	.92	1.0	4.4	461	.63	.700	4	2.9
10 07 82	1600	.110	.89	1.0	6.3	461	.63	1.20	<1	3.9
10 07 82	2030	.110	.89	1.0	6.1	411	.56	1.00	<1	8.6
10 07 82	2355	.110	.79	.90	5.9	396	.54	1.30	10	8.7
10 08 82	0215	.100	.80	.90	6.6	379	.52	1.40	8	4.1
10 08 82	0500	.110	.79	.90	5.9	392	.53	1.70	6	2.9

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Storm Sewer at Vallejo St.
Reference code TR-1110 USGS station number 394321105000600

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	1005	14.5	1200	1350	7.7	7.9	8.7	362	<0.060	5.10	---
10 07 82	1940	15.5	1300	1480	7.6	8.1	8.8	417	.140	3.70	3.6
10 08 82	0240	15.0	1380	1520	8.1	8.2	8.7	417	<.060	4.60	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1005	<0.020	---	4.9	10	899	1.2	---	---	2.2
10 07 82	1940	.020	6.5	6.5	10	893	1.2	---	---	3.3
10 08 82	0240	.030	6.0	6.0	11	969	1.3	---	---	.8

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River above 8th Ave. bridge
Reference code SP-1100A USGS station number 394345105005800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	1100	15.0	690	656	7.8	7.7	8.3	144	2.30	3.70	1.4
10 07 82	1345	16.0	690	616	10.2	8.0	7.9	126	1.40	2.90	1.5
10 07 82	1645	16.0	690	656	7.4	---	8.4	144	2.60	3.60	1.0
10 07 82	2055	15.0	690	672	6.6	7.6	7.7	144	2.90	6.70	3.8
10 08 82	0020	14.0	690	668	6.4	7.7	8.8	144	3.00	6.50	3.5
10 08 82	0235	14.0	685	660	6.3	7.7	8.1	144	3.10	5.20	2.1
10 08 82	0515	14.0	690	668	6.0	7.6	8.6	144	4.00	5.40	1.4

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1100	0.090	1.0	1.1	4.8	474	0.64	---	---	---
10 07 82	1345	.090	1.1	1.2	4.1	364	.50	---	---	3.0
10 07 82	1645	.100	.90	1.0	4.6	472	.64	---	---	3.8
10 07 82	2055	.110	.99	1.1	7.8	402	.55	---	---	5.3
10 08 82	0020	.100	.90	1.0	7.5	395	.54	---	---	7.1
10 08 82	0235	.100	.80	.90	6.1	386	.52	---	---	3.8
10 08 82	0515	.110	.79	.90	6.3	380	.52	---	---	3.3

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Lakewood WWTP effluent above Weir Gulch
Reference code TR-1120 USGS station number 394352105010000

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0615	16.0	900	956	6.4	7.5	7.6	256	11.0	12.0	1.0
10 07 82	0900	17.0	875	942	6.6	8.4	8.0	263	11.0	14.0	3.0
10 07 82	1200	17.5	925	960	6.4	7.6	8.1	263	12.0	15.0	3.0
10 07 82	1500	18.0	960	986	5.9	7.7	7.9	263	14.0	23.0	9.0
10 07 82	1820	20.0	900	1020	6.0	7.5	8.5	263	14.0	20.0	6.0
10 07 82	2045	18.0	1110	1030	6.2	7.5	8.1	272	13.0	17.0	4.0
10 07 82	2350	18.0	970	1020	5.0	7.5	8.6	263	12.0	18.0	6.0
10 08 82	0150	18.0	970	1000	5.4	7.5	8.8	263	12.0	15.0	3.0
10 08 82	0340	18.0	920	983	6.2	7.4	8.7	190	12.0	22.0	10.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0615	0.190	0.01	0.20	12	576	0.78	---	---	8.2
10 07 82	0900	.030	.17	.20	14	549	.75	---	---	5.1
10 07 82	1200	.180	.02	.20	15	509	.69	---	---	5.3
10 07 82	1500	.250	.05	.30	23	533	.72	---	---	6.8
10 07 82	1820	.290	.01	.30	20	577	.78	---	---	11.4
10 07 82	2045	.260	.04	.30	17	564	.77	---	---	5.1
10 07 82	2350	.230	.00	.20	18	508	.69	---	---	9.1
10 08 82	0150	.270	.03	.30	15	543	.74	---	---	10.4
10 08 82	0340	.180	.12	.30	22	446	.61	---	---	9.3

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Weir Gulch at mouth
Reference code TR-1130 USGS station number 06711622

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	1045	13.0	650	752	8.7	7.9	8.3	181	0.110	1.40	1.3
10 07 82	2000	13.5	720	780	6.6	7.7	8.7	200	.080	1.90	1.8
10 08 82	0250	12.5	725	780	7.5	7.8	8.6	91	<.060	2.10	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1045	0.070	1.8	1.9	3.3	518	0.70	---	---	7.0
10 07 82	2000	.060	1.8	1.9	3.8	478	.65	---	---	5.4
10 08 82	0250	.080	1.7	1.8	3.9	475	.65	---	---	4.2

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Zuni St. power plant #1 (west bank)
Reference code TR-1135 USGS station number 394405105010000

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos)		Dissolved oxygen (mg/L)	pH (standard units)		Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
			Field	Lab		Field	Lab				
10 07 82	1115	16.5	480	513	7.1	8.0	8.5	109	0.570	2.30	1.7
10 07 82	2020	17.0	500	536	7.0	8.1	8.4	109	.520	3.60	3.1
10 08 82	0310	16.5	510	550	7.4	8.1	8.5	109	.510	5.50	5.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1115	0.030	1.2	1.2	3.5	359	0.49	---	---	2.4
10 07 82	2020	.160	1.0	1.2	4.8	309	.42	---	---	2.4
10 08 82	0310	.170	1.0	1.2	6.7	309	.42	---	---	1.1

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Zuni St. power plant #3 (west bank)
Reference code TR-1145 USGS station number 394416105010400

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	1140	22.0	1320	1470	6.2	7.0	8.3	353	<0.060	2.70	---
10 07 82	2040	21.0	1400	1480	6.4	6.9	8.6	353	.290	2.30	2.0
10 08 82	0330	21.0	1300	1470	7.2	7.0	8.3	353	.240	2.20	2.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1140	<0.020	---	4.6	7.3	992	1.3	---	---	1.0
10 07 82	2040	<.020	---	4.7	7.0	926	1.3	---	---	1.4
10 08 82	0330	<.020	---	4.6	6.8	905	1.2	---	---	3.1

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Lakewood Gulch at mouth
Reference code TR-1150 USGS station number 06711800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	1245	13.5	710	794	9.0	8.1	8.5	208	0.160	1.30	1.1
10 07 82	2050	11.5	750	782	8.3	8.0	8.5	190	.070	1.10	1.0
10 08 82	0345	11.0	650	724	9.3	8.0	8.7	254	<.060	1.40	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1245	0.020	1.7	1.7	3.0	570	0.78	---	---	2.5
10 07 82	2050	<.020	1.6	1.7	2.8	488	.66	---	---	---
10 08 82	0345	.030	1.5	1.5	2.9	441	.60	---	---	1.2

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Sloans Lake outfall (old 15th Ave. bridge)
Reference code TR-1160 USGS station number 394424105010200

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	1315	17.0	940	1010	7.8	8.4	8.1	190	<0.060	3.70	---
10 07 82	2140	15.5	1050	1000	7.6	8.5	8.5	190	.090	7.20	7.1
10 08 82	0355	15.5	925	986	8.2	8.5	8.4	181	<.060	7.30	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1315	0.030	0.67	0.70	4.4	649	0.88	---	---	28.1
10 07 82	2140	<.020	----	.80	8.0	636	.86	---	---	7.6
10 08 82	0355	.020	.68	.70	8.0	609	.83	---	---	6.6

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River above 17th Ave. underpass
Reference code SP-1200 USGS station number 394433105005800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0620	13.0	690	690	7.3	7.8	7.7	149	3.60	8.60	5.0
10 07 82	1010	13.0	720	693	7.8	7.8	7.9	144	3.00	5.30	2.3
10 07 82	1400	14.5	700	658	8.4	8.0	7.7	136	2.20	5.10	2.9
10 07 82	1810	15.0	680	665	7.6	8.0	7.8	144	1.80	3.00	1.2
10 07 82	2210	13.5	720	630	7.5	7.8	8.1	144	2.60	6.60	4.0
10 08 82	0120	13.0	670	687	7.5	7.8	8.1	154	2.20	5.50	3.3
10 08 82	0430	13.0	670	679	7.4	7.8	8.3	144	3.00	5.90	2.9

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0620	0.110	1.1	1.2	9.8	426	0.58	---	---	5.9
10 07 82	1010	.110	.99	1.1	6.4	406	.55	---	---	4.4
10 07 82	1400	.090	1.1	1.2	6.3	389	.53	---	---	3.4
10 07 82	1810	.080	1.2	1.3	4.3	403	.55	---	---	4.0
10 07 82	2210	.090	1.1	1.2	7.8	414	.56	---	---	5.2
10 08 82	0120	.120	.98	1.1	6.6	405	.55	---	---	3.7
10 08 82	0430	.120	.98	1.1	7.0	396	.54	---	---	4.8

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Ellis Foods effluent
Reference code TR-1210 USGS station number 394434105005800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	1350	31.0	320	376	4.3	6.4	6.8	63	1.00	15.0	14.0
10 07 82	2200	20.5	320	332	5.9	7.4	8.6	63	.140	2.80	2.7
10 08 82	0410	19.0	290	320	7.5	7.4	8.5	54	<.060	5.10	----

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1350	0.050	0.05	0.10	15.0	313	0.43	---	---	---
10 07 82	2200	.060	.04	.10	2.9	179	.24	---	---	3.0
10 08 82	0410	.070	.03	.10	5.2	170	.23	---	---	.9

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River at 7th St., near Confluence Park
Reference code SP-1300 USGS station number 394502105004700

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0650	12.5	720	699	7.2	7.7	7.7	149	3.30	5.00	1.7
10 07 82	1045	13.0	730	699	7.8	7.8	8.2	144	2.80	5.50	2.7
10 07 82	1435	15.0	700	653	8.2	8.0	8.0	136	2.20	3.70	1.5
10 07 82	1845	15.0	660	650	6.7	7.9	8.1	144	1.60	3.60	2.0
10 07 82	2235	14.5	720	692	6.9	7.8	8.6	144	2.80	5.10	2.3
10 08 82	0140	12.0	670	690	6.7	7.8	8.4	144	2.60	5.70	3.1
10 08 82	0500	13.5	680	685	7.0	7.8	8.5	144	2.80	6.50	3.7

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0650	0.120	1.1	1.2	6.2	427	0.58	---	---	4.0
10 07 82	1045	.120	.98	1.1	6.6	411	.56	---	---	4.5
10 07 82	1435	.100	1.1	1.2	4.9	476	.65	---	---	5.6
10 07 82	1845	.100	1.1	1.2	4.8	393	.53	---	---	5.0
10 07 82	2235	.130	1.1	1.2	6.3	423	.58	---	---	5.7
10 08 82	0140	.120	1.1	1.2	6.9	395	.54	---	---	6.2
10 08 82	0500	.130	.97	1.1	7.6	393	.53	---	---	3.4

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Storm sewer at 7th St. above Confluence Park
Reference code TR-1305 USGS station number 394503105004800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	1445	17.5	900	1040	7.5	8.0	8.0	245	0.070	4.00	3.9
10 07 82	2240	16.0	1100	1150	7.2	6.4	8.5	282	.500	6.40	5.9
10 08 82	0430	16.0	650	738	8.1	6.4	8.4	172	.100	5.10	5.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1445	0.210	3.9	4.1	8.1	702	0.95	---	---	---
10 07 82	2240	.450	.85	1.3	7.7	722	.98	---	---	4.0
10 08 82	0430	.150	3.5	3.6	8.7	429	.58	---	---	5.3

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Cherry Creek at mouth
Reference code TR-1310 USGS station number 394513105002600

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0705	9.5	1130	1250	8.8	8.2	8.2	248	0.080	2.00	1.9
10 07 82	0945	13.0	1100	1230	12.4	9.0	8.3	245	<.060	1.10	---
10 07 82	1235	18.0	1200	1230	9.9	9.0	8.5	245	<.060	1.40	---
10 07 82	1535	19.5	1180	1210	9.9	8.6	8.5	236	<.060	1.30	---
10 07 82	1845	16.0	1200	1270	7.5	8.2	8.6	254	.120	1.80	1.7
10 07 82	2105	14.0	1270	1340	7.2	8.1	8.2	263	.080	1.20	1.1
10 08 82	0015	13.0	1190	1340	6.6	8.1	8.5	263	<.060	1.80	---
10 08 82	0215	13.0	1260	1290	6.8	8.2	9.1	254	<.060	1.70	---
10 08 82	0405	12.5	1260	1330	8.0	8.2	8.8	259	<.060	1.90	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0705	0.030	3.3	3.3	5.3	788	1.1	---	---	1.0
10 07 82	0945	<.020	---	3.4	4.5	864	1.2	---	---	3.1
10 07 82	1235	.070	3.0	3.1	4.5	801	1.1	---	---	3.0
10 07 82	1535	.060	2.8	2.9	4.2	800	1.1	---	---	1.9
10 07 82	1845	.070	2.8	2.9	4.7	756	1.0	---	---	5.5
10 07 82	2105	.070	2.9	3.0	4.2	854	1.2	---	---	4.3
10 08 82	0015	.060	3.0	3.1	4.9	875	1.2	---	---	5.8
10 08 82	0215	.050	3.2	3.2	4.9	839	1.1	---	---	1.5
10 08 82	0405	.050	3.1	3.1	5.0	857	1.2	---	---	1.3

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River at Denver
Reference code SP-1400 USGS station number 06714000

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0725	12.0	740	741	7.8	7.8	7.8	158	3.10	4.00	0.90
10 07 82	1110	13.5	780	738	8.4	7.9	8.0	154	2.70	5.40	2.7
10 07 82	1515	16.0	750	702	8.4	8.1	8.2	144	2.10	4.00	1.9
10 07 82	1910	15.0	730	688	7.3	8.0	8.3	144	1.40	3.00	1.6
10 07 82	2300	14.0	750	751	7.4	7.9	8.2	154	2.60	5.10	2.5
10 08 82	0200	14.0	700	730	7.4	7.8	8.6	154	2.10	6.40	4.3
10 08 82	0515	13.0	700	723	7.4	7.9	8.1	154	2.40	5.50	3.1

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0725	0.120	1.3	1.4	5.4	402	0.55	---	---	3.3
10 07 82	1110	.120	1.3	1.4	6.8	441	.60	---	---	3.4
10 07 82	1515	.110	1.3	1.4	5.4	422	.57	---	---	3.6
10 07 82	1910	.100	1.3	1.4	4.4	422	.57	---	---	6.8
10 07 82	2300	.140	1.3	1.4	6.5	451	.61	---	---	4.7
10 08 82	0200	.140	1.2	1.3	7.7	421	.57	---	---	3.5
10 08 82	0515	.140	1.2	1.3	6.8	419	.57	---	---	4.7

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Storm sewer at 23rd St. bridge
Reference code TR-1420 USGS station number 394543104595400

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	1515	16.0	1200	1340	8.1	7.4	8.0	281	0.100	1.60	1.5
10 07 82	2305	15.0	1100	1300	7.7	7.4	8.8	281	.120	6.60	6.5
10 08 82	0450	15.5	1200	1340	8.5	7.5	8.2	290	<.060	5.10	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1515	<0.020	---	2.7	4.3	829	1.1	---	---	2.4
10 07 82	2305	<.020	---	3.0	9.6	830	1.1	---	---	2.7
10 08 82	0450	<.020	---	2.8	7.9	811	1.1	---	---	.8

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River above 31st St. bridge
Reference code SP-1500 USGS station number 394602104590500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0800	12.0	780	754	7.4	7.8	7.7	158	3.00	6.30	3.3
10 07 82	1145	14.0	800	749	8.4	7.8	8.0	144	2.50	4.80	2.3
10 07 82	1550	16.0	750	720	8.3	8.0	8.3	154	1.80	3.60	1.8
10 07 82	1950	15.0	740	703	6.5	7.9	8.0	144	1.30	2.80	1.5
10 07 82	2330	14.0	770	750	6.7	7.9	8.5	154	2.50	5.10	2.6
10 08 82	0230	13.5	750	745	6.8	7.8	8.4	154	2.00	5.50	3.5

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0800	0.130	1.5	1.6	7.9	474	0.64	---	---	4.3
10 07 82	1145	.140	1.5	1.6	6.4	452	.61	---	---	3.6
10 07 82	1550	.150	1.4	1.6	5.2	509	.69	---	---	4.0
10 07 82	1950	.120	1.5	1.6	4.4	429	.58	---	---	5.3
10 07 82	2330	.160	1.4	1.6	6.7	458	.62	---	---	5.8
10 08 82	0230	.170	1.4	1.6	7.1	439	.60	---	---	4.7

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Ice plant effluent at 31st St. bridge
Reference code TR-1510 USGS station number 394603104590400

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	1545	19.5	1280	1250	6.1	7.4	8.5	308	0.310	2.80	2.5
10 07 82	2340	20.0	1200	1280	5.5	7.2	8.6	317	.600	2.30	1.7
10 08 82	0510	20.5	1200	1290	6.2	7.2	8.8	144	.400	1.50	1.1

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1545	0.120	5.0	5.1	7.9	919	1.2	---	---	3.4
10 07 82	2340	.100	5.0	5.1	7.4	800	1.1	---	---	1.7
10 08 82	0510	.140	5.1	5.2	6.7	757	1.0	---	---	1.2

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Thirty-sixth Street Storm Sewer
Reference code TR-1520 USGS station number 06714100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0736	15.5	490	499	8.3	9.0	8.1	111	0.100	1.60	1.5
10 07 82	1025	18.0	330	339	8.3	8.6	8.0	72	.060	3.80	3.7
10 07 82	1315	18.0	360	360	7.9	8.0	8.0	63	<.060	4.90	---
10 07 82	1615	19.0	550	549	7.9	3.9	4.0	- 4	1.30	3.50	2.2
10 07 82	1920	19.0	400	380	7.4	7.9	7.6	82	<.060	4.20	---
10 07 82	2135	18.0	390	435	7.6	7.8	7.6	91	<.060	4.10	---
10 08 82	0035	17.5	460	480	6.6	7.9	8.2	100	.070	3.90	3.8
10 08 82	0235	17.5	510	512	6.8	8.2	8.0	109	<.060	3.60	---
10 08 82	0425	17.5	420	436	7.8	8.1	8.4	236	<.060	2.50	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0736	0.070	1.8	1.9	3.5	307	0.42	---	---	2.8
10 07 82	1025	.040	.96	1.0	4.8	257	.35	---	---	---
10 07 82	1315	.120	.78	.90	5.8	229	.31	---	---	7.8
10 07 82	1615	.070	1.9	2.0	5.5	488	.66	---	---	---
10 07 82	1920	.050	.95	1.0	5.2	252	.34	---	---	---
10 07 82	2135	.040	1.2	1.2	5.3	257	.35	---	---	9.0
10 08 82	0035	.020	1.6	1.6	5.5	287	.39	---	---	7.1
10 08 82	0235	.110	2.0	2.1	5.7	309	.42	---	---	6.1
10 08 82	0425	.070	1.4	1.5	4.0	261	.35	---	---	---

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River below 38th St. bridge
Reference code SP-1600 USGS station number 394634104583800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0830	12.0	790	757	7.8	7.8	7.8	172	2.90	5.40	2.5
10 07 82	1220	14.5	775	748	8.8	8.0	8.2	154	2.40	3.90	1.5
10 07 82	1625	16.0	775	721	8.2	8.0	8.1	154	1.70	4.00	2.3
10 07 82	1815	14.5	730	695	6.1	7.9	7.9	144	1.00	3.60	2.6
10 08 82	0015	14.0	760	751	6.3	7.9	8.2	154	2.30	3.50	1.2
10 08 82	0250	13.5	750	746	6.6	7.9	8.3	154	1.90	4.50	2.6

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0830	0.140	1.6	1.7	7.1	529	0.72	---	---	5.8
10 07 82	1220	.160	1.5	1.7	5.6	442	.60	---	---	3.7
10 07 82	1625	.150	1.4	1.6	5.6	514	.70	---	---	5.6
10 07 82	1815	.120	1.5	1.6	5.2	417	.57	---	---	---
10 08 82	0015	.170	1.5	1.7	5.2	462	.63	---	---	5.8
10 08 82	0250	.180	1.4	1.6	6.1	439	.60	---	---	4.1

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Storm sewer below 38th Street bridge
Reference code TR-1610 USGS station number 394635104583800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0805	13.0	725	914	---	11.6	7.9	167	0.180	1.50	1.3
10 07 82	1045	16.0	850	921	8.0	8.0	8.2	181	.170	1.00	.83
10 07 82	1345	17.0	950	998	7.4	8.9	7.8	217	.270	3.80	3.5
10 07 82	1640	16.5	900	914	7.3	7.9	8.2	163	<.600	4.00	----
10 07 82	1950	16.0	650	903	6.4	7.6	8.3	163	.190	3.70	3.5
10 07 82	2215	15.0	880	901	7.9	7.6	8.3	163	.110	2.20	2.1
10 08 82	0050	18.0	900	921	6.0	7.8	8.0	172	.180	1.00	.82
10 08 82	0250	15.0	905	920	6.4	7.8	8.5	163	.120	1.50	1.4
10 08 82	0440	15.0	870	924	7.4	7.8	8.6	173	.100	2.80	2.7

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0805	0.040	2.4	2.4	3.9	633	0.86	---	---	1.5
10 07 82	1045	.060	2.1	2.2	3.2	605	.82	---	---	----
10 07 82	1345	.100	2.2	2.3	6.1	675	.92	---	---	----
10 07 82	1640	.070	2.0	2.1	6.1	688	.94	---	---	13.2
10 07 82	1950	.060	2.1	2.2	5.9	533	.72	---	---	11.1
10 07 82	2215	.040	2.2	2.2	4.4	576	.78	---	---	4.4
10 08 82	0050	.050	2.3	2.3	3.3	614	.84	---	---	5.4
10 08 82	0250	.040	2.3	2.3	3.8	593	.81	---	---	2.9
10 08 82	0440	.050	2.3	2.3	5.1	585	.80	---	---	2.8

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Storm sewer 200 yards above SP-1700
Reference code TR-1620 USGS station number 394709104583000

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos)		Dissolved oxygen (mg/L)	pH (standard units)		Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
			Field	Lab		Field	Lab				
10 07 82	1245	16.5	2250	2150	---	8.4	8.6	380	<0.060	1.40	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	1245	<0.020	---	5.8	7.2	1390	1.9	---	---	1.4

Table 5.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

South Platte River at 50th Ave.
Reference code SP-1700 USGS station number 06714130

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
10 07 82	0905	12.0	800	766	7.5	7.8	7.7	158	2.60	3.50	0.90
10 07 82	1310	15.5	780	760	9.4	8.0	8.1	154	2.40	4.30	1.9
10 07 82	1650	16.5	790	733	8.5	8.0	8.2	144	1.60	3.20	1.6
10 07 82	2045	14.5	725	711	6.0	7.9	8.4	144	1.00	2.40	1.4
10 08 82	0035	14.0	760	761	6.2	7.9	7.8	154	2.30	4.40	2.1
10 08 82	0310	13.0	760	758	6.2	7.8	8.1	154	1.90	4.90	3.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
10 07 82	0905	0.150	1.6	1.8	5.3	538	0.73	0.870	2	2.9
10 07 82	1310	.150	1.6	1.8	6.1	451	.61	1.00	5	6.0
10 07 82	1650	.160	1.5	1.7	4.9	528	.72	.880	5	2.6
10 07 82	2045	.130	1.6	1.7	4.1	436	.59	.620	<1	5.2
10 08 82	0035	.180	1.6	1.8	6.2	464	.63	1.00	<1	7.7
10 08 82	0310	.180	1.5	1.7	6.6	452	.61	.970	10	5.8

Table 6.--Discharge-measurement data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982

Study reference code	Date month	day	year	Time	Width (feet)	Area (square feet)	Velocity (feet per second)	Discharge (cubic feet per second)	Gage height (feet)
SP-100	10	07	82	0700	47.	41.	0.79	32.7	1.06
SP-100	10	07	82	1120	----	----	----	-----	1.06
SP-100	10	07	82	1508	----	----	----	-----	1.06
SP-200	10	07	82	0810	57.	69.	.77	52.5	1.54
SP-200	10	07	82	1145	----	----	----	-----	1.54
SP-200	10	07	82	1525	----	----	----	-----	1.54
SP-300	10	07	82	0922	32.	27.	1.89	51.7	1.58
SP-300	10	07	82	1242	----	----	----	-----	1.59
SP-300	10	07	82	1604	33.	24.	2.16	51.6	1.58
SP-400	10	07	82	1030	112.	129.	.87	112.	.73
SP-400	10	07	82	1315	----	----	----	-----	.73
SP-400	10	07	82	1650	----	----	----	-----	.73
SP-500	10	07	82	0715	108.	206.	.62	129.	2.53
SP-500	10	07	82	1205	108.	210.	.70	147.	2.59
SP-600	10	07	82	0845	76.	136.	.96	131.	2.15
SP-600	10	07	82	1330	76.	149.	1.08	161.	2.28
SP-700	10	07	82	0950	85.	141.	1.07	151.	1.86
SP-700	10	07	82	1430	85.	147.	1.09	160.	1.90
SP-800	10	07	82	1105	106.	149.	1.03	154.	.90
SP-800	10	07	82	1525	108.	157.	.95	150.	.89
SP-900	10	07	82	0636	95.	169.	.89	150.	2.12
SP-900	10	07	82	1102	95.	178.	.93	165.	2.18
SP-900	10	07	82	1537	95.	174.	.92	160.	2.17
SP-1000	10	07	82	0739	126.	168.	.86	145.	2.02
SP-1000	10	07	82	1240	128.	185.	.94	174.	2.11
SP-1000	10	07	82	1632	129.	169.	.96	163.	2.08
SP-1100	10	07	82	0841	84.	148.	1.01	149.	4.52
SP-1100	10	07	82	1335	85.	159.	1.05	167.	4.63
SP-1100	10	07	82	1727	86.	158.	1.02	161.	4.58
SP-1100A	10	07	82	1429	103.	130.	1.28	166.	1.79
SP-1100A	10	07	82	1819	102.	128.	1.20	153.	1.75
SP-1200	10	07	82	0807	106.	111.	1.36	151.	1.24
SP-1200	10	07	82	1402	106.	134.	1.42	189.	1.41
SP-1300	10	07	82	0950	121.	157.	1.04	163.	1.68
SP-1300	10	07	82	1510	121.	170.	1.09	185.	1.78
SP-1400	10	07	82	0940	----	----	----	177.	2.05
SP-1400	10	07	82	1109	----	----	----	----	1.99
SP-1400	10	07	82	1330	----	----	----	----	2.22
SP-1400	10	07	82	1555	----	----	----	----	2.15
SP-1400	10	07	82	1705	----	----	----	----	2.15

Table 6.--Discharge-measurement data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Study reference code	Date month	Date day	Date year	Time	Width (feet)	Area (square feet)	Velocity (feet per second)	Discharge (cubic feet per second)	Gage height (feet)
SP-1500	10	07	82	0720	94.	123.	1.31	161.	1.80
SP-1500	10	07	82	1110	96.	128.	1.30	167.	1.80
SP-1500	10	07	82	1637	96.	137.	1.40	192.	1.89
SP-1600	10	07	82	0800	124.	104.	1.54	161.	4.03
SP-1600	10	07	82	1130	-----	-----	----	-----	4.04
SP-1600	10	07	82	1545	130.	111.	1.66	185.	4.11
SP-1700	10	07	82	0900	93.	143.	1.20	171.	2.01
SP-1700	10	07	82	1140	-----	-----	----	-----	2.01
SP-1700	10	07	82	1425	-----	-----	----	-----	2.10
TR-210	10	07	82	0630	10.0	2.9	.98	2.8	1.80
TR-210	10	07	82	1640	11.0	2.9	.94	2.7	1.78
TR-310	10	07	82	0715	-----	-----	----	53.8	2.84
TR-310	10	07	82	1705	-----	-----	----	53.8	2.84
TR-320	10	07	82	0755	8.5	2.5	1.88	4.6	.70
TR-320	10	07	82	1715	8.5	2.1	1.68	3.6	.68
TR-330	10	07	82	0835	.5	.1	.75	.1	----
TR-330	10	07	82	1830	2.8	.8	2.03	1.6	----
TR-410	10	07	82	0855	1.6	.3	1.06	.3	.98
TR-440	10	07	82	0600	-----	-----	----	.5	----
TR-440	10	07	82	0900	-----	-----	----	.4	----
TR-440	10	07	82	1215	-----	-----	----	.4	----
TR-440	10	07	82	1505	-----	-----	----	.4	----
TR-460	10	07	82	0650	11.0	8.4	.13	1.1	1.10
TR-460	10	07	82	0940	9.6	5.4	.13	.7	1.10
TR-460	10	07	82	1245	2.3	.2	1.58	.4	1.10
TR-460	10	07	82	1530	2.7	.3	.93	.3	1.10
TR-610	10	07	82	0740	7.9	5.9	.57	3.4	.17
TR-610	10	07	82	1040	6.8	5.8	.56	3.3	.16
TR-610	10	07	82	1350	8.2	5.9	.56	3.3	.16
TR-610	10	07	82	1612	8.1	5.6	.56	3.2	.15
TR-810	10	07	82	0615	1.3	.3	3.66	1.1	----
TR-810	10	07	82	0833	1.6	.3	3.03	.9	----
TR-810	10	07	82	1027	1.5	.3	2.50	.8	----
TR-810	10	07	82	1233	1.5	.3	2.34	.8	----
TR-810	10	07	82	1450	1.4	.2	2.23	.5	----
TR-810	10	07	82	1647	1.4	.2	2.29	.5	----
TR-1110	10	07	82	1010	.8	.3	.53	.2	----
TR-1120	10	07	82	0700	-----	-----	----	.9	----
TR-1120	10	07	82	0905	-----	-----	----	1.5	----
TR-1120	10	07	82	1105	-----	-----	----	1.9	----

Table 6.--Discharge-measurement data for the South Platte River, tributaries, industrial, and municipal inflows, October 7 and 8, 1982--Continued

Study reference code	Date month	day	year	Time	Width (feet)	Area (square feet)	Velocity (feet per second)	Discharge (cubic feet per second)	Gage height (feet)
TR-1120	10	07	82	1315	-----	-----	----	1.6	----
TR-1120	10	07	82	1530	-----	-----	----	1.4	----
TR-1120	10	07	82	1715	-----	-----	----	1.5	----
TR-1130	10	07	82	1050	4.0	1.4	1.12	1.6	0.48
TR-1135	10	07	82	1115	-----	-----	----	.1	----
TR-1140	10	07	82	1140	-----	-----	----	.0	----
TR-1145	10	07	82	1140	-----	-----	----	.3	----
TR-1150	10	07	82	1247	14.0	7.8	.98	7.7	1.37
TR-1150	10	07	82	2100	13.0	7.7	1.34	10.3	----
TR-1160	10	07	82	1315	3.0	1.1	.38	.4	----
TR-1210	10	07	82	1355	1.2	.3	1.18	.3	----
TR-1220	10	07	82	1420	-----	-----	----	.0	----
TR-1305	10	07	82	1445	1.2	.1	.08	.1	----
TR-1310	10	07	82	1205	25.9	15.6	.74	11.6	1.17
TR-1420	10	07	82	1520	1.8	.5	2.05	1.1	----
TR-1420	10	07	82	2300	1.7	.5	1.7	.8	----
TR-1510	10	07	82	1555	3.0	.7	1.8	1.3	----
TR-1520	10	07	82	0742	3.4	.9	.9	.8	----
TR-1520	10	07	82	0942	3.4	.9	1.3	1.2	----
TR-1520	10	07	82	1145	3.5	1.0	.9	.9	----
TR-1520	10	07	82	1405	3.4	1.2	.8	1.0	----
TR-1520	10	07	82	1607	3.6	1.2	1.0	1.2	----
TR-1520	10	07	82	1745	3.4	1.1	1.2	1.3	----
TR-1610	10	07	82	1000	20.5	9.0	.4	3.6	.64

Table 7.--Cross-section data for the South Platte River, October 7, 1982

Figure and site number		Study reference code	Latitude (degrees, minutes, seconds)	Longitude	Date month	day	year	Width (feet)	Area (square feet)	Depth (feet)
3	1	SP-100-A	39 34 27	105 02 16	10	07	82	54.	46.6	0.86
3	2	SP-100-B	39 34 33	105 02 12	10	07	82	34.	44.2	1.30
3	3	SP-100-C	39 34 55	105 01 51	10	07	82	55.	79.3	1.44
3	4	SP-100-CC	39 36 19	105 01 25	10	07	82	38.	42.6	1.12
3	5	SP-100-D	39 36 49	105 01 28	10	07	82	45.	35.4	.79
3	6	SP-100-E	39 37 02	105 01 09	10	07	82	76.	53.2	.70
3	7	SP-200-A	39 37 21	105 00 58	10	07	82	31.	30.6	.98
3	8	SP-200-B	39 37 34	105 01 06	10	07	82	76.	48.4	.64
3	9	SP-200-C	39 37 45	105 00 52	10	07	82	76.	51.4	.68
3	10	SP-200-D	39 37 54	105 00 50	10	07	82	86.	104.8	1.22
3	11	SP-200-E	39 38 34	105 00 52	10	07	82	48.	44.1	.92
3	12	SP-200-F	39 38 47	105 00 51	10	07	82	56.	42.6	.76
3	13	SP-300-A	39 38 59	105 00 46	10	07	82	59.	100.8	1.71
3	14	SP-300-B	39 39 15	105 00 20	10	07	82	106.	91.6	.86
3	15	SP-300-C	39 39 28	105 00 10	10	07	82	105.	290.5	2.77
3	16	SP-300-D	39 39 40	105 00 13	10	07	82	72.	131.6	1.83
3	18	SP-400-B	39 40 07	104 59 57	10	06	82	100.	326.7	3.27
3	20	SP-400-D	39 40 17	104 59 51	10	07	82	103.	120.0	1.16
3	21	SP-400-E	39 40 23	104 59 48	10	07	82	115.	97.5	.85
3	22	SP-400-F	39 40 29	104 59 49	10	07	82	110.	74.0	.67
3	23	SP-400-G	39 40 36	104 59 50	10	07	82	100.	160.0	1.60
3	25	SP-500-A	39 40 43	104 59 51	10	07	82	105.	134.0	1.28
3	26	SP-500-B	39 41 08	105 00 01	10	07	82	124.	278.1	2.24
3	27	SP-600-A	39 41 23	104 59 55	10	07	82	114.	167.2	1.47
3	28	SP-700-A	39 41 29	104 59 46	10	07	82	80.	138.2	1.72
3	29	SP-800-A	39 41 48	104 59 30	10	07	82	142.	252.1	1.78
3	30	SP-900-A	39 42 11	104 59 42	10	07	82	122.	129.0	1.06
3	31	SP-1000-A	39 42 46	105 00 02	10	07	82	126.	193.6	1.54
3	32	SP-1000-B	39 43 20	105 00 41	10	07	82	60.	155.6	2.57
3	33	SP-1100-A	39 43 42	105 00 56	10	07	82	97.	196.0	2.02
3	34	SP-1100A-A	39 44 25	105 01 02	10	07	82	114.	265.9	2.32
3	35	SP-1100A-B	39 44 29	105 01 00	10	07	82	68.	113.8	1.67
3	36	SP-1100A-C	39 44 31	105 00 58	10	07	82	100.	131.9	1.31
3	37	SP-1200-A	39 44 33	105 00 58	10	07	82	85.	172.6	2.03
3	38	SP-1200-AA	39 44 35	105 00 57	10	07	82	88.	143.8	1.63

Table 7.--Cross-section data for the South Platte River, October 7, 1982--Continued

Figure and site number	Study reference code	Latitude (degrees, minutes, seconds)	Longitude	Date month	day	year	Width (feet)	Area (square feet)	Depth (feet)
3 39	SP-1200-B	39 44 40	105 00 55	10	07	82	123.	175.1	1.42
3 40	SP-1200-BB	39 44 43	105 00 55	10	07	82	88.	115.6	1.32
3 41	SP-1200-C	39 45 00	105 00 52	10	07	82	101.	140.2	1.39
3 42	SP-1300-A	39 45 20	105 00 24	10	07	82	92.	174.3	1.90
3 43	SP-1300-B	39 45 23	105 00 20	10	07	82	98.	116.0	1.18
3 44	SP-1300-C	39 45 31	105 00 15	10	07	82	74.	89.0	1.20
3 45	SP-1400-A	39 45 43	104 59 55	10	07	82	56.	143.4	2.56
3 46	SP-1400-B	39 45 53	104 59 34	10	07	82	62.	88.4	1.41
3 47	SP-1400-C	39 45 58	104 59 25	10	07	82	65.	83.3	1.28
3 48	SP-1400-D	39 45 59	104 59 14	10	07	82	68.	120.5	1.76
3 49	SP-1500-A	39 46 12	104 58 57	10	07	82	153.	123.2	.80
3 50	SP-1500-B	39 46 19	104 58 50	10	07	82	138.	138.1	1.00
3 51	SP-1600-A	39 46 38	104 58 39	10	07	82	130.	118.5	.91
3 52	SP-1600-B	39 46 43	104 58 39	10	07	82	97.	85.0	.88
3 53	SP-1600-C	39 46 49	104 58 37	10	07	82	68.	165.1	2.44
3 54	SP-1600-D	39 47 07	104 58 29	10	07	82	88.	112.8	1.28

Table 8.--Mixing-zone data for October 6, 1982

Cross Section SP-400-A

	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1440	1453	1505	1512	1520	1530	1540	1550
Temperature (deg C)	14.0	14.0	14.0	14.0	14.5	14.5	14.5	14.5
pH (units)	7.9	7.9	7.9	8.0	7.9	7.9	7.9	7.9
Conductivity (µmhos)	460	480	480	460	475	480	480	480
Dissolved oxygen (mg/L)	10.2	10.4	10.2	10.3	10.2	10.4	10.5	9.8
Dye concentration (µg/L)	.05	.05	.05	.05	.05	.05	.05	-----
Residual chlorine (mg/L)	-----	.03	.04	.05	.04	.01	.01	.01
Ammonia (mg/L)	.07	.11	.11	.10	.15	.11	.13	.12

Cross Section SP-400-B Surface Sample

	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1423	1450	1510	1530	1545	1555	1603	-----
Temperature (deg C)	16.0	16.0	15.5	14.5	14.5	14.5	15.0	-----
pH (units)	7.2	7.3	7.4	7.9	8.3	8.4	8.4	-----
Conductivity (µmhos)	730	680	666	485	480	475	-----	-----
Dissolved oxygen (mg/L)	9.0	9.4	9.5	10.1	10.7	10.7	10.8	-----
Dye concentration (µg/L)	8.8	7.5	7.1	.20	1.10	.05	.05	-----
Residual chlorine (mg/L)	-----	-----	-----	------	------	------	------	-----
Ammonia (mg/L)	-----	-----	-----	------	------	------	------	-----

Cross Section SP-400-B Mid-Depth Sample

	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1430	1453	1515	1535	1550	1600	1605	1609
Temperature (deg C)	16.5	16.0	15.5	15.0	15.0	14.5	15.0	14.5
pH (units)	7.3	7.5	7.5	8.2	8.4	8.4	8.4	8.4
Conductivity (µmhos)	720	660	640	480	485	475	475	475
Dissolved oxygen (mg/L)	9.0	9.4	9.4	10.3	10.6	10.7	10.7	10.8
Dye concentration (µg/L)	8.6	6.7	5.9	.70	.05	.05	.05	.05
Residual chlorine (mg/L)	.03	.01	.00	.00	.00	.00	.00	.00
Ammonia (mg/L)	5.4	4.7	4.2	.44	.17	.17	.16	.17

Table 8.--Mixing-zone data for October 6, 1982--Continued

	Cross Section SP-400-B Bottom Sample							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1447	1502	1520	1540	------	------	------	------
Temperature (deg C)	16.5	16.5	16.0	15.0	------	------	------	------
pH (units)	7.3	7.4	7.6	8.1	------	------	------	------
Conductivity (µmhos)	720	670	600	500	------	------	------	------
Dissolved oxygen (mg/L)	9.0	9.3	9.6	10.4	------	------	------	------
Dye concentration (µg/L)	8.8	7.6	5.1	1.40	------	------	------	------
Residual chlorine (mg/L)	-----	-----	-----	------	------	------	------	------
Ammonia (mg/L)	-----	-----	-----	------	------	------	------	------

	Cross Section SP-400-D							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1435	1440	1441	1445	1448	1451	1454	1457
Temperature (deg C)	15.0	15.0	15.0	15.0	14.5	14.0	14.0	14.0
pH (units)	7.1	7.1	7.2	7.2	7.4	7.5	7.6	7.6
Conductivity (µmhos)	690	700	700	680	620	640	650	650
Dissolved oxygen (mg/L)	8.1	8.3	8.2	8.5	8.8	9.0	9.1	9.0
Dye concentration (µg/L)	7.4	7.4	7.1	6.7	4.6	3.3	2.85	2.60
Residual chlorine (mg/L)	.02	.02	.02	.01	.00	.00	.00	.00
Ammonia (mg/L)	------	------	------	------	------	------	------	------

	Cross Section SP-400-D							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1523	1520	1517	1514	1509	1506	1503	1500
Temperature (deg C)	15.5	15.0	15.0	15.0	14.5	14.0	14.0	14.0
pH (units)	7.3	7.3	7.4	7.4	7.5	7.6	7.6	7.6
Conductivity (µmhos)	700	700	700	660	620	630	630	650
Dissolved oxygen (mg/L)	8.0	8.1	8.4	8.6	8.8	9.0	9.2	9.0
Dye concentration (µg/L)	8.0	8.0	7.7	6.5	5.1	3.3	2.75	2.40
Residual chlorine (mg/L)	------	------	------	------	------	------	------	------
Ammonia (mg/L)	------	------	------	------	------	------	------	------

Table 8.--Mixing-zone data for October 6, 1982--Continued

	Cross Section SP-400-D							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1604	1607	1610	1613	1616	1618	1621	1624
Temperature (deg C)	15.5	15.5	15.5	15.0	15.0	15.0	14.5	14.5
pH (units)	7.4	7.4	7.4	7.5	7.6	7.7	7.8	7.8
Conductivity (µmhos)	700	700	690	670	630	630	650	660
Dissolved oxygen (mg/L)	8.0	8.1	8.2	8.4	8.5	8.6	8.9	8.4
Dye concentration (µg/L)	7.9	7.9	7.9	6.9	5.0	2.85	2.35	2.10
Residual chlorine (mg/L)	------	------	------	------	------	------	------	------
Ammonia (mg/L)	------	------	------	------	------	------	------	------

	Cross Section SP-400-E							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1445	1433	1450	1458	1506	1512	1517	1523
Temperature (deg C)	16.0	16.0	16.0	15.5	15.5	15.0	15.0	14.5
pH (units)	7.3	7.2	7.2	7.5	7.5	7.4	7.6	7.7
Conductivity (µmhos)	690	650	540	135	575	650	580	610
Dissolved oxygen (mg/L)	9.6	9.8	10.0	10.1	10.8	10.6	10.8	10.4
Dye concentration (µg/L)	7.5	7.6	7.3	6.1	5.1	4.0	3.10	2.60
Residual chlorine (mg/L)	.04	.01	.03	.01	.01	.02	.00	.01
Ammonia (mg/L)	------	------	------	------	------	------	------	------

	Cross Section SP-400-E							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1533	1537	1543	1548	1553	1558	1602	1606
Temperature (deg C)	16.5	16.5	16.0	16.0	15.5	15.5	15.0	15.0
pH (units)	7.3	7.3	7.4	7.4	7.5	7.6	7.6	7.7
Conductivity (µmhos)	700	660	560	170	520	700	710	625
Dissolved oxygen (mg/L)	9.6	10.0	10.4	10.4	10.4	10.3	10.4	10.3
Dye concentration (µg/L)	7.9	7.9	7.6	6.1	5.0	4.3	3.05	2.50
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	------	------
Ammonia (mg/L)	-----	-----	-----	-----	-----	-----	------	------

Table 8.--Mixing-zone data for October 6, 1982--Continued

	Cross Section SP-400-E							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1615	1620	1629	1634	1640	1646	1649	1654
Temperature (deg C)	16.5	16.5	16.5	16.0	15.5	15.5	15.5	15.0
pH (units)	7.5	7.5	7.5	7.5	7.6	7.7	7.7	7.8
Conductivity (µmhos)	725	750	725	610	670	675	700	710
Dissolved oxygen (mg/L)	9.6	9.4	9.5	9.6	9.6	9.9	9.8	9.7
Dye concentration (µg/L)	8.3	8.3	7.0	1.35	.35	.15	1.45	1.65
Residual chlorine (mg/L)	-----	-----	-----	------	------	------	------	------
Ammonia (mg/L)	-----	-----	-----	------	------	------	------	------

	Cross Section SP-400-F							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1430	1440	1450	1455	1500	1505	1510	1515
Temperature (deg C)	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
pH (units)	7.5	7.5	7.5	7.5	7.5	7.6	7.6	7.7
Conductivity (µmhos)	600	580	530	520	520	500	500	480
Dissolved oxygen (mg/L)	9.0	9.2	9.4	9.4	9.8	9.8	9.8	9.4
Dye concentration (µg/L)	6.6	7.1	6.4	6.2	5.0	4.1	3.10	2.65
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	------	------
Ammonia (mg/L)	4.7	5.0	4.8	4.2	3.5	2.9	2.1	1.9

	Cross Section SP-400-F							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1600	1605	1610	1615	1620	1625	1630	1635
Temperature (deg C)	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
pH (units)	7.5	7.6	7.5	7.5	7.6	7.6	7.7	7.8
Conductivity (µmhos)	600	560	540	540	480	500	520	540
Dissolved oxygen (mg/L)	8.8	9.0	9.2	9.2	9.4	9.2	9.4	8.8
Dye concentration (µg/L)	6.7	7.6	7.2	6.3	5.2	4.2	2.65	2.40
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	------	------
Ammonia (mg/L)	-----	-----	-----	-----	-----	-----	------	------

Table 8.--Mixing-zone data for October 6, 1982--Continued

	Cross Section SP-400-G							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1430	1434	1439	1443	1448	1452	1457	1503
Temperature (deg C)	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.0
pH (units)	6.8	6.8	6.8	7.0	7.1	7.1	7.1	7.2
Conductivity (µmhos)	640	640	625	620	630	625	615	620
Dissolved oxygen (mg/L)	9.8	9.8	9.8	10.0	10.2	10.3	10.2	10.1
Dye concentration (µg/L)	4.7	4.9	5.1	5.1	5.0	4.9	4.6	4.4
Residual chlorine (mg/L)	.01	.02	.00	.01	.00	.02	.00	.01
Ammonia (mg/L)	3.2	3.6	3.3	3.8	3.7	4.0	3.8	3.9

	Cross Section SP-400-G							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1511	1516	1517	1520	1522	1524	1527	1530
Temperature (deg C)	15.5	15.5	15.5	15.5	15.5	15.0	15.0	15.0
pH (units)	7.1	7.1	7.1	7.1	7.1	7.2	7.2	7.2
Conductivity (µmhos)	650	650	640	640	620	625	610	610
Dissolved oxygen (mg/L)	9.8	9.7	9.7	9.7	10.0	10.1	10.1	9.8
Dye concentration (µg/L)	5.5	5.6	5.5	5.6	5.4	4.7	4.6	4.4
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----

	Cross Section SP-400-G							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1533	1537	1539	1543	1545	1548	1550	1552
Temperature (deg C)	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.0
pH (units)	7.2	7.1	7.2	7.1	7.2	7.2	7.2	7.2
Conductivity (µmhos)	640	640	640	645	640	625	620	620
Dissolved oxygen (mg/L)	10.0	9.7	9.7	9.7	9.9	10.0	10.0	9.6
Dye concentration (µg/L)	5.5	5.6	5.6	5.6	5.2	4.9	4.6	4.2
Residual chlorine (mg/L)	----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	----	------	-----	-----	-----	-----	-----	-----

Table 8.--Mixing-zone data for October 6, 1982--Continued

	Cross Section SP-400-G							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1604	1605	1608	1610	1612	1614	1615	1619
Temperature (deg C)	16.0	16.0	15.5	15.5	15.5	15.5	15.5	15.5
pH (units)	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Conductivity (µmhos)	650	650	650	650	650	625	620	620
Dissolved oxygen (mg/L)	9.8	9.6	9.6	9.6	9.7	10.0	9.9	9.5
Dye concentration (µg/L)	----	5.4	5.6	5.6	5.5	5.0	4.6	4.4
Residual chlorine (mg/L)	----	----	----	----	----	----	----	----
Ammonia (mg/L)	----	----	----	----	----	----	----	----

	Cross Section SP-400-G							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1623	1626	1628	1630	1633	1635	1637	1639
Temperature (deg C)	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
pH (units)	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Conductivity (µmhos)	645	640	640	640	635	630	625	625
Dissolved oxygen (mg/L)	9.8	9.5	9.0	9.5	9.6	9.7	9.7	9.4
Dye concentration (µg/L)	5.7	5.6	5.6	5.6	5.6	5.0	4.3	4.1
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----

	Cross Section SP-400-H							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1430	1437	1441	1445	1449	1453	1457	1502
Temperature (deg C)	16.0	16.0	15.0	15.0	15.5	15.0	15.0	15.0
pH (units)	7.3	7.3	7.3	7.4	7.4	7.4	7.4	7.4
Conductivity (µmhos)	650	650	650	630	630	630	590	570
Dissolved oxygen (mg/L)	9.9	9.9	10.1	10.1	10.2	10.2	10.1	10.1
Dye concentration (µg/L)	4.0	4.3	4.8	4.8	4.6	4.6	4.5	4.5
Residual chlorine (mg/L)	.02	.01	.01	.01	.01	.02	.02	.01
Ammonia (mg/L)	3.8	3.5	3.6	3.2	3.2	3.0	2.9	3.0

Table 8.--Mixing-zone data for October 6, 1982--Continued

	Cross Section SP-400-H							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1510	1514	1518	1522	1525	1529	1533	1537
Temperature (deg C)	16.0	16.0	15.5	15.5	15.5	15.5	15.5	15.5
pH (units)	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4
Conductivity (µmhos)	600	600	650	630	610	570	630	630
Dissolved oxygen (mg/L)	10.0	10.0	10.0	10.2	10.2	10.2	10.2	10.2
Dye concentration (µg/L)	5.4	5.5	5.3	4.9	4.8	4.5	4.5	4.4
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	3.8	3.7	3.7	3.5	3.4	3.3	3.3	2.9

	Cross Section SP-400-H							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1542	1545	1549	1555	1559	1603	1607	1613
Temperature (deg C)	16.0	16.0	15.5	16.0	16.0	16.0	15.5	15.5
pH (units)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Conductivity (µmhos)	650	660	650	650	650	630	630	640
Dissolved oxygen (mg/L)	10.0	10.0	10.0	10.1	10.1	10.1	10.0	9.9
Dye concentration (µg/L)	5.6	5.6	5.4	5.1	4.8	4.6	4.6	4.5
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	3.7	3.6	3.6	3.4	3.1	3.0	3.0	3.2

	Cross Section SP-400-H							
	Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1620	1624	1628	1632	1636	1642	1646	1651
Temperature (deg C)	16.0	16.0	16.0	16.0	16.0	16.0	16.0	15.5
pH (units)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Conductivity (µmhos)	660	660	650	650	650	650	650	650
Dissolved oxygen (mg/L)	9.8	9.8	9.8	9.9	9.9	9.8	9.7	9.7
Dye concentration (µg/L)	5.6	5.6	5.2	5.1	4.7	4.3	4.2	3.7
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----

Table 8.--Mixing-zone data for October 6, 1982--Continued

Effluent data			
Time (hours)	Dye concentration (micrograms per liter)		
	A	B	C
1355	24.0	24.5	24.5
1445	26.0	26.0	26.0
1515	26.5	25.5	25.5
1545	27.5	27.5	27.5

Discharge at SP-400-A = 140 cubic feet per second

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983

[mo, month; yr, year]

South Platte River near C-470
Reference code SP-100 USGS station number 393418105022300

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0630	4.5	440	430	8.8	7.7	7.8	102	0.130	0.50	0.37
03 14 83	1040	7.0	440	430	9.2	7.7	7.9	102	.120	.60	.48
03 14 83	1430	10.0	420	426	9.4	7.9	8.0	100	.100	.90	.80
03 14 83	1830	9.5	500	---	8.4	7.7	---	---	-----	----	----

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0630	<0.020	---	0.50	1.0	246	0.33	0.070	2	2.5
03 14 83	1040	<.020	---	.50	1.1	239	.33	.040	8	1.8
03 14 83	1430	<.020	---	.50	1.4	241	.33	.040	4	1.1
03 14 83	1830	------	---	----	---	---	----	-----	--	1.8

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River at Littleton
Reference code SP-200 USGS station number 06710000

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0715	7.0	670	678	8.6	7.9	7.8	150	0.120	0.80	0.68
03 14 83	1130	9.0	670	672	9.3	7.9	8.0	149	.150	.90	.75
03 14 83	1515	11.0	670	669	10.1	7.9	8.1	149	.090	.70	.61
03 14 83	1910	9.3	650	---	9.3	8.0	---	---	-----	----	----

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0715	<0.020	---	0.80	1.6	415	0.56	---	---	3.1
03 14 83	1130	<.020	---	.80	1.7	395	.54	---	---	2.1
03 14 83	1515	<.020	---	.70	1.4	408	.55	---	---	1.6
03 14 83	1910	------	---	----	---	---	----	---	---	1.8

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Big Dry Creek at mouth
Reference code TR-210 USGS station number 393750105005100

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0640	7.0	1150	1210	9.0	8.1	8.0	248	0.100	1.20	1.1
03 14 83	1825	9.5	1320	----	8.6	6.6	---	---	-----	----	---

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0640	<.020	---	4.0	5.2	816	1.1	---	---	1.8
03 14 83	1825	-----	---	---	---	---	---	---	---	---

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River above Bear Creek
Reference code SP-300 USGS station number 393855105004800

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0800	8.0	760	784	8.1	7.8	7.7	179	0.200	0.90	0.70
03 14 83	1200	10.0	800	786	8.8	7.8	7.8	181	.180	1.00	.82
03 14 83	1545	11.0	800	788	8.7	7.8	8.0	181	.230	.90	.67
03 14 83	1940	9.0	595	---	9.0	7.8	---	---	-----	----	----

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0800	0.010	1.1	1.1	2.0	471	0.64	---	---	2.4
03 14 83	1200	<.020	---	1.1	2.1	483	.66	---	---	2.5
03 14 83	1545	<.020	---	1.0	1.9	483	.66	---	---	1.6
03 14 83	1940	------	---	---	---	---	----	---	---	---

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Bear Creek at mouth, at Sheridan
Reference code TR-310 USGS station number 06711500

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0600	7.5	650	684	8.0	7.3	7.8	189	0.130	0.80	0.67
03 14 83	1900	9.5	410	---	8.5	7.6	---	---	-----	----	----

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0600	<0.020	---	0.80	1.6	410	0.56	---	---	2.2
03 14 83	1900	------	---	----	---	---	----	---	---	---

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Little Dry Creek at mouth
Reference code TR-320 USGS station number 393935105000500

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0710	7.0	1000	1110	9.8	8.1	8.1	192	0.140	1.10	0.96
03 14 83	1935	9.5	380	----	9.0	7.4	---	---	-----	----	----

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0710	0.060	0.84	0.90	2.0	749	1.0	---	---	1.5
03 14 83	1935	-----	----	----	---	---	---	---	---	---

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River at Englewood, CO
Reference code SP-400 USGS station number 06711565

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0830	8.0	840	841	8.5	7.9	7.8	188	0.220	1.00	0.78
03 14 83	1230	11.0	840	861	11.6	7.9	7.9	195	.270	1.10	.83
03 14 83	1615	10.0	870	882	9.4	7.8	8.0	199	.190	1.50	1.3

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0830	0.020	0.98	1.0	2.0	521	0.71	0.140	35	2.7
03 14 83	1230	<.020	----	1.1	2.2	542	.74	.090	13	1.7
03 14 83	1615	<.020	----	1.1	2.6	561	.76	.090	9	2.3

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Unnamed creek above PSCO dam (west bank)
Reference code TR-410 USGS station number 394003105001300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0735	8.0	1600	1770	9.0	8.0	8.1	456	0.190	1.00	0.81

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0735	0.040	8.5	8.5	9.5	1070	1.5	---	---	0.8

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Bi-City WWTP effluent (east bank)
Reference code TR-420 USGS station number 394005105000300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0610	14.5	1100	1180	6.9	7.0	7.1	252	14.0	18.0	4.0
03 14 83	0905	14.5	1100	1180	7.5	6.9	7.0	250	13.0	17.0	4.0
03 14 83	1205	14.5	1250	1390	7.2	---	7.0	258	15.0	20.0	5.0
03 14 83	1500	14.5	1350	1450	6.3	6.9	7.1	273	24.0	33.0	9.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0610	<0.020	----	<0.10	--	702	0.95	7.70	8	----
03 14 83	0905	<.020	----	<.10	--	724	.98	7.00	8	19.3
03 14 83	1205	.080	0.12	.20	20	815	1.1	5.70	4	13.7
03 14 83	1500	<.020	----	<.10	--	835	1.1	5.70	9	6.9

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Arapahoe PSCO effluent (west bank)
Reference code TR-440 USGS station number 394016104595100

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0950	11.5	2600	2620	8.8	7.9	8.0	141	0.160	0.80	0.64
03 14 83	1300	12.0	2600	2640	8.8	8.0	8.0	141	.350	.70	.35
03 14 83	1630	12.0	2600	2650	8.9	8.0	7.9	141	.280	1.00	.72

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0950	0.370	5.2	5.6	6.4	2150	2.9	---	---	1.1
03 14 83	1300	.360	5.1	5.5	6.2	2120	2.9	---	---	.8
03 14 83	1630	.360	5.1	5.5	6.5	2100	2.9	---	---	1.6

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Harvard Gulch at mouth
Reference code TR-460 USGS station number 394029104594800

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0755	8.5	1350	1400	8.8	8.6	8.2	315	0.080	1.20	1.1

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0755	0.020	3.5	3.5	4.7	810	1.1	---	---	2.2

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River at Evans Ave.
Reference code SP-500 USGS station number 394042104595100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0645	9.0	855	923	7.4	7.8	7.6	196	2.90	4.30	1.4
03 14 83	1015	10.0	950	981	8.4	7.5	7.5	209	5.00	7.60	2.6
03 14 83	1410	11.5	1040	1070	8.6	7.6	7.6	222	7.30	9.90	2.6
03 14 83	1815	11.0	1100	----	9.2	7.2	---	---	----	----	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0645	0.020	0.88	0.90	5.2	550	0.75	1.60	36	7.6
03 14 83	1015	.020	.78	.80	8.4	600	.82	2.60	17	7.9
03 14 83	1410	.040	.86	.90	11	688	.94	2.20	12	7.3
03 14 83	1815	-----	----	----	----	---	----	----	--	---

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River at Florida Ave.
Reference code SP-600 USGS station number 06711590

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0740	9.0	893	938	7.4	7.8	7.7	196	3.00	3.60	0.60
03 14 83	1050	10.0	950	944	8.7	7.6	7.7	200	3.90	5.10	1.2
03 14 83	1445	11.5	1020	1040	8.6	7.6	7.6	215	5.70	8.30	2.6
03 14 83	1845	11.0	1100	----	9.4	7.6	---	---	----	----	----

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0740	0.030	0.87	0.90	4.5	593	0.81	---	---	10.0
03 14 83	1050	.030	.97	1.0	6.1	579	.79	---	---	8.8
03 14 83	1445	.060	.94	1.0	9.3	662	.90	---	---	7.4
03 14 83	1845	-----	----	----	---	---	----	---	---	----

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Sanderson Gulch at mouth
Reference code TR-610 USGS station number 06711610

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0815	6.5	770	827	10.1	8.4	8.3	234	0.140	1.60	1.5
03 14 83	1130	10.0	808	818	10.2	8.5	8.3	231	.130	1.30	1.2
03 14 83	1510	11.5	808	833	8.6	8.6	8.6	222	.100	1.10	1.00
03 14 83	1900	7.0	540	---	11.4	8.2	---	---	-----	----	----

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0815	0.030	2.3	2.3	3.9	509	0.69	---	---	4.4
03 14 83	1130	.030	2.3	2.3	3.6	466	.63	---	---	5.7
03 14 83	1510	.020	2.1	2.1	3.2	454	.62	---	---	4.3
03 14 83	1900	-----	---	---	---	---	----	---	---	---

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River below footbridge, below Florida
Reference code SP-700 USGS station number 394128104594700

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0830	9.0	902	934	7.5	7.9	7.7	197	2.70	4.30	1.6
03 14 83	1200	10.5	950	962	8.6	7.8	7.6	205	4.20	6.80	2.6
03 14 83	1530	11.5	1020	1060	7.6	7.8	7.6	221	5.60	8.30	2.7

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0830	0.030	0.97	1.0	5.3	580	0.79	---	---	8.6
03 14 83	1200	.030	.97	1.0	7.8	603	.82	---	---	10.6
03 14 83	1530	.050	.95	1.0	9.3	670	.91	---	---	9.0

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River above Mississippi Ave.
Reference code SP-800 USGS station number 394141104593300

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0900	9.0	902	937	7.9	7.8	7.7	196	2.80	4.30	1.5
03 14 83	1225	10.5	960	964	9.0	7.7	7.6	207	4.40	7.30	2.9
03 14 83	1600	11.5	1020	1050	8.3	7.6	7.6	217	5.80	8.30	2.5

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0900	0.030	1.1	1.1	5.4	585	0.80	---	---	6.6
03 14 83	1225	.040	.96	1.0	8.3	612	.83	---	---	9.8
03 14 83	1600	.050	1.1	1.1	9.4	651	.89	---	---	6.8

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Storm Sewer at Mississippi Ave. (east bank)
Reference code TR-810 USGS station number 394149104592900

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0845	15.5	950	998	8.0	7.8	8.0	<307	0.140	1.60	1.5

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0845	<0.020	---	6.4	8.0	621	0.84	---	---	0.4

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River above Santa Fe overpass
Reference code SP-900 USGS station number 394210104594100

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0615	10.0	950	973	---	7.5	7.6	201	4.40	7.40	3.0
03 14 83	1015	10.0	900	941	9.0	7.7	7.7	199	2.90	4.40	1.5
03 14 83	1415	12.0	900	970	8.6	7.4	7.7	210	4.10	5.50	1.4
03 14 83	1802	11.5	980	---	8.3	8.2	---	---	----	----	---

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0615	0.040	1.1	1.1	8.5	604	0.82	---	---	11.4
03 14 83	1015	.040	1.2	1.2	5.6	616	.84	---	---	9.2
03 14 83	1415	.050	1.1	1.2	6.7	598	.81	---	---	8.5
03 14 83	1802	-----	---	---	---	---	----	---	---	----

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River below Alameda Ave.
Reference code SP-1000 USGS station number 394241104595900

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0715	9.5	950	972	---	7.4	7.7	203	4.40	7.60	3.2
03 14 83	1050	10.0	925	956	9.0	7.4	7.7	196	2.90	4.40	1.5
03 14 83	1445	12.0	920	951	8.6	7.3	7.7	207	3.30	5.20	1.9
03 14 83	1845	11.5	825	---	8.0	7.3	---	---	----	----	---

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0715	0.030	1.2	1.2	8.8	607	0.83	---	---	12.6
03 14 83	1050	.050	1.3	1.3	5.7	599	.81	---	---	6.8
03 14 83	1445	.050	1.3	1.3	6.5	598	.81	---	---	7.5
03 14 83	1845	-----	---	---	---	---	----	---	---	----

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River above Vallejo St.
Reference code SP-1100 USGS station number 394321105000500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0800	10.0	950	982	---	7.3	7.7	204	4.80	6.10	1.3
03 14 83	1130	10.5	800	973	8.7	7.5	7.8	202	3.20	5.00	1.8
03 14 83	1515	12.0	900	944	8.6	7.4	7.9	200	2.70	3.30	.60

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0800	0.050	1.2	1.2	7.3	614	0.84	2.70	23	10.6
03 14 83	1130	.040	1.3	1.3	6.3	611	.83	1.80	35	----
03 14 83	1515	.040	1.4	1.4	4.7	585	.80	1.50	44	5.7

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Storm sewer at Vallejo St.
Reference code TR-1110 USGS station number 394321105000600

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0905	10.5	1450	1600	9.0	8.3	8.4	417	0.200	1.10	0.90

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0905	0.030	7.4	7.4	8.5	1020	1.4	---	---	---

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River above 8th Ave. bridge
Reference code SP-1100A USGS station number 394345105005800

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0830	10.0	950	983	---	7.1	7.7	205	4.30	7.00	2.7
03 14 83	1220	11.0	980	969	8.4	7.6	7.8	199	3.10	4.50	1.4
03 14 83	1600	12.0	900	943	8.6	7.4	7.8	199	2.60	4.10	1.5

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0830	0.050	1.3	1.3	8.3	614	0.84	---	---	13.6
03 14 83	1220	.050	1.4	1.4	5.9	583	.79	---	---	----
03 14 83	1600	.050	1.4	1.4	5.5	573	.78	---	---	8.6

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Weir Gulch at mouth
Reference code TR-1130 USGS station number 06711622

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0930	9.0	1000	1080	9.4	8.2	8.4	234	0.160	2.00	1.8

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0930	0.040	3.1	3.1	5.1	676	0.92	---	---	2.6

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Zuni St. power plant #1 (west bank)
Reference code TR-1135 USGS station number 394405105010000

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	1005	19.5	700	1050	7.2	8.5	8.1	156	1.10	2.10	1.0

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	1005	0.050	0.75	0.80	2.9	599	0.81	---	---	2.1

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Lakewood Gulch at mouth
Reference code TR-1150 USGS station number 06711800

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0950	8.0	1200	1290	9.8	8.6	8.4	333	0.110	0.90	0.79

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0950	0.020	3.2	3.2	4.1	843	1.1	---	---	1.0

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Sloans Lake outfall (old 15th Ave. bridge)
Reference code TR-1160 USGS station number 394424105010200

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	1020	9.0	700	797	9.4	---	8.5	154	<0.060	2.20	---

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	1020	<0.020	---	0.20	2.4	480	0.65	---	---	6.9

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River above 17th Ave. underpass
Reference code SP-1200 USGS station number 394433105005800

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0915	10.0	850	981	---	7.3	7.8	211	4.40	6.10	1.7
03 14 83	1300	11.0	1000	1000	8.7	7.6	7.8	213	3.20	4.50	1.3
03 14 83	1635	11.0	920	980	8.2	7.4	7.9	211	2.40	4.00	1.6

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0915	0.050	1.4	1.4	7.5	611	0.83	---	---	10.1
03 14 83	1300	.040	1.6	1.6	6.1	623	.85	---	---	8.2
03 14 83	1635	.060	1.5	1.6	5.6	618	.84	---	---	6.0

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Ellis Foods effluent
Reference code TR-1210 USGS station number 394434105005800

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	1055	23.0	220	281	7.2	8.5	7.8	57	0.280	0.90	0.62

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	1055	0.020	---	<0.10	---	155	0.21	---	---	2.2

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River at 7th St., near Confluence Park
Reference code SP-1300 USGS station number 394502105004700

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0615	9.0	1020	941	8.2	7.9	7.8	201	4.40	6.10	1.7
03 14 83	1015	9.5	1030	983	8.5	8.0	7.8	209	4.60	6.20	1.6
03 14 83	1420	11.5	1030	994	8.7	8.0	7.9	209	3.20	5.00	1.8

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0615	0.050	1.4	1.4	7.5	576	0.78	---	---	7.4
03 14 83	1015	.040	1.4	1.4	7.6	611	.83	---	---	9.0
03 14 83	1420	.050	1.4	1.5	6.5	624	.85	---	---	4.9

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Storm Sewer at 7th St. above Confluence Park
Reference code TR-1305 USGS station number 394503105004800

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	1115	9.0	1400	1530	9.2	8.3	8.3	358	0.610	3.20	2.6

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	1115	0.180	8.6	8.8	12	928	1.3	---	---	6.0

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Cherry Creek at mouth
Reference code TR-1310 USGS station number 394513105002600

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0715	8.0	1150	1240	9.8	7.3	8.1	213	0.140	1.10	0.96
03 14 83	0945	9.5	1200	1240	8.0	7.5	8.2	221	.180	1.60	1.4
03 14 83	1250	12.5	1250	1290	7.4	7.9	8.3	228	.120	1.50	1.4
03 14 83	1530	13.5	1300	1400	7.6	7.3	8.3	231	.110	1.60	1.5

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0715	0.030	3.4	3.4	4.5	826	1.1	---	---	1.0
03 14 83	0945	.070	3.3	3.4	5.0	826	1.1	---	---	3.1
03 14 83	1250	.030	3.6	3.6	5.1	755	1.0	---	---	1.1
03 14 83	1530	.060	3.6	3.7	5.3	879	1.2	---	---	3.0

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River at Denver
Reference code SP-1400 USGS station number 06714000

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0650	8.5	1050	991	8.8	8.1	7.9	202	3.80	5.80	2.0
03 14 83	1050	10.0	1030	1020	9.0	8.0	8.0	209	4.10	6.10	2.0
03 14 83	1455	12.0	1050	1030	8.8	8.1	7.9	211	3.00	6.20	3.2

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0650	0.050	1.6	1.6	7.4	597	0.81	---	---	6.7
03 14 83	1050	.040	1.7	1.7	7.8	626	.85	---	---	9.8
03 14 83	1455	.050	1.8	1.8	8.0	646	.88	---	---	4.9

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Storm sewer at 23rd St. bridge
Reference code TR-1420 USGS station number 394543104595400

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	1130	15.0	1250	1400	8.1	8.1	7.8	290	0.220	1.20	0.98

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	1130	<0.020	---	3.6	4.8	852	1.2	---	---	0.8

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River above 31st St. bridge
Reference code SP-1500 USGS station number 394602104590500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0740	8.5	1080	982	8.4	8.0	7.8	204	3.30	6.30	3.0
03 14 83	1130	10.0	1050	1010	8.7	8.0	7.8	212	2.50	3.40	.90
03 14 83	1540	12.0	1050	1040	8.3	8.1	7.9	215	3.00	4.70	1.7

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0740	0.060	1.7	1.8	8.1	606	0.82	---	---	8.9
03 14 83	1130	.050	1.9	1.9	5.3	633	.86	---	---	11.0
03 14 83	1540	.060	1.8	1.9	6.6	649	.88	---	---	7.8

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Ice plant effluent at 31st St. bridge
Reference code TR-1510 USGS station number 394603104590400

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	1150	17.0	1200	1370	7.7	7.2	7.5	328	0.470	1.60	1.1

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	1150	0.130	6.0	6.1	7.7	825	1.1	---	---	0.8

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Thirty-sixth Street storm sewer at Denver
Reference code TR-1520 USGS station number 06714100

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0745	10.5	700	747	8.9	---	8.1	162	0.270	1.30	1.0
03 14 83	1015	10.5	750	815	8.7	7.1	8.1	174	.500	1.90	1.4
03 14 83	1325	11.0	900	955	6.7	7.2	7.5	99	.790	7.50	6.7
03 14 83	1605	11.5	670	516	7.4	---	7.7	100	.730	3.30	2.6

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0745	0.040	4.7	4.7	6.0	452	0.61	---	---	2.2
03 14 83	1015	.050	5.7	5.7	7.6	506	.69	---	---	2.8
03 14 83	1325	.140	1.8	1.9	9.4	513	.70	---	---	24.9
03 14 83	1605	.100	2.2	2.3	5.6	309	.42	---	---	----

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River below 38th St. bridge
Reference code SP-1600 USGS station number 394634104583800

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0815	9.0	1040	982	8.6	8.0	7.8	204	3.20	5.50	2.3
03 14 83	1210	11.0	1060	1020	9.2	8.0	7.9	211	3.40	3.80	.40
03 14 83	1605	12.0	1050	1040	8.2	8.0	7.9	215	3.00	4.90	1.9

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0815	0.060	1.8	1.9	7.4	610	0.83	---	---	4.6
03 14 83	1210	.070	1.9	2.0	5.8	632	.86	---	---	7.4
03 14 83	1605	.060	1.9	2.0	6.9	657	.89	---	---	---

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Storm sewer below 38th Street bridge
Reference code TR-1610 USGS station number 394635104583800

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0805	11.0	1250	1390	9.0	7.2	7.4	231	0.140	2.60	2.5
03 14 83	1035	11.5	1200	1260	8.2	7.1	7.6	217	.540	1.90	1.4
03 14 83	1345	12.0	1500	1570	6.2	9.8	9.5	214	.270	1.80	1.5
03 14 83	1630	11.5	1200	1260	7.2	7.0	7.8	217	.280	1.50	1.2

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0805	0.030	4.5	4.5	7.1	926	1.3	---	---	---
03 14 83	1035	.050	3.7	3.7	5.6	916	1.2	---	---	---
03 14 83	1345	.040	4.1	4.1	5.9	1100	1.5	---	---	---
03 14 83	1630	.060	3.5	3.6	5.1	867	1.2	---	---	---

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

Storm sewer 200 yards above SP-1700
Reference code TR-1620 USGS station number 394709104583000

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	1250	10.5	2200	2520	7.1	8.2	8.2	386	0.200	1.00	0.80

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	1250	<0.020	---	7.4	8.4	1530	2.1	---	---	5.6

Table 9.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, March 14, 1983--Continued

South Platte River at 50th Ave.
Reference code SP-1700 USGS station number 06714130

Date (mo day yr)	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity Lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
03 14 83	0850	9.0	1040	991	8.4	8.0	7.9	205	3.00	6.80	3.8
03 14 83	1250	11.5	1050	1030	9.2	8.0	7.8	212	3.30	5.00	1.7
03 14 83	1640	11.5	1050	1060	7.9	8.1	7.8	215	3.00	4.90	1.9

Date (mo day yr)	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
03 14 83	0850	0.060	1.9	2.0	8.8	618	0.84	1.20	15	4.0
03 14 83	1250	.060	2.0	2.1	7.1	645	.88	1.40	16	9.2
03 14 83	1640	.070	2.0	2.1	7.0	659	.90	1.70	8	11.8

Table 10.--Discharge-measurement data for the South Platte River, tributaries, industrial and municipal inflows, March 14, 1983

Study reference code	Date mo	Date day	Date year	Time	Width (feet)	Area (square feet)	Velocity (feet per second)	Discharge (cubic feet per second)	Gage height (feet)
SP-100	03	14	83	0630	47.	40.	0.29	11.5	1.82
SP-100	03	14	83	1330	40.	19.	.65	12.3	1.83
SP-200	03	14	83	0730	40.	25.	1.29	32.2	1.38
SP-200	03	14	83	1430	39.	25.	1.30	32.1	1.38
SP-300	03	14	83	0830	24.	20.	1.79	35.4	1.38
SP-300	03	14	83	1520	24.	19.	1.66	32.1	1.37
SP-400	03	14	83	0910	126.	107.	.68	73.1	1.66
SP-400	03	14	83	1600	126.	104.	.65	67.8	1.64
SP-500	03	14	83	0620	68.	92.	1.00	92.4	2.39
SP-500	03	14	83	1300	87.	109.	.96	105.	2.44
SP-600	03	14	83	0850	69.	97.	1.08	105.	1.93
SP-600	03	14	83	1450	68.	90.	1.25	112.	2.01
SP-700	03	14	83	1010	80.	99.	1.17	116.	1.75
SP-700	03	14	83	1550	79.	96.	1.23	118.	1.73
SP-800	03	14	83	1150	105.	146.	.83	121.	.87
SP-800	03	14	83	1655	104.	137.	.78	107.	.83
SP-900	03	14	83	0620	87.	143.	.80	115.	1.91
SP-900	03	14	83	1220	87.	151.	.93	140.	1.98
SP-1000	03	14	83	0720	126.	139.	.81	114.	1.81
SP-1000	03	14	83	1330	126.	148.	.88	131.	1.88
SP-1100	03	14	83	0830	70.	97.	1.11	107.	4.33
SP-1100	03	14	83	1435	72.	106.	1.21	128.	4.44
SP-1100A	03	14	83	0950	84.	173.	.66	114.	2.50
SP-1100A	03	14	83	1550	86.	179.	.68	122.	2.52
SP-1200	03	14	83	0710	105.	95.	1.24	118.	1.19
SP-1200	03	14	83	1345	105.	108.	1.35	145.	1.22
SP-1300	03	14	83	0850	121.	126.	1.03	130.	1.63
SP-1300	03	14	83	1445	122.	137.	1.10	151.	1.70
SP-1400	03	14	83	1200	86.	94.	1.44	136.	1.80
SP-1500	03	14	83	0700	96.	134.	1.11	149.	1.82
SP-1500	03	14	83	1100	96.	126.	1.08	136.	1.75
SP-1600	03	14	83	0810	123.	98.	1.68	164.	4.00
SP-1600	03	14	83	1155	122.	91.	1.60	146.	3.96
SP-1700	03	14	83	0855	93.	142.	1.06	150.	1.95
SP-1700	03	14	83	1250	93.	140.	1.00	140.	1.90
TR-210	03	14	83	0635	10.0	3.7	1.10	4.1	1.86
TR-210	03	14	83	1500	13.	3.9	1.08	4.2	----
TR-310	03	14	83	0610	-----	-----	----	18.	2.44
TR-310	03	14	83	1430	-----	-----	----	18.	2.43
TR-320	03	14	83	0715	10.0	5.6	3.29	18.	2.32

Table 10.--Discharge measurement data for the South Platte River, tributaries, industrial and municipal inflows, March 14, 1983--Continued

Study reference code	Date mo	day	year	Time	Width (feet)	Area (square feet)	Velocity (feet per second)	Discharge (cubic feet per second)	Gage height (feet)
TR-320	03	14	83	1345	15.	10.3	1.35	14.	1.56
TR-330	03	14	83		-----	-----	----	.1	----
TR-410	03	14	83	0735	2.4	.5	.96	.5	1.26
TR-410	03	14	83	1315	2.7	.6	.78	.5	1.27
TR-460	03	14	83	0810	5.5	1.8	.56	1.0	----
TR-460	03	14	83	1235	5.0	1.2	.77	.9	----
TR-610	03	14	83	0630	9.4	5.8	.38	2.2	.12
TR-610	03	14	83	0915	8.5	5.4	.38	2.0	----
TR-610	03	14	83	1200	9.5	6.2	.36	2.2	.12
TR-610	03	14	83	1415	9.3	6.1	.36	2.2	.12
TR-810	03	14	83	0840	3.0	.5	4.19	2.2	----
TR-810	03	14	83	1205	1.7	.3	4.24	1.4	----
TR-1110	03	14	83	0905	.6	.2	1.77	.4	----
TR-1110	03	14	83	1105	.8	.4	1.22	.5	----
TR-1130	03	14	83	0920	5.0	3.2	.82	2.6	.52
TR-1130	03	14	83	1030	6.0	4.0	.71	2.8	.52
TR-1135	03	14	83	1010	-----	-----	----	.3	----
TR-1140	03	14	83	1015	-----	-----	----	.0	----
TR-1145	03	14	83	1015	-----	-----	----	.0	----
TR-1150	03	14	83	0910	12.	6.6	.77	5.1	1.37
TR-1160	03	14	83	0855	-----	-----	----	2.0	----
TR-1160	03	14	83	1020	-----	-----	----	1.5	----
TR-1210	03	14	83	0840	-----	-----	----	.1	----
TR-1210	03	14	83	1045	1.0	.2	.83	.1	----
TR-1305	03	14	83	0810	1.0	.1	.06	.8	----
TR-1305	03	14	83	1105	.9	.0	1.00	.0	----
TR-1310	03	14	83	1030	26.	15.4	1.10	17.0	2.24
TR-1420	03	14	83	0730	3.3	.6	2.22	1.3	----
TR-1420	03	14	83	1125	4.5	1.1	1.02	1.2	----
TR-1510	03	14	83	0640	2.6	.6	1.28	.8	----
TR-1510	03	14	83	1150	2.8	.6	1.56	1.0	----
TR-1520	03	14	83	0830	1.5	.1	.42	.0	----
TR-1520	03	14	83	1030	1.6	.1	.62	.1	----
TR-1520	03	14	83	1255	1.8	.2	.68	.1	----
TR-1520	03	14	83	1500	1.8	.2	.90	.2	----
TR-1610	03	14	83	1000	19.	5.4	.37	2.0	.77
TR-1610	03	14	83	1430	18.	5.3	.41	2.2	.76
TR-1620	03	14	83	0605	8.	1.1	.30	.3	----
TR-1620	03	14	83	1250	4.0	.1	.75	.1	----

Table 11.--Cross-section data for the South Platte River, March 14, 1983

Figure and site number	Study reference code	Latitude (degrees, minutes, seconds)	Longitude	Date mo	day	year	Width (feet)	Area (square feet)	Depth (feet)
3 1	SP-100-A	39 34 27	105 02 16	03	14	83	28.	24.6	0.88
3 2	SP-100-B	39 34 33	105 02 12	03	14	83	22.	9.7	.44
3 3	SP-100-C	39 34 55	105 01 51	03	14	83	50.	67.0	1.34
3 4	SP-100-CC	39 36 19	105 01 25	03	14	83	40.	37.2	.93
3 5	SP-100-D	39 36 49	105 01 28	03	14	83	38.	23.0	.61
3 6	SP-100-E	39 37 02	105 01 09	03	14	83	73.	59.9	.82
3 7	SP-200-A	39 37 21	105 00 58	03	14	83	32.	24.4	.76
3 10	SP-200-D	39 37 54	105 00 50	03	14	83	91.	196.6	2.16
3 11	SP-200-E	39 38 34	105 00 52	03	14	83	40.	22.8	.57
3 12	SP-200-F	39 38 47	105 00 51	03	14	83	82.	27.4	.33
3 13	SP-300-A	39 38 59	105 00 46	03	14	83	58.	81.4	1.40
3 14	SP-300-B	39 39 15	105 00 20	03	14	83	98.	54.2	.55
3 16	SP-300-D	39 39 40	105 00 13	03	14	83	70.	105.7	1.51
3 38	SP-1200-AA	39 44 35	105 00 57	03	14	83	86.	130.0	1.51
3 39	SP-1200-B	39 44 40	105 00 55	03	14	83	128.	139.8	1.09
3 40	SP-1200-BB	39 44 43	105 00 55	03	14	83	70.	128.4	1.83
3 41	SP-1200-C	39 45 00	105 00 52	03	14	83	86.	139.7	1.62
3 42	SP-1300-A	39 45 20	105 00 24	03	14	83	99.	117.6	1.19
3 43	SP-1300-B	39 45 23	105 00 20	03	14	83	90.	144.0	1.60
3 44	SP-1300-C	39 45 31	105 00 15	03	14	83	74.	77.0	1.05
3 45	SP-1400-A	39 45 43	104 59 55	03	14	83	55.	115.8	2.11
3 46	SP-1400-B	39 45 53	104 59 34	03	14	83	63.	69.8	1.11
3 47	SP-1400-C	39 45 58	104 59 25	03	14	83	68.	104.3	1.53
3 48	SP-1400-D	39 45 59	104 59 14	03	14	83	67.	119.8	1.79
3 49	SP-1500-A	39 46 12	104 58 57	03	14	83	72.	110.9	1.54
3 50	SP-1500-B	39 46 19	104 58 50	03	14	83	143.	91.7	.64
3 51	SP-1600-A	39 46 38	104 58 39	03	14	83	124.	111.1	.90
3 52	SP-1600-B	39 46 43	104 58 39	03	14	83	88.	73.7	.84
3 53	SP-1600-C	39 46 49	104 58 37	03	14	83	67.	177.4	2.65
3 54	SP-1600-D	39 47 07	104 58 29	03	14	83	87.	98.0	1.18

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983

South Platte River near C-470
Reference code SP-100 USGS station number 393418105022300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0630	14.0	420	396	5.2	7.6	7.8	115	0.170	0.60	0.43
09 22 83	1035	15.5	400	400	9.0	8.0	7.3	116	.130	.50	.37
09 22 83	1430	18.5	400	404	10.3	8.4	7.6	118	.120	.50	.38
09 22 83	1840	17.0	410	385	8.0	7.5	7.8	111	.130	.70	.57
09 22 83	2145	16.0	410	387	4.8	7.9	7.6	111	.090	.80	.71
09 23 83	0110	14.5	420	398	4.2	7.2	7.6	113	.090	.50	.41
09 23 83	0335	14.5	420	400	4.4	8.0	7.7	116	.110	.40	.29

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0630	0.020	0.68	0.70	1.3	227	0.31	0.090	19	3.6
09 22 83	1035	.020	.68	.70	1.2	244	.33	.110	18	2.9
09 22 83	1430	.020	.58	.60	1.1	244	.33	.080	24	1.9
09 22 83	1840	<.020	----	.50	1.2	271	.37	.150	17	2.3
09 22 83	2145	<.020	----	.60	1.4	239	.33	.070	7	2.9
09 23 83	0110	<.020	----	.70	1.2	244	.33	.100	11	1.7
09 23 83	0335	<.020	----	.70	1.1	242	.33	.100	9	5.0

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River at Littleton
Reference code SP-200 USGS station number 06710000

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0720	11.5	500	533	7.5	8.1	7.8	135	0.120	0.70	0.58
09 22 83	1120	14.0	520	529	9.5	8.5	8.0	134	.110	.70	.59
09 22 83	1510	18.0	550	528	9.7	8.6	8.0	132	.090	.60	.51
09 22 83	1920	17.0	560	534	9.4	8.0	8.1	139	.080	.60	.52
09 22 83	2215	15.0	580	539	5.6	7.6	7.9	135	.060	.90	.84
09 23 83	0145	14.0	580	546	5.3	7.7	7.8	136	.120	.70	.58
09 23 83	0415	13.0	580	551	5.6	7.8	7.8	136	.150	.60	.45

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0720	0.020	0.78	0.80	1.5	332	0.45	---	---	2.3
09 22 83	1120	.020	.68	.70	1.4	336	.46	---	---	2.1
09 22 83	1510	.020	.68	.70	1.3	328	.45	---	---	1.8
09 22 83	1920	.020	.68	.70	1.3	355	.48	---	---	3.3
09 22 83	2215	<.020	----	.70	1.6	344	.47	---	---	3.0
09 23 83	0145	<.020	----	.70	1.4	348	.47	---	---	1.9
09 23 83	0415	<.020	----	.70	1.3	341	.46	---	---	2.0

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Big Dry Creek at mouth
Reference code TR-210 USGS station number 393750105005100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0640	9.0	1260	1130	9.2	7.2	8.1	262	0.190	1.30	1.1
09 22 83	1815	15.5	1300	1260	8.0	9.0	8.1	266	.080	2.10	2.0
09 23 83	0410	10.0	1280	1270	8.2	8.8	8.5	266	.080	1.50	1.4

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0640	0.030	5.1	5.1	6.4	799	1.1	---	---	1.5
09 22 83	1815	.020	6.0	6.0	8.1	878	1.2	---	---	3.0
09 23 83	0410	.020	6.0	6.0	7.5	843	1.1	---	---	1.9

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River above Bear Creek
Reference code SP-300 USGS station number 393855105004800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0805	11.5	625	615	6.8	8.9	7.8	164	0.210	0.60	0.39
09 22 83	1205	15.0	650	622	8.9	8.2	7.8	165	.200	.90	.70
09 22 83	1550	18.5	650	621	8.4	8.4	7.7	164	.170	.40	.23
09 22 83	2005	17.0	650	629	7.9	8.0	7.8	164	.230	.70	.47
09 22 83	2240	15.0	650	628	5.8	7.3	7.7	165	.250	.70	.45
09 23 83	0210	13.5	700	632	6.0	7.7	7.8	167	.260	.60	.34
09 23 83	0430	13.0	700	635	6.2	7.8	7.8	168	.260	.60	.34

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0805	0.020	0.88	0.90	1.5	389	0.53	---	---	2.4
09 22 83	1205	.020	.98	1.0	1.9	400	.54	---	---	1.9
09 22 83	1550	.020	.88	.90	1.3	394	.54	---	---	3.2
09 22 83	2005	<.020	----	.90	1.6	396	.54	---	---	2.0
09 22 83	2240	<.020	----	.90	1.6	399	.54	---	---	3.0
09 23 83	0210	<.020	----	1.0	1.6	400	.54	---	---	1.7
09 23 83	0430	<.020	----	1.0	1.6	407	.55	---	---	2.2

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Bear Creek at mouth, at Sheridan
Reference code TR-310 USGS station number 06711500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0550	10.0	430	444	9.2	8.1	8.0	138	0.130	0.50	0.37
09 22 83	1845	16.0	425	440	6.8	7.7	8.1	136	.080	.80	.72
09 23 83	0440	11.0	420	445	8.0	7.8	8.0	139	.080	.50	.42

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0550	0.020	0.78	0.80	1.3	282	0.38	---	---	4.2
09 22 83	1845	<.020	----	.70	1.5	276	.38	---	---	2.2
09 23 83	0440	<.020	----	.80	1.3	280	.38	---	---	2.7

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Little Dry Creek at mouth
Reference code TR-320 USGS station number 393935105000500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0710	9.5	1600	1660	9.4	7.2	8.0	259	0.140	1.00	0.86
09 22 83	1900	14.5	1590	1670	7.0	8.0	8.2	285	.130	1.30	1.2
09 23 83	0505	11.0	1580	1700	---	8.4	8.1	294	.150	1.30	1.2

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0710	0.020	2.9	2.9	3.9	870	1.2	---	---	---
09 22 83	1900	.020	3.5	3.5	4.8	1200	1.6	---	---	1.6
09 23 83	0505	.020	3.6	3.6	4.9	1200	1.6	---	---	2.4

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Storm sewer at Dartmouth Ave. (west bank)
Reference code TR-330 USGS station number 393936105000600

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0735	9.5	204	215	9.6	7.4	7.8	45	0.150	0.60	0.45
09 22 83	1935	14.0	260	246	6.6	7.9	7.6	55	.060	.60	.54

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0735	0.020	0.18	0.20	0.80	126	0.17	---	---	---
09 22 83	1935	.020	.28	.30	.90	158	.21	---	---	2.5

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River at Englewood
Reference code SP-400 USGS station number 06711565

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0850	10.5	700	690	8.2	8.6	7.9	175	0.200	0.70	0.50
09 22 83	1245	14.0	700	676	11.6	8.3	8.0	173	.200	1.10	.90
09 22 83	1620	19.0	650	664	12.3	8.3	8.0	171	.160	1.10	.94
09 22 83	2030	15.5	750	675	7.7	8.0	8.0	173	.140	.70	.56
09 22 83	2300	14.5	725	677	5.7	---	7.9	177	.180	.80	.62
09 23 83	0230	13.0	750	677	6.2	7.8	7.8	175	.190	.70	.51
09 23 83	0455	12.0	750	675	6.2	7.8	7.9	176	.260	.80	.54

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0850	0.020	1.3	1.3	2.0	457	0.62	0.040	19	3.6
09 22 83	1245	.020	1.3	1.3	2.4	450	.61	.040	19	2.5
09 22 83	1620	.020	1.2	1.2	2.3	433	.59	.050	11	3.5
09 22 83	2030	<.020	---	1.2	1.9	433	.59	.050	4	1.8
09 22 83	2300	<.020	---	1.3	2.1	454	.62	.040	9	3.1
09 23 83	0230	<.020	---	1.3	2.0	444	.60	.040	15	3.0
09 23 83	0455	.020	1.3	1.3	2.1	443	.60	.050	8	2.4

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Unnamed creek above PSCO dam (west bank)
Reference code TR-410 USGS station number 394003105001300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0755	10.0	1700	1740	9.2	7.4	8.2	434	0.090	1.30	1.2
09 22 83	1945	14.0	1650	1750	6.6	8.4	8.2	433	.090	2.20	2.1

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0755	0.050	8.2	8.2	9.5	1190	1.6	---	---	3.3
09 22 83	1945	.020	9.3	9.3	12.	1180	1.6	---	---	1.9

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Bi-City WWTP effluent (east bank)
Reference code TR-420 USGS station number 394005105000300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0600	19.0	995	1080	7.2	6.8	7.2	245	15.0	18.0	3.0
09 22 83	0925	20.5	1100	1070	6.7	6.8	7.0	243	15.0	17.0	2.0
09 22 83	1230	21.0	1200	1130	6.4	6.9	7.0	252	15.0	17.0	2.0
09 22 83	1440	21.0	1200	1150	6.4	6.8	7.1	257	16.0	18.0	2.0
09 22 83	2045	19.0	1200	1110	7.0	6.8	7.2	249	18.9	24.0	5.1
09 22 83	2335	19.0	1200	1100	6.7	6.8	7.1	249	16.0	20.0	4.0
09 23 83	0225	19.0	1300	1080	6.5	6.9	7.1	250	16.0	18.0	2.0
09 23 83	0500	16.0	900	892	7.5	6.9	7.5	215	7.50	9.00	1.5

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0600	0.060	----	<0.10	--	674	0.92	6.10	24	----
09 22 83	0925	.040	----	<.10	--	680	.92	5.60	19	55.2
09 22 83	1230	.050	----	<.10	--	737	1.0	5.50	4	8.7
09 22 83	1440	.060	----	<.10	--	736	1.0	5.50	15	11.6
09 22 83	2045	.050	----	<.10	--	680	.92	5.60	9	18.1
09 22 83	2335	.040	----	<.10	--	671	.91	5.80	3	11.7
09 23 83	0225	.050	----	<.10	--	692	.94	6.00	5	16.9
09 23 83	0500	.110	.89	1.0	10	569	.77	3.10	11	13.4

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Arapahoe PSCO effluent (west bank)
Reference code TR-440 USGS station number 394016104595100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0915	15.0	2200	2120	8.8	8.4	7.8	112	0.150	1.40	1.3
09 22 83	1315	16.0	2200	2110	11.6	8.0	7.9	108	.160	1.60	1.4
09 22 83	1655	18.0	2200	2110	12.2	8.1	8.0	106	.140	1.40	1.3
09 22 83	2045	16.0	2200	2120	9.4	7.8	7.9	103	.130	1.90	1.8
09 22 83	2320	15.5	2300	2130	7.2	---	7.9	103	.120	1.10	.98
09 23 83	0245	15.0	2300	2130	5.8	7.9	7.9	105	.120	1.60	1.5
09 23 83	0515	15.5	2400	2250	5.8	7.9	8.0	112	.170	1.50	1.3

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0915	0.020	0.68	0.70	2.1	1790	2.4	---	---	6.6
09 22 83	1315	.020	.48	.50	2.1	1780	2.4	---	---	7.6
09 22 83	1655	.020	.38	.40	1.8	1790	2.4	---	---	9.1
09 22 83	2045	.020	.38	.40	2.3	1790	2.4	---	---	11.7
09 22 83	2320	.020	.38	.40	1.5	1790	2.4	---	---	8.4
09 23 83	0245	.020	.48	.50	2.1	1790	2.4	---	---	12.2
09 23 83	0515	.020	1.3	1.3	2.8	1890	2.6	---	---	6.9

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Harvard Gulch at mouth
Reference code TR-460 USGS station number 394029104594800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0825	11.0	1300	1250	7.4	7.2	8.0	306	0.210	1.10	0.89
09 22 83	2020	16.0	1190	1180	6.3	8.2	8.4	256	.090	1.60	1.5
09 23 83	0530	14.5	1230	1190	7.1	7.3	8.2	291	.090	1.30	1.2

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0825	0.080	1.8	1.9	3.0	900	1.2	---	---	4.5
09 22 83	2020	.030	2.6	2.6	4.2	822	1.1	---	---	6.7
09 23 83	0530	.030	3.2	3.2	4.5	837	1.1	---	---	2.7

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River at Evans Ave.
Reference code SP-500 USGS station number 394042104595100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0640	12.0	840	789	6.0	7.7	7.6	195	3.90	8.00	4.1
09 22 83	1010	13.0	890	830	7.4	7.6	7.5	200	5.50	7.50	2.0
09 22 83	1405	17.0	940	859	10.6	7.4	7.5	202	5.50	7.00	1.5
09 22 83	1805	17.0	900	829	8.7	7.8	7.6	176	6.00	8.00	2.0
09 22 83	2100	16.0	950	850	6.9	7.4	7.6	199	6.50	9.00	2.5
09 23 83	0005	15.5	960	865	6.2	7.3	7.5	203	6.50	9.00	2.5
09 23 83	0305	14.5	950	835	6.2	7.4	7.2	201	5.50	7.00	1.5

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0640	0.050	1.2	1.2	9.2	526	0.72	1.50	19	5.4
09 22 83	1010	.050	.95	1.0	8.5	543	.74	1.90	15	6.9
09 22 83	1405	.070	.93	1.0	8.0	560	.76	1.60	1	6.4
09 22 83	1805	.080	1.0	1.1	9.1	536	.73	1.40	7	6.7
09 22 83	2100	.080	1.2	1.3	10.	545	.74	1.80	8	7.4
09 23 83	0005	.080	1.3	1.4	10.	554	.75	2.00	5	9.3
09 23 83	0305	.080	1.2	1.3	8.3	541	.74	1.70	8	7.7

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River at Florida Ave.
Reference code SP-600 USGS station number 06711590

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0720	12.5	860	811	6.4	7.7	7.8	195	4.30	5.10	0.80
09 22 83	1035	14.0	840	795	7.5	7.8	7.7	192	3.60	4.20	.60
09 22 83	1425	17.0	945	866	10.0	7.5	7.6	205	6.00	7.00	1.0
09 22 83	1835	17.0	980	853	8.0	7.8	7.7	201	5.50	7.00	1.5
09 22 83	2125	16.0	940	844	6.7	7.6	7.7	198	6.00	8.00	2.0
09 23 83	0035	15.0	960	858	6.2	7.5	7.6	200	6.50	8.00	1.5
09 23 83	0335	14.5	960	863	6.3	7.5	7.6	202	6.50	9.00	2.5

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0720	0.080	1.1	1.2	6.3	529	0.72	---	---	6.3
09 22 83	1035	.080	1.2	1.3	5.5	521	.71	---	---	6.2
09 22 83	1425	.110	1.1	1.2	8.2	562	.76	---	---	6.2
09 22 83	1835	.120	1.2	1.3	8.3	561	.76	---	---	6.7
09 22 83	2125	.110	1.2	1.3	9.3	534	.73	---	---	6.7
09 23 83	0035	.120	1.4	1.5	9.5	550	.75	---	---	6.9
09 23 83	0335	.100	1.2	1.3	10.	554	.75	---	---	8.7

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Sanderson Gulch at mouth, at Denver
Reference code TR-610 USGS station number 06711610

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0735	8.0	795	742	7.8	8.3	8.1	229	0.110	0.80	0.69
09 22 83	1055	12.5	690	665	9.1	8.7	8.3	197	.150	.90	.75
09 22 83	1440	17.5	730	666	10.8	8.8	8.3	175	.090	1.30	1.2
09 22 83	1855	16.0	700	647	7.2	8.8	8.6	158	.110	1.50	1.4
09 22 83	2150	14.0	700	653	6.9	8.1	8.1	163	.160	1.30	1.1
09 23 83	0050	12.0	750	689	7.6	8.0	8.0	188	.170	1.40	1.2
09 23 83	0355	10.0	790	715	7.8	8.1	8.1	211	.020	1.10	1.1

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0735	0.030	1.7	1.7	2.5	488	0.66	---	---	2.5
09 22 83	1055	.030	1.5	1.5	2.4	431	.59	---	---	5.2
09 22 83	1440	.030	1.5	1.5	2.8	425	.58	---	---	4.3
09 22 83	1855	.030	1.4	1.4	2.9	408	.55	---	---	4.0
09 22 83	2150	.030	1.4	1.4	2.7	417	.57	---	---	5.3
09 23 83	0050	.040	1.5	1.5	2.9	443	.60	---	---	6.3
09 23 83	0355	.050	1.5	1.5	2.6	458	.62	---	---	3.4

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River below footbridge, below Florida
Reference code SP-700 USGS station number 394128104594700

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0750	12.5	860	818	6.3	7.8	7.7	171	4.20	6.00	1.8
09 22 83	1115	14.0	840	795	7.5	7.9	7.8	193	3.60	4.30	.70
09 22 83	1455	17.0	930	862	9.4	7.7	7.6	204	5.50	7.50	2.0
09 22 83	1925	16.5	950	858	7.2	7.5	7.9	195	5.50	7.00	1.5
09 22 83	2215	15.5	930	849	7.0	7.5	7.6	198	6.00	8.00	2.0
09 23 83	0125	14.5	950	864	6.8	7.5	7.6	200	6.00	9.00	3.0
09 23 83	0420	14.0	960	862	6.7	7.5	7.6	204	6.00	8.00	2.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0750	0.080	1.2	1.3	7.3	485	0.66	---	---	6.7
09 22 83	1115	.080	1.2	1.3	5.6	525	.71	---	---	6.6
09 22 83	1455	.120	1.1	1.2	8.7	561	.76	---	---	5.0
09 22 83	1925	.130	1.2	1.3	8.3	548	.75	---	---	9.9
09 22 83	2215	.120	1.3	1.4	9.4	551	.75	---	---	8.9
09 23 83	0125	.120	1.5	1.6	11.	556	.76	---	---	7.2
09 23 83	0420	.110	1.3	1.4	9.4	563	.77	---	---	11.1

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River above Mississippi Ave.
Reference code SP-800 USGS station number 394141104593300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0810	12.0	890	828	6.1	7.7	7.6	198	4.30	5.00	0.70
09 22 83	1130	14.0	845	800	7.4	7.9	7.8	193	3.40	3.90	.50
09 22 83	1515	17.0	940	864	9.4	7.7	7.6	204	5.50	6.00	.50
09 22 83	1940	16.0	950	862	7.1	7.6	7.8	200	5.50	7.00	1.5
09 22 83	2245	15.5	940	853	6.7	7.6	7.7	169	6.00	8.00	2.0
09 23 83	0150	14.5	960	869	6.5	7.5	7.6	201	6.50	8.00	1.5
09 23 83	0445	14.0	960	868	6.5	7.5	7.7	204	6.00	9.00	3.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0810	0.080	1.3	1.4	6.4	537	0.73	---	---	5.5
09 22 83	1130	.090	1.3	1.4	5.3	527	.72	---	---	5.1
09 22 83	1515	.120	1.2	1.3	7.3	564	.77	---	---	4.9
09 22 83	1940	.140	1.3	1.4	8.4	553	.75	---	---	6.6
09 22 83	2245	.130	1.5	1.6	9.6	564	.77	---	---	10.1
09 23 83	0150	.130	1.6	1.7	9.7	556	.76	---	---	6.1
09 23 83	0445	.110	1.4	1.5	11.	566	.77	---	---	9.4

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Storm sewer at Mississippi Ave. (east bank)
Reference code TR-810 USGS station number 394149104592900

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0855	16.0	1030	921	8.3	7.0	8.1	305	0.160	1.60	1.4
09 22 83	2050	17.0	800	855	7.0	8.2	8.0	278	.110	1.70	1.6
09 23 83	0540	17.0	790	875	7.4	7.0	8.1	285	.080	1.20	1.1

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0855	<0.020	---	6.2	7.8	613	0.83	---	---	2.7
09 22 83	2050	.030	5.9	5.9	7.6	560	.76	---	---	2.6
09 23 83	0540	<.020	---	5.7	6.9	583	.79	---	---	1.8

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River above Santa Fe overpass
Reference code SP-900 USGS station number 394210104594100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0610	14.0	840	847	7.0	7.6	7.7	202	5.80	7.00	1.2
09 22 83	1010	14.0	810	818	8.2	7.6	7.8	197	4.00	4.90	.90
09 22 83	1315	16.5	840	829	9.4	7.8	7.8	198	4.50	5.00	.50
09 22 83	1816	18.5	890	869	7.9	7.9	7.9	201	5.00	6.00	1.0
09 22 83	2053	17.0	890	856	7.0	8.0	7.8	201	5.00	8.00	3.0
09 22 83	2356	16.0	860	851	7.3	8.0	7.7	198	5.50	8.00	2.5
09 23 83	0301	15.0	870	864	6.8	7.7	7.8	200	6.00	9.00	3.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0610	0.110	1.3	1.4	8.4	555	0.75	---	---	8.4
09 22 83	1010	.110	1.5	1.6	6.5	542	.74	---	---	4.4
09 22 83	1315	.130	1.5	1.6	6.6	539	.73	---	---	4.6
09 22 83	1816	.170	1.4	1.6	7.6	565	.77	---	---	7.2
09 22 83	2053	.160	1.3	1.5	9.5	562	.76	---	---	7.6
09 22 83	2356	.150	1.6	1.6	9.6	548	.75	---	---	9.0
09 23 83	0301	.140	1.6	1.7	11.	576	.78	---	---	12.9

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River below Alameda Ave.
Reference code SP-1000 USGS station number 394241104595900

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0705	14.0	850	856	6.5	7.6	7.7	204	5.90	8.00	2.1
09 22 83	1050	14.0	850	834	8.7	7.4	7.8	199	4.00	5.00	1.0
09 22 83	1450	14.0	880	811	9.1	7.9	7.9	196	3.50	3.90	.40
09 22 83	1843	17.0	900	870	7.7	8.1	7.8	203	4.90	6.00	1.1
09 22 83	2135	16.5	890	873	6.8	8.0	7.8	193	4.80	5.00	.20
09 23 83	0018	15.5	860	853	6.7	8.0	7.7	201	5.00	7.00	2.0
09 23 83	0325	15.0	860	869	6.7	7.9	7.8	202	6.00	9.00	3.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0705	0.130	1.4	1.5	9.5	556	0.76	---	---	5.6
09 22 83	1050	.130	1.6	1.7	6.7	551	.75	---	---	6.5
09 22 83	1450	.150	1.6	1.8	5.7	536	.73	---	---	8.2
09 22 83	1843	.200	1.6	1.8	7.8	567	.77	---	---	5.6
09 22 83	2135	.200	1.6	1.8	6.8	562	.76	---	---	5.7
09 23 83	0018	.170	1.4	1.6	8.6	550	.75	---	---	8.5
09 23 83	0325	.160	1.6	1.8	11.	560	.76	---	---	9.0

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River above Vallejo St.
Reference code SP-1100 USGS station number 394321105000500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0745	14.0	890	869	6.2	7.4	7.6	200	6.00	7.00	1.0
09 22 83	1140	15.5	880	876	8.0	7.2	8.0	205	3.70	4.30	.60
09 22 83	1530	17.0	840	824	9.2	7.7	7.7	189	2.80	3.30	.50
09 22 83	1905	17.0	890	863	---	8.1	7.9	198	4.30	4.80	.50
09 22 83	2151	16.5	900	876	---	7.9	7.7	198	4.50	7.00	2.5
09 23 83	0048	15.5	890	870	---	8.0	7.7	197	4.70	5.10	.40
09 23 83	0358	14.5	870	860	---	7.8	7.7	183	5.50	9.00	3.5

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0745	0.160	1.4	1.6	8.6	560	0.76	1.60	19	4.3
09 22 83	1140	.190	2.2	2.4	6.7	585	.80	.990	7	5.3
09 22 83	1530	.160	1.8	2.0	5.3	544	.74	1.10	13	3.7
09 22 83	1905	.240	1.8	2.0	6.8	567	.77	1.70	5	7.8
09 22 83	2151	.230	1.7	1.9	8.9	626	.85	1.30	12	7.0
09 23 83	0048	.220	1.6	1.8	6.9	561	.76	1.40	5	5.0
09 23 83	0358	.190	1.6	1.8	11.	571	.78	1.40	13	7.4

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Storm sewer at Vallejo St.
Reference code TR-1110 USGS station number 394321105000600

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0910	16.5	1700	1520	8.4	7.2	8.4	411	0.230	1.50	1.3
09 22 83	2115	16.0	950	1170	6.0	8.5	8.3	344	.100	1.10	1.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0910	0.020	7.2	7.2	8.7	961	1.3	---	---	2.9
09 22 83	2115	.740	3.5	4.2	5.3	775	1.1	---	---	8.0

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River above 8th Ave. bridge
Reference code SP-1100A USGS station number 394345105005800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0820	14.0	880	859	6.6	7.2	7.7	188	6.00	7.00	1.0
09 22 83	1215	15.0	740	864	8.5	7.5	7.7	201	4.80	6.00	1.2
09 22 83	1620	17.5	840	809	8.9	7.9	7.9	193	2.90	3.60	.70
09 22 83	1940	17.0	890	852	7.5	8.3	7.9	200	4.10	5.10	1.0
09 22 83	2226	16.5	880	875	6.6	8.0	7.7	203	4.50	7.00	2.5
09 23 83	0116	15.0	840	872	6.7	8.3	7.7	193	4.50	6.00	1.5
09 23 83	0500	14.5	890	867	6.9	7.5	7.8	205	5.00	6.00	1.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0820	0.170	1.5	1.7	8.7	559	0.76	---	---	7.0
09 22 83	1215	.180	1.7	1.9	7.9	568	.77	---	---	4.9
09 22 83	1620	.170	1.8	2.0	5.6	537	.73	---	---	3.2
09 22 83	1940	.240	1.8	2.0	7.1	561	.76	---	---	6.5
09 22 83	2226	.250	1.8	2.0	9.0	581	.79	---	---	5.4
09 23 83	0116	.230	1.7	1.9	7.9	564	.77	---	---	6.5
09 23 83	0500	.200	1.9	2.1	8.1	565	.77	---	---	4.5

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Weir Gulch at mouth
Reference code TR-1130 USGS station number 06711622

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	1000	12.0	841	805	8.8	7.6	8.1	204	0.140	1.40	1.3
09 22 83	2210	13.0	800	834	7.5	---	8.0	208	.170	1.20	1.0
09 23 83	0610	11.5	800	820	8.0	7.9	8.1	209	.140	1.20	1.1

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	1000	0.050	2.7	2.7	4.1	525	0.71	---	---	7.1
09 22 83	2210	.050	2.8	2.8	4.0	558	.76	---	---	10.5
09 23 83	0610	.040	2.6	2.6	3.8	546	.74	---	---	7.4

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Zuni St. power plant #1 (west bank)
Reference code TR-1135 USGS station number 394405105010000

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	1025	18.0	824	856	7.6	6.8	7.6	183	2.90	3.40	0.50
09 22 83	2240	19.5	850	853	6.6	7.9	7.6	186	2.90	4.00	1.1

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	1025	0.450	1.6	2.0	5.4	566	0.77	---	---	4.1
09 22 83	2240	.470	1.6	2.1	6.1	553	.75	---	---	3.6

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Zuni St. power plant #2 (east bank trough)
Reference code TR-1140 USGS station number 394414105010200

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	2320	17.0	750	846	8.0	8.5	8.0	198	3.50	3.90	0.40

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	2320	0.240	1.9	2.1	6.0	561	0.76	---	---	8.9

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Zuni St. power plant #3 (west bank)
Reference code TR-1145 USGS station number 394416105010400

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	1045	18.0	1520	1530	7.6	6.4	7.3	356	0.190	1.10	0.91
09 22 83	2300	19.5	1400	1530	4.4	7.9	7.3	356	.200	1.10	.90

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	1045	<0.020	---	6.0	7.1	1030	1.4	---	---	2.2
09 22 83	2300	<.020	---	5.6	6.7	1010	1.4	---	---	.6

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Lakewood Gulch at mouth, at Denver
Reference code TR-1150 USGS station number 06711800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	1105	11.0	773	762	---	7.4	8.2	201	0.070	1.00	0.93
09 22 83	2345	11.0	800	816	8.6	9.9	8.1	218	.100	1.40	1.3
09 23 83	0630	10.0	750	798	9.2	7.9	8.0	210	.090	.60	.51

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	1105	0.020	1.9	1.9	2.9	512	0.70	---	---	2.5
09 22 83	2345	.020	2.0	2.0	3.4	562	.76	---	---	1.3
09 23 83	0630	.020	2.0	2.0	2.6	530	.72	---	---	2.5

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Sloans Lake outfall (old 15th Ave. bridge)
Reference code TR-1160 USGS station number 394424105010200

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	1225	16.0	580	591	8.3	7.7	8.7	128	0.070	2.80	2.7
09 23 83	0020	17.0	610	641	7.2	9.6	8.6	134	.070	2.70	2.6

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	1225	0.020	0.18	0.20	3.0	391	0.53	---	---	5.5
09 23 83	0020	.020	.48	.50	3.2	414	.56	---	---	5.2

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River above 17th Ave. underpass
Reference code SP-1200 USGS station number 394433105005800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0900	14.0	850	839	8.2	7.2	7.9	203	5.00	7.00	2.0
09 22 83	1200	16.0	890	845	7.3	8.0	7.9	200	5.00	6.00	1.0
09 22 83	1540	16.0	940	854	8.4	8.0	7.9	201	4.70	5.00	.30
09 22 83	2008	17.0	850	815	7.7	8.4	8.1	195	2.70	3.00	.30
09 22 83	2257	16.0	---	838	7.3	8.3	7.9	198	3.10	4.00	.90
09 23 83	0205	15.0	870	869	7.2	8.3	7.9	204	3.90	4.60	.70
09 23 83	0433	15.0	890	876	7.3	7.5	7.9	203	3.80	4.50	.70

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0900	0.190	1.7	1.9	8.9	540	0.73	---	---	---
09 22 83	1200	.180	1.6	1.8	7.8	550	.75	---	---	6.6
09 22 83	1540	.190	1.8	2.0	7.0	561	.76	---	---	8.5
09 22 83	2008	.190	1.9	2.1	5.1	539	.73	---	---	7.9
09 22 83	2257	.220	2.0	2.2	6.2	545	.74	---	---	---
09 23 83	0205	.240	1.8	2.0	6.6	578	.79	---	---	3.3
09 23 83	0433	.230	1.8	2.0	6.5	576	.78	---	---	4.5

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Ellis Foods effluent
Reference code TR-1210 USGS station number 394434105005800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos)		Dissolved oxygen (mg/L)	pH (standard units)		Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
			Field	Lab		Field	Lab				
09 22 83	1255	28.0	250	248	5.6	6.8	7.8	57	0.310	0.80	0.49

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	1255	0.020	---	<0.10	---	150	0.20	---	---	1.2

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River at 7th St., near Confluence Park
Reference code SP-1300 USGS station number 394502105004700

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0620	13.5	920	849	7.0	7.9	7.8	201	4.10	4.20	0.10
09 22 83	1005	14.5	930	856	7.8	8.0	7.9	201	4.80	7.00	2.2
09 22 83	1410	16.5	930	855	8.6	8.1	7.9	201	5.00	7.00	2.0
09 22 83	1745	17.0	960	856	8.0	8.0	8.0	200	3.90	4.80	.90
09 22 83	2050	17.0	960	831	6.3	7.9	8.0	195	2.70	2.90	.20
09 22 83	2350	15.5	980	845	6.4	7.8	7.9	197	2.80	3.30	.50
09 23 83	0305	15.0	1020	880	6.2	7.7	7.8	204	3.80	4.80	1.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0620	0.230	1.8	2.0	6.2	561	0.76	---	---	---
09 22 83	1005	.210	1.8	2.0	9.0	562	.76	---	---	6.5
09 22 83	1410	.200	1.8	2.0	9.0	558	.76	---	---	5.9
09 22 83	1745	.220	2.0	2.2	7.0	576	.78	---	---	2.3
09 22 83	2050	.210	2.1	2.3	5.2	557	.76	---	---	5.5
09 22 83	2350	.230	2.0	2.2	5.5	551	.75	---	---	7.8
09 23 83	0305	.260	1.9	2.2	7.0	593	.81	---	---	3.4

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Storm sewer at 7th St. above Confluence Park
Reference code TR-1305 USGS station number 394503105004800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	1310	16.0	978	994	7.8	7.6	8.0	274	1.60	4.20	2.6
09 23 83	0055	14.5	380	436	7.4	9.8	7.8	115	.170	3.20	3.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	1310	0.540	3.8	4.3	8.5	663	0.90	---	----	14.7
09 23 83	0055	.230	1.5	1.7	4.9	282	.38	---	---	25.9

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Cherry Creek at mouth
Reference code TR-1310 USGS station number 394513105002600

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0700	10.0	660	1040	9.0	7.2	8.2	239	0.150	0.80	0.65
09 22 83	0955	12.0	1080	1020	9.6	7.3	8.2	235	.140	1.90	1.8
09 22 83	1300	18.0	1100	1030	8.7	7.2	8.3	232	.100	.80	.70
09 22 83	1510	18.0	1150	1060	8.1	7.2	8.2	240	.090	1.30	1.2
09 22 83	1838	15.5	950	1010	8.4	7.2	8.2	225	.080	1.50	1.4
09 22 83	2123	14.0	800	1040	8.0	7.1	8.0	234	.190	.90	.71
09 23 83	0006	12.0	1000	1050	8.5	7.2	8.1	236	.140	1.60	1.5
09 23 83	0245	12.0	950	1040	8.5	7.0	8.1	233	.200	1.80	1.6
09 23 83	0524	11.0	950	1050	8.7	7.1	8.1	238	.140	1.00	.86

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0700	0.030	4.4	4.4	5.2	728	0.99	---	---	---
09 22 83	0955	.030	4.2	4.2	6.1	729	.99	---	---	2.7
09 22 83	1300	.040	4.2	4.2	5.0	735	1.0	---	---	2.0
09 22 83	1510	.040	4.2	4.2	5.5	752	1.0	---	---	6.0
09 22 83	1838	.020	4.0	4.0	5.5	707	.96	---	---	1.8
09 22 83	2123	.020	4.1	4.1	5.0	735	1.0	---	---	3.9
09 23 83	0006	.040	4.4	4.4	6.0	739	1.0	---	---	---
09 23 83	0245	.030	4.2	4.2	6.0	729	.99	---	---	2.5
09 23 83	0524	.020	4.3	4.3	5.3	740	1.0	---	---	2.3

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River at Denver
Reference code SP-1400 USGS station number 06714000

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0700	13.0	920	880	7.6	---	7.9	206	3.20	3.10	0.0
09 22 83	1040	13.5	955	866	8.6	8.2	7.7	196	4.70	6.00	1.3
09 22 83	1450	17.5	955	875	8.6	8.2	8.0	204	4.00	5.00	1.0
09 22 83	1820	17.0	1000	881	7.7	8.0	8.1	204	3.80	4.80	1.0
09 22 83	2120	16.0	1010	872	7.2	7.9	7.9	201	2.70	2.90	.20
09 23 83	0020	15.0	1000	858	6.8	7.9	7.9	199	1.60	2.40	.80
09 23 83	0325	14.0	1020	891	7.2	7.8	7.9	206	3.00	2.90	.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0700	0.220	2.2	2.4	5.5	581	0.79	---	---	---
09 22 83	1040	.170	1.6	1.8	7.8	574	.78	---	---	5.5
09 22 83	1450	.200	2.2	2.4	7.4	583	.79	---	---	4.6
09 22 83	1820	.210	2.3	2.5	7.3	583	.79	---	---	5.9
09 22 83	2120	.220	2.4	2.6	5.5	579	.79	---	---	6.5
09 23 83	0020	.210	2.4	2.6	5.0	577	.78	---	---	5.2
09 23 83	0325	.240	2.3	2.5	5.4	595	.81	---	---	---

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Storm sewer at 23rd St. bridge
Reference code TR-1420 USGS station number 394543104595400

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	1330	16.0	1280	1220	---	---	7.6	278	0.200	1.70	1.5
09 23 83	0145	14.0	1200	1210	7.4	7.1	7.6	276	.210	1.50	1.3

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	1330	0.020	5.3	5.3	7.0	849	1.2	---	---	1.8
09 23 83	0145	.020	5.2	5.2	6.7	838	1.1	---	---	.5

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River above 31st St. bridge
Reference code SP-1500 USGS station number 394602104590500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0745	13.0	974	890	7.4	8.0	7.9	210	2.90	3.10	0.20
09 22 83	1130	14.5	974	894	9.1	8.1	7.9	209	3.40	4.10	.70
09 22 83	1530	18.0	960	884	8.8	8.1	8.0	206	4.10	4.90	.80
09 22 83	1850	17.0	960	893	7.1	7.9	7.9	207	3.70	5.00	1.3
09 22 83	2155	16.0	1010	890	6.1	7.8	7.9	196	2.50	2.70	.20
09 23 83	0045	15.0	1010	877	6.2	7.8	7.9	205	1.50	2.30	.80
09 23 83	0350	14.0	1030	894	6.3	7.7	7.9	206	2.50	3.20	.70

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0745	0.250	2.6	2.8	5.9	602	0.82	---	---	---
09 22 83	1130	.220	2.5	2.7	6.8	596	.81	---	---	5.9
09 22 83	1530	.250	2.4	2.6	7.5	584	.79	---	---	5.4
09 22 83	1850	.250	2.5	2.7	7.7	603	.82	---	---	4.5
09 22 83	2155	.250	2.7	2.9	5.6	600	.82	---	---	7.2
09 23 83	0045	.230	2.7	2.9	5.2	583	.79	---	---	3.6
09 23 83	0350	.260	2.5	2.8	6.0	598	.81	---	---	4.2

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Ice plant effluent at 31st St. bridge
Reference code TR-1510 USGS station number 394603104590400

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos)		Dissolved oxygen (mg/L)	pH (standard units)		Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
			Field	Lab		Field	Lab				
09 22 83	1400	16.0	1280	1180	8.3	7.5	7.5	311	0.640	2.20	1.6
09 23 83	0245	16.0	1200	1190	6.3	7.4	7.5	313	.700	1.70	1.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	1400	0.070	4.8	4.9	7.1	790	1.1	---	---	3.2
09 23 83	0245	.080	4.8	4.9	6.6	801	1.1	---	---	1.7

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Thirty-sixth Street storm sewer at Denver
Reference code TR-1520 USGS station number 06714100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0745	17.0	400	418	8.2	7.2	7.9	88	0.640	2.10	1.5
09 22 83	1030	18.0	360	352	7.9	7.0	7.7	81	.340	1.80	1.5
09 22 83	1335	18.0	330	328	7.2	7.1	7.5	78	.490	3.00	2.5
09 22 83	1540	18.5	320	311	7.3	6.9	7.8	71	.360	2.00	1.6
09 22 83	1903	17.0	560	566	7.5	7.0	7.6	128	.790	2.40	1.6
09 22 83	2200	16.0	580	707	6.5	6.9	7.6	165	1.30	3.30	2.0
09 23 83	0040	16.0	800	736	6.5	7.1	7.7	170	1.10	2.40	1.3
09 23 83	0332	15.0	700	681	7.0	7.1	7.9	159	.970	2.30	1.3
09 23 83	0612	15.0	650	655	7.6	7.1	7.9	151	1.10	1.80	.70

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0745	0.060	2.3	2.4	4.5	204	0.28	---	---	4.7
09 22 83	1030	.070	1.9	2.0	3.8	220	.30	---	---	7.1
09 22 83	1335	.070	1.3	1.4	4.4	219	.30	---	---	----
09 22 83	1540	.060	1.1	1.2	3.2	201	.27	---	---	5.7
09 22 83	1903	.140	2.7	2.8	5.2	362	.49	---	---	13.7
09 22 83	2200	.330	2.1	2.4	5.7	462	.63	---	---	----
09 23 83	0040	.210	2.9	3.1	5.5	476	.65	---	---	7.4
09 23 83	0332	.160	2.5	2.7	5.0	444	.60	---	---	3.8
09 23 83	0612	.150	2.5	2.6	4.4	417	.57	---	---	8.2

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River below 38th St. bridge
Reference code SP-1600 USGS station number 394634104583800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0815	13.0	970	888	7.6	8.0	7.9	208	2.70	3.10	0.40
09 22 83	1200	15.0	974	887	9.6	8.2	8.0	207	3.10	4.00	.90
09 22 83	1605	18.0	960	881	9.0	8.2	8.0	205	3.80	4.80	1.0
09 22 83	1910	16.5	945	900	6.3	7.9	8.0	208	3.60	4.40	.80
09 22 83	2215	16.0	1010	900	6.0	7.8	7.8	197	2.70	3.10	.40
09 23 83	0105	14.5	980	878	6.2	7.8	7.9	205	1.40	2.20	.80
09 23 83	0405	14.0	1000	889	6.5	7.8	8.0	208	2.30	2.80	.50

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0815	0.260	2.5	2.8	5.9	596	0.81	---	---	---
09 22 83	1200	.230	2.6	2.8	6.8	596	.81	---	---	5.2
09 22 83	1605	.270	2.5	2.8	7.6	587	.80	---	---	5.0
09 22 83	1910	.270	2.5	2.8	7.2	595	.81	---	---	6.9
09 22 83	2215	.270	2.6	2.9	6.0	597	.81	---	---	3.9
09 23 83	0105	.240	2.7	2.9	5.1	591	.80	---	---	6.1
09 23 83	0405	.270	2.6	2.9	5.7	600	.82	---	---	5.0

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Storm sewer below 38th Street bridge
Reference code TR-1610 USGS station number 394635104583800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0815	15.0	740	730	5.8	7.1	8.1	162	0.150	1.40	1.3
09 22 83	1050	15.5	625	610	6.0	7.2	7.5	125	.140	1.50	1.4
09 22 83	1350	16.5	770	727	5.4	7.0	7.6	147	.140	1.90	1.8
09 22 83	1555	16.5	775	751	6.8	7.1	7.5	153	.110	1.50	1.4
09 22 83	1940	15.5	650	680	6.2	7.5	7.5	145	.140	1.70	1.6
09 22 83	2230	15.0	650	664	7.0	7.0	7.6	142	.100	1.80	1.7
09 23 83	0115	16.0	675	641	7.2	7.2	7.7	135	.110	1.40	1.3
09 23 83	0407	15.0	650	658	7.6	7.0	7.7	137	.110	1.40	1.3
09 23 83	0638	15.0	750	768	7.3	7.1	7.9	145	.110	1.40	1.3

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0815	0.040	1.7	1.7	3.1	508	0.69	---	---	----
09 22 83	1050	.030	1.6	1.6	3.1	404	.55	---	---	----
09 22 83	1350	.070	1.8	1.9	3.8	500	.68	---	---	----
09 22 83	1555	.040	2.0	2.0	3.5	505	.69	---	---	9.8
09 22 83	1940	.060	1.4	1.5	3.2	450	.61	---	---	17.4
09 22 83	2230	.060	1.2	1.3	3.1	444	.60	---	---	11.5
09 23 83	0115	.030	1.3	1.3	2.7	421	.57	---	---	8.1
09 23 83	0407	.030	1.4	1.4	2.8	428	.58	---	---	6.7
09 23 83	0638	.030	1.3	1.3	2.7	500	.68	---	---	9.1

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

Storm sewer 200 yards above SP-1700
Reference code TR-1620 USGS station number 394709104583000

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos)		Dissolved oxygen (mg/L)	pH (standard units)		Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
			Field	Lab		Field	Lab				
09 22 83	1420	16.5	1530	1560	8.2	7.8	8.2	278	0.100	2.50	2.4
09 23 83	0315	16.0	1080	1110	6.4	7.4	7.7	197	.160	1.20	1.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	1420	0.20	5.9	5.9	8.4	982	1.3	---	---	2.2
09 23 83	0315	.020	4.3	4.3	5.5	710	.97	---	---	.5

Table 12.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, September 22 and 23, 1983--Continued

South Platte River at 50th Ave.
Reference code SP-1700 USGS station number 06714130

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
09 22 83	0840	13.0	964	889	7.4	---	7.9	209	2.50	2.40	0.0
09 22 83	1245	16.0	970	892	10.1	8.2	7.9	206	3.00	3.30	.30
09 22 83	1640	18.0	960	882	9.5	8.2	8.1	204	3.30	4.90	1.6
09 22 83	1935	16.5	880	908	6.4	7.9	7.9	207	3.30	4.40	1.1
09 22 83	2240	15.5	1010	886	5.5	7.7	7.9	204	2.50	2.70	.20
09 23 83	0130	14.5	1010	877	6.0	7.8	7.9	203	1.40	2.30	.90
09 23 83	0425	14.0	1010	882	6.2	7.7	7.9	205	1.50	2.60	1.1

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
09 22 83	0840	0.250	2.7	2.9	5.3	598	0.81	1.10	21	---
09 22 83	1245	.230	2.7	2.9	6.2	596	.81	.900	19	4.1
09 22 83	1640	.270	2.6	2.9	7.8	586	.80	1.10	18	6.4
09 22 83	1935	.270	2.6	2.9	7.3	591	.80	1.10	12	4.4
09 22 83	2240	.270	2.6	2.9	5.6	598	.81	1.00	<1	3.8
09 23 83	0130	.240	2.8	3.0	5.3	584	.79	.830	14	3.5
09 23 83	0425	.250	2.7	2.9	5.5	591	.80	.930	19	4.0

Table 13.--Discharge-measurement data for the South Platte River, tributaries, industrial and municipal inflows, September 22, 1983

Study reference code	Date mo	Date day	Date year	Time	Width (feet)	Area (square feet)	Velocity (feet per second)	Discharge (cubic feet per second)	Gage height (feet)
SP-100	09	22	83	0705	50.	52.	0.18	9.2	1.20
SP-100	09	22	83	1200	44.	45.	.26	11.6	1.20
SP-200	09	22	83	0805	92.	77.	.45	32.9	1.15
SP-200	09	22	83	1415	87.	65.	.50	32.4	1.15
SP-300	09	22	83	0910	33.	20.	1.55	31.8	2.82
SP-300	09	22	83	1520	33.	22.	1.46	32.3	2.82
SP-400	09	22	83	1015	125.	130.	.52	68.0	1.66
SP-400	09	22	83	1610	125.	131.	.53	70.4	1.66
SP-500	09	22	83	0740	56.	72.	1.34	96.2	2.37
SP-500	09	22	83	1340	55.	75.	1.57	118.	2.42
SP-600	09	22	83	0930	71.	129.	.80	103.	2.02
SP-600	09	22	83	1500	70.	132.	.83	110.	2.05
SP-700	09	22	83	1118	78.	116.	1.08	125.	1.74
SP-700	09	22	83	1505	75.	111.	.94	104.	1.69
SP-800	09	22	83	1230	102.	123.	1.03	126.	.98
SP-800	09	22	83	1700	102.	117.	.92	108.	.90
SP-900	09	22	83	0640	89.	160.	.64	102.	1.74
SP-900	09	22	83	1325	90.	139.	.74	130.	1.84
SP-1000	09	22	83	0725	130.	125.	.80	100.	1.78
SP-1000	09	22	83	1440	132.	141.	.89	121.	1.91
SP-1100	09	22	83	0915	66.	99.	1.05	104.	.82
SP-1100	09	22	83	1557	66.	107.	1.13	121.	.93
SP-1100A	09	22	83	1055	115.	243.	.45	110.	2.40
SP-1100A	09	22	83	1657	113.	248.	.44	110.	2.41
SP-1200	09	22	83	0815	104.	159.	.73	116.	2.07
SP-1200	09	22	83	1541	104.	179.	.81	145.	2.25
SP-1300	09	22	83	1047	128.	211.	.59	125.	1.51
SP-1300	09	22	83	1652	128.	216.	.63	136.	1.58
SP-1400	09	22	83	1121	97.	91.	1.57	143.	1.60
SP-1400	09	22	83	1757	98.	93.	1.56	145.	1.64
SP-1500	09	22	83	1005	96.	114.	1.20	138.	1.75
SP-1500	09	22	83	1507	97.	130.	1.34	174.	1.86
SP-1600	09	22	83	1125	122.	101.	1.38	139.	.63
SP-1600	09	22	83	1621	124.	116.	1.37	159.	.71
SP-1700	09	22	83	1332	91.	94.	1.71	160.	2.73
TR-210	09	22	83	0647	11.5	3.3	.98	3.2	1.90
TR-210	09	22	83	1250	12.	3.2	1.01	3.2	1.90
TR-310	09	22	83	0600	-----	-----	----	19.0	2.44
TR-310	09	22	83	1300	-----	-----	----	20.5	2.46
TR-320	09	22	83	0722	9.2	3.7	2.40	9.0	----

Table 13.--Discharge-measurement data for the South Platte River, tributaries, industrial and municipal inflows, September 22, 1983--Continued

Study reference code	Date mo	day	year	Time	Width (feet)	Area (square feet)	Velocity (feet per second)	Discharge (cubic feet per second)	Gage height (feet)
TR-320	09	22	83	1212	11.5	8.2	0.88	7.2	----
TR-330	09	22	83	0740	-----	-----	----	.1	----
TR-330	09	22	83	1222	.8	.2	.89	.1	----
TR-410	09	22	83	0802	1.9	.4	.73	.3	0.43
TR-410	09	22	83	1145	2.0	.4	1.05	.4	----
TR-440	09	22	83	0700	-----	-----	----	.1	----
TR-440	09	22	83	1030	-----	-----	----	.5	----
TR-440	09	22	83	1400	-----	-----	----	.5	----
TR-460	09	22	83	0830	2.6	1.0	.71	.7	----
TR-460	09	22	83	1130	3.3	1.8	.33	.6	----
TR-610	09	22	83	0812	6.5	1.2	1.84	2.2	.12
TR-610	09	22	83	1050	6.7	1.3	2.05	2.7	.14
TR-610	09	22	83	1430	6.7	1.2	1.87	2.3	.14
TR-810	09	22	83	1105	2.1	.5	3.68	2.0	----
TR-1110	09	22	83	0911	1.2	.6	.76	.4	----
TR-1110	09	22	83	1047	.7	.2	1.09	.2	----
TR-1130	09	22	83	1015	5.0	3.2	.67	2.1	.50
TR-1130	09	22	83	1012	7.5	4.1	.58	2.4	.52
TR-1130	09	22	83	1630	4.0	2.4	.72	1.7	.48
TR-1135	09	22	83	0930	-----	-----	----	.0	----
TR-1135	09	22	83	1025	-----	-----	----	.6	----
TR-1135	09	22	83	1610	-----	-----	----	.0	----
TR-1140	09	22	83	0942	1.2	.2	4.68	1.0	----
TR-1145	09	22	83	0920	-----	-----	----	.6	----
TR-1145	09	22	83	1045	-----	-----	----	.5	----
TR-1145	09	22	83	1600	-----	-----	----	.6	----
TR-1150	09	22	83	0807	13.	8.3	1.16	9.6	1.36
TR-1150	09	22	83	1115	14.	9.0	1.23	11.0	1.40
TR-1150	09	22	83	1547	14.	9.2	1.02	9.4	1.36
TR-1160	09	22	83	0847	2.4	.9	1.68	1.6	----
TR-1160	09	22	83	1232	1.6	.7	1.46	1.1	----
TR-1160	09	22	83	1525	1.8	.6	1.28	.7	----
TR-1210	09	22	83	1512	1.0	.1	.88	.1	----
TR-1220	09	22	83	0817	.6	.1	.50	.1	----
TR-1220	09	22	83	1300	-----	-----	----	.0	----
TR-1220	09	22	83	1452	1.5	.8	1.14	.9	----
TR-1305	09	22	83	0757	1.2	.2	2.75	.4	----
TR-1305	09	22	83	1310	-----	-----	----	.1	----
TR-1305	09	22	83	1437	1.2	.1	1.30	.1	----
TR-1310	09	22	83	1358	30.	13.9	1.68	23.3	2.17

Table 13.--Discharge-measurement data for the South Platte River, tributaries, industrial and municipal inflows, September 22, 1983--Continued

Study reference code	Date mo	Date day	Date year	Time	Width (feet)	Area (square feet)	Velocity (feet per second)	Discharge (cubic feet per second)	Gage height (feet)
TR-1420	09	22	83	0740	3.2	0.5	2.92	1.5	----
TR-1420	09	22	83	1345	1.6	.4	2.94	1.1	----
TR-1420	09	22	83	1410	1.4	.5	2.35	1.1	----
TR-1510	09	22	83	0650	3.0	.6	1.56	1.0	----
TR-1510	09	22	83	1345	3.0	.6	1.17	.7	----
TR-1510	09	22	83	1400	.8	.2	3.89	.7	----
TR-1520	09	22	83	0855	3.5	1.2	.67	.8	----
TR-1520	09	22	83	1145	3.4	1.3	.72	.9	----
TR-1520	09	22	83	1500	3.3	1.1	.65	.7	----
TR-1610	09	22	83	1232	16.	7.0	.62	4.4	1.04
TR-1610	09	22	83	1740	16.	8.0	.76	6.1	1.10
TR-1620	09	22	83	0605	1.2	.2	1.11	.2	----
TR-1620	09	22	83	1332	1.2	.2	.88	.2	----

Table 14.--Cross-section data for the South Platte River, September 22, 1983

Figure and site number		Study reference code	Latitude (degrees, minutes, seconds)	Longitude	Date mo	day	year	Width (feet)	Area (square feet)	Depth (feet)
3	1	SP-100-A	39 34 27	105 02 16	09	22	83	56.	26.4	0.47
3	2	SP-100-B	39 34 33	105 02 12	09	22	83	38.	22.2	.58
3	3	SP-100-C	39 34 55	105 01 51	09	22	83	32.	18.2	.56
3	4	SP-100-CC	39 36 19	105 01 25	09	22	83	56.	80.1	1.43
3	5	SP-100-D	39 36 49	105 01 28	09	22	83	56.	26.0	.46
3	6	SP-100-E	39 37 02	105 01 09	09	22	83	78.	83.3	1.07
3	8	SP-200-B	39 37 34	105 01 06	09	22	83	95.	41.0	.43
3	10	SP-200-D	39 37 54	105 00 50	09	22	83	137.	97.9	.71
3	11	SP-200-E	39 38 34	105 00 52	09	22	83	21.	15.0	.71
3	12	SP-200-F	39 38 47	105 00 51	09	22	83	64.	42.8	.67
3	13	SP-300-A	39 38 59	105 00 46	09	22	83	60.	68.4	1.14
3	14	SP-300-B	39 39 15	105 00 20	09	22	83	104.	50.8	.49
3	15	SP-300-C	39 39 28	105 00 10	09	22	83	105.	111.5	1.06
3	16	SP-300-D	39 39 40	105 00 13	09	22	83	75.	136.0	1.81
3	17	SP-400-A	39 39 55	105 00 15	09	21	83	80.	91.4	1.14
3	20	SP-400-D	39 40 17	104 59 51	09	21	83	110.	115.5	1.05
3	21	SP-400-E	39 40 23	104 59 48	09	21	83	110.	63.4	.58
3	22	SP-400-F	39 40 29	104 59 49	09	21	83	110.	61.7	.56
3	23	SP-400-G	39 40 36	104 59 50	09	21	83	100.	172.3	1.72
3	24	SP-400-H	39 40 42	104 59 51	09	21	83	100.	171.1	1.71
3	25	SP-500-A	39 40 43	104 59 51	09	22	83	102.	136.1	1.33
3	26	SP-500-B	39 41 08	105 00 01	09	22	83	117.	254.6	2.18
3	27	SP-600-A	39 41 23	104 59 55	09	22	83	91.	153.1	1.68
3	28	SP-700-A	39 41 29	104 59 46	09	22	83	83.	113.4	1.37
3	29	SP-800-A	39 41 48	104 59 30	09	22	83	127.	186.1	1.47
3	30	SP-900-A	39 42 11	104 59 42	09	22	83	121.	97.9	.81
3	31	SP-1000-A	39 42 46	105 00 02	09	22	83	115.	161.2	1.40
3	32	SP-1000-B	39 43 20	105 00 41	09	22	83	55.	128.8	2.34
3	34	SP-1100A-A	39 44 25	105 01 02	09	22	83	96.	207.9	2.17
3	35	SP-1100A-B	39 44 29	105 01 00	09	22	83	64.	86.2	1.35
3	36	SP-1100A-C	39 44 31	105 00 58	09	22	83	99.	155.8	1.57
3	37	SP-1200-A	39 44 33	105 00 58	09	22	83	99.	212.7	2.14
3	38	SP-1200-AA	39 44 35	105 00 57	09	22	83	88.	222.2	2.52
3	39	SP-1200-B	39 44 40	105 00 55	09	22	83	128.	181.0	1.41
3	40	SP-1200-BB	39 44 43	105 00 55	09	22	83	87.	114.1	1.31
3	42	SP-1300-A	39 45 20	105 00 24	09	22	83	95.	116.1	1.22
3	43	SP-1300-B	39 45 23	105 00 20	09	22	83	104.	122.0	1.17
3	44	SP-1300-C	39 45 31	105 00 15	09	22	83	83.	76.1	.92
3	45	SP-1400-A	39 45 43	104 59 55	09	22	83	56.	130.6	2.33
3	46	SP-1400-B	39 45 53	104 59 34	09	22	83	53.	58.6	1.11

Table 14.--Cross-section data for the South Platte River, September 22, 1983--Continued

Figure and site number	Study reference code	Latitude (degrees, minutes, seconds)	Longitude	Date mo day year	Width (feet)	Area (square feet)	Depth (feet)
3 47	SP-1400-C	39 45 58	104 59 25	09 22 83	67.	100.4	1.50
3 48	SP-1400-D	39 45 59	104 59 14	09 22 83	76.	90.3	1.19
3 49	SP-1500-A	39 46 12	104 58 57	09 22 83	98.	114.9	1.17
3 50	SP-1500-B	39 46 19	104 58 50	09 22 83	147.	102.5	.70
3 51	SP-1600-A	39 46 38	104 58 39	09 22 83	123.	114.3	.93
3 52	SP-1600-B	39 46 43	104 58 39	09 22 83	100.	75.0	.75
3 53	SP-1600-C	39 46 49	104 58 37	09 22 83	69.	154.1	2.23
3 54	SP-1600-D	39 47 07	104 58 29	09 22 83	77.	99.1	1.29

Table 15.--Mixing-zone data for September 21, 1983

	Cross Section SP-400-A Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1315	1330	1340	1350	1400	1410	1415	1420
Temperature (deg C)	14.0	14.2	14.5	14.8	15.0	15.0	15.2	15.3
pH (units)	6.85	7.6	7.9	7.9	7.95	7.9	8.0	8.0
Conductivity (µmhos)	675	675	710	720	710	710	710	700
Dissolved oxygen (mg/L)	9.5	9.2	9.1	9.1	9.1	8.9	9.1	9.5
Dye concentration (µg/L)	.05	.05	.05	.05	.05	.05	.05	.05
Residual chlorine (mg/L)	.00	.00	.00	.00	.00	.01	.00	.00
Ammonia (mg/L)	.18	.24	.22	.23	.23	.24	.26	.24

	Cross Section SP-400-A Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1440	1446	1452	1458	1504	1510	1512	1516
Temperature (deg C)	15.7	15.7	15.7	15.8	15.8	15.8	15.9	15.5
pH (units)	7.9	7.9	7.9	7.8	7.85	7.8	7.8	7.85
Conductivity (µmhos)	710	710	710	725	725	710	720	710
Dissolved oxygen (mg/L)	9.4	8.8	8.7	8.9	8.8	8.5	9.0	9.0
Dye concentration (µg/L)	.05	.05	.05	.05	.05	.05	.05	.05
Residual chlorine (mg/L)	.00	.00	.00	.00	.00	.00	.00	.00
Ammonia (mg/L)	.27	.32	.37	.31	.31	.31	.31	.31

	Cross Section SP-400-A Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1530	1537	1543	1548	1552	1557	1604	1610
Temperature (deg C)	16.4	16.2	16.2	16.2	16.2	16.1	16.1	16.0
pH (units)	7.85	7.8	7.8	7.8	7.8	7.75	7.7	7.7
Conductivity (µmhos)	710	710	710	710	700	710	710	710
Dissolved oxygen (mg/L)	9.0	8.8	8.7	8.7	8.6	8.2	8.3	8.4
Dye concentration (µg/L)	.05	.05	.05	.05	.05	.05	.05	.05
Residual chlorine (mg/L)	------	------	------	------	------	------	------	------
Ammonia (mg/L)	.29	.30	.31	.29	.30	.29	.30	.29

Table 15.--Mixing-zone data for September 21, 1983--Continued

	Cross Section SP-400-D Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1314	1318	1323	1330	1333	1337	1341	1344
Temperature (deg C)	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
pH (units)	6.9	7.0	7.2	7.3	7.3	7.3	7.4	7.4
Conductivity (µmhos)	880	850	870	860	850	830	820	830
Dissolved oxygen (mg/L)	8.8	9.0	9.1	9.2	9.0	9.1	9.2	9.1
Dye concentration (µg/L)	20.0	21.0	21.0	21.5	21.5	19.5	18.5	18.0
Residual chlorine (mg/L)	------	------	------	------	------	------	------	-----
Ammonia (mg/L)	6.0	6.0	5.5	5.5	5.5	5.0	5.0	5.0

	Cross Section SP-400-D Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1356	1358	1401	1403	1407	1409	1411	1413
Temperature (deg C)	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
pH (units)	7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.4
Conductivity (µmhos)	900	890	840	870	860	850	850	850
Dissolved oxygen (mg/L)	9.3	9.1	9.2	9.1	9.0	9.0	9.1	9.0
Dye concentration (µg/L)	23.5	24.0	20.5	21.0	21.0	20.0	18.5	18.5
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----

	Cross Section SP-400-D Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1419	1422	1424	1426	1429	1432	1434	1437
Temperature (deg C)	17.5	17.0	17.5	17.0	17.0	17.0	17.0	17.0
pH (units)	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.5
Conductivity (µmhos)	900	900	900	880	870	850	820	830
Dissolved oxygen (mg/L)	8.8	9.0	9.0	9.2	9.1	9.0	9.3	9.2
Dye concentration (µg/L)	23.5	23.5	22.5	22.0	22.0	21.0	18.5	18.0
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	------
Ammonia (mg/L)	-----	-----	-----	-----	-----	-----	-----	------

Table 15.--Mixing-zone data for September 21, 1983--Continued

	Cross Section SP-400-D Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1446	1450	1454	1457	1501	1505	1509	1514
Temperature (deg C)	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
pH (units)	7.4	7.4	7.4	7.4	7.4	7.5	7.5	7.5
Conductivity (µmhos)	890	890	890	880	870	850	850	850
Dissolved oxygen (mg/L)	8.9	9.2	9.1	9.2	9.0	9.0	9.0	9.0
Dye concentration (µg/L)	22.5	23.5	23.0	22.0	22.0	20.0	19.0	20.0
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	6.7	6.8	6.6	6.6	6.8	6.3	6.0	6.0

	Cross Section SP-400-E Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1311	1319	1326	1333	1337	1343	1347	1352
Temperature (deg C)	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
pH (units)	6.6	6.6	6.7	6.7	6.9	6.9	7.0	7.3
Conductivity (µmhos)	860	870	850	830	830	830	820	820
Dissolved oxygen (mg/L)	9.8	10.0	9.9	9.8	9.8	9.8	9.9	9.7
Dye concentration (µg/L)	16.5	20.5	20.0	20.0	19.0	19.0	18.5	17.5
Residual chlorine (mg/L)	.04	.05	.06	.06	.05	.05	.05	.04
Ammonia (mg/L)	5.5	5.5	5.5	5.0	5.0	5.0	5.0	4.7

	Cross Section SP-400-E Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1400	1405	1408	1411	1415	1418	1421	1424
Temperature (deg C)	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
pH (units)	6.8	6.9	7.1	7.2	7.2	7.2	7.2	7.2
Conductivity (µmhos)	870	870	840	840	840	840	840	830
Dissolved oxygen (mg/L)	10.0	9.9	9.9	9.0	9.8	9.9	9.8	9.7
Dye concentration (µg/L)	21.5	22.5	20.0	19.5	19.5	18.5	18.5	18.0
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----

Table 15.--Mixing-zone data for September 21, 1983--Continued

	Cross Section SP-400-E Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1429	1433	1436	1439	1442	1446	1449	1452
Temperature (deg C)	16.5	17.0	16.5	16.5	16.5	16.5	16.5	16.5
pH (units)	6.8	7.1	7.1	7.2	7.3	7.4	7.3	7.4
Conductivity (µmhos)	860	850	860	830	810	820	810	810
Dissolved oxygen (mg/L)	10.1	9.9	9.8	9.8	9.8	9.7	9.8	9.6
Dye concentration (µg/L)	22.0	22.0	22.0	21.0	19.0	19.0	20.0	18.5
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----

	Cross Section SP-400-E Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1459	1505	1512	1517	1524	1529	1535	1541
Temperature (deg C)	17.0	17.0	17.0	17.0	17.0	17.0	17.0	16.5
pH (units)	7.0	7.3	7.3	7.4	7.5	7.6	7.6	7.5
Conductivity (µmhos)	860	850	850	840	830	830	810	820
Dissolved oxygen (mg/L)	9.9	10.0	9.9	9.7	9.6	9.6	9.6	9.3
Dye concentration (µg/L)	22.5	23.0	21.5	19.5	19.5	19.0	18.5	17.5
Residual chlorine (mg/L)	.01	.01	.01	.01	.01	.01	.0	.01
Ammonia (mg/L)	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5

	Cross Section SP-400-F Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1313	1316	1318	1320	1322	1324	1326	1330
Temperature (deg C)	15.0	15.5	15.5	15.5	16.0	16.0	16.0	15.5
pH (units)	7.4	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Conductivity (µmhos)	900	900	900	900	900	850	900	900
Dissolved oxygen (mg/L)	10.0	9.9	9.8	9.8	10.0	10.0	10.2	10.2
Dye concentration (µg/L)	12.0	17.5	20.0	20.0	19.5	18.5	18.0	17.5
Residual chlorine (mg/L)	.01	.05	.05	.04	.05	.04	.06	.04
Ammonia (mg/L)	4.9	5.5	5.5	5.5	5.0	5.0	4.7	5.0

Table 15.--Mixing-zone data for September 21, 1983--Continued

	Cross Section SP-400-F Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1400	1403	1406	1409	1412	1415	1418	1421
Temperature (deg C)	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
pH (units)	7.5	7.6	7.5	7.5	7.5	7.4	7.4	7.5
Conductivity (µmhos)	900	950	950	900	900	900	850	900
Dissolved oxygen (mg/L)	10.0	10.0	9.8	10.0	10.0	10.2	10.0	10.0
Dye concentration (µg/L)	17.0	21.0	22.0	20.0	17.5	18.0	17.0	17.5
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----

	Cross Section SP-400-F Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1426	1428	1430	1432	1434	1436	1438	1440
Temperature (deg C)	16.5	16.5	16.5	16.5	16.5	16.5	16.0	16.0
pH (units)	7.6	7.6	7.5	7.5	7.5	7.5	7.5	7.6
Conductivity (µmhos)	950	950	925	950	900	900	850	850
Dissolved oxygen (mg/L)	10.0	10.0	9.8	9.8	10.0	10.2	10.0	9.7
Dye concentration (µg/L)	17.0	20.5	21.0	21.5	20.5	19.5	17.5	17.5
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----

	Cross Section SP-400-F Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1500	1505	1510	1515	1520	1525	1530	1535
Temperature (deg C)	17.0	17.0	17.0	17.0	17.0	17.0	16.5	16.0
pH (units)	7.7	7.7	7.5	7.5	7.5	7.5	7.5	7.6
Conductivity (µmhos)	950	950	950	900	925	900	900	900
Dissolved oxygen (mg/L)	10.0	10.0	9.8	9.8	9.8	9.7	9.6	9.6
Dye concentration (µg/L)	18.5	22.0	22.0	21.0	20.5	20.0	19.5	18.0
Residual chlorine (mg/L)	.00	.00	.00	.00	.01	.00	.00	.00
Ammonia (mg/L)	5.0	6.0	6.0	6.0	6.0	6.0	------	5.5

Table 15.--Mixing-zone data for September 21, 1983--Continued

	Cross Section SP-400-G Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1332	1339	1345	1350	1355	1402	1406	1412
Temperature (deg C)	16.5	16.5	17.0	17.0	17.0	17.0	17.0	17.0
pH (units)	7.2	7.2	7.2	7.3	7.3	7.3	7.3	7.2
Conductivity (µmhos)	930	930	920	910	910	925	910	910
Dissolved oxygen (mg/L)	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
Dye concentration (µg/L)	13.5	16.0	16.0	17.5	19.5	20.0	20.0	20.0
Residual chlorine (mg/L)	.03	.04	.05	.03	.05	.04	.03	.04
Ammonia (mg/L)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

	Cross Section SP-400-G Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1425	1430	1438	1444	1449	1454	1507	1511
Temperature (deg C)	17.0	17.0	17.0	17.5	17.5	17.5	17.5	17.5
pH (units)	7.3	7.2	7.3	7.3	7.3	7.3	7.3	7.3
Conductivity (µmhos)	950	940	940	950	940	910	910	920
Dissolved oxygen (mg/L)	10.1	10.2	10.1	10.1	10.0	10.0	9.9	9.85
Dye concentration (µg/L)	19.0	19.0	19.5	19.5	20.0	21.0	21.0	21.0
Residual chlorine (mg/L)	.04	.03	.01	.02	-----	.01	.01	.01
Ammonia (mg/L)	5.0	5.0	5.0	5.0	5.5	5.5	5.0	5.0

	Cross Section SP-400-G Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1619	1624	1628	1633	1638	1643	1648	1652
Temperature (deg C)	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
pH (units)	7.3	7.3	7.3	7.35	7.35	7.35	7.30	7.30
Conductivity (µmhos)	930	940	950	940	920	920	925	940
Dissolved oxygen (mg/L)	9.70	9.65	9.50	9.40	9.40	9.30	9.15	9.05
Dye concentration (µg/L)	21.0	21.5	21.5	21.5	20.5	20.5	21.0	21.0
Residual chlorine (mg/L)	.00	.01	.01	.01	.01	.00	.01	.01
Ammonia (mg/L)	6.0	6.3	6.3	6.0	6.0	6.3	6.3	6.0

Table 15.--Mixing-zone data for September 21, 1983--Continued

	Cross Section SP-400-G Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1605	1606	1607	1608	1609	1610	1611	1612
Temperature (deg C)	----	----	----	----	----	----	----	----
pH (units)	----	----	----	----	----	----	----	----
Conductivity (µmhos)	----	----	----	----	----	----	----	----
Dissolved oxygen (mg/L)	----	----	----	----	----	----	----	----
Dye concentration (µg/L)	21.0	21.0	21.0	21.0	21.5	21.5	21.0	21.0
Residual chlorine (mg/L)	----	----	----	----	----	----	----	----
Ammonia (mg/L)	----	----	----	----	----	----	----	

	Cross Section SP-400-H Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1330	1335	1339	1343	1348	1353	1358	1402
Temperature (deg C)	16.5	16.5	17.0	17.0	17.0	17.0	17.0	17.0
pH (units)	8.3	8.2	8.2	8.3	8.2	8.1	8.2	8.2
Conductivity (µmhos)	850	850	850	850	850	850	850	850
Dissolved oxygen (mg/L)	10.0	10.2	10.2	10.1	10.1	10.1	10.1	10.1
Dye concentration (µg/L)	9.5	11.0	17.5	18.5	19.0	19.0	19.0	19.5
Residual chlorine (mg/L)	.05	.04	.03	.04	.02	.03	.04	.03
Ammonia (mg/L)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

	Cross Section SP-400-H Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1408	1414	1422	1428	1434	1442	1447	1453
Temperature (deg C)	17.0	17.5	17.5	17.5	17.5	17.5	17.5	17.5
pH (units)	8.4	8.1	8.1	8.2	8.2	8.3	8.4	8.4
Conductivity (µmhos)	860	850	850	850	850	850	850	850
Dissolved oxygen (mg/L)	10.3	10.0	10.0	10.0	10.0	9.9	9.8	9.8
Dye concentration (µg/L)	17.5	18.0	19.5	19.5	19.5	19.5	20.0	20.0
Residual chlorine (mg/L)	.02	.03	.03	.04	.02	.02	.02	.02
Ammonia (mg/L)	5.0	4.9	5.0	5.0	5.5	5.5	5.5	5.5

Table 15.--Mixing-zone data for September 21, 1983--Continued

	Cross Section SP-400-H Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1500	1507	1513	1520	1527	1534	1541	1548
Temperature (deg C)	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
pH (units)	8.4	8.2	8.1	8.3	8.1	7.9	7.8	7.8
Conductivity (µmhos)	850	850	850	850	850	850	850	850
Dissolved oxygen (mg/L)	10.1	10.0	9.9	9.7	9.7	9.5	9.4	9.4
Dye concentration (µg/L)	19.0	20.0	20.5	20.0	20.0	20.0	20.0	20.0
Residual chlorine (mg/L)	.01	.01	.01	.01	.01	.02	.02	.01
Ammonia (mg/L)	5.0	5.0	5.5	5.5	5.5	5.5	5.5	6.0

	Cross Section SP-400-H Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1610	1618	1628	1633	1640	1645	1651	1657
Temperature (deg C)	18.5	18.5	18.5	18.5	18.5	18.0	18.0	18.0
pH (units)	8.1	7.9	7.9	8.0	8.0	7.9	8.0	8.1
Conductivity (µmhos)	850	850	850	850	840	840	850	850
Dissolved oxygen (mg/L)	9.7	9.6	9.2	9.0	9.0	8.9	8.8	8.5
Dye concentration (µg/L)	20.0	20.0	21.0	20.0	20.0	20.5	21.0	20.5
Residual chlorine (mg/L)	.01	.01	.01	.01	.02	.03	.02	.02
Ammonia (mg/L)	6.0	6.0	6.5	6.0	6.0	6.0	6.5	6.5

	Cross Section SP-400-H Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1600	1602	1603	1604	1605	1606	1607	1608
Temperature (deg C)	----	----	----	----	----	----	----	----
pH (units)	----	----	----	----	----	----	----	----
Conductivity (µmhos)	----	----	----	----	----	----	----	----
Dissolved oxygen (mg/L)	----	----	----	----	----	----	----	----
Dye concentration (µg/L)	20.0	20.0	20.5	20.5	20.5	20.0	20.0	20.0
Residual chlorine (mg/L)	----	----	----	----	----	-----	----	----
Ammonia (mg/L)	----	----	----	----	----	-----	----	----

Table 15.--Mixing-zone data for September 21, 1983--Continued

Time (hours)	Dye concentration (micrograms per liter)			Temperature (degrees Celsius)	Conductivity (micromhos)	Ammonia concentration (milligrams per liter)	Residual chlorine concentration (milligrams per liter)
				Effluent data			
1245	60.	60.	60.	21.	900	13.9	0.40
1315	63.	62.	62.	21.	1050	----	----
1330	---	---	---	21.	1025	14.9	.19
1345	57.	58.	57.	21.	1075	----	----
1415	68.	68.	66.	21.	1050	16.4	.15
1445	59.	60.	62.	21.	1050	----	----
1517	66.	68.	66.	21.	1050	21.5	.22
1545	64.	68.	66.	21.	1000	----	----
1620	0.	0.	0.	21.	1100	23.7	.34

Discharge at SP-400-A = 81 cubic feet per second

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984

South Platte River near C-470
Reference code SP-100 USGS station number 393418105022300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0645	4.0	420	409	8.7	7.6	7.6	114	0.060	0.60	0.54
01 26 84	1030	4.0	410	406	11.3	8.0	7.8	114	.050	.50	.45
01 26 84	1415	4.5	410	405	11.7	7.7	7.7	111	<.010	1.50	----
01 26 84	1845	5.0	400	408	8.6	7.6	7.6	108	<.010	.50	----
01 26 84	2335	5.0	400	408	8.4	7.7	7.7	113	<.010	.50	----
01 27 84	0220	4.0	400	404	8.0	7.8	7.6	112	<.010	.30	----
01 27 84	0555	4.0	400	408	7.9	7.8	7.7	113	.060	.30	.24

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0645	0.010	0.89	0.90	1.5	243	0.33	0.090	<1	1.4
01 26 84	1030	.010	.89	.90	1.4	250	.34	.060	<1	2.0
01 26 84	1415	.010	.79	.80	2.3	238	.32	.040	<1	2.4
01 26 84	1845	.010	.89	.90	1.4	234	.32	.050	4	1.5
01 26 84	2335	.010	.89	.90	1.4	244	.33	.070	2	1.3
01 27 84	0220	.010	.89	.90	1.2	248	.34	.060	<1	1.9
01 27 84	0555	.010	.89	.90	1.2	252	.34	.050	4	2.1

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River at Littleton
Reference code SP-200 USGS station number 06710000

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0730	2.0	675	660	9.4	7.8	7.8	154	0.040	0.30	0.26
01 26 84	1110	3.0	665	643	12.4	8.0	7.8	150	.060	.60	.54
01 26 84	1515	5.0	660	627	13.8	8.3	7.9	146	.070	.50	.43
01 26 84	2005	3.5	650	636	10.0	7.8	7.8	147	.040	.60	.56
01 27 84	0010	2.0	650	639	8.8	7.9	7.7	149	<.010	.50	----
01 27 84	0300	1.5	650	666	9.0	7.8	7.6	156	.050	.40	.35
01 27 84	0630	1.0	650	664	8.8	7.8	7.6	155	.080	.50	.42

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0730	0.020	1.1	1.1	1.4	419	0.57	---	---	2.4
01 26 84	1110	.020	.98	1.0	1.6	404	.55	---	---	2.4
01 26 84	1515	.020	.98	1.0	1.5	395	.54	---	---	3.2
01 26 84	2005	.020	1.1	1.1	1.7	398	.54	---	---	2.5
01 27 84	0010	.020	.98	1.0	1.5	400	.54	---	---	3.1
01 27 84	0300	.020	1.1	1.1	1.5	431	.59	---	---	2.3
01 27 84	0630	.020	1.1	1.1	1.6	420	.57	---	---	3.2

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Big Dry Creek at mouth
Reference code TR-210 USGS station number 393750105005100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0645	3.0	1340	1460	10.2	8.0	7.7	262	0.090	0.90	0.81
01 26 84	1755	5.0	1410	1450	9.6	7.8	7.7	236	.140	1.70	1.6

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0645	0.050	5.7	5.7	6.6	968	1.3	---	---	3.6
01 26 84	1755	.060	5.5	5.6	7.3	903	1.2	---	---	6.1

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River above Bear Creek
Reference code SP-300 USGS station number 393855105004800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0800	3.0	800	775	9.2	7.8	7.6	188	0.180	0.60	0.42
01 26 84	1150	4.0	830	794	10.4	7.8	7.7	191	.180	.80	.62
01 26 84	1545	6.0	880	836	10.1	8.0	7.5	180	.220	1.00	.78
01 26 84	2035	4.0	800	774	8.9	7.8	7.5	180	.170	.80	.63
01 27 84	0040	2.5	800	770	9.0	7.8	7.6	183	.140	.70	.56
01 27 84	0325	2.5	800	777	9.0	7.7	7.5	187	.120	.60	.48
01 27 84	0650	2.0	800	772	9.0	7.7	7.6	187	.190	.60	.41

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0800	0.020	1.5	1.5	2.1	503	0.68	---	---	2.4
01 26 84	1150	.020	1.6	1.6	2.4	509	.69	---	---	2.4
01 26 84	1545	.040	1.4	1.4	2.4	529	.72	---	---	8.0
01 26 84	2035	.020	1.4	1.4	2.2	482	.66	---	---	3.0
01 27 84	0040	.020	1.4	1.4	2.1	496	.67	---	---	3.0
01 27 84	0325	.020	1.5	1.5	2.1	503	.68	---	---	2.4
01 27 84	0650	.020	1.5	1.5	2.1	506	.69	---	---	2.6

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Bear Creek at mouth, at Sheridan
Reference code TR-310 USGS station number 06711500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0605	1.5	450	456	11.8	7.5	7.7	127	0.150	0.40	0.25
01 26 84	0900	1.5	450	449	12.0	7.3	7.7	126	.120	.90	.78
01 26 84	1200	3.0	450	447	12.2	7.5	7.8	125	.100	.70	.60
01 26 84	1500	4.0	460	455	11.8	7.5	7.9	122	.120	.60	.48
01 26 84	1845	5.0	400	462	10.2	7.1	7.7	122	.110	.70	.59
01 26 84	2120	3.0	500	471	10.2	7.6	7.5	129	.230	1.10	.87
01 26 84	2340	3.0	550	465	10.5	7.8	7.6	128	.170	.70	.53
01 27 84	0140	3.0	650	465	10.6	7.6	7.5	125	.250	.90	.65
01 27 84	0410	3.0	500	450	11.0	7.4	7.6	127	.150	.70	.55

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0605	0.020	1.3	1.3	1.7	282	0.38	---	---	2.0
01 26 84	0900	.020	1.3	1.3	2.2	276	.38	---	---	2.3
01 26 84	1200	.010	1.3	1.3	2.0	275	.37	---	---	1.8
01 26 84	1500	.020	1.3	1.3	1.9	281	.38	---	---	3.7
01 26 84	1845	.020	1.3	1.3	2.0	285	.39	---	---	3.9
01 26 84	2120	.020	1.3	1.3	2.4	276	.38	---	---	4.8
01 26 84	2340	.020	1.3	1.3	2.0	282	.38	---	---	4.9
01 27 84	0140	.020	1.3	1.3	2.2	278	.38	---	---	3.9
01 27 84	0410	.020	1.3	1.3	2.0	278	.38	---	---	3.4

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Little Dry Creek at mouth
Reference code TR-320 USGS station number 393935105000500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0720	1.5	1610	1750	10.8	7.7	7.7	269	0.100	1.50	1.4
01 26 84	1830	3.0	1420	1720	10.6	7.9	7.6	262	.180	1.30	1.1
01 27 84	0250	2.0	1750	1760	11.6	7.6	7.8	273	.070	1.50	1.4

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
0126 84	0720	0.050	2.9	2.9	4.4	1220	1.7	---	---	2.4
01 26 84	1830	.060	2.6	2.7	4.0	1160	1.6	---	---	8.7
01 27 84	0250	.030	2.9	2.9	4.4	1190	1.6	---	---	2.4

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River at Englewood, CO
Reference code SP-400 USGS station number 06711565

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0840	2.0	790	753	10.3	7.9	7.6	175	0.180	1.00	0.82
01 26 84	1235	3.0	780	741	11.5	8.0	7.7	174	.170	.80	.63
01 26 84	1615	4.0	790	757	11.1	8.0	7.6	171	.170	.80	.63
01 26 84	2115	2.0	800	762	9.4	7.8	7.6	169	.160	1.00	.84
01 27 84	0105	2.0	750	751	9.6	7.8	7.6	171	.200	.80	.60
01 27 84	0400	1.5	750	717	9.7	7.8	7.6	172	.140	.90	.76
01 27 84	0720	1.0	750	730	9.6	7.9	7.6	173	.190	1.30	1.1

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0840	0.020	1.7	1.7	2.7	490	0.67	0.100	8	2.7
01 26 84	1235	.020	1.6	1.6	2.4	480	.65	.090	6	1.8
01 26 84	1615	.020	1.6	1.6	2.4	488	.66	.120	14	3.2
01 26 84	2115	.030	1.6	1.6	2.6	487	.66	.140	14	3.8
01 27 84	0105	.030	1.6	1.6	2.4	497	.68	.130	18	3.1
01 27 84	0400	.020	1.6	1.6	2.5	472	.64	.100	10	2.5
01 27 84	0720	.020	1.6	1.6	2.9	474	.64	.100	10	2.3

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Unnamed creek above PSCO dam (west bank)
Reference code TR-410 USGS station number 394003105001300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0800	4.0	1850	1980	10.0	7.7	7.9	426	0.060	1.20	1.1
01 26 84	1905	4.0	1580	1570	8.6	7.9	7.3	202	.530	3.00	2.5

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0800	0.100	7.9	8.0	9.2	1320	1.8	---	---	2.8
01 26 84	1905	.220	3.6	3.8	6.8	988	1.3	---	---	21.0

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Bi-City WWTP effluent (east bank)
Reference code TR-420 USGS station number 394005105000300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0640	13.0	1100	1070	8.0	7.4	7.0	245	15.0	20.0	5.0
01 26 84	0940	13.5	1000	1040	8.0	7.1	6.9	242	14.3	17.0	2.7
01 26 84	1240	13.0	1100	1110	7.7	6.9	6.9	244	13.7	15.0	1.3
01 26 84	1540	13.0	1080	1150	7.8	6.9	6.9	253	16.0	20.0	4.0
01 26 84	1915	13.0	1080	1150	8.9	6.8	6.9	235	23.0	25.0	2.0
01 26 84	2150	9.0	1300	1110	8.5	6.8	6.9	206	21.0	20.0	-0
01 27 84	0025	11.0	1200	1110	8.4	6.8	6.9	240	19.0	21.0	2.0
01 27 84	0220	10.5	1150	1110	8.7	6.9	7.0	238	19.0	21.0	2.0
01 27 84	0440	11.0	1200	1080	8.3	6.9	7.0	241	17.0	18.0	1.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0640	0.050	----	<0.10	--	650	0.88	5.00	<1	10.1
01 26 84	0940	.030	----	<.10	--	643	.87	7.60	<1	5.4
01 26 84	1240	.050	.05	.10	15	686	.93	5.00	6	8.7
01 26 84	1540	.060	----	<.10	--	687	.93	5.00	<1	11.4
01 26 84	1915	.040	----	<.10	--	633	.86	6.10	2	6.4
01 26 84	2150	.030	----	<.10	--	560	.76	5.00	4	26.4
01 27 84	0025	.030	----	<.10	--	658	.89	3.70	6	42.4
01 27 84	0220	.030	----	<.10	--	654	.89	5.00	8	33.4
01 27 84	0440	.040	----	<.10	--	646	.88	7.60	2	14.4

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Arapahoe PSCO effluent (west bank)
Reference code TR-440 USGS station number 394016104595100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0815	5.0	----	2990	9.5	7.0	7.4	119	0.200	1.30	1.1
01 26 84	1930	5.5	3220	3010	9.2	7.1	7.4	108	.190	2.00	1.8
01 27 84	0310	5.0	3220	3070	10.3	7.1	7.4	117	.140	1.50	1.4

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0815	0.170	5.3	5.5	6.8	2700	3.7	---	---	1.0
01 26 84	1930	.170	5.5	5.7	7.7	2440	3.3	---	---	1.6
01 27 84	0310	.170	5.4	5.6	7.1	2700	3.7	---	---	1.6

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Harvard Gulch at mouth
Reference code TR-460 USGS station number 394029104594800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0925	3.5	1330	1220	10.0	7.3	7.7	236	0.200	2.10	1.9
01 26 84	1950	2.0	1020	920	10.0	---	7.1	118	.840	3.50	2.7

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0925	0.080	3.1	3.2	5.3	812	1.1	---	---	8.6
01 26 84	1950	.120	1.3	1.4	4.9	559	.76	---	---	21.9

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River at Evans Ave.
Reference code SP-500 USGS station number 394042104595100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0915	4.5	890	849	9.8	7.8	7.4	194	3.80	4.60	0.80
01 26 84	1300	7.0	950	894	10.8	7.5	7.2	204	5.70	7.0	1.3
01 26 84	1645	7.0	970	924	10.2	7.6	7.3	200	5.50	5.50	-0
01 26 84	2150	6.0	950	902	8.0	7.6	7.3	188	7.30	8.00	.70
01 27 84	0125	6.0	950	900	7.4	7.6	7.4	200	7.00	6.00	-0
01 27 84	0435	5.0	950	853	7.8	7.6	7.3	193	4.10	4.50	.40
01 27 84	0740	5.0	950	856	8.0	7.6	7.4	192	4.30	5.50	1.2

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0915	0.040	1.4	1.4	6.0	546	0.74	2.00	10	8.2
01 26 84	1300	.040	1.2	1.2	13	574	.78	2.90	6	11.2
01 26 84	1645	.060	1.2	1.3	6.8	579	.79	1.80	16	7.0
01 26 84	2150	.040	1.1	1.1	9.1	535	.73	2.40	4	7.8
01 27 84	0125	.040	1.1	1.1	7.1	558	.76	2.40	16	8.3
01 27 84	0435	.030	1.3	1.3	5.8	543	.74	1.70	12	5.3
01 27 84	0740	.030	1.4	1.4	6.9	546	.74	1.80	14	8.4

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River at Florida Ave.
Reference code SP-600 USGS station number 06711590

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0620	5.5	925	923	6.4	7.6	7.3	195	4.80	5.50	0.70
01 26 84	1000	5.0	840	847	8.2	7.7	7.4	188	3.20	4.20	1.0
01 26 84	1355	7.0	910	888	11.2	7.6	7.2	201	5.50	5.50	-0
01 26 84	1817	6.5	910	915	9.6	7.4	7.4	193	5.50	6.50	1.0
01 26 84	2117	6.2	880	896	9.3	7.6	7.4	191	6.50	6.50	-0
01 27 84	0017	6.0	910	898	9.2	7.7	7.2	196	7.50	9.00	1.5
01 27 84	0314	5.5	900	904	9.8	7.6	7.3	197	7.00	7.50	.50

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0620	0.040	1.4	1.4	6.9	586	0.80	---	---	9.5
01 26 84	1000	.050	1.6	1.6	5.8	557	.76	---	---	7.3
01 26 84	1355	.040	1.2	1.2	6.7	556	.76	---	---	6.6
01 26 84	1817	.060	1.2	1.3	7.8	550	.75	---	---	6.3
01 26 84	2117	.050	1.1	1.2	7.7	550	.75	---	---	9.0
01 27 84	0017	.040	1.1	1.1	10	555	.75	---	---	9.3
01 27 84	0314	.040	1.1	1.1	8.6	560	.76	---	---	8.3

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Sanderson Gulch at mouth, at Denver
Reference code TR-610 USGS station number 06711610

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0950	-0	980	1030	11.4	7.7	8.0	256	0.220	1.20	0.98
01 26 84	2015	.5	1100	1200	11.5	8.1	7.2	178	.570	4.00	3.4

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0950	0.090	2.6	2.7	3.9	671	0.91	---	---	3.8
01 26 84	2015	.170	1.9	2.1	6.1	804	1.1	---	---	---

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River below footbridge, below Florida Ave.
Reference code SP-700 USGS station number 394128104594700

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0705	5.0	900	922	9.3	7.5	7.3	196	4.60	7.50	2.9
01 26 84	1030	5.0	860	859	8.0	7.8	7.4	189	3.10	3.90	.80
01 26 84	1430	7.0	920	895	10.4	7.3	7.3	202	5.40	5.50	.10
01 26 84	1845	6.0	920	930	9.8	7.5	7.4	201	5.00	5.50	.50
01 26 84	2133	6.2	890	913	9.4	7.4	7.3	193	6.00	7.00	1.0
01 27 84	0037	6.0	910	911	9.4	7.6	7.3	196	7.50	8.00	.50
01 27 84	0337	5.5	890	918	----	7.6	7.3	197	6.50	8.00	1.5

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0705	0.050	1.4	1.5	9.0	595	0.81	---	---	10.6
01 26 84	1030	.050	1.6	1.6	5.5	554	.75	---	---	8.2
01 26 84	1430	.040	1.3	1.3	6.8	568	.77	---	---	7.8
01 26 84	1845	.060	1.3	1.4	6.9	582	.79	---	---	6.8
01 26 84	2133	.060	1.2	1.3	8.3	559	.76	---	---	9.7
01 27 84	0037	.050	1.1	1.2	9.2	561	.76	---	---	10.7
01 27 84	0337	.040	1.2	1.2	9.2	563	.77	---	---	8.9

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River above Mississippi Ave.
Reference code SP-800 USGS station number 394141104593300

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0725	2.0	930	929	8.8	7.5	7.3	196	4.40	5.50	1.1
01 26 84	1100	5.0	860	864	9.8	7.8	7.4	189	3.00	4.20	1.2
01 26 84	1455	7.0	930	898	10.2	7.4	7.3	201	5.40	5.50	.10
01 26 84	1902	6.5	920	932	9.5	7.5	7.4	202	5.50	6.00	.50
01 26 84	2155	6.0	900	915	9.4	7.6	7.5	192	5.90	6.00	.10
01 27 84	0105	6.0	---	906	9.2	---	7.3	181	7.00	6.50	-0
01 27 84	0355	5.5	915	919	----	7.7	7.3	195	6.50	8.50	2.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0725	0.050	1.4	1.5	7.0	596	0.81	---	---	10.9
01 26 84	1100	.050	1.7	1.7	5.9	553	.75	---	---	8.0
01 26 84	1455	.040	1.4	1.4	6.9	568	.77	---	---	7.2
01 26 84	1902	.070	1.3	1.4	7.4	588	.80	---	---	8.5
01 26 84	2155	.060	1.3	1.4	7.4	563	.77	---	---	9.7
01 27 84	0105	.040	1.2	1.2	7.7	568	.77	---	---	9.3
01 27 84	0355	.040	1.3	1.3	9.8	562	.76	---	---	7.8

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Storm sewer at Mississippi Ave. (east bank)
Reference code TR-810 USGS station number 394149104592900

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	1020	16.5	890	885	8.0	7.9	8.1	284	0.080	0.70	0.62
01 26 84	2035	14.0	930	894	7.2	8.0	7.5	215	.230	1.90	1.7

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	1020	0.020	5.7	5.7	6.4	587	0.80	---	---	2.5
01 26 84	2035	.080	4.4	4.5	6.4	492	.67	---	---	8.6

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River above Santa Fe overpass
Reference code SP-900 USGS station number 394210104594100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0755	3.0	900	949	9.0	7.6	7.2	199	4.90	7.50	2.6
01 26 84	1100	6.0	900	870	10.3	7.9	7.5	191	3.20	4.00	.80
01 26 84	1525	6.0	930	890	10.3	7.5	7.4	200	4.80	9.00	4.2
01 26 84	1925	5.5	800	989	9.6	7.5	7.3	196	5.00	6.00	1.00
01 26 84	2228	5.0	880	922	9.2	7.6	7.5	198	5.50	6.50	1.00
01 27 84	0131	5.5	900	914	9.5	7.7	7.5	186	6.50	6.00	-0
01 27 84	0428	5.0	910	912	----	7.8	7.3	197	7.00	7.00	-0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0755	0.060	1.4	1.5	9.0	601	0.82	---	---	10.9
01 26 84	1100	.050	1.7	1.7	5.7	563	.77	---	---	8.2
01 26 84	1525	.030	1.5	1.5	11	572	.78	---	---	7.9
01 26 84	1925	.070	1.3	1.4	7.4	573	.78	---	---	7.2
01 26 84	2228	.070	1.3	1.4	7.9	579	.79	---	---	7.9
01 27 84	0131	.050	1.3	1.3	7.3	564	.77	---	---	9.2
01 27 84	0428	.040	1.2	1.2	8.2	561	.76	---	---	8.6

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River below Alameda Ave.
Reference code SP-1000 USGS station number 394241104595900

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0830	5.0	940	933	9.4	7.5	7.3	202	5.00	5.50	0.50
01 26 84	1220	5.0	930	894	10.3	7.9	7.4	196	3.60	4.20	.60
01 26 84	1550	6.0	920	881	10.3	7.7	7.4	197	3.60	4.80	1.2
01 26 84	1952	6.0	915	936	9.2	7.5	7.4	191	4.90	5.00	.10
01 26 84	2252	5.5	910	930	9.2	7.6	7.3	202	5.00	7.50	2.5
01 27 84	0153	6.0	910	906	9.6	7.7	7.5	196	6.00	6.00	-0
01 27 84	0445	4.5	900	915	----	7.7	7.3	197	6.50	7.00	.50

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0830	0.060	1.4	1.5	7.0	601	0.82	---	---	13.2
01 26 84	1220	.050	1.8	1.8	6.0	577	.78	---	---	10.7
01 26 84	1550	.050	1.7	1.7	6.5	565	.77	---	---	6.0
01 26 84	1952	.070	1.3	1.4	6.4	562	.76	---	---	9.9
01 26 84	2252	.060	1.4	1.5	9.0	583	.79	---	---	9.9
01 27 84	0153	.050	1.4	1.4	7.4	570	.78	---	---	9.5
01 27 84	0445	.050	1.4	1.4	8.4	562	.76	---	---	10.0

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River above Vallejo St.
Reference code SP-1100 USGS station number 394321105000500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0850	6.0	950	938	9.2	7.5	7.2	193	5.00	6.00	1.0
01 26 84	1315	7.0	970	936	10.1	7.7	7.3	194	4.00	3.00	-0
01 26 84	1630	7.0	930	931	9.4	7.7	7.2	180	3.00	3.50	.50
01 26 84	2026	5.5	900	930	9.6	7.5	7.2	183	4.60	7.00	2.4
01 26 84	2326	6.2	910	935	9.1	7.6	7.3	196	4.70	5.50	.80
01 27 84	0228	5.5	930	932	9.6	7.8	7.3	197	5.00	7.50	2.5
01 27 84	0503	5.5	910	920	----	7.6	7.2	191	6.00	7.00	1.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0850	0.060	1.3	1.4	7.4	592	0.81	2.70	16	11.2
01 26 84	1315	.060	1.6	1.7	4.7	611	.83	2.30	18	6.1
01 26 84	1630	.080	1.7	1.8	5.3	592	.81	1.60	42	11.1
01 26 84	2026	.070	1.4	1.5	8.5	550	.75	2.70	70	13.1
01 26 84	2326	.080	1.4	1.5	7.0	583	.79	1.60	30	9.5
01 27 84	0228	.060	1.4	1.5	9.0	591	.80	1.60	34	8.7
01 27 84	0503	.050	1.3	1.4	8.4	568	.77	1.60	46	10.6

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Storm sewer at Vallejo St.
Reference code TR-1110 USGS station number 394321105000600

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	1050	5.0	1410	1550	10.0	7.5	8.1	375	0.080	1.30	1.2
01 26 84	2110	5.0	1600	1400	8.5	8.0	7.2	205	.520	2.50	2.0

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	1050	0.080	5.6	5.7	7.0	989	1.3	---	---	3.5
01 26 84	2110	.400	1.4	1.8	4.3	895	1.2	---	---	---

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River above 8th Ave. bridge
Reference code SP-1100A USGS station number 394345105005800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0625	5.0	900	955	9.0	7.9	7.3	192	5.00	6.50	1.5
01 26 84	1015	5.0	850	944	9.1	7.6	7.3	200	5.00	5.00	-0
01 26 84	1400	7.0	890	931	10.1	7.7	7.4	194	4.30	4.50	.20
01 26 84	1830	6.5	900	897	9.0	7.0	7.5	185	3.10	3.50	.40
01 26 84	2040	6.0	975	938	9.8	7.2	7.3	200	4.30	5.50	1.2
01 26 84	2300	5.0	1000	954	8.5	7.1	7.2	204	4.60	4.50	-0
01 27 84	0325	4.0	1000	937	10.0	6.9	7.4	178	5.00	8.50	3.5

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0625	0.060	1.4	1.5	8.0	588	0.80	---	---	11.8
01 26 84	1015	.060	1.4	1.5	6.5	575	.79	---	---	11.4
01 26 84	1400	.060	1.7	1.8	6.3	588	.80	---	---	9.8
01 26 84	1830	.060	1.9	2.0	5.5	536	.73	---	---	8.3
01 26 84	2040	.090	1.7	1.8	7.3	580	.79	---	---	10.9
01 26 84	2300	.080	1.5	1.6	6.1	598	.81	---	---	9.1
01 27 84	0325	.060	1.5	1.6	10	509	.69	---	---	7.0

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Weir Gulch at mouth
Reference code TR-1130 USGS station number 06711622

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	1115	---	1490	1670	11.0	7.3	7.5	236	0.260	2.20	1.9
01 26 84	2150	---	1230	1590	10.3	8.0	7.8	247	.310	1.60	1.3

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	1115	0.240	3.8	4.0	6.2	983	1.3	---	---	18.1
01 26 84	2150	.210	3.9	4.1	5.7	959	1.3	---	---	13.8

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Zuni St. power plant #1 (west bank)
Reference code TR-1135 USGS station number 394405105010000

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	1210	18.0	2450	2420	6.8	7.2	7.1	53	<0.010	4.00	----
01 26 84	2245	19.0	2380	2370	6.9	7.5	7.4	82	.210	.40	.19

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	1210	0.020	0.18	0.20	4.2	1780	2.4	---	---	2.2
01 26 84	2245	.030	.17	.20	.60	1470	2.0	---	---	2.7

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Lakewood Gulch at mouth, at Denver
Reference code TR-1150 USGS station number 06711800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	1310	-0	1190	1220	11.4	8.3	7.8	283	0.130	1.60	1.5
01 26 84	2015	-0	1230	1230	12.1	7.9	7.8	284	.200	1.30	1.1
01 27 84	0355	.5	1210	1220	11.6	7.8	7.9	299	.130	1.30	1.2

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	1310	0.090	3.2	3.3	4.9	829	1.1	---	---	6.7
01 26 84	2015	.080	3.2	3.3	4.6	800	1.1	---	---	6.0
01 27 84	0355	.060	3.3	3.4	4.7	817	1.1	---	---	4.2

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Sloans Lake outfall (old 15th Ave. bridge)
Reference code TR-1160 USGS station number 394424105010200

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	1330	3.0	840	875	10.4	7.9	7.5	161	1.10	3.50	2.4
01 26 84	2315	2.5	780	727	10.8	8.1	7.8	175	1.10	2.00	.90
01 27 84	0415	3.0	744	724	10.8	8.0	7.9	170	1.10	2.20	1.1

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	1330	0.070	0.23	0.30	3.8	551	0.75	---	---	12.2
01 26 84	2315	.020	.08	.10	2.1	465	.63	---	---	2.7
01 27 84	0415	.020	.08	.10	2.3	451	.61	---	---	2.8

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River above 17th Ave. underpass
Reference code SP-1200 USGS station number 394433105005800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0710	6.0	990	1010	9.5	7.8	7.4	197	4.40	5.00	0.60
01 26 84	1105	13.0	950	985	8.7	7.6	7.0	194	4.60	5.50	.90
01 26 84	1430	10.0	940	961	9.0	7.7	7.4	188	4.50	4.50	-0
01 26 84	1825	8.0	900	958	9.3	7.8	7.5	195	3.90	4.50	.60
01 26 84	2115	5.0	910	917	9.6	7.7	7.5	190	3.10	3.50	.40
01 27 84	0010	5.0	940	927	9.6	7.4	7.5	197	3.60	4.40	.80
01 27 84	0300	5.0	1000	946	9.4	7.4	7.4	200	4.30	5.00	.70

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0710	0.080	1.6	1.7	6.7	637	0.87	---	---	----
01 26 84	1105	.070	1.5	1.6	7.1	703	.96	---	---	9.9
01 26 84	1430	.070	1.5	1.6	6.1	568	.77	---	---	10.2
01 26 84	1825	.070	1.7	1.8	6.3	---	----	---	---	7.5
01 26 84	2115	.070	1.8	1.9	5.4	576	.78	---	---	7.1
01 27 84	0010	.060	1.6	1.7	6.1	582	.79	---	---	6.4
01 27 84	0300	.070	1.5	1.6	6.6	595	.81	---	---	9.1

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Ellis Foods effluent
Reference code TR-1210 USGS station number 394434105005800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos)		Dissolved oxygen (mg/L)	pH (standard units)		Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
			Field	Lab		Field	Lab				
01 26 84	1345	22.5	370	378	8.4	8.6	7.8	76	0.230	0.70	0.47

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	1345	0.030	0.17	0.20	0.90	213	0.29	---	---	6.0

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River at 7th St., near Confluence Park
Reference code SP-1300 USGS station number 394502105004700

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0735	5.0	1000	1020	9.1	7.5	7.4	200	4.70	5.50	0.80
01 26 84	1125	5.0	1000	995	10.0	8.0	7.3	195	4.30	5.00	.70
01 26 84	1445	6.0	940	970	10.3	7.7	7.4	176	4.80	5.50	.70
01 26 84	1855	5.0	1000	969	9.4	7.7	7.4	183	4.60	4.70	.10
01 26 84	2145	5.0	940	937	8.4	7.6	7.5	194	2.90	4.10	1.2
01 27 84	0030	4.5	950	935	8.4	7.6	7.4	193	3.10	6.50	3.4
01 27 84	0320	4.5	980	962	8.6	7.4	7.4	201	4.20	5.00	.80

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0735	0.090	1.7	1.8	7.3	643	0.87	---	---	10.8
01 26 84	1125	.080	1.6	1.7	6.7	628	.85	---	---	8.5
01 26 84	1445	.070	1.5	1.6	7.1	534	.73	---	---	10.9
01 26 84	1855	.070	1.7	1.8	6.5	559	.76	---	---	8.5
01 26 84	2145	.070	1.8	1.9	6.0	596	.81	---	---	7.5
01 27 84	0030	.060	1.8	1.9	8.4	573	.78	---	---	7.1
01 27 84	0320	.060	1.5	1.6	6.6	602	.82	---	---	8.0

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Storm sewer at 7th St. above Confluence Park
Reference code TR-1305 USGS station number 394503105004800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos)		Dissolved oxygen (mg/L)	pH (standard units)		Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
			Field	Lab		Field	Lab				
01 26 84	1415	7.0	1820	1920	8.7	8.0	6.2	88	1.40	8.00	6.6
01 26 84	2350	5.0	1250	1150	9.2	8.1	7.6	222	.440	2.10	1.7

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	1415	0.350	0.75	1.1	9.1	1200	1.6	---	---	---
01 26 84	2350	.280	4.4	4.7	6.8	707	.96	---	---	7.7

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Cherry Creek at mouth
Reference code TR-1310 USGS station number 394513105002600

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0800	5.0	1100	1220	11.0	7.5	7.8	218	0.230	1.10	0.87
01 26 84	1020	7.5	1300	1300	10.4	8.1	7.9	232	.170	2.00	6.8
01 26 84	1320	8.5	1150	1130	10.3	8.2	8.0	216	.170	2.20	2.0
01 26 84	1610	8.0	1180	1280	10.0	7.9	7.8	233	.280	3.20	2.9
01 26 84	2000	7.0	1250	1250	10.0	6.5	7.5	190	.400	2.50	2.1
01 26 84	2230	5.0	1200	1210	9.7	7.8	7.5	210	.470	2.50	2.0
01 27 84	0100	4.0	1200	1240	10.3	7.9	7.7	209	.270	1.80	1.5
01 27 84	0305	4.0	1250	1230	10.5	7.8	7.7	224	.180	1.70	1.5
01 27 84	0515	3.0	1200	1230	11.0	7.7	7.8	231	.180	1.30	.62

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0800	0.090	4.2	4.3	5.4	787	1.1	---	---	2.2
01 26 84	1020	.100	4.3	4.4	11	819	1.1	---	---	4.8
01 26 84	1320	.100	4.0	4.1	6.3	761	1.0	---	---	3.7
01 26 84	1610	.100	3.4	3.5	6.7	878	1.2	---	---	4.8
01 26 84	2000	.120	3.6	3.7	6.2	808	1.1	---	---	8.1
01 26 84	2230	.130	3.6	3.7	6.2	790	1.1	---	---	10.6
01 27 84	0100	.100	3.8	3.9	5.7	827	1.1	---	---	6.4
01 27 84	0305	.100	3.8	3.9	5.6	810	1.1	---	---	6.2
01 27 84	0515	.080	4.1	4.2	5.0	841	1.1	---	---	2.6

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River at Denver
Reference code SP-1400 USGS station number 06714000

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0800	5.0	1000	1040	9.6	7.6	7.3	204	4.00	5.00	1.0
01 26 84	1155	5.0	1030	1030	10.2	7.8	7.4	201	3.80	4.50	.70
01 26 84	1510	6.5	910	1000	10.6	7.8	7.5	190	4.30	4.50	.20
01 26 84	1915	5.0	1020	1000	9.0	7.7	7.4	201	4.00	4.50	.50
01 26 84	2210	5.0	990	994	9.0	7.7	7.5	202	2.80	4.30	1.5
01 27 84	0045	4.0	990	951	9.0	7.6	7.5	183	2.50	3.90	1.4
01 27 84	0335	4.0	1000	980	9.4	7.6	7.4	203	3.40	4.70	1.3

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0800	0.090	1.9	2.0	7.0	663	0.90	---	---	9.7
01 26 84	1155	.090	2.0	2.1	6.6	658	.89	---	---	7.7
01 26 84	1510	.080	1.8	1.9	6.4	603	.82	---	---	9.4
01 26 84	1915	.080	1.8	1.9	6.4	642	.87	---	---	11.1
01 26 84	2210	.080	2.1	2.2	6.5	637	.87	---	---	8.5
01 27 84	0045	.070	2.1	2.2	6.1	613	.83	---	---	7.6
01 27 84	0335	.060	1.9	2.0	6.7	610	.83	---	---	7.2

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Storm sewer at 23rd St. bridge
Reference code TR-1420 USGS station number 394543104595400

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	1435	13.5	1280	1250	8.2	7.7	7.7	268	0.160	1.50	1.3
01 27 84	0030	13.0	1360	1240	8.0	7.8	7.7	207	.200	2.00	1.8

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	1435	0.040	4.8	4.8	6.3	841	1.1	---	---	4.0
01 27 84	0030	.010	5.1	5.1	7.1	836	1.1	---	---	6.3

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River above 31st St. bridge
Reference code SP-1500 USGS station number 394602104590500

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0820	5.5	1000	1040	9.2	7.5	7.4	208	3.90	5.00	1.1
01 26 84	1220	7.0	1030	1050	10.0	7.8	7.5	206	3.60	5.00	1.4
01 26 84	1545	7.0	930	1020	9.9	7.7	7.4	195	3.90	5.00	1.1
01 26 84	1950	5.0	1000	1030	8.4	7.7	7.4	204	4.00	4.50	.50
01 26 84	2230	5.0	1000	1010	8.8	7.6	7.4	206	3.40	5.10	1.7
01 27 84	0110	4.5	1010	972	8.8	7.6	7.5	202	2.50	3.90	1.4
01 27 84	0400	4.0	1000	988	9.4	7.6	7.5	205	2.80	4.30	1.5

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0820	0.090	2.1	2.2	7.2	673	0.92	---	---	9.5
01 26 84	1220	.090	2.2	2.3	7.3	673	.92	---	---	7.9
01 26 84	1545	.090	2.0	2.1	7.1	628	.85	---	---	10.1
01 26 84	1950	.080	1.9	2.0	6.5	645	.88	---	---	8.7
01 26 84	2230	.080	2.2	2.3	7.4	645	.88	---	---	8.1
01 27 84	0110	.070	2.2	2.3	6.2	628	.85	---	---	9.5
01 27 84	0400	.060	2.1	2.2	6.5	620	.84	---	---	8.1

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Ice plant effluent at 31st St. bridge
Reference code TR-1510 USGS station number 394603104590400

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	1500	16.5	1280	1230	4.9	7.7	7.6	330	1.40	4.80	3.4
01 27 84	0100	16.5	1380	1250	3.8	7.5	7.2	326	1.70	3.20	1.5

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	1500	0.640	6.4	7.0	12	831	1.1	---	---	7.4
01 27 84	0100	.630	6.4	7.0	10	786	1.1	---	---	7.7

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Thirty-sixth Street storm sewer at Denver
Reference code TR-1520 USGS station number 06714100

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	1515	9.5	1530	1620	8.9	7.6	6.6	69	2.20	8.00	5.8
01 27 84	0120	8.5	1050	944	8.4	8.0	7.2	134	.420	2.00	1.6
01 27 84	0435	8.0	860	809	8.5	8.1	7.4	138	.330	1.50	1.2

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	1515	0.310	0.39	0.70	8.7	987	1.3	---	---	----
01 27 84	0120	.030	2.0	2.0	4.0	554	.75	---	---	10.4
01 27 84	0435	.040	2.9	2.9	4.4	468	.64	---	---	8.1

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River below 38th St. bridge
Reference code SP-1600 USGS station number 394634104583800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0840	5.0	1000	1050	9.2	7.4	7.4	211	3.90	5.50	1.6
01 26 84	1240	7.0	1020	1060	10.8	7.8	7.5	207	3.50	5.10	1.6
01 26 84	1615	6.5	1000	1060	10.1	7.8	7.4	197	3.30	4.80	1.5
01 26 84	2010	4.0	1090	1050	8.4	7.8	7.4	197	3.80	4.50	.70
01 26 84	2050	4.0	1060	1010	8.9	7.6	7.4	206	3.10	4.60	1.5
01 27 84	0125	4.0	1010	990	8.8	7.6	7.5	205	2.60	3.90	1.3
01 27 84	0410	4.0	1010	990	9.1	7.6	7.4	208	2.60	3.70	1.1

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0840	0.100	2.2	2.3	7.8	673	0.92	---	---	10.0
01 26 84	1240	.090	2.4	2.5	7.6	680	.92	---	---	8.7
01 26 84	1615	.090	2.1	2.2	7.0	657	.89	---	---	11.4
01 26 84	2010	.080	2.0	2.1	6.6	628	.85	---	---	8.3
01 26 84	2050	.080	2.2	2.3	6.9	648	.88	---	---	9.2
01 27 84	0125	.080	2.3	2.4	6.3	639	.87	---	---	7.6
01 27 84	0410	.070	2.2	2.3	6.0	628	.85	---	---	4.5

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

Storm sewer below 38th Street bridge
Reference code TR-1610 USGS station number 394635104583800

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	1540	7.0	1520	1580	8.4	7.6	7.0	148	1.40	7.00	5.6
01 27 84	0150	7.0	1260	1150	8.3	7.6	7.0	236	.910	3.30	2.4
01 27 84	0450	7.0	1300	1230	8.4	8.8	7.4	257	.370	1.90	1.5

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	1540	0.290	1.9	2.2	9.2	910	1.2	---	---	78.0
01 27 84	0150	.140	4.0	4.1	7.4	799	1.1	---	---	54.4
01 27 84	0450	.120	4.4	4.5	6.4	860	1.2	---	---	30.0

Table 16.--Water-quality data for the South Platte River, tributaries, industrial, and municipal inflows, January 26 and 27, 1984--Continued

South Platte River at 50th Ave.
Reference code SP-1700 USGS station number 06714130

Date mo day yr	Time	Temperature (deg C)	Specific conductance (µmhos) Field	Specific conductance (µmhos) Lab	Dissolved oxygen (mg/L)	pH (standard units) Field	pH (standard units) Lab	Alkalinity lab (mg/L)	Ammonia nitrogen (mg/L)	Ammonia plus organic nitrogen (mg/L)	Organic nitrogen (mg/L)
01 26 84	0905	5.0	1060	1060	9.2	7.5	7.4	212	3.80	4.80	1.0
01 26 84	1310	7.0	1070	1060	11.0	7.8	7.4	210	3.60	4.70	1.1
01 26 84	1700	6.5	1040	1070	9.6	7.8	7.3	195	3.40	4.80	1.4
01 26 84	2030	5.0	1060	1050	8.2	7.7	7.3	198	3.50	4.50	-0
01 26 84	2310	4.0	1070	1020	8.7	7.7	7.3	205	3.60	3.50	-0
01 27 84	0140	4.0	1000	1000	8.8	7.6	7.4	206	2.70	4.50	1.8
01 27 84	0430	4.0	1010	985	9.4	7.6	7.5	209	2.40	3.20	.80

Date mo day yr	Time	Nitrite nitrogen (mg/L)	Nitrate nitrogen (mg/L)	Nitrite plus nitrate nitrogen (mg/L)	Total nitrogen (mg/L)	Dissolved solids (mg/L)	Dissolved solids (tons per acre-ft)	Phosphorus (mg/L)	Suspended solids (mg/L)	CBOD 5-day (mg/L)
01 26 84	0905	0.090	2.3	2.4	7.2	704	0.96	1.80	14	11.9
01 26 84	1310	.100	2.3	2.4	7.1	682	.93	1.40	24	6.9
01 26 84	1700	.100	2.1	2.2	7.0	670	.91	1.60	48	14.7
01 26 84	2030	.090	2.0	2.1	5.6	637	.87	2.00	<1	10.6
01 26 84	2310	.080	2.2	2.3	5.8	649	.88	2.00	<1	9.6
01 27 84	0140	.080	2.3	2.4	6.9	650	.88	1.40	20	9.9
01 27 84	0430	.070	2.3	2.4	5.6	618	.84	1.30	16	5.9

Table 17.--Discharge-measurement data for the South Platte River, tributaries, industrial and municipal inflows, January 26, 1984

Study reference code	Date mo	Date day	Date year	Time	Width (feet)	Area (square feet)	Velocity (feet per second)	Discharge (cubic feet per second)	Gage height (feet)
SP-100	01	26	84	0704	22.	10.0	1.02	10.2	1.22
SP-100	01	26	84	1300	24.	10.	1.10	11.2	1.22
SP-200	01	26	84	0815	26.	19.	1.02	19.8	1.03
SP-200	01	26	84	1450	29.	21.	1.05	22.3	1.04
SP-300	01	26	84	0925	32.	15.	1.40	20.9	2.26
SP-300	01	26	84	1615	32.	16.	1.46	23.6	2.29
SP-400	01	26	84	1100	124.	129.	.49	63.5	1.61
SP-500	01	26	84	0710	53.	68.	1.24	84.4	2.30
SP-500	01	26	84	1355	53.	69.	1.43	98.9	2.35
SP-600	01	26	84	0905	67.	119.	.80	95.2	1.91
SP-600	01	26	84	1515	----	----	----	96.2	1.96
SP-700	01	26	84	1105	80.	106.	.95	101.	1.65
SP-700	01	26	84	1530	78.	108.	.91	97.6	1.63
SP-800	01	26	84	1240	101.	112.	.91	101.	.86
SP-800	01	26	84	1625	99.	113.	.87	97.9	.86
SP-900	01	26	84	0700	60.	82.	1.03	85.0	1.73
SP-900	01	26	84	1225	59.	86.	1.20	102.	1.81
SP-1000	01	26	84	0800	132.	122.	.72	88.0	1.72
SP-1000	01	26	84	1325	130.	132.	.80	106.	1.81
SP-1100	01	26	84	0910	66.	98.	.89	87.4	.29
SP-1100	01	26	84	1430	65.	101.	1.04	104.	.39
SP-1100A	01	26	84	1030	114.	247.	.37	92.0	2.38
SP-1100A	01	26	84	1540	114.	246.	.43	107.	2.44
SP-1200	01	26	84	0700	105.	147.	.68	101.	2.15
SP-1200	01	26	84	1330	105.	164.	.70	115.	2.25
SP-1300	01	26	84	0800	123.	180.	.53	95.3	1.45
SP-1300	01	26	84	1430	123.	184.	.61	113.	1.50
SP-1400	01	26	84	1020	63.	61.	1.47	90.1	----
SP-1400	01	26	84	1600	68.	71.	1.62	114.	----
SP-1500	01	26	84	0720	96.	101.	1.18	118.	1.63
SP-1500	01	26	84	1330	96.	103.	1.12	115.	1.58
SP-1600	01	26	84	0820	120.	87.	1.35	118.	.58
SP-1600	01	26	84	1250	120.	88.	1.19	105.	.54
SP-1700	01	26	84	0920	96.	64.	1.99	127.	2. 9
SP-1700	01	26	84	1200	96.	62.	1.87	115.	2.16
TR-210	01	26	84	0620	11.5	3.5	.96	3.3	1.94
TR-210	01	26	84	1345	11.5	3.3	.82	2.9	1.92
TR-310	01	26	84	1420	-----	-----	----	29.8	2.56
TR-320	01	26	84	0725	16.	13.	.56	7.5	.85
TR-320	01	26	84	1310	11.0	5.0	1.31	6.6	.82

Table 17.--Discharge-measurement data for the South Platte River, tributaries, industrial and municipal inflows, January 26, 1984--Continued

Study reference code	Date mo	Date day	Date year	Time	Width (feet)	Area (square feet)	Velocity (feet per second)	Discharge (cubic feet per second)	Gage height (feet)
TR-330	01	26	84	1305	-----	-----	----	0.1	----
TR-410	01	26	84	0755	2.0	.4	.88	.4	.40
TR-410	01	26	84	1250	1.8	.3	.90	.3	.40
TR-440	01	26	84	0830	-----	-----	----	.2	----
TR-460	01	26	84	0850	4.0	.6	.84	.5	----
TR-460	01	26	84	1205	3.3	.8	.61	.5	----
TR-610	01	26	84	0945	4.8	2.6	.60	1.6	----
TR-610	01	26	84	1140	2.4	1.9	.51	1.0	----
TR-810	01	26	84	1015	.7	.1	2.45	.3	----
TR-810	01	26	84	1115	1.8	.3	2.51	.7	----
TR-1110	01	26	84	1045	-----	-----	----	.2	----
TR-1110	01	26	84	1100	-----	-----	----	.2	----
TR-1130	01	26	84	1115	4.5	2.3	.46	1.1	----
TR-1130	01	26	84	1035	4.5	1.7	.58	1.0	----
TR-1135	01	26	84	1210	-----	-----	----	.3	----
TR-1150	01	26	84	0920	6.0	2.8	1.59	4.5	----
TR-1150	01	26	84	1255	8.0	3.4	1.20	4.0	----
TR-1160	01	26	84	0900	2.1	.3	3.10	.9	----
TR-1160	01	26	84	1325	2.3	.9	1.20	1.1	----
TR-1210	01	26	84	1345	1.5	.2	2.20	.4	----
TR-1220	01	26	84	0840	.8	<.1	.67	<.1	----
TR-1305	01	26	84	0825	.8	<.1	.66	<.1	----
TR-1305	01	26	84	1410	1.6	.2	2.80	.7	----
TR-1310	01	26	84	0735	27.	10.1	1.27	12.9	2.01
TR-1310	01	26	84	1330	27.	10.3	1.28	13.3	2.01
TR-1420	01	26	84	0800	3.5	.9	1.36	1.2	----
TR-1420	01	26	84	1430	2.3	.4	3.02	1.1	----
TR-1510	01	26	84	0720	3.0	.5	1.13	.6	----
TR-1510	01	26	84	1500	-----	-----	----	1.1	----
TR-1520	01	26	84	0655	1.8	.3	.41	.1	----
TR-1520	01	26	84	1515	3.3	.5	4.24	2.1	----
TR-1610	01	26	84	0620	8.0	1.8	2.13	3.8	----
TR-1610	01	26	84	1540	48.	40.	.31	12.7	----

Table 18.--Cross-section data for the South Platte River, January 26 and 27, 1984

Figure and site number	Study reference code	Latitude (degrees, minutes, seconds)	Longitude	Date mo	Date day	Date year	Width (feet)	Area (square feet)	Depth (feet)
3 1	SP-100-A	39 34 27	105 02 16	01	27	84	55.	49.3	0.90
3 2	SP-100-B	39 34 33	105 02 12	01	27	84	31.	27.8	.90
3 3	SP-100-C	39 34 55	105 01 51	01	27	84	28.	22.6	.81
3 4	SP-100-CC	39 36 19	105 01 25	01	27	84	62.	77.6	1.25
3 5	SP-100-D	39 36 49	105 01 28	01	27	84	48.	19.6	.41
3 6	SP-100-E	39 37 02	105 01 09	01	27	84	85.	30.7	.36
3 7	SP-200-A	39 37 21	105 00 58	01	27	84	31.	42.1	1.36
3 8	SP-200-B	39 37 34	105 01 06	01	26	84	56.	31.6	.56
3 9	SP-200-C	39 37 45	105 00 52	01	26	84	50.	45.0	.90
3 10	SP-200-D	39 37 54	105 00 50	01	26	84	129.	111.6	.87
3 11	SP-200-E	39 38 34	105 00 52	01	27	84	38.	28.2	.74
3 12	SP-200-F	39 38 47	105 00 51	01	26	84	32.	15.8	.49
3 13	SP-300-A	39 38 59	105 00 46	01	27	84	35.	15.4	.44
3 14	SP-300-B	39 39 15	105 00 20	01	27	84	100.	43.0	.43
3 15	SP-300-C	39 39 28	105 00 10	01	26	84	102.	55.6	.54
3 16	SP-300-D	39 39 40	105 00 13	01	26	84	88.	123.0	1.40
3 17	SP-400-A	39 39 55	105 00 15	01	25	84	80.	107.5	1.34
3 19	SP-400-C	39 40 13	104 59 52	01	25	84	135.	55.5	.41
3 20	SP-400-D	39 40 17	104 59 51	01	25	84	110.	94.1	.86
3 21	SP-400-E	39 40 23	104 59 48	01	25	84	110.	59.4	.54
3 22	SP-400-F	39 40 29	104 59 49	01	25	84	110.	59.9	.54
3 23	SP-400-G	39 40 36	104 59 50	01	25	84	100.	157.3	1.57
3 24	SP-400-H	39 40 42	104 59 51	01	25	84	100.	156.0	1.56
3 25	SP-500-A	39 40 43	104 59 51	01	26	84	90.	153.2	1.70
3 26	SP-500-B	39 41 08	105 00 01	01	26	84	119.	243.5	2.05
3 27	SP-600-A	39 41 23	104 59 55	01	26	84	99.	141.0	1.42
3 28	SP-700-A	39 41 29	104 59 46	01	26	84	78.	102.8	1.32
3 29	SP-800-A	39 41 48	104 59 30	01	26	84	139.	182.2	1.31
3 30	SP-900-A	39 42 11	104 59 42	01	26	84	108.	90.4	.84
3 31	SP-1000-A	39 42 46	105 00 02	01	26	84	120.	149.5	1.25
3 32	SP-1000-B	39 43 20	105 00 41	01	26	84	50.	83.0	1.66
3 33	SP-1100-A	39 43 42	105 00 56	01	26	84	96.	242.5	2.53
3 34	SP-1100A-A	39 44 25	105 01 02	01	26	84	70.	135.2	1.93
3 36	SP-1100A-C	39 44 31	105 00 58	01	26	84	103.	142.7	1.39
3 37	SP-1200-A	39 44 33	105 00 58	01	26	84	80.	211.2	2.64
3 39	SP-1200-B	39 44 40	105 00 55	01	26	84	123.	212.0	1.72
3 40	SP-1200-BB	39 44 43	105 00 55	01	26	84	102.	97.1	.95
3 41	SP-1200-C	39 45 00	105 00 52	01	26	84	129.	281.2	2.18
3 42	SP-1300-A	39 45 20	105 00 24	01	26	84	61.	98.7	1.62
3 43	SP-1300-B	39 45 23	105 00 20	01	26	84	105.	109.3	1.04

Table 18.--Cross-section data for the South Platte River, January 26 and 27, 1984--Continued

Figure and site number	Study reference code	Latitude (degrees, minutes, seconds)	Longitude	Date mo day year	Width (feet)	Area (square feet)	Depth (feet)
3 44	SP-1300-C	39 45 31	105 00 15	01 26 84	73.	73.2	1.00
3 45	SP-1400-A	39 45 43	104 59 55	01 26 84	56.	123.5	2.21
3 46	SP-1400-B	39 45 53	104 59 34	01 26 84	51.	49.9	.98
3 47	SP-1400-C	39 45 58	104 59 25	01 26 84	66.	89.2	1.35
3 48	SP-1400-D	39 45 59	104 59 14	01 26 84	74.	82.6	1.16
3 49	SP-1500-A	39 46 12	104 58 57	01 26 84	71.	102.7	1.45
3 50	SP-1500-B	39 46 19	104 58 50	01 26 84	134.	89.2	.67
3 51	SP-1600-A	39 46 38	104 58 39	01 26 84	123.	102.6	.83
3 52	SP-1600-B	39 46 43	104 58 39	01 26 84	100.	61.6	.61
3 53	SP-1600-C	39 46 49	104 58 37	01 26 84	67.	130.8	1.95
3 54	SP-1600-D	39 47 07	104 58 29	01 26 84	63.	71.1	1.13

Table 19.--Mixing-zone data for January 25, 1984

	Cross Section SP-400-A Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1315	1325	1330	1337	1342	1349	1355	1359
Temperature (deg C)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
pH (units)	7.5	7.4	7.6	7.7	7.7	7.7	7.4	7.5
Conductivity (µmhos)	710	710	710	705	500	500	710	705
Dissolved oxygen (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Dye concentration (µg/L)	.01	.01	.01	.01	.01	.01	.01	.01
Residual chlorine (mg/L)	.00	.00	.00	.00	.00	.00	.00	.00
Ammonia (mg/L)	.22	.19	.20	.21	.20	.20	.20	.19

	Cross Section SP-400-A Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1450	1457	1502	1506	1510	1514	1518	1522
Temperature (deg C)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
pH (units)	7.7	7.6	7.7	7.7	7.8	7.8	7.8	7.8
Conductivity (µmhos)	675	680	685	685	690	695	695	700
Dissolved oxygen (mg/L)	11.1	11.1	11.0	11.0	10.9	11.0	11.0	11.1
Dye concentration (µg/L)	.01	.01	.01	.01	.01	.01	.01	.01
Residual chlorine (mg/L)	------	------	------	------	------	------	------	------
Ammonia (mg/L)	.18	.15	.14	.17	.17	.20	.20	.20

	Cross Section SP-400-C Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1354	1357	1401	1404	1408	1411	1416	1420
Temperature (deg C)	7.5	7.5	7.5	7.0	7.0	7.0	7.0	6.5
pH (units)	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Conductivity (µmhos)	910	900	900	910	910	910	910	900
Dissolved oxygen (mg/L)	10.0	10.3	10.3	10.4	10.3	10.5	10.8	10.8
Dye concentration (µg/L)	22.5	23.1	22.5	22.7	22.5	21.5	19.1	18.9
Residual chlorine (mg/L)	.01	.01	.00	.02	.01	.00	.00	.05
Ammonia (mg/L)	5.5	5.5	5.5	5.5	5.0	5.5	4.4	4.4

Table 19.--Mixing-zone data for January 25, 1984--Continued

	Cross Section SP-400-C Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1449	1452	1454	1456	1500	1503	1505	1509
Temperature (deg C)	7.5	7.5	7.5	7.5	7.0	7.0	7.0	6.5
pH (units)	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Conductivity (µmhos)	940	920	910	920	920	920	900	900
Dissolved oxygen (mg/L)	10.0	10.3	10.4	10.4	10.5	10.6	11.0	11.0
Dye concentration (µg/L)	22.9	24.5	23.5	24.1	23.9	23.3	21.0	19.7
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	5.0	5.5	5.5	5.5	5.5	5.0	4.2	4.4

	Cross Section SP-400-D Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1305	1314	1318	1322	1325	1329	1333	1338
Temperature (deg C)	7.5	7.5	7.5	7.5	7.0	7.0	7.0	6.5
pH (units)	7.1	7.1	7.2	7.2	7.2	7.2	7.2	7.2
Conductivity (µmhos)	925	925	925	925	900	910	910	890
Dissolved oxygen (mg/L)	10.2	10.4	10.8	10.8	10.8	10.7	10.8	10.9
Dye concentration (µg/L)	22.3	21.9	21.9	22.9	20.9	20.7	19.9	18.3
Residual chlorine (mg/L)	.04	.03	.03	.01	.02	.03	.01	.02
Ammonia (mg/L)	5.7	5.8	5.8	5.7	5.0	5.0	5.0	4.6

	Cross Section SP-400-D Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1505	1509	1511	1514	1517	1520	1523	1527
Temperature (deg C)	7.5	7.5	7.5	7.5	7.5	7.0	6.5	6.5
pH (units)	7.4	7.5	7.5	7.6	7.6	7.6	7.6	7.6
Conductivity (µmhos)	940	940	940	940	920	900	900	900
Dissolved oxygen (mg/L)	10.8	10.8	11.0	11.0	10.7	10.8	10.8	10.8
Dye concentration (µg/L)	22.9	23.3	23.3	24.1	23.9	22.3	22.1	21.3
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	6.5	5.9	6.0	6.5	6.0	6.0	5.0	5.0

Table 19.--Mixing-zone data for January 25, 1984--Continued

	Cross Section SP-400-E Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1246	1253	1257	1301	1305	1310	1314	1319
Temperature (deg C)	8.0	8.0	8.0	7.5	7.0	7.0	7.0	6.5
pH (units)	7.4	7.4	7.4	7.5	7.5	7.6	7.5	7.5
Conductivity (µmhos)	850	900	890	910	910	900	900	900
Dissolved oxygen (mg/L)	11.2	11.6	11.7	11.4	11.6	11.6	11.6	11.5
Dye concentration (µg/L)	22.1	21.7	20.7	20.9	20.1	18.7	19.1	18.0
Residual chlorine (mg/L)	.08	.07	.08	.12	.12	.12	.06	.10
Ammonia (mg/L)	5.9	5.9	5.9	5.7	5.5	5.0	5.5	5.0

	Cross Section SP-400-E Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1345	1348	1352	1357	1401	1405	1409	1413
Temperature (deg C)	7.5	7.5	7.5	7.5	7.0	7.0	7.0	7.0
pH (units)	7.6	7.5	7.5	7.5	7.5	7.6	7.6	7.6
Conductivity (µmhos)	910	910	900	900	900	900	900	900
Dissolved oxygen (mg/L)	11.3	11.4	11.4	11.4	11.4	11.6	11.5	11.4
Dye concentration (µg/L)	22.0	22.0	22.0	21.5	21.0	21.0	19.7	19.0
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	5.0	5.5	5.5	5.5	3.9	4.8	4.4	3.7

	Cross Section SP-400-F Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1256	1304	1308	1313	1317	1322	1327	1332
Temperature (deg C)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.1
pH (units)	7.0	7.0	7.1	7.1	7.0	6.9	7.0	7.0
Conductivity (µmhos)	----	----	----	----	----	----	----	----
Dissolved oxygen (mg/L)	10.4	10.5	10.8	11.0	10.8	11.2	11.1	10.8
Dye concentration (µg/L)	19.5	20.7	21.0	20.9	20.5	20.0	18.0	18.5
Residual chlorine (mg/L)	.00	.00	.06	.00	.00	.00	.00	.00
Ammonia (mg/L)	4.9	5.5	5.5	5.0	5.0	4.8	5.0	5.0

Table 19.--Mixing-zone data for January 25, 1984--Continued

	Cross Section SP-400-F Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1405	1409	1413	1419	1425	1430	1436	1440
Temperature (deg C)	7.0	7.2	7.0	7.0	7.0	7.0	7.0	7.0
pH (units)	7.1	7.0	7.0	7.1	7.0	7.1	7.0	7.1
Conductivity (µmhos)	999	950	900	900	900	900	875	900
Dissolved oxygen (mg/L)	9.8	11.5	10.9	11.0	11.1	11.2	11.0	11.0
Dye concentration (µg/L)	19.0	20.9	21.5	21.5	20.7	20.5	20.0	19.5
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	4.6	5.0	5.0	5.0	5.0	4.7	4.7	4.8

	Cross Section SP-400-G Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1248	1255	1302	1309	1315	1320	1326	1332
Temperature (deg C)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
pH (units)	7.2	7.2	7.4	7.4	7.4	7.4	7.4	7.4
Conductivity (µmhos)	960	960	960	960	960	955	955	950
Dissolved oxygen (mg/L)	11.0	11.0	10.9	10.8	10.8	10.8	10.7	10.6
Dye concentration (µg/L)	19.1	19.1	19.7	19.0	19.3	19.9	19.7	19.7
Residual chlorine (mg/L)	.06	.03	.06	.08	.06	.08	.06	.06
Ammonia (mg/L)	5.0	5.5	5.5	5.5	5.5	5.4	5.4	5.4

	Cross Section SP-400-G Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1406	1411	1416	1422	1427	1433	1438	1444
Temperature (deg C)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.5
pH (units)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Conductivity (µmhos)	980	980	980	970	970	970	960	950
Dissolved oxygen (mg/L)	10.7	10.6	10.6	10.5	10.5	10.5	10.4	10.4
Dye concentration (µg/L)	19.9	20.7	19.9	20.0	20.7	20.3	20.7	20.5
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	4.9	4.9	4.9	4.8	4.8	4.9	4.8	4.8

Table 19.--Mixing-zone data for January 25, 1984--Continued

	Cross Section SP-400-H Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1323	1332	1338	1346	1354	1404	1410	1415
Temperature (deg C)	8.0	8.0	7.0	7.0	7.0	7.0	7.0	7.0
pH (units)	7.4	7.1	7.2	7.2	7.3	7.3	7.3	7.3
Conductivity (µmhos)	875	875	875	860	900	900	900	900
Dissolved oxygen (mg/L)	10.0	10.0	9.9	9.9	10.0	10.0	9.9	10.0
Dye concentration (µg/L)	19.3	18.7	-----	18.7	19.7	20.3	20.0	19.5
Residual chlorine (mg/L)	-----	-----	-----	-----	-----	-----	-----	-----
Ammonia (mg/L)	5.0	5.0	4.9	4.9	4.9	5.0	4.9	4.9

	Cross Section SP-400-H Verticals							
	A	B	C	D	E	F	G	H
Time (hours)	1437	1445	1452	1459	1507	1512	1518	1524
Temperature (deg C)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
pH (units)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Conductivity (µmhos)	900	910	910	910	910	910	910	910
Dissolved oxygen (mg/L)	10.2	10.2	10.1	10.0	10.1	10.0	10.1	10.1
Dye concentration (µg/L)	20.0	20.5	21.1	20.9	20.7	20.9	20.5	20.5
Residual chlorine (mg/L)	.00	.00	.00	.00	.04	.03	.00	.07
Ammonia (mg/L)	4.8	4.8	4.8	4.5	4.7	4.6	4.6	4.6

Table 19.--Mixing-zone data for January 25, 1984--Continued

Time (hours)	Dye concentration (micrograms per liter) A	B	C	Temperature (degrees Celsius)	pH (standard units)	Conductivity (micromhos)	Ammonia concentration (milligrams per liter)	Residual chlorine concentration (milligrams per liter)
	Effluent data							
1230	43.	50.	52.	13.5	6.9	1120	14.3	0.36
1340	58.	57.	60.	13.0	7.4	1200	16.2	.38
1435	61.	62.	64.	----	---	----	----	----
1510	2.	0.	0.	13.0	7.8	1200	18.7	.34

Discharge at SP-400-A = 68 cubic feet per second

Table 20.--Traveltime and reaeration measurement sites for the South Platte River

[L, low-flow; I, injection site; S, sampling site]

Site	Reference code	Flow conditions	Site type	Distance from SP-1700 (miles)	Name
0	--------	L	I	19.40	South Platte River below Chatfield Reservoir
1	SP-100	L	S	18.67	South Platte River near Colorado Highway 470
2	SP-200	L	S	14.51	South Platte River at Littleton
3	--------	L	I	13.29	South Platte River at Englewood water intake
4	SP-300	L	S	11.89	South Platte River above Bear Creek
5	--------	L	I	11.30	South Platte River below Hampton Avenue
6	SP-400	L	S	10.44	South Platte River at Englewood
7	SP-500	L	I,S	9.32	South Platte River at Evans Avenue
8	SP-600	L	S	8.48	South Platte River at Florida Avenue
9	SP-700	L	S	8.27	South Platte River below footbridge below Florida
10	SP-800	L	S	7.94	South Platte River above Mississippi Avenue
11	SP-900	L	I,S	7.33	South Platte River above Sante Fe overpass
12	SP-1000	L	S	6.68	South Platte River below Alameda Avenue
13	--------	L	S	6.32	South Platte River at footbridge below Alameda Ave.
14	SP-1100	L	S	5.59	South Platte River above Vallejo Street
15	SP-1100A	L	S	5.29	South Platte River above 8th Avenue bridge
16	SP-1200	L	I,S	4.15	South Platte River above 17th Street overpass
17	SP-1300	L	S	3.63	South Platte River at 7th St. near Confluence Park
18	SP-1400	L	S	2.73	South Platte River at Denver
19	SP-1500	L	S	1.54	South Platte River above 31st Street bridge
20	SP-1600	L	S	.80	South Platte River below 38th Street bridge
21	SP-1700	L	S	.00	South Platte River at 50th Ave. at Denver

Table 21.--Basic dye-curve characteristics

Site	Elevation (feet)	Distance downstream from injection (miles)	Stream discharge (cubic feet per second)	Cumulative traveltime of dye clouds: Leading edge (hours)	Cumulative traveltime of dye clouds: Peak (hours)	Mean velocity of dye cloud (miles per hour)	Time for dye cloud to pass site (hours)	Peak dye concentration (micrograms per liter)
South Platte River, slug injection of 400 milliliters of 20-percent dye solution at 0715 hours, October 4, 1982 at site 0								
0	5367	0.00	----	-----	-----	----	----	-----
1	5361	.73	33.4	2.20	2.75	0.24	2.69	25.0
2	5306	4.89	65.2	8.20	9.80	.57	6.85	4.00
4	5263	7.51	58.1	10.42	12.42	1.02	7.18	2.55
South Platte River, slug injection of 820 milliliters of 20-percent dye solution at 0637 hours, October 4, 1982 at site 3								
3	5290	0.00	----	----	----	----	----	-----
4	5263	1.40	58.1	1.12	1.42	0.92	1.13	50.0
6	5251	2.85	148.0	3.70	4.72	.37	6.70	5.45
7	5245	3.97	182.0	5.50	6.76	.52	8.51	3.15
8	5231	4.81	202.0	6.90	8.38	.53	8.62	2.85
South Platte River, slug injection of 1,000 milliliters of 20-percent dye solution at 0640 hours, October 5, 1982 st site 7								
7	5245	0.00	-----	----	----	----	----	-----
8	5231	.84	166.0	1.16	1.37	0.52	1.89	27.0
9	5229	1.05	175.0	1.48	1.88	.78	2.12	17.8
10	5226	1.38	175.0	1.88	2.22	.54	2.24	17.0
11	5220	1.99	179.0	2.70	3.28	.54	3.40	11.8
12	5210	2.64	167.0	3.83	4.64	.48	3.91	9.80
14	5199	3.68	167.0	5.20	5.94	.70	4.40	8.70
15	5198	4.03	167.0	5.88	6.80	.43	5.22	6.70
16	5182	5.17	189.0	7.40	8.66	.58	5.44	5.20
South Platte River, slug injection of 1,000 milliliters of 20-percent dye solution at 1150 hours, October 5, 1982 at site 16								
16	5182	0.00	-----	----	----	----	----	-----
17	5175	.52	203.0	0.51	0.60	0.81	0.46	83.0
18	5161	1.42	215.0	1.16	1.48	.87	1.94	16.0
19	5145	2.61	211.0	2.05	2.42	1.09	3.09	10.5
20	5138	3.55	209.0	2.76	3.25	.96	3.38	8.80
21	5133	4.15	206.0	3.50	4.10	.91	3.38	5.40

Table 21.--Basic dye-curve characteristics--Continued

Site	Elevation (feet)	Distance downstream from injection (miles)	Stream discharge (cubic feet per second)	Cumulative traveltime of dye clouds: Leading edge (hours)	Cumulative traveltime of dye clouds: Peak (hours)	Mean velocity of dye cloud (miles per hour)	Time for dye cloud to pass site (hours)	Peak dye concentration (micrograms per liter)
South Platte River, continuous injection of 1,660 milliliters of 4.25-percent dye solution for 60 minutes begining at 0805 hours, September 19, 1983 at site 5								
5	5257	0.00	-----	----	----	----	----	----
6	5251	.86	97.5	1.10	2.10	0.42	2.90	7.40
7	5245	1.98	144.0	2.68	4.08	.51	4.60	3.62
8	5231	2.82	147.0	4.34	5.94	.41	5.60	2.85
10	5226	3.36	136.0	5.16	6.76	.57	6.80	2.60
South Platte River, continuous injection Of 1,730 milliliters of 10-percent dye solution for 60 minutes begining at 0735 hours, September 20, 1983 at site 16								
16	5182	0.00	-----	----	----	----	----	----
17	5175	.84	129.0	1.24	2.12	0.41	2.08	13.8
18	5161	1.42	159.0	2.01	2.97	.59	2.88	8.90
19	5145	2.61	186.0	3.03	4.20	.94	3.77	8.03
21	5133	4.15	190.0	4.32	5.60	1.07	4.16	6.75
South Platte River, continuous injection of 1,700 milliliters of 6.7-percent dye solution for 60 minutes begining at 0855 hours, January 23, 1984 at site 11								
11	5220	0.00	-----	----	----	----	----	-----
12	5210	.65	82.5	1.10	2.00	0.32	2.60	15.5
13	5205	1.01	115.7	1.55	2.45	.68	2.55	13.0
14	5199	1.69	115.7	3.22	4.42	.33	4.08	9.50
15	5198	2.04	118.9	4.00	5.00	.51	4.10	8.90
16	5182	3.18	126.1	5.23	6.83	.61	5.77	6.60
South Platte River, slug injection of 275 milliliters of 20-percent dye solution at 2300 hours, January 23, 1984 at site 1								
1	5361	0.00	----	-----	----	----	----	-----
4	5263	6.78	26.1	23.93	----	----	----	----
6	5251	8.23	63.0	26.12	----	----	----	----

Table 22.--Ethylene and propane-curve and additional dye-curve characteristics

Site	Areas of curves (µg/h/L)			Traveltime of centroid (hours)			Peak concentration (µg/L)			Traveltime of peak (hours)			Date of measurement		
	Ethylene	Propane	Dye	Ethylene	Propane	Dye	Ethylene	Propane	Dye	Ethylene	Propane	Dye	mo	day	year
6	55.14	23.82	8.09	2.09	2.01	2.05	51.0	21.0	7.40	2.18	2.08	2.10	09	19	83
7	17.75	8.72	5.70	4.24	4.13	4.23	12.1	6.0	3.62	4.10	3.95	4.08	09	19	83
8	9.97	5.17	5.68	6.23	6.20	6.28	5.5	2.8	2.85	5.84	5.76	5.94	09	19	83
10	7.59	3.98	5.58	7.13	7.04	7.23	4.0	2.2	2.60	6.68	6.68	6.76	09	19	83
17	35.42	12.42	13.77	2.04	2.07	2.05	35.1	12.5	13.75	2.20	2.20	2.12	09	20	83
18	13.54	5.10	10.02	3.05	3.06	3.04	10.9	4.1	8.90	2.98	2.98	2.97	09	20	83
19	8.54	3.51	9.98	4.20	4.23	4.31	7.1	2.8	8.03	4.08	4.08	4.20	09	20	83
21	4.99	2.01	9.36	5.65	5.60	5.75	3.5	1.6	6.75	5.50	5.50	5.60	09	20	83
12	-----	-----	15.22	----	----	2.01	140.	----	15.5	2.00	----	2.00	01	23	84
13	-----	-----	12.42	----	----	2.54	36.	----	13.0	2.37	----	2.45	01	23	84
14	-----	-----	11.85	----	----	4.58	27.	----	9.50	4.42	----	4.42	01	23	84
15	-----	-----	11.83	----	----	5.26	15.	----	8.90	5.08	----	5.00	01	23	84
16	-----	-----	11.54	----	----	7.12	12.	----	6.60	6.83	----	6.83	01	23	84

BENTHIC OXYGEN-DEMAND DATA

Measurements of benthic oxygen demand (SOD) were made at selected points along the study reach of the South Platte river during periods of regulated low flow. These data, in grams per square meter per day, are presented in table 23. Also presented are site number, date, location, bottom type, temperature, initial dissolved oxygen, elapsed time of measurement, and method of measurement.

These data were collected at locations in the river where the water was less than 2 feet deep. The locations on the South Platte River of sites where sediment oxygen-demand measurements were made or samples for in-vitro measurements were collected are shown in figure 5. Four laboratory (in-vitro) measurements and eighteen in-situ measurements were made of the change in dissolved oxygen with time in a closed system of stream water (in-situ) or of deionized water (in-vitro) circulating over a layer of streambed material (SOD).

The in-vitro measurements of SOD were made using a clear plastic 18.3-liter cylinder to hold the sediment sample, a variable-speed peristaltic pump, and a dissolved-oxygen probe (and meter) in a closed system of sediment and circulating air-saturated deionized water. The in-situ measurements were made using a 27.7-liter clear plastic dome (or flattened cone) fitted with a one-way valve (to exhaust air bubbles), a submersible pump (for water circulation), and a dissolved-oxygen probe connected to a meter and a continuously recording paper recorder. The dome was placed into the riverbed to seal against freshwater recharge. Dissolved-oxygen measurements were then made until there was no measurable change in dissolved-oxygen concentration.

ANALYTICAL DATA FROM THE U.S. GEOLOGICAL SURVEY DENVER CENTRAL LABORATORY

Methods used by the U.S. Geological Survey Denver Central Laboratory for the determination of water-quality constituents presented in this report are listed in table 24. Methods used to determine CBOD data are described by R. J. Pickering (U.S. Geological Survey, written commun., 1980).

Table 23.--Summary of benthic sediment oxygen-demand measurements for the South Platte River

[g/m²/d, gram per square meter per day; Bottom Types--C, cobble; G, gravel; M, mud (silt and organic material); S, sand; s, silt; Sh, shale; Method S, in-situ; V, in-vitro; *, blank adjusted measurement]

Site number in figure 5	Date	Location	Bottom type	Temperature (deg C)	Initial dissolved oxygen (mg/L)	Elapsed time (minutes)	Benthic sediment oxygen demand (g/m²/d)	Method
8	82/10/05	South Platte River above 19th Street bridge	CS	----	8.0	370	1.20	S*
6	82/10/07	South Platte River at Confluence Park	Ss	----	8.1	130	3.80	S*
6	82/10/07	South Platte River at Confluence Park	Ss	----	8.6	155	2.80	S*
6	82/10/07	South Platte River at Confluence Park	Ss	----	4.1	75	.88	S
6	82/10/07	South Platte River at Confluence Park	Ss	----	3.0	60	.55	S
4	82/10/18	South Platte River at Zuni power plant	M	12.0	6.0	20	29.0	S*
2	83/03/22	South Platte River below CO-470	CS	----	4.9	320	.37	V
3	83/03/23	South Platte River above Evans Avenue bridge	CGSSh	----	6.6	150	5.30	V
3	83/03/28	South Platte River above Evans Avenue bridge	CGSSh	----	5.9	315	1.60	V
6	83/09/20	South Platte River at Confluence Park	Ss	13.5	7.0	570	.92	S
6	83/09/20	South Platte River at Confluence Park	Ss	13.5	6.9	70	1.60	S
2	83/09/22	South Platte River above Bi-City WWTP	CSs	10.0	9.2	540	1.40	S
5	83/09/22	South Platte River below 17th Street underpass	Ss	----	7.9	540	1.20	S
5	83/09/22	South Platte River below 17th Street underpass	Ss	13.0	8.0	570	1.40	S
6	83/10/13	South Platte River at Confluence Park	CGSs	21.0	5.2	750	1.60	V
5	84/01/23	South Platte River below 17th Street underpass	Ss	1.0	10.2	350	.82	S
5	84/01/23	South Platte River below 17th Street underpass	Ss	1.0	9.8	458	1.80	S
6	84/01/24	South Platte River at Confluence Park	Ss	1.0	12.4	36	8.80	S
6	84/01/24	South Platte River at Confluence Park	Ss	1.0	9.8	510	.82	S
4	84/01/25	South Platte River at Zuni power plant	M	3.0	10.4	312	1.55	S
7	84/01/26	South Platte River below 16th Street viaduct	Ss	4.0	12.0	519	1.10	S
7	84/01/26	South Platte River below 16th Street viaduct	Ss	4.0	10.0	502	.72	S

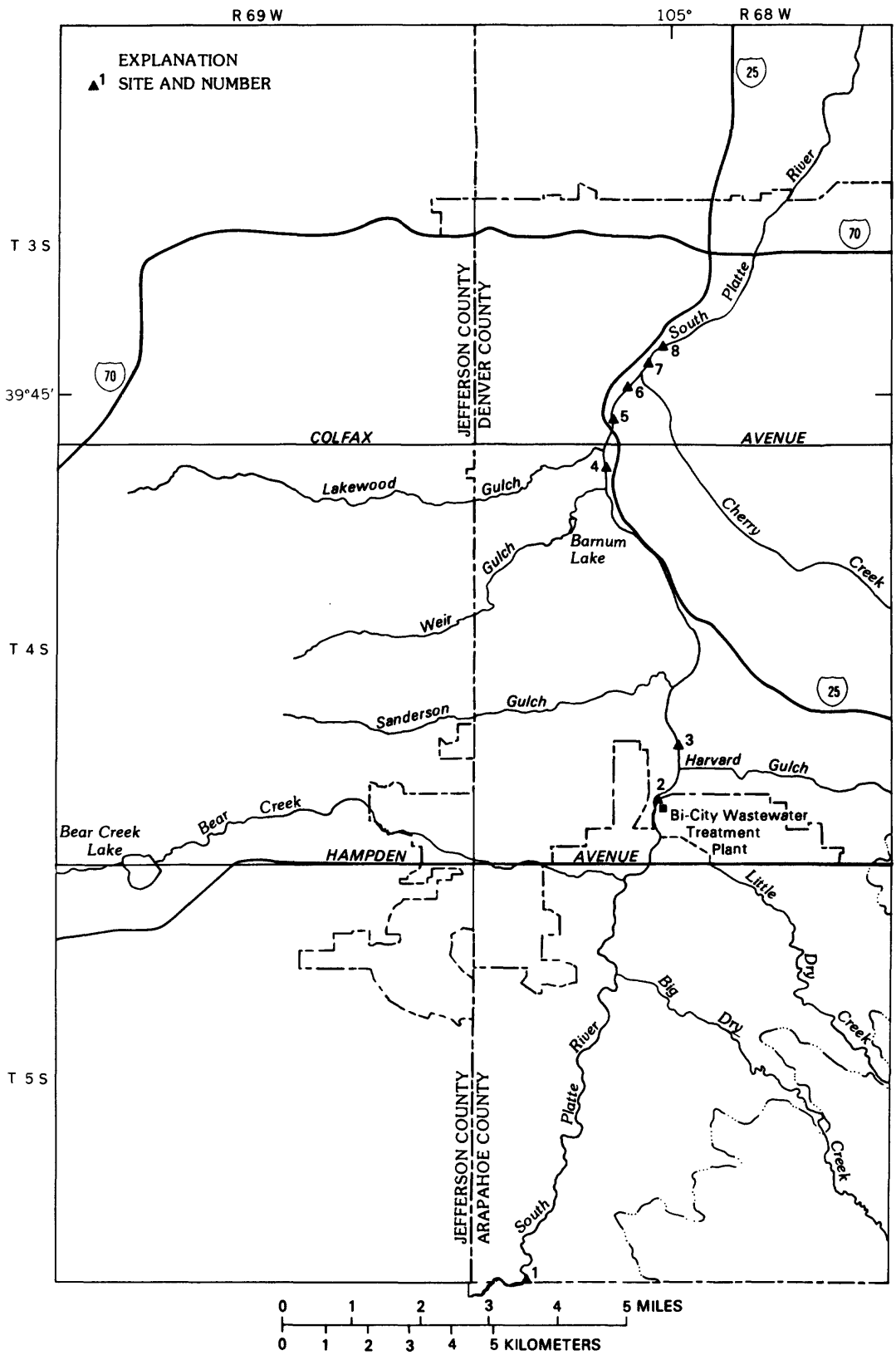

Figure 5.--Locations of benthic oxygen-demand measurement sites.

Table 24.--Methods used by the U.S. Geological Survey Denver Central Laboratory

Parameter name	Phase and units	Method code	USGS parameter code	Range, if method is different
Alkalinity	Dissolved mg/L as CaCo	I-2030-78	90410	
Nitrogen, ammonia	Total mg/L as N	I-4522-78	00610	
Nitrogen, ammonia plus organic	Total mg/L as N	I-4552-78	00625	
Nitrogen, organic	Total mg/L as N	computed	00605	
Nitrogen, nitrite	Total mg/L as N	I-4540-78	00615	
Nitrogen, nitrate	Total mg/L as N	computed	00620	
Nitrogen, nitrite plus nitrate	Total mg/L as N	I-4545-78	00630	.1 - 5.0
		I-4543-83		.01 - 3
Nitrogen	Total mg/L as N	computed	00600	
Phosphorus	Total mg/L as P	I-4600-78	00665	
Solids, residue at 105 deg C	Suspended mg/L	I-3765-78	00530	
Solids, residue at 180 deg C	Dissolved mg/L	I-1750-78	70300	
Solids	Dissolved tons/acre-ft	computed	70303	

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