



## 00430061 HURON WELL FIELD—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Precipitation total for defined period, inches (00193)	Atm dep wet, liters (83177)	Specif. conductance, wet dep unfltrd field, uS/cm (83154)	Specif. conductance, wet dep unfltrd lab, uS/cm (83156)	pH, wet atm dep unfltrd field, std units (83106)	pH wet atm dep unfltrd lab, std units (83107)	Calcium wet atm dep fltrd, mg/L (82932)	Magnesium, wet atm dep fltrd, mg/L (83002)	Sodium, wet atm dep fltrd, mg/L (83138)	Potassium, wet atm dep fltrd, mg/L (83120)	Sulfate wet atm dep fltrd, mg/L (83160)	Chloride, wet atm dep fltrd, mg/L (82944)	Ammonia wet atm dep fltrd, mg/L as NH4 (83047)	Nitrate wet atm dep fltrd, mg/L (83071)
04-11	.03	.010	--	--	--	--	--	--	--	--	--	--	--	--
MAY 11-18	2.45	4.240	8.6	7.7	5.84	6.1	.16	.02	.04	.03	.77	.05	.800	.93
MAY 18-25	.55	1.070	16.3	19.2	6.12	6.7	.62	.07	.09	.05	1.50	.13	1.82	3.26
MAY 25-31	.19	.300	16.1	15.5	6.36	6.6	.56	.07	.05	.05	1.38	.07	1.38	2.58
JUN 01-08	.50	.850	9.4	9.4	6.12	6.7	.28	.03	.01	.04	.72	.04	.920	1.46
JUN 08-15	2.00	3.510	6.1	7.0	5.92	6.6	.23	.03	.03	.03	.55	.04	.630	1.00
JUN 15-22	.02	.040	--	--	--	--	--	--	--	--	--	--	--	--
JUN 22-29	.21	.370	11.4	10.5	6.03	6.0	.59	.07	.02	.05	1.11	.06	.650	1.62
JUN 29-30	1.54	2.710	6.6	7.0	5.79	6.5	.13	.02	.01	.02	.53	.03	.770	1.00
JUL 06-13	.80	1.310	10.4	11.0	5.78	6.4	.28	.04	.04	.04	.85	.08	1.07	1.97
JUL 13-20	.37	.640	15.8	15.1	6.07	6.7	.41	.05	.02	.04	.92	.08	1.53	2.84
JUL 20-27	<.01	.010	--	--	--	--	--	--	--	--	--	--	--	--
JUL 27-31	1.34	2.140	11.1	11.2	6.10	6.4	.26	.03	.02	.05	.93	.08	1.12	1.89
AUG 03-10	.05	.100	11.7	12.8	5.15	5.1	.22	.04	.03	.01	.84	.09	.680	2.19
AUG 10-17	.13	.210	--	--	--	--	--	--	--	--	--	--	--	--
AUG 17-24	.06	.100	--	--	--	--	--	--	--	--	--	--	--	--
AUG 24-31	.14	.240	9.2	8.3	6.15	6.7	.33	.04	.02	.05	.59	.05	.730	1.23
AUG 31-SEP 07	2.35	4.010	5.7	6.0	5.97	6.3	.17	.02	.01	.02	.65	.03	.510	.66
SEP 07-14	.08	.150	--	--	--	--	--	--	--	--	--	--	--	--
SEP 14-21	1.55	2.460	4.6	5.2	5.91	6.2	.17	.02	.02	.02	.58	.04	.400	.70
SEP 21-28	1.37	2.300	4.0	3.8	5.40	5.6	.04	M	.01	M	.34	.01	.210	.41
SEP 28-OCT 05	.84	1.380	10.7	11.3	5.94	6.5	.49	.06	.01	.03	1.33	.04	.890	1.78

## MISCELLANEOUS WATER QUALITY DATA

The following water-quality data are for a sewage lagoon and a reservoir at EROS Data Center, and private wells downgradient of EROS Data Center near Garretson, South Dakota. Water samples are routinely collected one time per year as part of a monitoring program with the EROS Data Center.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2032 TO SEPTEMBER 2004

Station name	Date	Time	Specif. conductance, wat unfltrd Date 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)
LAGOON 1	05-12-04	1130	1,200	6.7	6.0	18.4	718	5.0	57	79.0
EROS LAKE	05-12-04	1345	778	8.3	12.0	17.3	721	8.9	98	--
103N48W 5CACA2	05-11-04	1530	995	7.3	26.0	9.5	715	.9	8	--
103N48W 9CCDA	05-11-04	1415	1,180	7.0	26.0	9.5	718	8.8	82	--
103N48W17ACCC2	05-11-04	1050	848	7.0	25.5	9.8	719	.3	3	--

  

Station name	Date	COD, high level, water, unfltrd mg/L (00340)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrate water, fltrd, mg/L as N (00618)	Orthophosphate, water, fltrd, mg/L as P (00671)
LAGOON #1 AT	05-12-04	160	76	93	--	811	6.17	4.13	17.4	13.3	3.43
EROS LAKE	05-12-04	30	257	278	18	479	<.04	<.008	<.06	--	.05
103N48W 5CACA2	05-11-04	<10	285	348	--	706	<.04	<.008	.08	--	<.02
103N48W 9CCDA	05-11-04	<10	444	542	--	726	<.04	<.008	24.0	--	E.02
103N48W17ACCC2	05-11-04	<10	328	400	--	565	.15	<.008	<.06	--	E.01

  

Station name	Date	Aluminum, water, unfltrd recover-able, ug/L (01105)	Boron, water, unfltrd recover-able, ug/L (01022)	Bromide water, fltrd, mg/L (71870)	Chromium, water, fltrd, ug/L (01030)	Cyanide water unfltrd mg/L (00720)	Iodide water, fltrd, mg/L (71865)	Iron, water, unfltrd recover-able, ug/L (01045)	Silver, water, unfltrd recover-able, ug/L (01077)	Silver, water, fltrd, ug/L (01075)	Zinc, water, unfltrd recover-able, ug/L (01092)
LAGOON #1 AT	05-12-04	213	181	4.47	3.0	.05	.067	1,710	152	1.1	113
EROS LAKE	05-12-04	41	218	2.91	<.8	<.01	.038	110	<.3	<.3	3
103N48W 5CACA2	05-11-04	208	245	.04	<.8	<.01	.005	32,300	<.3	<.5	377
103N48W 9CCDA	05-11-04	E1	54	.17	E.8	<.01	.008	M	<.3	<.5	25
103N48W17ACCC2	05-11-04	2	250	.06	<.8	<.01	.009	90	<.3	<.5	6

< Less than.

E Estimated value.

M Presence verified, not quantified.

## 430419098401600 LAKE FRANCIS CASE NEAR LAKE ANDES, SD

LOCATION.--Lat 43°04'14", long 98°40'16", in SE<sup>1</sup>/<sub>4</sub> sec.5, T.95 N., R.66 E., Charles Mix County, Hydrologic Unit 10140101, about 6 mi west of Ft. Randall Dam.

PERIOD OF RECORD.--April 2002 to current year.

REMARKS.--For all samples collected during water year 2004, a total water column depth-integrated sample and a discrete near-bottom sample were collected. On Sept. 21, 2003, a blank sample also was collected for quality-control purposes.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	pH, water, unfiltered, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Noncarbon hardness, wat flt field, mg/L as CaCO <sub>3</sub> (00904)	Alkalinity, wat flt inc tit field, mg/L as CaCO <sub>3</sub> (39086)
NOV													
a17...	1430	27,500	709	8.4	16.0	8.9	1.60	713	11.0	102	240	78	166
b17...	1440	--	709	8.4	16.0	8.9	--	713	11.0	102	240	74	166
APR													
a19...	1425	--	736	8.2	11.5	7.7	1.10	743	12.1	104	250	75	172
b19...	1435	--	736	8.2	11.5	7.7	1.10	743	12.1	104	240	70	172
MAY													
a24...	1430	28,200	725	8.1	12.0	13.8	.80	725	9.6	97	230	65	162
b24...	1435	28,200	725	8.1	12.0	13.8	.80	725	9.6	97	250	--	--
JUL													
a19...	1315	32,600	728	8.2	32.0	21.8	.70	728	7.8	93	240	74	163
b19...	1330	32,600	728	8.2	32.0	21.8	.70	728	7.8	93	230	66	163
SEP													
a21...	1300	32,000	697	8.4	14.0	21.2	1.70	732	--	--	230	74	159
b21...	1305	32,000	698	8.5	14.0	21.2	1.70	732	--	--	230	70	159

Date	ANC, wat unfiltered, mg/L as CaCO <sub>3</sub> (90410)	Chlorophyll a, phytoplankton, fluoro, ug/L (70953)	Pheophytin a, phytoplankton, ug/L (62360)	Calcium water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Sodium, water, filtered, mg/L (00930)	Sodium, percent (00932)	Sodium adsorption ratio (00931)	Potassium, water, filtered, mg/L (00935)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Sulfate water, filtered, mg/L (00945)	Chloride, water, filtered, mg/L (00940)
NOV													
a17...	167	1.6	.5	58.4	23.9	69.7	38	2	5.05	195	4	188	11.2
b17...	164	--	--	57.0	23.8	67.9	38	2	4.88	195	4	191	11.1
APR													
a19...	176	2.1	.4	59.0	24.3	70.9	38	2	4.83	198	6	188	11.3
b19...	176	--	--	57.8	23.9	69.6	38	2	4.83	198	6	188	11.3
MAY													
a24...	172	1.1	.4	53.7	22.6	67.6	39	2	4.26	191	3	187	11.4
b24...	172	--	--	59.6	24.7	74.7	39	2	4.98	--	--	186	11.3
JUL													
a19...	165	.9	.2	58.0	22.5	66.3	37	2	5.08	196	2	172	10.1
b19...	167	--	--	55.5	22.0	68.0	39	2	5.07	196	2	189	11.2
SEP													
a21...	155	1.5	.5	55.9	22.8	70.9	39	2	5.12	190	2	180	10.9
b21...	163	--	--	54.3	22.8	68.8	39	2	5.01	190	2	180	10.9





## MISCELLANEOUS WATER QUALITY DATA

430419098401600 LAKE FRANCIS CASE NEAR LAKE ANDES, SD—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potassium, water, fltrd, mg/L (00935)	Sulfate water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho- phosphate, water, fltrd, mg/L as P (00671)
SEP c21...	1255	.01	<.008	<.10	.010	<.01	.04	<.01	<.04	<.010	<.002	<.016	<.006
Date		Arsenic water, fltrd, ug/L (01000)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Zinc, water, fltrd, ug/L (01090)				
SEP c21...		<.2	<.4	<.6	<.2	<.4	<.06	<.4	E.6				

&lt; Less than.

a Total water column depth-integrated sample.

b Discrete near-bottom sample.

c Field blank collected for quality-control purposes.

E Estimated value.

The following water-quality data were collected at three locations within the State of South Dakota. Water samples were collected as part of a regional study of water quality and stream biology to assess landscape indicators for pesticides, nutrients, and aquatic biological conditions in small streams in the Midwest. This study is part of a long-term cooperative national research effort between the USEPA and the USGS, termed Landscape Investigations for Pesticides Study (LIPS). On Sept. 1, 2004, blank water was processed at the field site through the sampling equipment that would be used on Sept. 2, 2004; the blank sample was then processed and analyzed for quality-control purposes. The analytical results for the field blank sample is presented in a table following the water-quality results.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Station name	Date	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)
UNNAMED TRIB TO N.FK. YELLOWBANK R NR MILBANK, SD	09-29-04	E.10	1050	8.0	20.0
LITTLE BEAVER CREEK NEAR CANTON, SD	09-02-04	.92	2200	8.0	23.0
UNNAMED TRIB TO E.FK. VERMILLION R NR MONROE, SD	09-30-04	E.10	1620	7.7	17.0

Date	Temperature, water, deg C (00010)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)
09-29-04	14.9	737	7.3	72	259	123	56.6	26.4	10.8	316
09-02-04	17.5	734	7.7	82	327	365	112	62.6	11.4	399
09-30-04	13.6	728	2.3	22	362	190	88.4	45.5	20.1	442

Date	Sulfate water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Residue on evap. Residue 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water fltrd, mg/L as N (00631)
09-29-04	307	8.03	.3	32.1	771	<.04	1.2	.65	<.008	<.06
09-02-04	1040	7.44	.3	36.3	1840	<.04	.26	.23	.017	2.98
09-30-04	529	30.5	.3	35.8	1270	2.53	7.7	6.6	.056	.12

Date	Phosphorus, water, unfltrd mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)	Orthophosphate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Propachlor, water, fltrd, ug/L (04024)	Butylate, water, fltrd, ug/L (04028)	Bromacil, water, fltrd, ug/L (04029)	Simazine, water, fltrd, ug/L (04035)	Prometon, water, fltrd, ug/L (04037)
09-29-04	.189	.078	.05	19	314	<.025	<.004	<.5	<.005	<.01
09-02-04	.036	.012	<.02	<6	214	<.025	<.004	<.5	<.005	<.01
09-30-04	.39	.138	.07	37	1780	<.025	<.004	<.5	<.005	<.01

Date	CIAT, water, fltrd, ug/L (04040)	Cyanazine, water, fltrd, ug/L (04041)	Fonofos, water, fltrd, ug/L (04095)	Anthracene, water, fltrd, ug/L (34221)	Benzo[a]pyrene, water, fltrd, ug/L (34248)	alpha-HCH, water, fltrd, ug/L (34253)	Tri-bromo-methane, water, fltrd, ug/L (34288)	Fluoranthene, water, fltrd, ug/L (34377)	Iso-phorone, water, fltrd, ug/L (34409)	Naphthalene, water, fltrd, ug/L (34443)
09-29-04	E.004	<.018	<.003	<.5	<.5	<.005	<.5	<.5	M	<.5
09-02-04	E.007	<.018	<.003	<.5	<.5	<.005	<.5	<.5	<.5	<.5
09-30-04	<.006	<.018	<.003	<.5	<.5	<.005	<.5	<.5	<.5	<.5



## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Penta-chloro-phenol, water, fltrd, ug/L (34459)	Phenan-threne, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)	Pyrene, water, fltrd, ug/L (34470)	Tetra-chloro-ethene, water, fltrd, ug/L (34476)	1,4-Di-chloro-benzene, water, fltrd, ug/L (34572)	p,p'-DDE, water, fltrd, ug/L (34653)	Chlor-pyrifos, water, fltrd, ug/L (38933)	Lindane, water, fltrd, ug/L (39341)	Diel-drin, water, fltrd, ug/L (39381)
09-29-04	<2	<.5	E.2	<.5	<.5	<.5	<.003	<.005	<.004	<.009
09-02-04	<2	<.5	2.7	<.5	<.5	<.5	<.003	<.007	<.004	<.009
09-30-04	<2	<.5	12.0	<.5	<.5	<.5	<.003	<.005	<.004	<.009
Date	Metola-chlor, water, fltrd, ug/L (39415)	Mala-thion, water, fltrd, ug/L (39532)	Para-thion, water, fltrd, ug/L (39542)	Diazi-non, water, fltrd, ug/L (39572)	Atra-zine, water, fltrd, ug/L (39632)	Ala-chlor, water, fltrd, ug/L (46342)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (50009)	Caf-feine, water, fltrd, ug/L (50305)	Meta-laxyl, water, fltrd, ug/L (50359)
09-29-04	<.013	<.027	<.010	<.005	.012	<.005	<.006	<.02	M	<.5
09-02-04	E.007	<.027	<.010	<.005	.016	<.005	<.006	.06	<.5	<.5
09-30-04	<.013	<.027	<.010	<.005	.040	<.005	<.006	<.02	<.5	<.5
Date	Aceto-chlor, water, fltrd, ug/L (61029)	Aceto-chlor, water, fltrd, ug/L (61030)	Ala-chlor, water, fltrd, ug/L (61031)	Metola-chlor, water, fltrd, ug/L (61043)	Metola-chlor, water, fltrd, ug/L (61044)	Dimeth-enamid, water, fltrd, ug/L (61588)	Di-ethoxy-octyl-phenol, water, fltrd, ug/L (61705)	Ethoxy-octyl-phenol, water, fltrd, ug/L (61706)	Dimeth-enamid, water, fltrd, ug/L (61951)	Flufen-acet, water, fltrd, ug/L (61952)
09-29-04	<.02	<.02	<.02	<.02	<.02	<.02	<1	<1	<.02	<.02
09-02-04	.02	<.02	<.02	.13	<.02	<.02	<1	<1	<.02	<.02
09-30-04	.09	.04	<.02	.04	<.02	<.02	<1	<1	<.02	<.02
Date	Cot-inine, water, fltrd, ug/L (62005)	1-Methyl-naphth-alene, water, fltrd, ug/L (62054)	2,6-Di-methyl-naphth-alene, water, fltrd, ug/L (62055)	2-Methyl-naphth-alene, water, fltrd, ug/L (62056)	3-beta-Copro-satanol, water, fltrd, ug/L (62057)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)	3-tert-Butyl-4-hydroxy-anisole, water, fltrd, ug/L (62059)	4-Cumyl-phenol, water, fltrd, ug/L (62060)	4-Octyl-phenol, water, fltrd, ug/L (62061)	4-tert-Octyl-phenol, water, fltrd, ug/L (62062)
09-29-04	<1.00	<.5	<.5	<.5	<2	M	<.5	M	<1	<1
09-02-04	<1.00	<.5	<.5	<.5	<2	<1	<.5	<1	<1	<1
09-30-04	<1.00	<.5	<.5	<.5	M	M	<.5	<1	<1	<1
Date	5-Meth-yl-1H-benzo-tri-azole, water, fltrd, ug/L (62063)	Aceto-phenone, water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	9,10-Anthra-quinone, water, fltrd, ug/L (62066)	Benzo-phenone, water, fltrd, ug/L (62067)	beta-Sitosterol, water, fltrd, ug/L (62068)	Bisphe-nol A, water, fltrd, ug/L (62069)	Camphor, water, fltrd, ug/L (62070)	Carba-zole, water, fltrd, ug/L (62071)	Choles-terol, water, fltrd, ug/L (62072)
09-29-04	<2	<.5	M	<.5	<.5	<2	<1	M	<.5	M
09-02-04	<2	<.5	<.5	<.5	<.5	<2	<1	<.5	<.5	<2
09-30-04	<2	<.5	M	<.5	M	<2	<1	<.5	<.5	M
Date	D-Limo-nene, water, fltrd, ug/L (62073)	HHCB, water, fltrd, ug/L (62075)	Indole, water, fltrd, ug/L (62076)	Isobor-neol, water, fltrd, ug/L (62077)	Iso-propyl-benzene, water, fltrd, ug/L (62078)	Iso-quin-oline, water, fltrd, ug/L (62079)	Menthol, water, fltrd, ug/L (62080)	Methyl-salicy-late, water, fltrd, ug/L (62081)	DEET, water, fltrd, ug/L (62082)	Di-ethoxy-nonyl-phenol, water, fltrd, ug/L (62083)
09-29-04	<.5	<.5	M	<.5	<.5	<.5	<.5	<.5	E.5	<.5
09-02-04	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	M	<.5
09-30-04	<.5	M	.6	<.5	<.5	<.5	<.5	M	E.3	<.5

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	p-Cresol, water, fltrd, ug/L (62084)	4-Nonylphenol, water, fltrd, ug/L (62085)	beta-Stigmanol, water, fltrd, ug/L (62086)	Tris(2-chloroethyl) phosphate, wat flt ug/L (62087)	Tris(di-chloro-i-Pr) phosphate, wat flt ug/L (62088)	Tri-butyl phosphate, fltrd, ug/L (62089)	Triclosan, water, fltrd, ug/L (62090)	Tri-ethyl citrate water, fltrd, ug/L (62091)	Tri-phenyl phosphate, water, fltrd, ug/L (62092)	Tris(2-butoxyethyl) phosphate, wat flt ug/L (62093)	
09-29-04	M	E2	<2	E.1	<.5	E.1	<1	<.5	M	<.5	
09-02-04	<1	<5	<2	<.5	<.5	<.5	<1	<.5	<.5	<.5	
09-30-04	51	E3	<2	E.1	<.5	E.1	<1	<.5	M	<.5	
Date	Fipronil, water, fltrd, ug/L (62166)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Desulf-inyl-fipronil amide, wat flt ug/L (62169)	Desulf-inyl fipronil, water, fltrd, ug/L (62170)	Flufenacet, water, fltrd, ug/L (62481)	Dimethenamid OA, water, fltrd, ug/L (62482)	Flufenacet OA, water, fltrd, ug/L (62483)	Propachlor ESA, water, fltrd, 0.7u GF ug/L (62766)	Propachlor OA, water, fltrd, 0.7u GF ug/L (62767)	
09-29-04	<.016	<.013	<.024	<.029	<.012	<.02	<.02	<.02	<.05	<.02	
09-02-04	<.016	<.013	<.024	<.029	<.012	<.02	<.02	<.02	<.05	<.02	
09-30-04	<.016	<.013	<.024	<.029	<.012	<.02	<.02	<.02	<.05	<.02	
Date	Acetochlor SAA, water, fltrd, ug/L (62847)	Alachlor SAA, water, fltrd, ug/L (62848)	Alachlor ESA SA, water, fltrd, ug/L (62849)	2-[(2-Ethyl-6methyl phenyl) amino]2 oxoESA ug/L (62850)	Metribuzin, water, fltrd, ug/L (82630)	2,6-Diethyl-aniline water fltrd 0.7u GF ug/L (82660)	Tri-fluralin, water, fltrd 0.7u GF ug/L (82661)	Ethal-fluralin, water, fltrd 0.7u GF ug/L (82663)	Phorate water fltrd 0.7u GF ug/L (82664)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	
09-29-04	<.02	<.02	<.02	<.02	<.006	<.006	<.009	<.009	<.011	<.034	
09-02-04	<.02	<.02	.02	<.02	<.006	<.006	<.009	<.009	<.011	<.034	
09-30-04	<.02	<.02	<.02	.02	<.006	<.006	<.009	<.009	<.011	<.034	
Date	Linuron water fltrd 0.7u GF ug/L (82666)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Molinatate, water, fltrd 0.7u GF ug/L (82671)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Ben-fluralin, water, fltrd 0.7u GF ug/L (82673)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)
09-29-04	<.035	<.015	<.004	<.004	E.01	<.003	<.005	<.010	<.020	<.02	<.004
09-02-04	<.035	<.015	<.004	<.004	<.02	<.003	<.005	<.010	<.020	<.02	<.004
09-30-04	<.035	<.015	<.004	<.004	<.02	<.003	<.005	<.010	<.020	<.02	<.004
Date	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	DCPA, water fltrd 0.7u GF ug/L (82682)	Pendi-methalin, water, fltrd 0.7u GF ug/L (82683)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Azin-phosmethyl, water, fltrd 0.7u GF ug/L (82686)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
09-29-04	<.02	<.002	<.011	<.041	<.010	<.003	<.022	<.007	<.02	<.050	<.007
09-02-04	<.02	<.002	<.011	<.041	<.010	<.003	<.022	<.007	<.02	<.050	<.006
09-30-04	<.02	<.002	<.011	<.041	<.010	<.003	<.022	<.007	<.02	<.050	<.006

&lt; Less than.

E Estimated value.

M Presence verified, not quantified.

## MISCELLANEOUS WATER QUALITY DATA

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Station name		Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potassium, water, fltrd, mg/L (00935)				
LITTLE BEAVER CREEK NEAR CANTON, SD		a09-01-04	.03	<.008	<.10	<.16				
Date	Sulfate water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
a09-01-04	<.2	<.20	<.2	<.04	<10	<.04	<.10	<.10	<.008	<.06
Date	Phosphorus, water, unfltrd mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)	Orthophosphate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Propachlor, water, fltrd, ug/L (04024)	Butylate, water, fltrd, ug/L (04028)	Bromacil, water, fltrd, ug/L (04029)	Simazine, water, fltrd, ug/L (04035)	Prometon, water, fltrd, ug/L (04037)
a09-01-04	<.004	<.004	<.02	<6	<.8	<.025	<.004	<.5	<.005	<.01
Date	CIAT, water, fltrd, ug/L (04040)	Cyanazine, water, fltrd, ug/L (04041)	Fonofos, water, fltrd, ug/L (04095)	Anthracene, water, fltrd, ug/L (34221)	Benzo[a]pyrene, water, fltrd, ug/L (34248)	alpha-HCH, water, fltrd, ug/L (34253)	Tri-bromomethane, water, fltrd, ug/L (34288)	Fluoranthene, water, fltrd, ug/L (34377)	Iso-phorone, water, fltrd, ug/L (34409)	Naphthalene, water, fltrd, ug/L (34443)
a09-01-04	<.006	<.018	<.003	<.5	<.5	<.005	<.5	<.5	<.5	<.5
Date	Pentachlorophenol, water, fltrd, ug/L (34459)	Phenanthrene, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)	Pyrene, water, fltrd, ug/L (34470)	Tetrachloroethene, water, fltrd, ug/L (34476)	1,4-Dichlorobenzene, water, fltrd, ug/L (34572)	p,p'-DDE, water, fltrd, ug/L (34653)	Chlorpyrifos, water, fltrd, ug/L (38933)	Lindane, water, fltrd, ug/L (39341)	Dieldrin, water, fltrd, ug/L (39381)
a09-01-04	<2	<.5	3.2	<.5	<.5	<.5	<.003	<.005	<.004	<.009
Date	Metolachlor, water, fltrd, ug/L (39415)	Malathion, water, fltrd, ug/L (39532)	Parathion, water, fltrd, ug/L (39542)	Diazinon, water, fltrd, ug/L (39572)	Atrazine, water, fltrd, ug/L (39632)	Alachlor, water, fltrd, ug/L (46342)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor ESA, water, fltrd 0.7u GF ug/L (50009)	Caffeine, water, fltrd, ug/L (50305)	Metaxyl, water, fltrd, ug/L (50359)
a09-01-04	<.013	<.027	<.010	<.005	<.007	<.005	<.006	<.02	<.5	<.5
Date	Acetochlor ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)	Alachlor OA, water, fltrd 0.7u GF ug/L (61031)	Metolachlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metolachlor OA, water, fltrd 0.7u GF ug/L (61044)	Dimethenamid, water, fltrd, ug/L (61588)	Diethyloctylphenol, water, fltrd, ug/L (61705)	Ethyoctylphenol, water, fltrd, ug/L (61706)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Flufenacet ESA, water, fltrd, ug/L (61952)
a09-01-04	<.02	<.02	<.02	<.02	<.02	<.02	M	M	<.02	<.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Cotinine, water, fltrd, ug/L (62005)	1-Methylnaphthalene, water, fltrd, ug/L (62054)	2,6-Dimethylnaphthalene, water, fltrd, ug/L (62055)	2-Methylnaphthalene, water, fltrd, ug/L (62056)	3-beta-Coprostanol, water, fltrd, ug/L (62057)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)	3-tert-Butyl-4-hydroxyanisole, wat flt ug/L (62059)	4-Cumylphenol, water, fltrd, ug/L (62060)	4-Octylphenol, water, fltrd, ug/L (62061)	4-tert-Octylphenol, water, fltrd, ug/L (62062)
a09-01-04	<1.00	<.5	<.5	<.5	<2	<1	<5	<1	<1	<1
Date	5-Methyl-1H-benzotriazole, wat flt ug/L (62063)	Acetophenone, water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	9,10-Anthraquinone, water, fltrd, ug/L (62066)	Benzo-phenone, water, fltrd, ug/L (62067)	beta-Sitosterol, water, fltrd, ug/L (62068)	Bisphenol A, water, fltrd, ug/L (62069)	Camphor, water, fltrd, ug/L (62070)	Carbazole, water, fltrd, ug/L (62071)	Cholesterol, water, fltrd, ug/L (62072)
a09-01-04	<2	<.5	<.5	<.5	M	<2	<1	<.5	<.5	<2
Date	D-Limonene, water, fltrd, ug/L (62073)	HHCB, water, fltrd, ug/L (62075)	Indole, water, fltrd, ug/L (62076)	Isoborneol, water, fltrd, ug/L (62077)	Iso-propylbenzene, water, fltrd, ug/L (62078)	Isoquinoline, water, fltrd, ug/L (62079)	Menthol, water, fltrd, ug/L (62080)	Methyl salicylate, water, fltrd, ug/L (62081)	DEET, water, fltrd, ug/L (62082)	Diethylnonylphenol, water, fltrd, ug/L (62083)
a09-01-04	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	E.1	<5
Date	p-Cresol, water, fltrd, ug/L (62084)	4-Nonylphenol, water, fltrd, ug/L (62085)	beta-Stigmasterol, water, fltrd, ug/L (62086)	Tris(2-chloroethyl) phosphate, wat flt ug/L (62087)	Tris(dichloro-i-Pr) phosphate, wat flt ug/L (62088)	Tri-butyl phosphate, water, fltrd, ug/L (62089)	Triclosan, water, fltrd, ug/L (62090)	Tri-ethyl citrate, water, fltrd, ug/L (62091)	Tri-phenyl phosphate, water, fltrd, ug/L (62092)	Tris(2-butylethyl) phosphate, wat flt ug/L (62093)
a09-01-04	M	<5	<2	<.5	<.5	E.1	<1	<.5	M	<.5
Date	Fipronil, water, fltrd, ug/L (62166)	Fipronil sulfide, water, fltrd, ug/L (62167)	Fipronil sulfone, water, fltrd, ug/L (62168)	Desulf-inyl-fipronil amide, wat flt ug/L (62169)	Desulf-inyl fipronil, water, fltrd, ug/L (62170)	Flufenacet, water, fltrd, ug/L (62481)	Dimethenamid OA, water, fltrd, ug/L (62482)	Flufenacet OA, water, fltrd, ug/L (62483)	Propachlor ESA, water, fltrd 0.7u GF ug/L (62766)	Propachlor OA, water, fltrd 0.7u GF ug/L (62767)
a09-01-04	<.016	<.013	<.024	<.029	<.012	<.02	<.02	<.02	<.05	<.02
Date	Acetochlor SAA, water, fltrd, ug/L (62847)	Alachlor SAA, water, fltrd, ug/L (62848)	Alachlor ESA SA, water, fltrd, ug/L (62849)	2-[(2-Ethyl-6methyl phenyl) amino]2 ooESA, ug/L (62850)	Metribuzin, water, fltrd, ug/L (82630)	2,6-Diethyl-aniline, water, fltrd 0.7u GF ug/L (82660)	Tri-fluralin, water, fltrd 0.7u GF ug/L (82661)	Ethal-fluralin, water, fltrd 0.7u GF ug/L (82663)	Phorate, water, fltrd 0.7u GF ug/L (82664)	Terbacil, water, fltrd 0.7u GF ug/L (82665)
a09-01-04	<.02	<.02	<.02	<.02	<.006	<.006	<.009	<.009	<.011	<.034

## MISCELLANEOUS WATER QUALITY DATA

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Linuron water fltrd 0.7u GF ug/L (82666)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)
a09-01-04	<.035	<.015	<.004	<.004	<.02	<.003	<.005	<.010	<.020	<.02	<.004
Date	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	DCPA, water fltrd 0.7u GF ug/L (82682)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)
a09-01-04	<.02	<.002	<.011	<.041	<.010	<.003	<.022	<.007	<.02	<.050	<.006

< Less than.

a Field blank sample collected for quality-control purposes.

E Estimated value.

M Presence verified, not quantified.

MISCELLANEOUS WATER QUALITY DATA

The following water-quality data were collected as part of a Total Maximum Daily Load (TMDL) study on the lower Big Sioux River and are presented in downstream order.

433421096355900 BIG SIOUX RIVER NEAR BRANDON, SD

LOCATION.--Lat 43°34'21", long 96°35'59", in NW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> sec.9, T.101 N., R.49 W., Minnehaha County, Hydrologic Unit 10170203, on downstream side of bridge on East Maple Street, 3.6 mi upstream from Split Rock Creek, 2.1 mi southeast of Brandon, and 155.7 mi upstream from mouth.

PERIOD OF RECORD.--March 2003 to May 2004.

REMARKS.--In addition to the water-quality data presented in the table below, water-quality samples were collected at this station as part of a Total Maximum Daily Load (TMDL) study. Analytical results for the TMDL samples are available from the South Dakota Department of Environment and Natural Resources.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Gage height, feet (00065)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfiltered, uS/cm 25 degC (00095)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Barometric pressure, mm Hg (00025)
DEC 01...	1605	49	-19.51	4.2	7.0	8.2	1,660	15.9	127	741
MAY 24...	1230	400	-18.09	13.8	10.0	8.2	690	13.8	134	720

## MISCELLANEOUS WATER QUALITY DATA

432309096311600 BIG SIOUX RIVER AT KLONDIKE, IA

LOCATION.--Lat 43°23'09", long 96°31'16", in SE $\frac{1}{4}$  NE $\frac{1}{4}$  NW $\frac{1}{4}$  sec.21, T.99 N., R.48 W., Lyon County, Hydrologic Unit 10170203, on upstream side of bridge on Lincoln County Highway 116, 7.8 mi downstream from Nine Mile Creek, at southeast edge of Klondike, and 133.4 mi upstream from mouth.

PERIOD OF RECORD.--March 2003 to May 2004.

REMARKS.--In addition to the water-quality data presented in the table below, water-quality samples were collected at this station as part of a Total Maximum Daily Load (TMDL) study. Analytical results for the TMDL samples are available from the South Dakota Department of Environment and Natural Resources.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Gage height, feet (00065)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfiltered, uS/cm 25 degC (00095)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Barometric pressure, mm Hg (00025)
DEC 02...	1000	--	-26.66	.1	2.0	8.0	1,330	15.4	110	738
MAY 24...	1230	935	-25.50	14.1	13.5	8.1	776	11.2	116	720

## MISCELLANEOUS WATER QUALITY DATA

423

431824096313700 BIG SIOUX RIVER NEAR CANTON, SD

LOCATION.--Lat 43°18'24", long 96°31'37", in NW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> sec.16, T.98 N., R.48 W., Lincoln County, Hydrologic Unit 10170203, on downstream side of bridge on U.S. Highway 18, 3.9 mi upstream from Canton, 3.3 mi east of Canton, and 124.9 mi upstream from mouth.

PERIOD OF RECORD.--March 2003 to May 2004.

REMARKS.--In addition to the water-quality data presented in the table below, water-quality samples were collected at this station as part of a Total Maximum Daily Load (TMDL) study. Analytical results for the TMDL samples are available from the South Dakota Department of Environment and Natural Resources.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Gage height, feet (00065)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfiltered, uS/cm 25 degC (00095)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Barometric pressure, mm Hg (00025)
DEC 02...	1300	115	-35.61	.1	4.0	8.1	1,370	15.2	108	738
MAY 25...	1030	1,030	-33.50	14.1	8.0	8.2	790	10.0	102	726



## MISCELLANEOUS WATER QUALITY DATA

431324096292300 BIG SIOUX RIVER AT FAIRVIEW, SD

LOCATION.--Lat 43°13'24", long 96°29'23", in NE<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> sec.15, T.97 N., R.48 W., Lincoln County, Hydrologic Unit 10170203, on upstream side of bridge on county highway 143, 10.0 mi upstream from Hudson, 0.1 mi north of Fairview, and 107.0 mi upstream from mouth.

PERIOD OF RECORD.--March 2003 to May 2004.

REMARKS.--In addition to the water-quality data presented in the table below, water-quality samples were collected at this station as part of a Total Maximum Daily Load (TMDL) study. Analytical results for the TMDL samples are available from the South Dakota Department of Environment and Natural Resources.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Gage height, feet (00065)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfiltered, uS/cm 25 degC (00095)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Barometric pressure, mm Hg (00025)
DEC 02...	1600	124	-36.21	.1	3.0	8.3	1,470	16.9	120	738
MAY 25...	1330	1,390	-32.72	14.4	18.0	8.0	805	8.8	90	727

## MISCELLANEOUS WATER QUALITY DATA

425

430801096263400 BIG SIOUX RIVER AT HUDSON, SD

LOCATION.--Lat 43°08'01", long 96°26'34", in NE<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> sec.18, T.96 N., R.47 W., Lincoln County, Hydrologic Unit 10170203, on upstream side of bridge on county highway 143, 4.8 mi upstream from Rock River, Iowa, 0.5 mi west of Hudson, and 97.0 mi upstream from mouth.

PERIOD OF RECORD.--March 2003 to May 2004.

REMARKS.--In addition to the water-quality data presented in the table below, water-quality samples were collected at this station as part of a Total Maximum Daily Load (TMDL) study. Analytical results for the TMDL samples are available from the South Dakota Department of Environment and Natural Resources.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Gage height, feet (00065)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfiltered, uS/cm 25 degC (00095)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Barometric pressure, mm Hg (00025)
DEC 03...	1100	127	-28.61	.1	4.0	8.1	1,450	15.0	107	738
MAY 25...	1600	1,320	-25.26	14.6	16.0	8.0	829	8.5	88	727

## MISCELLANEOUS WATER QUALITY DATA

425953096295900 BIG SIOUX RIVER AT HAWARDEN, IA

LOCATION.--Lat 42°59'53", long 96°29'59", in SW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub> sec.34, T.95 N., R.48 W., Sioux County, Hydrologic Unit 10170203, on downstream side of bridge on Union County Highway 13, 9.0 mi downstream from Rock River, at east edge of Hawarden, and 83.2 mi upstream from mouth.

PERIOD OF RECORD.--March 2003 to May 2004.

REMARKS.--In addition to the water-quality data presented in the table below, water-quality samples were collected at this station as part of a Total Maximum Daily Load (TMDL) study. Analytical results for the TMDL samples are available from the South Dakota Department of Environment and Natural Resources.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Gage height, feet (00065)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfiltered, uS/cm 25 degC (00095)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Barometric pressure, mm Hg (00025)
DEC 04...	1430	229	4.88	.8	.0	8.2	1,220	15.2	110	738
MAY 26...	1045	2,940	9.73	13.0	15.0	8.1	788	8.4	84	724

## MISCELLANEOUS WATER QUALITY DATA

427

424543096375700 BIG SIOUX RIVER NEAR RICHLAND, SD

LOCATION.--Lat 42°45'43", long 96°37'57", in SW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> sec.28, T.92 N., R.49 W., Union County, Hydrologic Unit 10170203, on downstream side of bridge on SD Highway 50, 0.5 mi upstream from Richland Creek, 1.0 mi east of Richland, and 49.0 mi upstream from mouth.

PERIOD OF RECORD.--March 2003 to May 2004.

REMARKS.--In addition to the water-quality data presented in the table below, water-quality samples were collected at this station as part of a Total Maximum Daily Load (TMDL) study. Analytical results for the TMDL samples were available from the South Dakota Department of Environment and Natural Resources.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Gage height, feet (00065)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfiltered, uS/cm 25 degC (00095)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Barometric pressure, mm Hg (00025)
DEC 03...	1630	--	95.05	.2	-1.0	8.4	1,190	16.3	116	738
MAY 26...	1730	3,210	99.94	15.3	25.0	7.9	792	8.0	84	726

## MISCELLANEOUS WATER QUALITY DATA

423735096305400 BIG SIOUX RIVER NEAR BROKEN KETTLE, IA

LOCATION.--Lat 42°37'35", long 96°30'54", in SE $\frac{1}{4}$  SW $\frac{1}{4}$  NE $\frac{1}{4}$  sec.9, T.90 N., R.48 W., Plymouth County, Hydrologic Unit 10170203, on downstream side of bridge on Union County Highway 7, 0.1 mi downstream from Broken Kettle Creek, 0.9 mi southwest of Broken Kettle, and 16.8 mi upstream from mouth.

PERIOD OF RECORD.--March 2003 to May 2004.

REMARKS.--In addition to the water-quality data presented in the table below, water-quality samples were collected at this station as part of a Total Maximum Daily Load (TMDL) study. Analytical results for the TMDL samples are available from the South Dakota Department of Environment and Natural Resources.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Gage height, feet (00065)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf 25 degC uS/cm (00095)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Barometric pressure, mm Hg (00025)
DEC 04...	1600	284	81.01	.0	2.0	8.3	1,150	16.2	115	737
MAY 27...	1030	3,450	87.70	15.8	22.0	7.9	881	7.5	80	725

## MISCELLANEOUS WATER QUALITY DATA

429

423128096284700 BIG SIOUX RIVER AT NORTH SIOUX CITY, IA

LOCATION.--Lat 42°31'28", long 96°28'47", in NW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> sec.14, T.89 N., R.48 W., Union County, Hydrologic Unit 10170203, on downstream side of bridge on Military Road (old SD Highway 77) between the cities of Riverside, IA, and North Sioux City, and 5.0 mi upstream from mouth.

PERIOD OF RECORD.--March 2003 to May 2004.

REMARKS.--In addition to the water-quality data presented in the table below, water-quality samples were collected at this station as part of a Total Maximum Daily Load (TMDL) study. Analytical results for the TMDL samples are available from the South Dakota Department of Environment and Natural Resources.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Gage height, feet (00065)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfiltered, uS/cm 25 degC (00095)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Barometric pressure, mm Hg (00025)
DEC 05...	1100	350	76.78	.1	-2.5	8.2	1,190	18.5	130	745
MAY 27...	1500	3,410	83.42	16.7	27.0	7.9	878	7.2	78	725

The following discharge measurements were made at current streamflow and crest-stage partial-record stations. Sites are listed in downstream order.

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
05051650 LA BELLE CR NEAR VEBLEN, SD (LAT 45 53 33N LONG 097 21 40W)					
APR 2004					
05...	1150	2.1	860	8.0	7.0
05289985 BIG COULEE CR NEAR PEEVER, SD (LAT 45 29 14N LONG 096 57 26W)					
NOV 2003					
13...	0930	.02	1630	-18.0	0.0
APR 2004					
05...	1400	1.3	1410	10.0	8.5
05292704 NORTH FORK YELLOW BANK RIVER NEAR ODESSA, MN (LAT 45 11 21N LONG 096 24 54W)					
OCT 2003					
02...	0815	.02	1080	-3.0	1.0
MAR 2004					
08...	1505	2.0	--	10.5	0.0
AUG					
13...	1105	.49	984	18.0	17.0
06334500 LITTLE MISSOURI R AT CAMP CROOK, SD (LAT 45 32 53N LONG 103 58 16W)					
OCT 2003					
06...	0845	1.4	1950	11.0	9.5
NOV					
19...	0845	4.4	1540	7.0	1.0
JAN 2004					
12...	0940	1.8	1850	-3.0	0.0
FEB					
23...	0845	14	898	-2.5	0.0
APR					
07...	0915	4.3	1470	10.0	10.0
MAY					
24...	0845	4.8	1210	7.0	11.0
JUL					
13...	0845	57	550	29.0	21.0
AUG					
23...	0845	6.0	1480	15.0	17.5
06354882 OAK CR NEAR WAKPALA, SD (LAT 45 42 43N LONG 100 33 32W)					
MAR 2004					
16...	1655	108	209	6.0	0.0
APR					
22...	0810	2.2	--	3.0	7.0
JUN					
16...	0725	24	570	12.0	18.0
06355500 NORTH FORK GRAND R NEAR WHITE BUTTE, SD (LAT 45 48 08N LONG 102 21 43W)					
OCT 2003					
06...	1345	.14	2670	27.0	18.0
NOV					
19...	1245	3.1	3600	16.5	1.5
JAN 2004					
12...	1555	1.1	5100	1.0	0.0
FEB					
23...	1420	55	582	-1.0	0.5
APR					
07...	1415	36	2140	14.0	13.5
MAY					
24...	1510	3.4	3020	15.0	15.5
JUL					
13...	1415	2.9	3500	29.0	26.5

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06356500 SOUTH FORK GRAND R NEAR CASH, SD (LAT 45 38 56N LONG 102 38 27W)					
OCT 2003					
06...	1130	9.6	2150	19.0	13.0
NOV					
19...	1115	27	2090	16.0	1.0
JAN 2004					
12...	1340	2.5	3950	6.0	0.0
FEB					
23...	1200	393	403	-2.0	0.0
APR					
07...	1145	16	2130	13.0	11.5
MAY					
24...	1315	30	2190	10.0	12.0
JUL					
13...	1145	13	1780	30.0	23.5
AUG					
23...	1145	7.5	2040	15.0	15.5
06357620 WILLOW CREEK NEAR KELDRON, SD (LAT 45 50 00N LONG 101 52 02W)					
MAR 2003					
10...	--	68	--	--	--
06357800 GRAND R AT LITTLE EAGLE, SD (LAT 45 39 28N LONG 100 49 04W)					
OCT 2003					
06...	1435	20	2290	28.5	18.0
NOV					
19...	1305	52	2000	18.5	1.0
FEB 2004					
05...	1555	7.5	3120	-8.0	0.0
MAR					
17...	0750	287	751	4.0	3.5
APR					
21...	1600	59	1790	17.0	16.0
JUN					
15...	1535	100	1390	21.5	21.0
JUL					
28...	1505	23	2170	21.5	22.5
06359500 MOREAU R NEAR FAITH, SD (LAT 45 11 52N LONG 102 09 22W)					
OCT 2003					
06...	1730	4.1	1230	29.0	17.0
NOV					
19...	1615	22	1940	14.0	0.5
JAN 2004					
13...	0950	1.2	4340	-6.0	0.0
FEB					
24...	0830	492	446	-3.0	0.0
APR					
07...	1750	16	1990	15.5	17.0
MAY					
25...	0705	58	1920	2.0	10.5
JUL					
13...	1745	45	2780	33.0	30.5
AUG					
23...	1630	8.6	1100	32.0	25.5



## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06360500 MOREAU R NEAR WHITEHORSE, SD (LAT 45 15 21N LONG 100 50 33W)					
OCT 2003					
06...	1125	3.7	917	23.0	13.0
NOV					
19...	0950	4.6	1890	8.0	1.5
MAR 2004					
16...	1130	625	923	8.0	4.0
29...	1400	66	1350	10.0	9.0
APR					
21...	1220	11	--	9.0	4.0
JUN					
15...	1155	40	1280	21.0	23.0
JUL					
28...	1205	3.2	1760	23.5	23.0
06386500 CHEYENNE RIVER NEAR SPENCER, WY (LAT 43 25 16N LONG 104 07 52W)					
OCT 2003					
17...	1115	.06	4810	14.0	12.0
MAR 2004					
25...	1405	.32	4680	20.0	17.0
MAY					
18...	1600	.25	--	14.5	15.0
06395000 CHEYENNE R AT EDGEMONT, SD (LAT 43 18 20N LONG 103 49 14W)					
OCT 2003					
06...	1030	1.4	5910	17.0	9.0
NOV					
17...	1045	16	7850	8.0	3.5
DEC					
29...	1515	15	4210	0.0	0.0
FEB 2004					
09...	1250	12	3740	-5.0	0.0
MAR					
11...	1120	37	3520	20.0	1.5
APR					
05...	1035	7.1	5110	22.0	11.5
MAY					
17...	1105	3.6	6020	15.0	16.5
JUL					
12...	1135	.14	6930	24.0	28.0
06400000 HAT CR NEAR EDGEMONT, SD (LAT 43 14 24N LONG 103 35 16W)					
NOV 2003					
17...	1245	3.0	4650	11.0	2.5
DEC					
31...	0830	.25	3420	-10.0	0.0
FEB 2004					
09...	1435	.12	4570	12.0	0.0
APR					
05...	1220	.48	2420	34.0	15.0
06400875 HORSEHEAD CR AT OELRICHS, SD (LAT 43 11 17N LONG 103 13 34W)					
DEC 2003					
01...	0845	E.02	4120	8.0	4.5
30...	1505	E.02	4610	3.0	0.0
FEB 2004					
12...	0815	E.05	3320	-15.0	0.0
MAR					
30...	0845	.03	3460	13.0	4.0
APR					
06...	1350	.02	3550	30.0	19.0

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06401500 CHEYENNE R BELOW ANGOSTURA DAM, SD (LAT 43 20 42N LONG 103 26 12W)					
JAN 2004					
29...	0940	.56	2690	-7.0	0.5
APR 06...	1510	.59	2520	20.0	21.0
MAY 19...	1510	.56	2540	27.0	25.0
JUL 12...	1445	.50	2510	30.0	32.0
AUG 02...	1220	.48	2520	30.0	28.0
06402000 FALL R AT HOT SPRINGS, SD (LAT 43 25 50N LONG 103 28 33W)					
OCT 2003					
09...	1400	--	1260	30.0	25.5
NOV 20...	1251	--	1230	11.0	22.5
DEC 31...	0940	--	1240	2.0	20.5
FEB 2004					
12...	1330	--	1240	17.0	20.5
APR 05...	1355	28	1220	17.0	24.0
MAY 21...	0750	30	1220	14.0	23.5
JUL 16...	0710	28	1250	25.0	25.0
AUG 19...	1415	28	1230	21.0	25.0
06402430 BEAVER CREEK NEAR PRINGLE, SD (LAT 43 34 53N LONG 103 28 34W)					
*Field determinations from 2003 water year also published.					
OCT 2002					
10...	1120	.70	529	10.0	7.5
NOV 26...	1215	.68	576	-6.0	0.5
JAN 2003					
13...	1320	.63	553	10.0	1.5
MAR 12...	1225	.75	470	25.0	3.5
JUL 09...	1030	.51	539	25.0	18.0
SEP 03...	1205	.41	494	24.0	17.0
NOV 19...	0920	.64	552	14.0	4.0
JAN 2004					
02...	0845	.83	535	2.0	0.0
FEB 12...	1210	.62	560	4.0	0.0
APR 08...	1100	.63	528	17.0	10.0
MAY 20...	0800	.57	539	17.0	12.0
JUL 15...	0807	.21	534	33.0	19.0
AUG 19...	0755	.16	532	13.0	11.0
06402470 BEAVER CREEK ABOVE BUFFALO GAP, SD (LAT 43 31 20N LONG 103 21 23W)					
OCT 2003					
08...	1245	--	2390	28.0	17.5

## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06402500 BEAVER CR NEAR BUFFALO GAP, SD (LAT 43 28 00N LONG 103 18 20W)					
OCT 2003					
10...	0830	7.3	2540	14.0	12.0
NOV					
19...	1300	7.9	2540	20.0	8.5
JAN 2004					
02...	1110	7.4	2550	10.0	4.0
FEB					
13...	0840	7.5	2520	-2.0	0.0
APR					
08...	0745	8.6	2530	5.0	8.5
MAY					
20...	1120	3.5	2600	15.0	14.5
JUL					
15...	1220	1.2	2480	33.0	24.5
AUG					
19...	1145	5.7	2550	20.0	14.0
06402940 RUBY CREEK NR CUSTER, SD (LAT 43 45 59N LONG 103 39 20W)					
MAR 2004					
29...	0830	.21	368	11.0	0.0
06402950 FRENCH CREEK BLW RUBY CREEK NR CUSTER, SD (LAT 43 45 37N LONG 103 38 52W)					
MAR 2004					
26...	1200	1.6	368	15.0	4.0
29...	0930	1.3	406	13.0	1.0
06402970 LAUGHING WATER CR AT CUSTER, SD (LAT 43 46 06N LONG 103 35 33W)					
MAR 2004					
29...	1015	.10	381	8.0	3.0
06402995 FRENCH CREEK ABOVE STOCKADE LAKE NEAR CUSTER, SD (LAT 43 46 10N LONG 103 32 10W)					
OCT 2003					
02...	0850	--	539	24.0	5.5
06403300 FRENCH CR ABOVE FAIRBURN, SD (LAT 43 43 02N LONG 103 22 03W)					
OCT 2003					
08...	0908	1.4	305	15.0	11.0
NOV					
20...	0935	2.0	300	12.0	5.0
JAN 2004					
06...	1015	.95	371	-15.0	0.0
FEB					
11...	1030	1.3	290	-5.0	0.0
APR					
07...	0900	3.7	321	15.0	9.0
MAY					
19...	0845	2.5	310	13.0	12.0
JUL					
13...	0910	1.2	307	22.0	19.0
AUG					
18...	0830	.55	300	17.0	17.0

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06403700 CHEYENNE RIVER AT REDSHIRT, SD (LAT 43 40 23N LONG 102 53 36W)					
OCT 2003					
01...	0815	75	2800	1.0	9.0
NOV					
12...	0855	82	2580	0.0	2.5
DEC					
22...	0945	65	2550	2.0	0.0
FEB 2004					
17...	1000	68	2400	13.0	0.0
APR					
02...	0745	66	2480	11.0	9.5
MAY					
21...	1015	56	2570	19.0	17.5
JUL					
16...	0945	41	2700	28.0	24.5
AUG					
20...	0825	50	2920	18.0	15.0
06403810 BATTLE CR ABOVE KEYSTONE, SD (LAT 43 54 17N LONG 103 27 48W)					
MAR 2004					
25...	1350	--	586	21.0	10.5
06403850 GRIZZLY BEAR CREEK NEAR KEYSTONE, SD (LAT 43 52 41N LONG 103 26 14W)					
OCT 2003					
02...	1030	--	127	17.0	7.5
MAR 2004					
31...	0930	--	91	21.0	3.5
APR					
09...	1215	--	100	4.0	6.5
MAY					
26...	1218	--	96	19.5	15.0
JUL					
12...	1030	--	131	27.0	20.5
06404000 BATTLE CR NEAR KEYSTONE, SD (LAT 43 52 21N LONG 103 20 10W)					
OCT 2003					
02...	1230	E.05	410	27.0	16.0
NOV					
13...	1230	.78	412	8.0	2.0
DEC					
23...	1100	1.1	258	2.0	0.0
FEB 2004					
18...	1240	.63	569	15.0	0.0
APR					
02...	1205	2.1	350	24.0	10.0
MAY					
24...	1230	6.8	341	18.0	14.0
JUL					
20...	1145	E.03	482	30.0	27.0
06404800 GRACE COOLIDGE CREEK NEAR HAYWARD, SD (LAT 43 48 07N LONG 103 26 03W)					
OCT 2003					
02...	0745	--	162	11.0	5.5

## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06404998 GRACE COOLIDGE CR NR GAME LODGE NR CUSTER, SD (LAT 43 45 40N LONG 103 21 49W)					
OCT 2003					
02...	1100	.89	252	16.0	9.0
NOV					
13...	0935	1.1	248	9.0	0.5
DEC					
23...	0845	.70	248	-3.0	0.0
FEB 2004					
18...	0905	1.5	234	12.0	0.0
APR					
07...	1105	1.0	248	18.0	11.0
MAY					
19...	1110	1.2	262	20.0	16.0
JUL					
13...	1200	.47	268	25.0	24.0
AUG					
18...	1113	.56	265	23.0	20.0
06406000 BATTLE CR AT HERMOSA, SD (LAT 43 49 41N LONG 103 11 44W)					
OCT 2003					
01...	1245	8.4	555	16.0	9.0
NOV					
12...	1240	8.4	561	3.0	3.5
DEC					
22...	1320	7.8	557	5.0	2.5
FEB 2004					
18...	1105	6.5	561	18.0	2.0
APR					
02...	1050	6.6	577	20.0	11.0
MAY					
24...	1100	7.2	570	12.0	13.5
JUN					
24...	0740	3.2	612	10.0	15.0
JUL					
20...	1010	3.0	621	30.0	22.0
AUG					
24...	1025	3.4	615	27.0	17.0
06406500 BATTLE CR BELOW HERMOSA, SD (LAT 43 43 31N LONG 102 54 22W)					
OCT 2003					
01...	1050	4.9	709	13.0	9.0
NOV					
12...	1040	7.6	745	5.0	1.0
DEC					
22...	1130	9.4	720	6.0	0.0
FEB 2004					
17...	1215	7.8	727	14.0	0.0
APR					
02...	0915	4.6	786	14.0	10.0
MAY					
24...	0930	7.0	692	15.0	15.5
JUL					
20...	0825	.36	654	25.0	23.5
AUG					
24...	0830	.22	744	18.0	17.5
06406700 SPRING CR AT OREVILLE, NR HILL CITY, SD (LAT 43 51 58N LONG 103 37 24W)					
OCT 2003					
02...	1225	--	401	21.5	6.5
MAR 2004					
25...	1020	--	367	15.5	3.0
APR					
01...	0940	--	379	14.0	3.0
09...	1045	--	386	5.0	2.5
MAY					
26...	1120	1.4	398	18.0	9.5
JUL					
12...	0905	--	396	27.0	16.0
AUG					
17...	1045	--	382	22.0	16.0

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06406740 SUNDAY GULCH BL JOHNSON CANYON NR HILL CITY, SD (LAT 43 52 10N LONG 103 34 55W)					
OCT 2003					
02...	1135	--	101	17.0	8.5
MAR 2004					
31...	1045	--	82	19.5	5.5
APR					
09...	1115	--	89	5.0	4.5
MAY					
21...	1310	.76	84	19.0	14.5
JUL					
12...	0930	--	91	25.0	17.5
AUG					
17...	1030	--	99	24.0	15.5

## 06406760 RENO GULCH NEAR HILL CITY, SD (LAT 43 54 35N LONG 103 36 43W)

OCT 2003					
02...	1245	--	316	25.0	7.0
MAR 2004					
25...	1120	--	335	20.0	4.0
MAY					
21...	1600	--	369	23.0	12.0
JUL					
12...	0840	--	365	25.0	12.5
AUG					
17...	1110	--	350	24.0	13.5

## 06406920 SPRING CREEK ABOVE SHERIDAN LAKE NEAR KEYSTONE, SD (LAT 43 57 39N LONG 103 29 18W)

OCT 2003					
02...	0945	2.9	417	14.5	5.0
NOV					
04...	1007	--	430	-2.0	0.0
17...	1300	4.0	420	8.0	0.5
JAN 2004					
07...	1430	.59	525	6.0	0.0
FEB					
18...	1220	1.3	463	13.0	0.0
APR					
02...	1025	5.5	385	13.0	6.5
MAY					
19...	0930	3.9	403	18.0	12.0
JUN					
09...	1130	--	432	9.5	12.5
JUL					
09...	1225	2.1	406	24.5	21.0
AUG					
19...	0935	.07	472	8.0	12.5
SEP					
14...	1330	1.4	469	16.5	15.0

## 06407500 SPRING CR NEAR KEYSTONE, SD (LAT 43 58 43N LONG 103 20 46W)

NOV 2003					
18...	1415	3.0	333	12.0	3.0
JUN 2004					
09...	0933	--	356	9.5	15.0

## 06408500 SPRING CR NEAR HERMOSA, SD (LAT 43 56 31N LONG 103 09 32W)

NOV 2003					
18...	1300	.28	1260	13.0	3.0
JAN 2004					
02...	1415	.36	1290	7.0	0.0
FEB					
20...	0845	.46	1070	11.0	0.0
APR					
01...	1300	.22	1290	22.0	13.0
MAY					
21...	1210	.08	1200	29.0	17.5

## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06408700 RHOADS FORK NEAR ROCHFORD, SD (LAT 44 08 12N LONG 103 51 29W)					
OCT 2003					
01...	1300	4.6	462	13.5	8.0
NOV 25...	1045	4.4	472	-5.5	2.0
APR 2004					
01...	1230	4.2	464	21.5	10.5
MAY 14...	1030	4.2	463	13.0	6.5
JUN 04...	0830	--	465	19.0	7.5
JUL 02...	0930	3.9	466	21.0	8.0
AUG 18...	0930	3.9	469	13.0	8.0
06409000 CASTLE CR ABOVE DEERFIELD RES NEAR HILL CITY, SD (LAT 44 00 49N LONG 103 49 48W)					
OCT 2003					
20...	1340	11	470	23.0	7.0
DEC 05...	1050	9.3	236	-3.5	0.0
APR 2004					
01...	1100	13	478	25.0	5.5
MAY 25...	1000	10	477	24.0	5.5
JUL 19...	1035	8.2	459	40.0	14.0
AUG 23...	1015	8.6	459	23.0	12.0
06410000 CASTLE CR BELOW DEERFIELD DAM, SD (LAT 44 01 45N LONG 103 46 53W)					
OCT 2003					
20...	1230	8.4	407	24.0	8.5
MAR 2004					
16...	1025	10	428	3.0	3.0
APR 01...	0905	17	433	22.0	3.5
MAY 25...	0815	12	407	13.0	6.5
JUL 19...	0845	11	309	20.0	10.0
AUG 23...	0820	11	415	12.0	9.5
06410500 RAPID CR ABOVE PACTOLA RES AT SILVER CITY, SD (LAT 44 05 05N LONG 103 34 48W)					
OCT 2003					
01...	0915	23	400	-5	3.5
NOV 17...	0845	27	411	3.0	1.0
JAN 2004					
07...	1030	17	445	-7.0	0.0
FEB 18...	0920	21	413	1.0	0.0
APR 01...	1430	44	400	19.5	8.0
MAY 14...	1305	28	410	15.0	7.0
JUL 09...	0900	21	416	18.0	13.0
AUG 18...	1200	17	411	20.0	15.5

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06411500 RAPID CR BELOW PACTOLA DAM, SD (LAT 44 04 36N LONG 103 28 54W)					
OCT 2003					
01...	1045	26	391	16.0	7.0
NOV					
17...	1015	21	379	5.0	6.0
JAN 2004					
07...	1200	20	386	5.0	2.5
FEB					
18...	1035	22	392	12.0	3.0
APR					
02...	0900	22	381	11.5	4.5
MAY					
14...	1515	61	381	12.0	6.5
JUL					
09...	1030	39	386	23.0	7.5
AUG					
18...	1345	69	386	11.0	8.0
06411900 RAPID CR ABV JOHNSON SIDING BLW PACTOLA DAM, SD (LAT 44 04 54N LONG 103 26 34W)					
OCT 2003					
03...	1050	--	387	18.0	7.0
MAR 2004					
23...	1015	--	387	14.0	3.5
MAY					
20...	1135	55	381	13.0	7.0
JUL					
01...	1300	--	383	26.0	11.0
AUG					
18...	0735	--	388	23.0	8.0
06412000 RAPID CR AT BIG BEND NR RAPID CITY, SD (LAT 44 03 18N LONG 103 25 00W)					
OCT 2003					
03...	1115	--	395	17.5	8.0
MAR 2004					
23...	1100	--	394	16.0	5.0
MAY					
20...	1300	54	382	12.0	8.0
JUL					
01...	1235	--	383	28.5	12.0
AUG					
18...	0715	--	390	19.5	9.5
06412200 RAPID CREEK AB VICTORIA CR NR RAPID CITY, SD (LAT 44 02 48N LONG 103 21 06W)					
MAR 2004					
24...	1130	--	391	24.0	6.5
06412220 VICTORIA CR ABOVE VICTORIA DAM NR RAPID CITY, SD (LAT 44 01 47N LONG 103 26 06W)					
OCT 2003					
03...	0945	--	300	17.0	8.5
MAR 2004					
24...	1300	--	274	23.0	17.5
25...	0915	--	277	14.0	9.0
APR					
12...	1430	--	276	8.0	16.0
MAY					
26...	0925	--	290	21.0	11.5
06412250 VICTORIA CR BELOW VICTORIA DAM NR RAPID CITY, SD (LAT 44 01 05N LONG 103 23 07W)					
MAY 2004					
26...	0830	--	272	11.0	17.0



## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06412500 RAPID CR ABOVE CANYON LAKE NEAR RAPID CITY, SD (LAT 44 03 10N LONG 103 18 41W)					
OCT 2003					
08...	1115	11	395	19.0	11.0
DEC 02...	1015	15	372	8.0	1.0
JAN 2004					
09...	1315	21	492	8.0	0.0
FEB 26...	1330	17	365	16.0	2.5
APR 06...	0840	14	394	10.0	6.5
MAY 19...	1350	43	384	25.0	14.0
JUL 01...	1125	58	384	27.0	16.5
27...	0745	--	386	20.0	16.0
AUG 20...	0900	74	391	15.5	11.0
SEP 13...	0900	--	391	17.0	15.0
06412810 CLEGHORN SPRINGS AT RAPID CITY, SD (LAT 44 03 32N LONG 103 17 49W)					
DEC 2003					
19...	1045	9.7	389	7.5	11.0
MAY 2004					
19...	1139	9.2	380	24.0	13.0
19...	1232	9.8	380	24.0	13.0
JUL 01...	1440	10	388	31.5	13.5
02...	1245	10	--	27.0	14.5
AUG 10...	0950	7.6	390	26.0	11.5
SEP 24...	1350	8.6	384	19.5	12.5
06414000 RAPID CR AT RAPID CITY, SD (LAT 44 05 09N LONG 103 14 31W)					
OCT 2003					
02...	1315	24	--	20.0	12.0
NOV 03...	1040	--	734	-2.0	4.0
04...	1230	--	658	-2.5	4.5
12...	1200	--	590	9.0	5.0
14...	1250	32	584	14.0	7.0
JAN 2004					
02...	1230	36	570	0.0	4.0
FEB 12...	1300	--	587	0.5	2.0
13...	1027	--	606	10.0	2.0
17...	1330	34	557	12.0	6.0
APR 05...	0755	32	616	11.0	9.5
MAY 17...	1300	69	495	12.0	10.0
JUN 29...	1135	38	500	22.0	17.5
AUG 16...	1230	34	497	22.0	18.5
06416000 RAPID CR BELOW HAWTHORN DITCH AT RAPID CITY, SD (LAT 44 04 03N LONG 103 10 50W)					
OCT 2003					
03...	1335	--	630	23.0	14.0
MAR 2004					
23...	1430	--	642	18.0	9.5
MAY 27...	0900	45	604	19.5	13.5
JUL 03...	1640	419	--	--	--
12...	1155	--	560	28.0	21.5
AUG 17...	1325	--	549	30.0	20.0

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06418900 RAPID CR BL SEWAGE TREATMENT PL NR RAPID CITY, SD (LAT 44 01 24N LONG 103 05 43W)					
OCT 2003					
08...	1245	28	1080	25.0	17.0
NOV					
14...	0900	49	894	5.0	5.0
JAN 2004					
02...	0830	46	851	6.0	2.0
FEB					
17...	0830	46	833	-4.5	2.0
APR					
05...	0950	51	903	19.0	12.0
MAY					
17...	0925	63	831	12.0	10.5
JUN					
28...	1350	24	--	24.5	--
28...	1440	24	--	--	--
28...	1442	24	--	--	--
JUL					
03...	2020	745	--	--	--
AUG					
16...	0850	22	1150	18.0	19.5
06421500 RAPID CR NEAR FARMINGDALE, SD (LAT 43 56 31N LONG 102 51 12W)					
OCT 2003					
03...	1315	17	1130	21.0	12.0
NOV					
14...	1040	50	997	9.5	3.0
JAN 2004					
02...	1050	44	1000	-3.0	0.0
FEB					
17...	1200	49	944	4.0	0.0
APR					
05...	1300	51	958	18.0	13.0
MAY					
03...	1115	--	1160	30.0	15.5
05...	0820	--	1080	19.0	16.0
05...	0930	--	1050	23.0	18.5
17...	1115	31	1010	11.0	11.0
JUL					
01...	0945	4.9	1160	23.0	22.0
AUG					
16...	1045	3.2	1050	21.0	21.0
06422500 BOXELDER CR NEAR NEMO, SD (LAT 44 08 38N LONG 103 27 16W)					
*Field determinations from 2003 water year also published.					
OCT 2002					
08...	1320	4.6	368	10.0	8.5
DEC					
16...	0910	3.3	392	2.5	0.0
FEB 2003					
14...	1315	4.3	350	-2.0	0.0
MAR					
17...	1450	26	207	5.0	2.0
MAY					
28...	1055	18	249	24.0	17.0
JUL					
16...	0850	6.4	342	24.0	19.0
OCT					
23...	1430	3.3	--	--	--
DEC					
05...	1320	4.5	371	6.5	0.0
FEB 2004					
25...	1230	4.6	316	12.0	1.0
APR					
06...	1030	6.2	336	13.0	7.0
MAY					
20...	1005	3.9	349	15.0	12.5
JUL					
02...	1130	5.3	317	28.0	19.5
AUG					
20...	1045	1.0	413	23.0	12.0

## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06423500 CHEYENNE RIVER NEAR WASTA, SD (LAT 44 04 52N LONG 102 24 03W)					
OCT 2003					
01...	0930	84	2070	4.0	8.0
NOV					
12...	1100	264	1420	7.0	1.0
DEC					
17...	1055	111	1880	9.5	1.0
JAN 2004					
23...	1135	112	1580	9.0	0.0
MAR					
31...	0920	117	1660	14.0	10.0
APR					
30...	1000	59	1990	15.0	10.0
MAY					
21...	0940	87	1700	21.0	15.5
JUL					
08...	1400	151	1130	--	24.5
AUG					
17...	1500	38	2210	29.0	25.5
06424000 ELK CR NEAR ROUBAIX, SD (LAT 44 17 41N LONG 103 35 47W)					
OCT 2003					
09...	1155	1.9	373	26.5	11.0
DEC					
04...	1210	2.1	369	-5.0	0.0
JAN 2004					
14...	1240	2.6	275	9.5	0.0
FEB					
25...	1110	3.5	328	9.0	0.0
MAR					
24...	1520	6.9	280	15.5	11.0
APR					
08...	1315	4.4	327	13.0	9.5
MAY					
17...	1500	3.9	339	10.5	11.5
17...	1540	3.8	339	10.5	11.5
JUL					
12...	1150	1.5	333	27.0	22.5
AUG					
24...	0950	1.1	352	16.5	13.5
06425100 ELK CR NR RAPID CITY, SD (LAT 44 14 25N LONG 103 09 03W)					
MAR 2004					
25...	1115	.75	1180	22.0	12.0
06425500 ELK CR NEAR ELM SPRINGS, SD (LAT 44 14 54N LONG 102 30 10W)					
FEB 2004					
19...	0900	.10	765	6.0	1.0
MAR					
24...	0935	--	3740	11.0	12.0
MAY					
24...	1055	6.7	1260	10.0	13.5

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06428500 BELLE FOURCHE R AT WY-SD STATE LINE (LAT 44 44 59N LONG 104 02 49W)					
OCT 2003					
03...	1050	17	2090	15.5	10.0
NOV					
14...	1045	23	2270	9.5	0.0
DEC					
23...	1030	12	2580	3.0	0.0
FEB 2004					
04...	1325	5.2	2770	-8.0	0.0
MAR					
10...	0950	122	1110	1.0	0.0
APR					
07...	1350	22	2060	12.5	13.5
MAY					
28...	1100	44	1820	22.0	17.5
JUL					
01...	0910	5.8	2200	23.0	20.0
AUG					
13...	1025	30	1950	18.0	17.0
06429997 MURRAY DITCH AB HEADGATE AT WY-SD STATE LINE (LAT 44 34 35N LONG 104 03 20W)					
OCT 2003					
06...	1235	9.3	1450	--	12.0
JUN 2004					
01...	1040	6.3	1620	18.0	12.0
21...	1140	12	1450	--	14.0
JUL					
19...	1215	14	1710	30.5	19.0
AUG					
19...	1135	18	1470	19.5	13.0
06430500 REDWATER CR AT WY-SD STATE LINE (LAT 44 34 18N LONG 104 03 12W)					
OCT 2003					
06...	1135	21	1530	--	11.0
NOV					
13...	0925	31	1560	6.0	3.5
DEC					
30...	0940	30	1540	-6.0	1.0
FEB 2004					
04...	1035	30	1550	-14.0	1.0
APR					
09...	1010	30	1510	7.0	8.5
JUN					
01...	0935	16	1740	15.5	11.5
JUL					
09...	1050	24	1720	21.0	17.0
19...	1055	12	1750	29.0	21.0
AUG					
19...	1020	8.7	1620	17.0	13.5
06430770 SPEARFISH CREEK NEAR LEAD, SD (LAT 44 17 57N LONG 103 52 05W)					
OCT 2003					
06...	1140	26	457	18.0	6.0
DEC					
08...	1055	27	440	-1.5	3.5
JAN 2004					
07...	1055	28	458	-12.0	0.5
FEB					
23...	1040	26	442	0.0	2.0
APR					
12...	1015	27	456	-3.0	1.0
JUN					
07...	1220	28	442	22.0	10.5
JUL					
12...	1145	27	447	25.0	10.5
AUG					
18...	0930	25	449	13.5	9.0

## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06430800 ANNIE CREEK NEAR LEAD, SD (LAT 44 19 37N LONG 103 53 38W)					
OCT 2003					
06...	1225	--	587	21.0	5.5
DEC					
08...	1155	--	217	-3.5	0.0
JAN 2004					
07...	1220	--	847	1.5	0.0
FEB					
23...	1135	--	669	7.5	0.0
APR					
12...	1115	.76	293	3.0	0.0
JUN					
07...	1113	--	355	20.5	12.5
JUL					
12...	1047	--	461	25.0	15.0
AUG					
18...	1015	--	510	17.0	13.0
06430850 LITTLE SPEARFISH CREEK NEAR LEAD, SD (LAT 44 20 58N LONG 103 56 08W)					
OCT 2003					
06...	1325	11	480	22.5	9.0
DEC					
08...	1305	11	466	-2.5	4.5
JAN 2004					
07...	1330	12	482	9.5	5.0
FEB					
23...	1250	11	469	3.5	5.5
APR					
12...	1225	12	471	6.0	8.0
MAY					
10...	1445	12	436	26.5	13.5
JUL					
12...	1015	12	471	25.5	9.5
AUG					
18...	1105	12	468	16.0	9.5
06430898 CLEOPATRA CREEK NEAR SPEARFISH, SD (LAT 44 24 04N LONG 103 53 35W)					
OCT 2003					
21...	1350	--	347	25.0	8.5
DEC					
09...	1130	--	326	-2.0	0.0
JAN 2004					
08...	1145	--	346	3.0	0.0
FEB					
24...	0925	--	331	0.0	0.0
APR					
13...	0810	--	239	0.5	0.5
JUN					
07...	1045	--	279	19.0	13.5
06430900 SPEARFISH CREEK ABOVE SPEARFISH, SD (LAT 44 24 06N LONG 103 53 40W)					
OCT 2003					
21...	1330	51	442	25.0	8.5
DEC					
09...	1100	53	436	-2.0	2.0
JAN 2004					
08...	1110	74	420	3.0	0.0
FEB					
24...	1025	53	434	0.0	2.0
APR					
13...	0915	57	444	1.0	3.0
JUN					
07...	1020	55	427	18.5	10.0
25...	0955	51	426	14.5	8.0
AUG					
18...	1225	47	416	19.0	11.5

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06431500 SPEARFISH CR AT SPEARFISH, SD (LAT 44 28 57N LONG 103 51 40W)					
OCT 2003					
21...	1100	45	445	23.0	7.5
DEC					
09...	1305	47	441	-2.5	2.0
JAN 2004					
08...	1305	54	434	3.5	0.5
FEB					
24...	1215	47	431	10.0	3.0
APR					
13...	1045	49	433	15.0	4.0
JUN					
01...	1240	49	420	--	7.0
25...	1105	45	423	18.0	9.0
JUL					
09...	1305	45	423	21.5	12.0
AUG					
20...	1250	44	423	21.5	9.5
06432172 FALSE BOTTOM CREEK NR CENTRAL CITY, SD (LAT 44 23 28N LONG 103 47 58W)					
OCT 2003					
23...	1240	.40	371	23.5	7.5
DEC					
10...	0915	.37	241	-6.0	0.0
JAN 2004					
14...	0915	.41	335	2.5	0.0
FEB					
24...	1320	.30	439	15.0	3.0
JUL					
20...	1015	.22	332	25.0	16.0
SEP					
14...	0835	.16	716	8.5	9.0
06433000 REDWATER RIVER ABOVE BELLE FOURCHE, SD (LAT 44 40 02N LONG 103 50 20W)					
OCT 2003					
07...	1245	125	1160	25.0	12.5
NOV					
13...	1100	151	1220	4.0	3.5
DEC					
23...	1230	152	--	4.0	2.5
JAN 2004					
13...	0837	--	1180	-4.0	0.5
FEB					
02...	1205	158	1180	-9.5	0.0
09...	1219	--	1100	-1.0	1.5
APR					
09...	1250	139	1130	11.5	10.5
MAY					
05...	1300	67	1250	25.5	18.0
28...	1225	79	1250	26.0	18.0
JUL					
06...	1050	112	1160	16.5	16.0
AUG					
13...	1200	47	1240	20.0	16.5
06434505 INLET CANAL ABOVE BELLE FOURCHE RESERVOIR, SD (LAT 44 42 05N LONG 103 44 00W)					
OCT 2003					
07...	0920	129	1300	12.5	10.5
NOV					
14...	0910	173	1400	4.5	3.0
DEC					
31...	1015	112	2650	-10.5	0.0
JAN 2004					
21...	1440	145	1270	1.0	2.5
MAR					
09...	1255	228	1140	9.0	5.5
APR					
07...	0945	168	1290	9.0	12.0
AUG					
17...	1225	.60	1490	28.0	21.5

## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06436000 BELLE FOURCHE R NEAR FRUITDALE, SD (LAT 44 41 27N LONG 103 44 14W)					
OCT 2003					
07...	1035	5.7	1980	19.0	12.0
NOV					
12...	1230	8.4	1960	4.0	2.0
DEC					
31...	1155	5.5	1980	-7.0	0.0
JAN 2004					
08...	1336	--	2000	3.0	0.0
FEB					
02...	1025	5.8	2020	-11.0	0.0
09...	1142	--	1870	-3.0	1.0
APR					
07...	1115	6.5	1890	10.0	12.5
MAY					
17...	1020	10	1930	10.0	11.0
JUL					
08...	1330	16	1380	25.5	23.0
AUG					
17...	1330	12	1840	28.0	22.5
06436156 WHITETAIL CREEK AT LEAD, SD (LAT 44 20 36N LONG 103 45 57W)					
OCT 2003					
06...	0955	--	639	15.5	7.0
DEC					
08...	0915	--	559	-1.0	1.5
FEB 2004					
23...	0905	--	578	0.0	0.0
06436165 DEADWOOD CREEK AT CENTRAL CITY, SD (LAT 44 22 07N LONG 103 45 55W)					
FEB 2004					
18...	1500	1.2	557	7.5	0.0
APR					
09...	1340	1.2	441	9.0	8.5
MAY					
20...	1605	.97	439	10.0	11.0
20...	1645	1.1	439	10.0	11.0
JUL					
07...	1750	.70	691	22.0	16.5
AUG					
24...	1253	.40	638	19.5	15.0
06436180 WHITEWOOD CR ABOVE WHITEWOOD, SD (LAT 44 26 32N LONG 103 37 44W)					
OCT 2003					
08...	1300	7.3	1150	22.5	11.5
JAN 2004					
09...	1145	4.4	1110	7.0	0.0
12...	0950	--	1110	1.5	0.0
FEB					
09...	1005	5.4	1090	-4.0	0.0
APR					
05...	1105	20	800	15.0	9.0
MAY					
18...	1400	12	915	21.0	14.0
JUL					
02...	1315	21	832	28.5	20.5
AUG					
12...	1005	7.8	1620	16.5	14.5

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06436190 WHITEWOOD CREEK NEAR WHITEWOOD, SD (LAT 44 32 30N LONG 103 34 16W)					
OCT 2003					
08...	1125	6.0	1310	20.0	13.0
NOV					
20...	1310	8.1	1300	3.0	6.0
DEC					
22...	1115	6.4	1410	3.5	3.0
JAN 2004					
12...	1105	5.5	1400	6.5	2.0
21...	1225	6.4	1380	2.0	3.5
MAR					
09...	0925	11	1270	8.5	3.0
APR					
05...	0945	19	1030	13.5	9.0
MAY					
20...	1015	9.8	1210	--	12.0
27...	1255	12	1180	20.5	16.5
JUL					
02...	1025	31	807	27.0	17.5
AUG					
12...	1125	5.2	1390	20.5	17.5
06436198 WHITEWOOD CR ABOVE VALE, SD (LAT 44 37 04N LONG 103 28 52W)					
OCT 2003					
02...	1315	6.5	1350	18.0	11.5
NOV					
20...	1145	8.7	1410	5.0	5.0
DEC					
19...	1030	5.0	--	--	0.0
JAN 2004					
30...	1315	2.8	--	-6.0	0.0
APR					
02...	1320	21	1080	9.0	8.5
MAY					
17...	1320	19	1180	12.5	10.5
JUL					
02...	0905	55	892	20.5	18.0
AUG					
12...	1300	2.0	1370	20.5	19.0
SEP					
07...	1000	1.2	1500	14.0	15.0
06436760 HORSE CR ABOVE VALE, SD (LAT 44 39 08N LONG 103 21 59W)					
OCT 2003					
01...	0925	3.7	2650	8.0	9.5
02...	1140	2.9	2750	--	10.0
09...	1305	2.4	3210	29.0	13.0
NOV					
06...	1005	2.3	--	-7.0	1.5
12...	1020	2.5	4750	0.5	0.0
JAN 2004					
08...	1235	.64	6120	5.0	0.0
FEB					
03...	1020	1.7	5750	-8.0	0.0
MAR					
09...	1050	16	1990	8.5	0.5
12...	1315	176	2140	15.0	1.5
APR					
02...	1045	2.7	2540	8.0	9.5
MAY					
05...	0940	.80	4390	21.0	16.5
18...	0905	1.9	4400	11.0	12.0
25...	1300	275	783	14.0	13.0
JUN					
14...	1104	--	2420	20.0	17.0
AUG					
31...	1020	--	1760	--	18.5



## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06437000 BELLE FOURCHE R NEAR STURGIS, SD (LAT 44 30 47N LONG 103 08 11W)					
OCT 2003					
09...	1120	33	2290	26.5	14.0
NOV					
20...	0925	39	2530	7.0	4.0
JAN 2004					
08...	1030	10	3470	-1.0	0.0
30...	1045	14	--	-16.0	0.0
FEB					
03...	0843	--	2770	-14.0	0.0
MAR					
11...	1020	112	1810	1.5	0.0
29...	1130	64	2110	11.0	8.5
MAY					
11...	0930	11	2210	23.0	17.5
25...	0955	943	938	12.5	12.5
JUL					
07...	1130	538	1300	24.0	19.5
AUG					
17...	1015	196	1810	22.0	20.5
06437020 BEAR BUTTE CREEK NEAR DEADWOOD, SD (LAT 44 20 08N LONG 103 38 06W)					
OCT 2003					
09...	1325	1.4	1000	26.0	9.5
DEC					
04...	1045	1.2	1210	-5.5	0.0
JAN 2004					
14...	1110	1.2	1570	5.0	0.0
FEB					
25...	1010	2.1	1240	7.5	0.0
APR					
09...	1120	3.5	780	5.0	4.0
MAY					
20...	1335	2.0	1240	10.0	11.0
20...	1400	1.9	1240	10.0	11.0
20...	1425	1.9	1240	10.0	11.0
JUL					
12...	1335	.90	1070	26.0	21.5
AUG					
24...	1110	.37	802	19.0	14.5
06437200 BEAR BUTTE CR NEAR GALENA, SD (LAT 44 23 48N LONG 103 34 36W)					
OCT 2003					
08...	1310	--	1440	21.0	11.5
JUL 2004					
15...	0824	--	1420	28.0	15.5
06437650 ELM CREEK NEAR FAIRPOINT, SD (LAT 44 46 59N LONG 103 03 43W)					
MAR 2004					
10...	1315	17	635	3.0	0.5
06438000 BELLE FOURCHE RIVER NEAR ELM SPRINGS, SD (LAT 44 22 11N LONG 102 33 56W)					
OCT 2003					
03...	1030	39	2200	20.0	12.0
NOV					
18...	1000	65	2330	9.0	2.0
JAN 2004					
08...	1200	4.2	7470	-1.0	0.0
FEB					
19...	1125	18	2660	6.0	0.5
MAR					
24...	1110	88	1670	17.0	14.0
MAY					
17...	1220	27	1950	15.0	13.5
JUL					
08...	1020	745	1040	23.0	21.5
AUG					
17...	1155	154	1400	27.0	22.0

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06438500 CHEYENNE R NEAR PLAINVIEW, SD (LAT 44 31 54N LONG 101 55 47W)					
OCT 2003					
07...	0920	118	2530	10.0	12.0
NOV 20...	0900	190	2260	7.0	2.0
JAN 2004					
13...	1400	106	2690	2.0	0.0
FEB 24...	1250	--	1450	12.0	0.0
APR 08...	1030	143	2290	10.0	9.5
MAY 25...	1107	860	2220	13.0	12.5
JUL 14...	1010	226	1890	28.0	25.0
AUG 24...	1000	221	2020	23.0	19.0
06438800 ELM CREEK NEAR RED OWL, SD (LAT 44 45 04N LONG 102 26 55W)					
FEB 2004					
19...	1330	13	457	9.0	0.0
MAR 24...	1240	.26	1760	18.0	14.0
MAY 19...	1100	.11	3590	24.0	27.0
06439000 CHERRY CR NEAR PLAINVIEW, SD (LAT 44 44 35N LONG 102 03 11W)					
FEB 2004					
24...	1130	23	73	2.0	0.5
APR 08...	0800	.20	2240	2.0	9.0
JUL 14...	0755	21	902	26.0	24.5
AUG 24...	0750	.19	1180	14.0	18.5
06439960 CHANTIER CREEK NEAR HAYES, SD (LAT 44 31 20N LONG 100 42 13W)					
JUN 2004					
11...	1840	--	2000	--	--
06440200 SOUTH FORK BAD R NEAR COTTONWOOD, SD (LAT 43 58 08N LONG 101 46 00W)					
MAR 2004					
29...	1045	.01	579	10.5	12.5
06440850 MEDICINE CREEK NEAR PHILLIP, SD (LAT 44 03 17N LONG 101 29 12W)					
JUN 2004					
12...	1130	63	1040	30.0	18.0
06441000 BAD R NEAR MIDLAND, SD (LAT 44 04 01N LONG 101 09 36W)					
JUN 2004					
12...	0900	1290	560	24.0	18.5
06441110 PLUM CREEK BELOW HAYES, SD (LAT 44 12 38N LONG 100 43 34W)					
JUN 2004					
11...	1520	78	1700	30.0	20.5
SEP 24...	1305	58	1200	20.5	11.5

## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	
06442150 CEDAR CREEK NEAR KENNEBEC, SD (LAT 44 08 27N LONG 099 56 37W)						
MAY 2004						
	12...	1130	8.8	1240	6.5	10.5
	24...	1220	22	1840	11.0	12.5
SEP						
	24...	1040	18	571	17.5	11.5
06442500 MEDICINE CR AT KENNEBEC, SD (LAT 43 54 17N LONG 099 52 35W)						
JUN 2004						
	11...	1430	413	826	27.5	20.0
06442670 COUNSELOR CREEK NEAR LOWER BRULE, SD (LAT 44 01 34N LONG 099 31 00W)						
JUN 2004						
	11...	1200	6.0	1680	24.0	20.0
SEP						
	24...	0955	3.2	1230	13.5	12.5
06442718 CAMPBELL C NR LEE'S CORNER, SD (LAT 44 04 39N LONG 099 22 51W)						
DEC 2003						
	09...	1020	.15	3170	-4.0	0.0
SEP 2004						
	24...	0725	20	738	11.0	11.5
06445685 WHITE R NR NE-SD STATE LINE (LAT 43 00 47N LONG 102 50 07W)						
OCT 2003						
	07...	0850	16	546	11.0	9.5
NOV						
	18...	0840	12	840	2.0	1.5
DEC						
	30...	0850	7.6	887	2.0	0.0
FEB 2004						
	10...	1010	6.8	909	3.0	0.0
MAR						
	10...	0925	95	536	7.0	0.0
APR						
	06...	0830	31	596	8.0	10.0
MAY						
	18...	0825	13	727	8.0	13.5
JUL						
	14...	0825	5.3	640	26.0	27.5
AUG						
	17...	0830	1.0	719	19.0	19.5
06445980 WHITE CLAY CR NEAR OGLALA, SD (LAT 43 08 46N LONG 102 40 58W)						
OCT 2003						
	07...	1215	--	543	28.0	10.0
NOV						
	18...	1100	--	520	14.0	2.0
DEC						
	30...	1145	--	563	11.0	0.0

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06446000 WHITE R NEAR OGLALA, SD (LAT 43 15 17N LONG 102 49 29W)					
OCT 2003					
07...	1350	10	559	32.0	11.5
NOV					
18...	1255	6.7	814	8.0	2.0
DEC					
30...	1405	6.1	1060	0.0	0.0
FEB 2004					
10...	1405	5.3	1130	10.0	0.0
APR					
06...	1245	41	619	22.0	12.5
MAY					
18...	1550	9.7	782	21.0	15.0
JUL					
14...	1130	2.7	672	30.0	26.0
AUG					
17...	1230	1.9	927	28.0	21.5
06446100 WOUNDED KNEE CREEK AT WOUNDED KNEE, SD (LAT 43 08 38N LONG 102 21 28W)					
OCT 2003					
07...	1115	--	396	30.0	9.5
NOV					
18...	1015	--	435	15.0	2.0
DEC					
30...	1100	--	437	6.0	0.0
06446500 WHITE R NEAR INTERIOR, SD (LAT 43 41 38N LONG 101 55 56W)					
OCT 2003					
03...	1225	8.9	648	28.0	16.5
NOV					
14...	1145	28	611	19.0	5.5
DEC					
16...	1345	12	848	6.0	1.0
JAN 2004					
28...	1525	9.0	940	-8.0	0.0
APR					
06...	1230	52	590	24.0	14.5
MAY					
28...	1500	38	570	34.0	23.0
JUN					
12...	1050	521	401	24.0	17.5
12...	1055	517	401	24.0	17.5
15...	1230	30	485	26.0	22.0
24...	1035	25	667	17.0	17.0
AUG					
06...	0900	19	590	27.0	22.0
SEP					
06...	0515	10300	--	--	--
06446700 BEAR IN THE LODGE CR NEAR WANBLEE, SD (LAT 43 32 12N LONG 101 47 54W)					
OCT 2003					
03...	1025	2.4	527	19.0	8.5
NOV					
14...	1030	8.3	483	12.0	1.5
DEC					
16...	1145	6.8	546	3.0	0.0
JAN 2004					
28...	1350	5.2	548	-11.0	0.0
APR					
02...	1330	12	508	24.0	14.5
JUN					
01...	1105	16	473	29.0	15.5
JUL					
14...	0900	5.0	463	--	24.0
AUG					
20...	1555	1.7	469	28.0	19.0

## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06447000 WHITE R NEAR KADOKA, SD (LAT 43 45 09N LONG 101 31 28W)					
OCT 2003					
02...	1030	12	818	21.0	8.5
NOV					
13...	1045	14	601	7.0	1.0
DEC					
15...	1150	20	686	2.0	1.0
JAN 2004					
26...	1210	13	--	-4.0	0.0
APR					
01...	1035	54	570	20.0	13.5
MAY					
18...	1030	30	590	20.0	15.5
JUN					
12...	1415	1500	464	30.0	20.5
JUL					
12...	1220	26	450	30.0	27.0
AUG					
19...	1130	1.1	784	22.0	16.0

## 06447230 BLACK PIPE CREEK NR BELVIDERE, SD (LAT 43 45 28N LONG 101 13 40W)

NOV 2003					
13...	1205	.09	686	12.0	2.0
FEB 2004					
27...	1250	4.4	384	19.0	9.0
MAR					
29...	1245	8.1	514	13.0	13.0
MAY					
18...	1300	2.1	563	21.0	20.0
JUL					
07...	1430	1.0	478	27.0	28.5

## 06447450 WHITE RIVER NEAR WHITE RIVER, SD (LAT 43 42 50N LONG 100 41 05W)

OCT 2003					
07...	1220	8.8	1420	31.0	15.5
NOV					
13...	1520	13	1180	14.0	1.5
DEC					
18...	1200	70	1690	14.0	0.0
JAN 2004					
26...	1520	7.3	1090	-12.0	1.5
APR					
01...	1620	81	621	22.0	16.5
MAY					
20...	1410	29	794	26.0	23.5
JUN					
12...	1420	266	792	27.5	22.0
15...	1630	347	512	25.0	23.0
JUL					
09...	1030	406	414	22.0	22.0
AUG					
19...	1355	5.4	702	27.0	18.5
SEP					
07...	1655	6620	421	28.0	18.5

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06447500 LITTLE WHITE R NEAR MARTIN, SD (LAT 43 10 00N LONG 101 37 47W)					
OCT 2003					
03...	0825	8.7	216	13.5	9.0
NOV					
25...	1440	11	258	6.0	1.0
DEC					
16...	0930	15	220	-7.0	1.0
JAN 2004					
28...	0830	8.4	250	-8.0	1.0
APR					
05...	1420	18	262	19.5	15.5
JUN					
02...	0710	10	290	8.5	13.0
JUL					
13...	1630	8.3	368	30.5	30.5
AUG					
20...	1415	5.8	214	24.0	22.0
06448000 LAKE CR ABOVE REFUGE NEAR TUTHILL, SD (LAT 43 05 13N LONG 101 36 11W)					
OCT 2003					
02...	1410	20	111	26.0	14.0
NOV					
25...	1310	24	124	3.0	1.0
DEC					
16...	0815	12	126	-10.0	0.5
JAN 2004					
28...	1230	19	127	-11.0	1.0
APR					
06...	0805	23	122	10.0	8.5
JUN					
01...	1335	21	106	26.0	19.0
JUL					
13...	1515	17	107	33.0	28.5
AUG					
20...	1320	17	79	28.0	19.0
06449000 LAKE CR BELOW REFUGE NEAR TUTHILL, SD (LAT 43 08 49N LONG 101 30 51W)					
OCT 2003					
02...	1250	1.1	420	24.0	15.0
NOV					
25...	1200	36	428	2.0	1.0
DEC					
15...	1530	24	262	0.0	2.0
JAN 2004					
28...	0930	29	219	-13.0	3.0
APR					
06...	1000	32	271	15.0	13.0
JUN					
01...	1500	49	490	26.0	19.0
JUL					
13...	1335	1.9	442	32.0	28.5
AUG					
20...	1205	.06	466	26.0	18.5

## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06449100 LITTLE WHITE R NEAR VETAL, SD (LAT 43 06 03N LONG 101 13 49W)					
OCT 2003					
20...	1240	26	340	24.0	13.0
NOV					
17...	1150	54	308	14.0	5.5
DEC					
15...	1410	66	282	1.0	2.5
JAN 2004					
27...	1555	49	320	-3.0	1.0
APR					
05...	1220	71	280	23.0	14.5
JUN					
02...	0905	50	308	15.0	14.0
JUL					
13...	1200	29	315	--	26.5
AUG					
20...	1100	23	495	23.0	17.0
06449500 LITTLE WHITE R NEAR ROSEBUD, SD (LAT 43 19 32N LONG 100 53 00W)					
OCT 2003					
20...	1420	81	303	25.0	14.0
NOV					
17...	1355	121	307	14.0	6.5
DEC					
18...	1520	129	289	9.0	0.5
JAN 2004					
27...	1230	27	321	2.0	0.5
APR					
02...	1010	138	294	20.0	13.0
JUN					
02...	1100	124	305	18.0	16.0
JUL					
13...	0905	77	375	22.0	24.0
AUG					
20...	0900	65	291	18.0	15.5
06450500 LITTLE WHITE R BELOW WHITE RIVER, SD (LAT 43 36 05N LONG 100 44 58W)					
OCT 2003					
07...	1450	170	296	32.0	17.5
NOV					
13...	1410	118	305	12.0	3.5
DEC					
18...	1330	81	311	9.5	0.0
JAN 2004					
27...	1030	88	420	-3.0	1.0
APR					
02...	0815	143	308	15.0	12.0
MAY					
28...	1200	128	316	30.0	23.0
JUL					
12...	1450	124	303	31.0	30.5
AUG					
19...	1610	50	291	26.0	18.5
06451650 WILLIAMS CREEK NEAR VIVIAN, SD (LAT 43 43 33N LONG 100 17 50W)					
JUN 2004					
11...	1200	6.9	738	25.0	21.2
06452290 EAST FORK PLATTE CREEK NEAR AURORA CENTER, SD (LAT 43 33 36N LONG 098 36 58W)					
JUN 2004					
10...	1505	10	207	26.5	22.0

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06452320 PLATTE CREEK NEAR PLATTE, SD (LAT 43 19 38N LONG 098 58 13W)					
OCT 2003					
09...	1420	.01	2310	23.0	20.0
DEC					
11...	1550	.01	2300	-9.0	1.0
JAN 2004					
21...	1640	.19	--	-4.0	0.0
MAR					
18...	1105	.74	2100	8.0	9.0
APR					
30...	1037	.32	3170	12.0	12.0
JUN					
16...	1250	45	708	22.0	24.0
JUL					
30...	0810	.02	2180	19.0	20.0
06453255 CHOTEAU CR NR AVON, SD (LAT 42 55 24N LONG 098 06 21W)					
OCT 2003					
09...	0920	.66	1760	19.0	17.5
DEC					
11...	0940	--	1750	-11.5	1.0
06463900 ANTELOPE CR NEAR MISSION, SD (LAT 43 16 26N LONG 100 40 56W)					
MAR 2004					
19...	1330	7.3	393	27.5	11.0
MAY					
25...	1440	12	402	13.0	16.5
06464100 KEYA PAHA R NEAR KEYAPAHA, SD (LAT 43 07 45N LONG 100 06 24W)					
OCT 2003					
10...	1120	10	405	21.0	17.5
DEC					
12...	1155	15	465	-4.0	0.0
FEB 2004					
05...	1320	14	520	-3.0	0.0
MAR					
19...	0920	50	433	16.0	8.0
MAY					
06...	0928	15	490	14.0	14.0
26...	0940	73	489	15.0	15.0
JUN					
17...	1230	48	497	15.5	17.0
AUG					
03...	1620	10	426	23.5	29.0
06464120 SAND CREEK NEAR OLSONVILLE, SD (LAT 43 01 03N LONG 100 24 46W)					
MAR 2004					
19...	1050	.25	583	9.0	18.0
MAY					
25...	1715	2.2	495	19.0	21.0



## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06464500 KEYA PAHA R AT WEWELA, SD (LAT 43 01 44N LONG 099 46 49W)					
OCT 2003					
10...	0910	20	421	17.0	15.5
DEC 12...	0930	32	439	-3.0	0.0
FEB 2004					
05...	1015	16	524	5.0	0.0
MAR 18...	1730	94	399	13.0	13.0
MAY 05...	1743	39	469	37.0	27.0
26...	1155	125	475	23.0	17.5
JUN 17...	0935	87	447	17.5	17.5
AUG 03...	1415	15	397	33.5	30.0
06466715 SNATCH CREEK NEAR TABOR, SD (LAT 42 54 30N LONG 097 46 33W)					
MAR 2004					
17...	1155	.15	2040	5.5	6.0
06471000 JAMES R AT COLUMBIA, SD (LAT 45 36 13N LONG 098 18 36W)					
OCT 2003					
02...	1715	90	1490	15.0	11.0
NOV 18...	0900	49	1610	2.5	2.0
FEB 2004					
10...	1650	16	2310	-1.5	0.0
MAR 16...	0945	40	1730	-4.0	0.0
APR 01...	1753	92	1260	13.5	12.0
MAY 11...	1420	441	1060	30.0	19.0
JUN 03...	1425	923	904	26.5	18.5
21...	1655	870	899	19.0	20.0
JUL 01...	1430	865	965	30.5	25.0
16...	1205	726	1020	26.0	24.5
AUG 02...	1130	500	1130	27.5	24.5
06471065 ELM RIVER NEAR FREDERICK, SD (LAT 45 50 15N LONG 098 42 06W)					
OCT 2003					
02...	1055	5.6	1720	14.0	9.5
06471200 MAPLE R AT ND-SD STATE LINE (LAT 45 56 20N LONG 098 27 08W)					
MAR 2004					
15...	1400	40	1740	4.0	0.0
APR 01...	1045	253	692	9.5	6.5
MAY 11...	1035	4.4	1530	17.0	13.0
JUN 21...	1140	72	1360	16.0	19.0
AUG 02...	1610	.66	1670	31.5	25.5

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06471500 ELM R AT WESTPORT, SD (LAT 45 39 22N LONG 098 29 48W)					
OCT 2003					
02...	1340	.02	1990	12.5	13.5
DEC 03...	1300	1.8	2060	2.0	1.0
FEB 2004					
10...	1240	1.4	2350	-7.0	0.0
MAR 16...	1115	5.9	1830	-1.0	0.0
APR 01...	1520	290	843	14.0	9.0
MAY 10...	1200	5.5	1110	17.0	17.0
JUN 21...	1440	77	1740	26.0	20.0
AUG 02...	1325	2.3	1550	28.5	28.0
06471770 MOCCASIN CREEK AT ABERDEEN, SD (LAT 45 28 13N LONG 098 27 13W)					
DEC 2003					
02...	1635	.01	2120	1.5	7.0
MAR 2004					
17...	0930	.10	2010	3.0	1.0
MAY 12...	0800	1.7	780	4.0	9.0
JUN 22...	0720	3.5	2200	13.0	15.0
AUG 03...	0650	.74	3090	19.0	20.0
06471800 FOOT CREEK NEAR ABERDEEN, SD (LAT 45 31 08N LONG 098 34 37W)					
OCT 2003					
03...	0905	.40	1900	11.0	9.5
DEC 03...	1625	.31	2090	0.0	1.5
FEB 2004					
11...	1135	.33	1720	-8.0	0.0
MAR 16...	1410	.47	1610	0.0	0.5
MAY 10...	1740	.14	2080	16.0	18.0
JUN 22...	0935	.44	1930	17.5	18.0
AUG 03...	0815	.11	2020	18.0	21.5
06472000 JAMES R NEAR STRATFORD, SD (LAT 45 14 30N LONG 098 23 28W)					
OCT 2003					
06...	1315	74	1540	18.5	14.5
DEC 02...	1410	48	1940	3.5	0.0
MAR 2004					
16...	1650	85	1590	3.0	0.5
MAY 11...	1710	406	1070	30.0	19.0
JUN 22...	1355	776	950	20.0	20.0
AUG 03...	1250	710	1120	24.0	24.0
06472050 ANTELOPE CREEK NEAR LANGFORD, SD (LAT 45 34 22N LONG 097 50 10W)					
APR 2004					
05...	1010	.76	2350	9.0	7.5

## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06473000 JAMES R AT ASHTON, SD (LAT 44 59 54N LONG 098 28 50W)					
OCT 2003					
06...	1700	68	1540	20.0	16.0
NOV					
18...	1235	84	1560	10.0	3.5
FEB 2004					
09...	1520	20	1360	-3.0	0.0
MAR					
17...	1320	95	1480	6.0	1.0
MAY					
12...	1040	429	1060	6.0	16.0
JUN					
22...	1600	747	980	21.0	19.5
AUG					
03...	1625	746	1140	28.0	25.0
06475000 JAMES R NEAR REDFIELD, SD (LAT 44 54 38N LONG 098 28 18W)					
OCT 2003					
01...	1635	29	1690	14.0	13.0
NOV					
17...	1705	87	1580	4.5	4.0
MAR 2004					
17...	1730	103	1510	7.0	0.5
APR					
08...	1545	248	1690	12.5	14.0
MAY					
12...	1405	445	1060	9.0	16.0
JUN					
23...	1405	827	993	26.0	20.0
24...	1140	780	988	--	--
AUG					
11...	1730	640	1190	22.0	20.0
06475600 TURTON TRIB SOUTH NEAR TURTON, SD (LAT 45 03 07N LONG 097 59 38W)					
JUN 2004					
07...	1030	.01	--	--	--
06476000 JAMES R AT HURON, SD (LAT 44 21 49N LONG 098 11 56W)					
OCT 2003					
06...	1430	21	1620	19.0	16.0
APR 2004					
22...	1140	314	1640	15.0	13.0
JUN					
08...	1500	633	1260	22.0	21.0
AUG					
06...	1645	643	921	27.5	24.0
06477000 JAMES R NEAR FORESTBURG, SD (LAT 43 58 26N LONG 098 04 14W)					
OCT 2003					
07...	0940	18	1680	15.0	15.5
DEC					
04...	1555	65	1690	0.0	0.0
FEB 2004					
03...	1100	34	1070	-11.0	0.0
MAR					
16...	1025	74	1910	-.5	3.0
APR					
26...	1720	308	1850	11.5	14.5
JUN					
08...	1400	654	1320	19.0	23.0
JUL					
27...	1005	685	1120	25.0	23.0

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06477500 FIRESTEEL CR NEAR MOUNT VERNON, SD (LAT 43 46 35N LONG 098 14 44W)					
OCT 2003					
07...	1205	.05	2640	22.0	20.0
DEC 09...	1620	.17	2690	-7.0	0.5
FEB 2004					
02...	1545	.07	3290	-9.5	0.0
MAR 15...	1640	.55	1080	1.0	5.0
APR 27...	0830	.09	2120	7.0	9.5
MAY 20...	1120	66	2150	19.0	17.5
JUN 01...	1135	247	542	14.5	15.5
08...	1650	27	761	18.5	22.0
14...	1845	444	697	19.0	25.5
JUL 26...	1745	1.6	1680	27.5	27.5
06478000 JAMES R NEAR MITCHELL, SD (LAT 43 39 32N LONG 097 55 08W)					
APR 2004					
27...	1605	316	1870	28.0	15.0
MAY 20...	1910	655	--	--	--
JUN 09...	1040	852	1300	24.5	21.5
15...	1205	1660	1100	27.0	24.0
06478052 ENEMY CR NEAR MITCHELL, SD (LAT 43 38 33N LONG 097 59 09W)					
MAY 2004					
20...	1450	38	1740	25.5	19.0
06478500 JAMES R NEAR SCOTLAND, SD (LAT 43 11 09N LONG 097 38 07W)					
OCT 2003					
08...	1210	46	1880	20.0	17.5
DEC 10...	1140	42	1730	-9.0	0.0
FEB 2004					
03...	1650	55	2070	-13.5	0.0
MAR 16...	1755	167	1580	3.0	4.5
APR 28...	1055	319	1870	23.0	15.0
JUN 09...	1750	953	1320	21.5	23.0
15...	1830	2070	1200	29.5	25.0
JUL 28...	1535	765	1140	26.5	25.0
06478513 JAMES RIVER NR YANKTON, SD (LAT 42 59 45N LONG 097 22 10W)					
JUN 2004					
10...	0900	914	1350	22.5	22.5
06478540 LITTLE VERMILLION R NEAR SALEM, SD (LAT 43 47 39N LONG 097 22 02W)					
MAR 2004					
08...	1050	2.8	705	--	--
APR 05...	1455	.32	1910	23.0	17.0
MAY 28...	0930	4.5	931	19.0	17.0
JUL 27...	1035	.87	1540	24.0	19.5

## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06478600 EAST FORK VERMILLION RIVER NEAR PARKER, SD (LAT 43 26 43N LONG 097 06 34W)					
OCT 2003					
01...	1325	7.2	2020	11.0	9.0
NOV					
13...	1130	7.4	1990	3.0	1.5
DEC					
22...	1330	10	2100	6.0	0.0
MAR 2004					
09...	1050	58	1180	5.0	1.5
APR					
07...	0840	21	1670	12.0	10.0
MAY					
25...	1815	45	1460	14.0	15.0
JUN					
01...	1050	245	1180	13.5	14.5
06478690 WEST FORK VERMILLION R NEAR PARKER, SD (LAT 43 24 55N LONG 097 12 18W)					
OCT 2003					
01...	1135	.26	1560	7.0	11.0
30...	1530	.35	1990	5.0	5.0
NOV					
13...	1020	.24	1950	1.0	2.0
DEC					
22...	1100	.71	2050	4.0	2.0
MAR 2004					
09...	0910	30	886	0.0	0.0
APR					
07...	1120	4.2	1780	19.0	14.0
23...	1420	2.1	1940	18.0	16.0
MAY					
25...	1630	95	1340	12.0	12.0
JUN					
01...	1415	249	912	19.5	15.5
JUL					
06...	1530	66	1590	22.5	20.5
27...	1245	30	840	27.5	23.0
06479010 VERMILLION RIVER NR VERMILLION, SD (LAT 42 49 02N LONG 096 55 26W)					
OCT 2003					
02...	0920	64	1600	6.0	7.0
NOV					
14...	0805	57	1700	5.0	3.0
DEC					
23...	1305	53	1780	0.0	0.5
MAR 2004					
04...	1115	1080	805	3.0	1.0
APR					
06...	1105	182	1870	16.0	12.0
MAY					
25...	1210	886	1430	15.0	12.0
JUN					
01...	1840	1810	650	16.0	16.5
JUL					
28...	1155	113	1430	24.0	21.0
06479159 BLUE DOG LAKE INFLOW (OWENS CR) NR WAUBAY, SD (LAT 45 20 48N LONG 097 15 07W)					
OCT 2003					
01...	1325	4.8	566	9.0	6.0
MAR 2004					
09...	0940	8.8	316	3.0	0.0

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06479215 BIG SIOUX RIVER NR FLORENCE, SD (LAT 45 10 51N LONG 097 11 09W)					
OCT 2003					
02...	1020	.14	776	0.0	3.0
NOV					
13...	1325	.20	781	4.0	0.5
DEC					
29...	1335	.19	720	-4.0	1.0
MAR 2004					
09...	1255	.84	469	5.0	0.0
APR					
06...	1000	.67	677	8.0	7.5
JUN					
08...	1135	7.1	665	17.0	19.0
AUG					
10...	0940	.29	690	10.0	12.0
06479438 BIG SIOUX R NEAR WATERTOWN, SD (LAT 45 00 22N LONG 097 09 53W)					
OCT 2003					
02...	1220	.14	746	15.0	8.0
NOV					
13...	1455	1.3	771	4.0	1.0
DEC					
29...	1525	1.1	781	-4.0	-1.0
MAR 2004					
09...	1450	5.2	595	7.0	0.0
APR					
07...	1100	6.1	562	14.0	12.0
JUN					
08...	1345	25	670	17.0	20.0
AUG					
10...	1440	1.6	619	17.5	17.0
06479498 SOUTH BRANCH TRIB TO MUD CR NR RAUVILLE, SD (LAT 44 57 12N LONG 097 06 23W)					
MAR 2004					
10...	1245	3.0	--	1.0	0.0
APR					
07...	1335	.01	898	14.0	12.0
JUN					
08...	0920	.78	1240	13.0	20.0
06479500 BIG SIOUX R AT WATERTOWN, SD (LAT 44 56 33N LONG 097 08 45W)					
OCT 2003					
02...	1305	.01	702	15.0	9.0
NOV					
13...	1615	.49	1070	2.0	0.5
DEC					
30...	0955	.06	907	-7.0	0.0
MAR 2004					
09...	1700	4.4	348	9.0	0.0
APR					
06...	1550	3.5	740	20.0	17.5
JUN					
08...	1520	12	924	16.0	20.0
15...	1035	--	780	18.5	20.0
AUG					
10...	1610	.01	643	17.0	23.0
06479512 BIG SIOUX R AT BROADWAY AT WATERTOWN, SD (LAT 44 53 22N LONG 097 07 07W)					
JUN 2004					
15...	1155	8.8	786	22.0	21.0
06479515 WILLOW CR NEAR WATERTOWN, SD (LAT 44 55 08N LONG 097 02 43W)					
MAR 2004					
10...	1120	76	386	1.0	0.0

## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06479520 BIG SIOUX RIVER BELOW WATERTOWN, SD (LAT 44 50 52N LONG 097 02 57W)					
OCT 2003					
02...	1720	4.8	1170	15.0	11.0
NOV					
14...	0910	9.8	1280	0.5	0.0
DEC					
30...	1330	6.1	1350	--	0.0
MAR 2004					
02...	1310	26	781	3.0	0.0
10...	0900	34	856	0.5	0.0
APR					
07...	1545	9.9	1120	14.0	15.0
JUN					
08...	1730	24	977	17.0	19.0
AUG					
11...	1050	6.8	1210	11.5	15.0
06479525 BIG SIOUX R NEAR CASTLEWOOD, SD (LAT 44 43 54N LONG 097 02 39W)					
OCT 2003					
02...	1530	5.9	1080	15.0	9.0
NOV					
14...	1125	13	1080	1.0	0.0
DEC					
30...	1620	7.7	1290	-2.0	0.0
MAR 2004					
11...	0920	14	715	-3.5	0.0
APR					
08...	0850	14	1100	1.0	2.5
JUN					
09...	0815	32	953	14.0	15.0
AUG					
05...	1050	10	881	23.5	22.0
06479640 HIDEWOOD CR NEAR ESTELLINE, SD (LAT 44 36 42N LONG 096 54 17W)					
MAR 2004					
11...	1100	13	575	-3.0	0.0
06479770 BIG SIOUX RIVER NEAR BRUCE, SD (LAT 44 28 04N LONG 096 53 14W)					
OCT 2003					
03...	1235	7.2	837	10.0	16.0
NOV					
19...	1355	14	977	12.0	5.5
DEC					
31...	1125	6.5	1210	-8.0	0.0
MAR 2004					
11...	1415	50	557	-1.0	0.0
APR					
08...	1345	32	855	11.0	11.5
JUN					
09...	1010	53	834	15.0	15.0
AUG					
05...	1325	20	783	26.5	25.0
06479980 MEDARY CR NEAR BROOKINGS, SD (LAT 44 13 27N LONG 096 46 02W)					
MAY 2004					
24...	1000	34	860	9.0	6.0

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06480000 BIG SIOUX RIVER NEAR BROOKINGS, SD (LAT 44 10 48N LONG 096 44 55W)					
OCT 2003					
03...	1505	13	1110	17.0	12.0
NOV					
19...	1155	27	1040	12.0	5.5
DEC					
31...	1410	17	1270	-4.0	0.0
MAR 2004					
02...	1710	60	705	--	--
10...	0835	132	659	4.5	0.0
APR					
08...	1705	76	975	14.0	14.0
MAY					
24...	1200	188	948	7.0	10.0
JUN					
09...	1155	184	975	18.0	17.0
AUG					
05...	1530	56	945	22.5	26.5
06480650 FLANDREAU CR ABOVE FLANDREAU, SD (LAT 44 03 45N LONG 096 29 15W)					
JUN 2004					
01...	1605	187	571	16.0	14.0
06481000 BIG SIOUX R NEAR DELL RAPIDS, SD (LAT 43 47 25N LONG 096 44 42W)					
OCT 2003					
03...	0920	24	833	11.0	10.0
NOV					
18...	1655	39	871	7.0	5.0
DEC					
24...	1215	23	1180	-3.0	0.0
APR 2004					
08...	0840	122	845	2.0	10.0
MAY					
26...	1230	264	889	15.0	13.0
JUN					
01...	1305	1020	602	16.5	14.5
JUL					
29...	1335	173	867	27.0	24.0
06481480 SKUNK CR NR CHESTER, SD (LAT 43 50 53N LONG 096 50 10W)					
OCT 2003					
03...	1125	.42	946	13.0	10.0
NOV					
19...	1025	.44	938	10.0	3.5
DEC					
24...	1410	.36	1010	3.0	0.5
MAR 2004					
08...	1335	21	677	11.0	1.0
APR					
05...	1700	5.5	1210	17.0	18.0
MAY					
24...	1535	3.6	1200	7.0	10.0
30...	1825	18	1130	15.0	18.5
JUN					
02...	2000	28	1310	20.5	20.0
JUL					
13...	1140	75	828	25.0	24.0
29...	1135	8.9	1210	21.0	21.0
06481493 SKUNK CREEK NEAR HARTFORD, SD (LAT 43 38 09N LONG 096 54 00W)					
MAY 2004					
30...	1645	890	321	20.0	18.0
31...	1720	507	516	20.0	17.0
JUN					
01...	1250	293	685	18.0	14.0
02...	1055	167	961	23.5	16.5



## MISCELLANEOUS TEMPERATURE MEASUREMENT AND FIELD DETERMINATIONS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06481497 WILLOW CREEK NEAR CROOKS, SD (LAT 43 37 51N LONG 096 49 37W)					
MAY 2004					
24...	1735	8.4	878	8.0	11.0
30...	1445	601	227	23.0	18.0
31...	1535	142	330	16.5	18.0
JUN					
01...	1100	68	429	18.0	14.0
06481500 SKUNK CR AT SIOUX FALLS, SD (LAT 43 32 01N LONG 096 47 26W)					
OCT 2003					
30...	1155	8.0	1100	4.5	3.5
NOV					
13...	1715	8.2	1140	5.0	3.0
DEC					
22...	1450	7.3	1370	3.0	--
MAR 2004					
09...	1430	144	725	12.0	3.0
APR					
09...	0935	29	623	4.0	9.0
MAY					
26...	0720	80	1210	6.0	11.0
31...	0920	1820	425	16.0	16.0
JUN					
01...	0910	874	561	--	--
02...	1715	383	836	20.5	20.0
JUL					
13...	1730	126	1180	36.5	29.0
28...	1755	39	1170	24.5	24.0
06482020 BIG SIOUX R AT NORTH CLIFF AVE AT SIOUX FALLS, SD (LAT 43 34 01N LONG 096 42 39W)					
OCT 2003					
02...	1625	23	1710	17.0	15.0
NOV					
13...	1525	42	1420	7.0	6.0
DEC					
22...	1620	37	1660	3.0	0.5
MAR 2004					
09...	1700	475	745	10.0	3.5
APR					
08...	1710	160	1100	17.0	15.0
MAY					
17...	0940	221	662	14.5	14.5
26...	1510	--	--	15.5	14.0
27...	1735	--	--	27.0	--
30...	1215	5140	430	19.0	17.0
JUL					
28...	1555	219	1060	22.0	24.0
06482610 SPLIT ROCK CR AT CORSON, SD (LAT 43 36 59N LONG 096 33 54W)					
OCT 2003					
01...	1625	23	608	11.5	13.0
NOV					
13...	1405	34	677	6.0	2.0
DEC					
23...	1600	26	907	3.0	0.0
MAR 2004					
10...	1115	304	427	4.0	0.0
APR					
08...	1055	75	677	8.0	10.0
MAY					
26...	0950	181	740	15.0	12.0
JUN					
01...	0855	899	480	14.0	15.0
JUL					
29...	0820	69	803	20.0	21.0

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	
06482848 BEAVER CR AT CANTON, SD (LAT 43 17 12N LONG 096 35 46W)						
MAY 2004						
	25...	1010	318	898	12.0	11.0
	31...	1215	770	576	20.0	18.0
06485500 BIG SIOUX R AT AKRON, IA (LAT 42 50 14N LONG 096 33 41W)						
OCT 2003						
	02...	1130	259	814	10.0	10.0
NOV						
	14...	1005	297	1120	8.0	3.0
DEC						
	23...	1030	246	1280	-2.0	0.0
MAR 2004						
	04...	1650	6790	421	2.5	1.0
APR						
	06...	1345	1230	923	19.0	14.0
JUL						
	28...	0940	1110	843	22.0	22.0

## MISCELLANEOUS DISCHARGE MEASUREMENTS

The following miscellaneous discharge measurements are listed in downstream order.

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
451342096432000 S.FK. WHETSTONE R NR TWIN BROOKS, SD (LAT 45 13 42N LONG 096 43 20W)					
JUN 2004					
29...	1332	.92	836	30.5	20.3
451338096382600 S.FK. WHETSTONE R AT MILBANK, SD (LAT 45 13 38N LONG 096 38 26W)					
JUN 2004					
28...	1900	.76	946	28.0	25.5
451520096333800 S.FK. WHETSTONE R NR MILBANK, SD (LAT 45 15 20N LONG 096 33 38W)					
JUN 2004					
28...	1640	--	1680	30.0	23.3
450809096484000 N. FK. YELLOWBANK R NR STOCKHOLM, SD (LAT 45 08 02N LONG 096 49 00W)					
JUN 2004					
29...	1630	.55	895	29.0	25.5
450942096420900 N. FK. YELLOWBANK R NR TWIN BROOKS, SD (LAT 45 09 42N LONG 096 42 09W)					
JUN 2004					
29...	1803	--	--	28.0	26.0
451214096274000 N. FK. YELLOWBANK R ABV SD/MN STATE LINE (LAT 45 12 14N LONG 096 27 40W)					
JUN 2004					
30...	1150	1.6	959	28.0	22.0
454406100365400 OAK CREEK NR MAHTO, SD (LAT 45 44 06N LONG 100 36 54W)					
JUN 2004					
23...	1040	5.4	607	19.5	16.0
453324103394400 SOUTH FORK GRAND RIVER ABOVE BUFFALO, SD (LAT 45 33 24N LONG 103 39 44W)					
JUN 2004					
04...	1000	.86	1890	32.0	16.5
453256103225500 CLARKS FORK CREEK NR BUFFALO, SD (LAT 45 32 56N LONG 103 22 55W)					
JUN 2004					
03...	0945	1.1	2060	22.0	16.0
453707103203100 SOUTH GRAND RIVER NR BUFFALO, SD (LAT 45 37 07N LONG 103 20 31W)					
JUN 2004					
02...	1030	5.8	2150	33.0	15.5
06357500 GRAND R AT SHADEHILL, SD (LAT 45 45 23N LONG 102 11 44W)					
NOV 2003					
19...	1405	24	2140	18.0	6.0
453733100542600 HIGH BANK CREEK NR LITTLE EAGLE, SD (LAT 45 37 33N LONG 100 54 26W)					
JUN 2004					
22...	1230	.30	899	19.0	14.9

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
450801102503000 SOUTH FORK MOREAU RIVER BELOW ZEONA, SD (LAT 45 08 01N LONG 102 50 30W)					
JUN 2004					
01...	1545	12	2660	24.0	17.0
433608103303600 BEAVER CREEK 1/4 MI. SOUTH OF COREY RANCH, NR PRINGLE, SD (LAT 43 36 08N LONG 103 30 36W)					
OCT 2003					
14...	1330	.49	493	17.0	7.5
433444103295200 COLD SPRING CR at 0.1 MILE WEST OF PARK BOUNDARY ON HWY 385, WIND CAVE NATL. PARK, SD (LAT 43 34 44N LONG 103 29 52W)					
OCT 2003					
15...	1255	.12	582	20.0	7.0
433459103280800 BEAVER CREEK SITE C, WIND CAVE NATL. PARK, SD (LAT 43 34 59N LONG 103 28 08W)					
OCT 2003					
15...	1010	.56	491	6.0	3.0
433506103273500 BEAVER CREEK SITE D, WIND CAVE NATL. PARK, SD (LAT 43 35 06N LONG 103 27 35W)					
OCT 2003					
15...	0915	.43	490	4.0	2.5
433745103261900 HIGHLAND CR ABV MADISON OUTCROP NR PRINGLE, SD (LAT 43 37 45N LONG 103 26 19W)					
OCT 2003					
14...	0930	.90	280	6.0	7.5
433706103260400 HIGHLAND CREEK SITE B, WIND CAVE NATL. PARK, SD (LAT 43 37 06N LONG 103 26 04W)					
OCT 2003					
14...	1035	.34	281	17.0	5.5
433654103254800 HIGHLAND CREEK SITE C, WIND CAVE NATL. PARK, SD (LAT 43 36 54N LONG 103 25 48W)					
OCT 2003					
14...	1125	.35	279	12.0	9.0
433639103254000 HIGHLAND CREEK SITE D, WIND CAVE NATL. PARK, SD (LAT 43 36 39N LONG 103 25 40W)					
OCT 2003					
14...	1200	.19	287	19.0	6.5
06413720 RAPID CREEK AT WTP AT RAPID CITY, SD (LAT 44 04 33N LONG 103 15 21W)					
OCT 2003					
08...	1450	21	514	26.0	15.5
JAN 2004					
09...	0830	--	508	-5.0	2.0
15...	1225	--	494	17.0	5.0
21...	0930	--	491	1.0	3.5
APR					
02...	1340	--	483	12.0	13.5
MAY					
26...	1412	--	447	22.5	25.5
JUN					
28...	1150	23	463	27.0	17.0
29...	1305	36	411	27.0	19.5
AUG					
19...	1300	--	405	16.0	16.5

## MISCELLANEOUS DISCHARGE MEASUREMENTS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
06434500 INLET CANAL NEAR BELLE FOURCHE, SD (LAT 44 42 14N LONG 103 49 23W)					
JAN 2004					
13...	0907	--	1260	-4.0	0.0
APR					
13...	1305	146	1300	21.0	9.0
JUN					
23...	1110	70	1420	25.0	16.0
443559101274400 PLUM CREEK NR CHERRY CREEK, SD (LAT 44 35 59N LONG 101 27 44W)					
JUN 2004					
21...	1410	11	2250	15.0	20.0
433151101480400 BEAR IN THE LODGE CR SOUTH OF HWY 44 NR WANBLEE, SD (LAT 43 31 51N LONG 101 48 04W)					
JUN 2004					
15...	1525	6.8	503	24.0	22.1
433338101482100 BEAR IN THE LODGE CR BELOW WANBLEE, SD (LAT 43 33 38N LONG 101 48 21W)					
JUN 2004					
15...	1135	7.1	507	25.0	20.5
434027101502600 BEAR IN THE LODGE CR NR MOUTH NR INTERIOR, SD (LAT 43 40 27N LONG 101 50 26W)					
JUN 2004					
16...	1000	5.9	519	17.0	17.7
434049101464400 EAGLE NEST CR NR INTERIOR, SD (LAT 43 40 49N LONG 101 46 44W)					
JUN 2004					
14...	1415	.19	510	33.0	29.5
434126101280700 PASS CREEK NR KADOKA, SD (LAT 43 41 26N LONG 101 28 07W)					
JUN 2004					
07...	1500	1.8	584	30.0	27.5
432735101100300 BLACK PIPE CR AT HWY 63 NR NORRIS, SD (LAT 43 27 35N LONG 101 10 03W)					
JUN 2004					
08...	1230	1.4	434	18.0	17.4
433822101125500 BLACK PIPE CR NORTH OF HWY 44 NR NORRIS, SD (LAT 43 38 22N LONG 101 12 55W)					
JUN 2004					
09...	1015	.38	590	14.0	17.0
434633101134000 BLACK PIPE CR AT MOUTH NR BELVIDERE, SD (LAT 43 46 33N LONG 101 13 40W)					
JUN 2004					
09...	1410	.00	1340	17.0	18.7
430631101061300 LITTLE WHITE R NR SPRING CREEK, SD (LAT 43 06 31N LONG 101 06 13W)					
JUL 2004					
07...	1120	55	290	21.0	21.9
430610101044300 SPRING CREEK (NR SPRING CR) NEAR ST. FRANCIS, SD (LAT 43 06 10N LONG 101 04 43W)					
OCT 2003					
21...	0855	3.8	180	13.0	9.5
NOV					
18...	0825	3.8	187	1.0	6.0

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
430724101010200 SAWMILL CANYON NEAR SPRING CREEK, SD (LAT 43 07 24N LONG 101 01 02W)					
OCT 2003					
21...	0955	1.4	288	14.0	9.0
NOV					
18...	0915	1.7	308	4.0	5.0
430939101003500 LITTLE WHITE R, VALANDRA BRIDGE, NR SPRING CREEK, SD (LAT 43 09 39N LONG 101 00 35W)					
OCT 2003					
21...	1050	61	280	21.0	10.5
NOV					
18...	1010	92	284	6.0	4.0
431146100574900 OMAHA CREEK NEAR ROSEBUD, SD (LAT 43 11 46N LONG 100 57 49W)					
OCT 2003					
21...	1125	1.1	399	24.0	10.0
NOV					
18...	1045	1.2	399	10.0	5.0
431343100571700 SOUTH FORK IRONWOOD CREEK NEAR ROSEBUD, SD (LAT 43 13 43N LONG 100 57 17W)					
OCT 2003					
21...	1235	1.9	325	27.0	13.5
NOV					
18...	1130	2.0	319	12.0	5.0
06449300 LITTLE WHITE R ABV ROSEBUD, SD (LAT 43 15 47N LONG 100 55 02W)					
OCT 2003					
21...	1340	72	294	28.0	14.0
NOV					
18...	1220	102	294	15.0	5.5
431605100535600 LITTLE WHITE R AT GHOST HAWK PARK NR ROSEBUD, SD (LAT 43 15 54N LONG 100 54 02W)					
JUL 2004					
06...	1725	77	293	24.0	22.0
06449400 ROSEBUD CR AT ROSEBUD, SD (LAT 43 14 14N LONG 100 51 26W)					
OCT 2003					
21...	1445	9.5	342	28.0	13.5
NOV					
18...	1340	9.6	343	16.0	6.0
431600100533600 ROSEBUD CREEK AT LITTLE WHITE RIVER CONFLUENCE BELOW ROSEBUD, SD (LAT 43 16 00N LONG 100 53 36W)					
OCT 2003					
22...	0825	9.6	358	14.0	9.5
NOV					
19...	0815	9.6	361	11.0	4.5
431911100525200 SOLDIER CREEK NR ROSEBUD, SD (LAT 43 19 11N LONG 100 52 52W)					
OCT 2003					
22...	0935	1.2	387	17.0	9.5
NOV					
17...	1440	1.7	395	14.0	5.5

## MISCELLANEOUS DISCHARGE MEASUREMENTS

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
432136100520700 LITTLE WHITE R NEAR TODD/MELLETT COUNTY LINE, SD (LAT 43 21 36N LONG 100 52 07W)					
OCT 2003					
22...	1035	78	309	24.0	12.5
NOV					
19...	0955	109	305	14.0	4.5
432358100502600 CUT MEAT CR NR CONFLUENCE LITTLE WHITE RIVER BLW SOLDIER CR, SD (LAT 43 23 58N LONG 100 50 26W)					
OCT 2003					
22...	1100	.00	--	--	--
NOV					
19...	1015	.00	--	16.0	--
432851100455000 LITTLE WHITE R SOUTH OF HWY 44 NR WHITE RIVER, SD (LAT 43 28 51N LONG 100 45 48W)					
JUL 2004					
08...	1105	88	304	28.0	22.8
433240097211500 W. FK. VERMILLION R NR STANLEY CORNER, SD (LAT 43 32 40N LONG 097 21 15W)					
JUL 2004					
09...	0832	9.8	1500	20.5	19.6
06479167 LITTLE RUSH LAKE OUTFLOW NR WAUBAY, SD (LAT 45 19 18N LONG 097 19 37W)					
OCT 2003					
01...	1515	1.9	1310	15.0	6.0
MAR 2004					
09...	1105	3.2	941	5.0	.0
AUG					
09...	1330	2.0	--	--	--
445234097054800 BIG SIOUX R BLW WASTEWATER EFFLUENT NR WATERTOWN, SD (LAT 44 52 34N LONG 097 05 48W)					
JUN 2004					
15...	1420	16	996	26.0	19.5
442026096533600 BIG SIOUX RIVER NEAR VOLGA, SD (LAT 44 20 26N LONG 096 53 36W)					
OCT 2003					
21...	1005	9.1	877	16.0	11.0
JUN 2004					
16...	1020	127	810	15.0	20.0
441841096521400 BIG SIOUX RIVER BLW WASTEWATER WETLAND NR VOLGA, SD (LAT 44 18 41N LONG 096 52 14W)					
OCT 2003					
21...	1140	9.7	--	--	--
JUN 2004					
16...	1425	130	843	19.0	19.0
441421096491200 BIG SIOUX R ABV WASTEWATER EFFLUENT NR BROOKINGS, SD (LAT 44 14 21N LONG 096 49 12W)					
JUN 2004					
17...	0940	129	861	20.0	19.0
441316096483300 BIG SIOUX R BLW WASTEWATER EFFLUENT NR BROOKINGS, SD (LAT 44 13 16N LONG 096 48 33W)					
JUN 2004					
18...	1045	284	956	11.0	17.5

## WATER QUALITY DATA

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
441151096472200 BIG SIOUX RIVER ABV MEDARY CREEK AT MEDARY, SD (LAT 44 11 51N LONG 096 47 22W)					
JUN 2004					
17...	1510	256	921	27.0	21.0
440428096275400 FLANDREAU CREEK NR FLANDREAU, SD (LAT 44 04 28N LONG 096 27 54W)					
JUL 2004					
01...	0720	17	759	19.0	21.0
433843096450500 BIG SIOUX RIVER NEAR RENNER, SD (LAT 43 38 43N LONG 096 45 05W)					
MAY 2004					
18...	1100	98	911	24.0	20.0
31...	1605	1700	528	20.0	18.0
433408096432000 BIG SIOUX R DIVERSION AT NORTH DRIVE AT SIOUX FALLS, SD (LAT 43 34 08N LONG 096 43 20W)					
MAY 2004					
18...	1010	64	908	16.5	14.0
31...	1035	1990	515	22.0	17.0
433559096390700 BIG SIOUX R. DOWNSTREAM SIOUX FALLS WASTEWATER DISCHARGE, AT SIOUX FALLS, SD (LAT 43 35 59N LONG 096 39 07W)					
MAY 2004					
17...	0955	286	820	13.0	14.0
30...	1440	5260	501	23.5	17.5
433541096355800 BIG SIOUX RIVER AT BRANDON, SD (LAT 43 35 41N LONG 096 35 58W)					
MAY 2004					
17...	1550	274	877	17.5	16.0
31...	1110	6040	406	16.5	17.0