UPPER MISSISSIPPI RIVER BASIN

DAILY MEAN VALUES

05355250 MISSISSIPPI RIVER AT RED WING, MN

LOCATION.--Lat 44° 34'13", long 92° 32'02", in NE¼NE¼ sec. 30, T.113 N., R.14 W., Goodhue County, Hydrologic Unit 07040001, at bridge on U.S. Highway 63 in Red Wing, 6.3 mi downstream from Lock and Dam 3, and at mile 790.6 upstream from Ohio River.

DRAINAGE AREA.--46,800 mi², approximately.

PERIOD OF RECORD.--October 1996 to September 1997.

REMARKS.--Water-discharge computed on the basis of discharge for Mississippi River at Prescott, WI (station 05344500) combined with Cannon River at Welch (station 05355200) and adjusted for inflow.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY JUL	OCT AUG	NOV SEP	DEC	JAN	FEB	MAR	APR	MAY	JUN
1	9240	21100	23500	15900	13700	13400	64200	63400	28800
26000 2	48300 9160	25100 21600	25000	15100	12900	13700	70900	61200	28200
32200 3	47100 8990	23500 21800	24300	15500	14000	13800	79400	59400	27600
34700 4	45400 9270	22900 21700	22600	16000	14000	13400	89300	56600	26500
35200	43600	24300		10000	14000	13400	69300	56600	20500
5 35600	9330 40600	22000 22700	22000	16100	13700	13700	99000	54700	25900
6 36200	9420 37600	21900 21600	21900	16300	13300	14700	111000	51900	25800
7 36400	8650 34500	21600 19700	23400	15100	13700	15100	123000	49800	25800
8	9160	22400	23900	14400	14200	15200	136000	48900	24300
37400 9	31800 8780	18800 22400	22800	14300	13900	16900	147000	47200	23200
37600 10	29500 8480	18100 21900	21900	13500	13300	18200	155000	44700	22500
37000	27700	17500	21900	13300	13300	16200	133000	44700	22300
11	8780	22300	22100	13600	13900	18900	161000	43700	21400
36600	25700	17100							
12 36200	8980 24800	22000 16800	22300	13800	13400	20000	163000	42300	20600
13 36400	8650 23300	20700 16000	22900	12700	13100	22400	163000	41100	20100
14	8550	18400	23300	12200	12800	23900	159000	40600	19300

37200 15 37700	22300 7960 22400	15500 17300 15500	22500	12500	13300	25300	152000	39900	17800
16 38400	8330 24600	17400 15600	20400	12900	13500	26500	143000	38600	17300
17 39100	8180 24500	17400 17100	19000	13600	13200	26700	133000	37500	16700
18 39700	9460 23300	22700 17100	17700	15000	13100	26800	123000	36500	16400
19 39700	10200 22700	26600 17100	17400	13700	12800	27000	116000	35800	16000
20 37600	11200 28100	30100 17200	16800	14000	13300	27300	108000	34500	15400
21 37000	11200 30700	32700 16700	15400	13800	12900	28200	102000	33300	15200
22 35700	11300 31000	33700 16500	14600	13900	13600	29800	96200	31900	15200
23 37700	13200 29500	33500 16300	15200	13900	13600	32500	90000	30700	14500
24 38100	14300 28700	30200 15800	17000	14400	13600	36000	84900	30700	13900
25 43900	15600 28300	29100 15900	16500	14500	13300	38200	80500	29400	15100
26 50400	17100 27600	27200 15500	15900	14000	13400	38200	77000	28700	14500
27 51200	17800 26100	24100 14600	15000	14000	13300	39800	74100	28400	17000
28 50800	17600 24800	21800 14600	15600	13800	13600	43100	71500	29000	18400
29 50600	17900 23900	20900 15200	15900	14000		47600	69200	29300	20400
30 49700	18900 23400	22600 14300	16200	13900		52500	67000	29400	21400
31 48900	19100 25200		16400	13800		58300		29300	
TOTAL 1220900	354770 927000	709100 534600	609400	440200	376400	837100	3308200	1258400	605200
MEAN 39380	11440 29900	23640 17820	19660	14200	13440	27000	110300	40590	20170
MAX 51200	19100 48300	33700 25100	25000	16300	14200	58300	163000	63400	28800
MIN 26000	7960 22300	17300 14300	14600	12200	12800	13400	64200	28400	13900
AC-FT 2422000 CFSM	703700 1839000 367	1406000 1060000 758	1209000 630		746600	1660000 865	6562000		1200000
1260 IN.	958 422.99 1105.27	571 845.47	726.59	455 524.85	431 448.78	998.08	3530 3944.39	1300 1500.40	
1100.00	1100.27	557.11							

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

TTTT	OCT AUG	NOV SEP	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL MEAN 39380	11440 29900	23640 17820	19660	14200	13440	27000	110300	40590	20170
MAX 39380	11440 29900	23640 17820	19660	14200	13440	27000	110300	40590	20170
(WY) 1997	1997 1997	1997 1997	1997	1997	1997	1997	1997	1997	1997
MIN 39380	11440 29900	23640 17820	19660	14200	13440	27000	110300	40590	20170
(WY) 1997	1997 1997	1997 1997	1997	1997	1997	1997	1997	1997	1997
SUMMARY ANNUAL	STATIST TOTAL	'ICS		FOR 199	7 WATER	YEAR	WATER Y	EARS 199	6 - 1997
ANNUAL	MEAN			30630			30630		
HIGHEST									
	ANNUAL						30630		1997
LOWEST	ANNUAL M	IEAN		162000	7 10		30630	7 10	1997
LOWEST HIGHEST	ANNUAL M DAILY M	IEAN IEAN		163000	Apr 12		30630 163000	Apr 12	1997 1997
LOWEST HIGHEST LOWEST	ANNUAL M DAILY M DAILY ME	IEAN IEAN IAN	·M	7960	Oct 15		30630 163000 7960	Oct 15	1997 1997 1996
LOWEST HIGHEST LOWEST ANNUAL	ANNUAL M DAILY M DAILY ME SEVEN-DA	IEAN IEAN IAN IY MINIMU	Μ	7960 8490	Oct 15 Oct 11		30630 163000 7960 8490	Oct 15 Oct 11	1997 1997
LOWEST HIGHEST LOWEST ANNUAL ANNUAL	ANNUAL M DAILY ME DAILY ME SEVEN-DA RUNOFF (IEAN IEAN AN LY MINIMU AC-FT)	ſΜ	7960 8490 2218000	Oct 15 Oct 11		30630 163000 7960 8490 2219000	Oct 15 Oct 11	1997 1997 1996
LOWEST HIGHEST LOWEST ANNUAL	ANNUAL M DAILY ME DAILY ME SEVEN-DA RUNOFF (RUNOFF (IEAN IEAN IAN IY MINIMU	M	7960 8490	Oct 15 Oct 11 O		30630 163000 7960 8490	Oct 15 Oct 11	1997 1997 1996
LOWEST HIGHEST LOWEST ANNUAL ANNUAL ANNUAL ANNUAL	ANNUAL M DAILY ME DAILY ME SEVEN-DA RUNOFF (RUNOFF (EAN EAN AN Y MINIMU AC-FT) CFSM) INCHES)	M	7960 8490 2218000 982	Oct 15 Oct 11 O		30630 163000 7960 8490 2219000 982	Oct 15 Oct 11	1997 1997 1996
LOWEST HIGHEST LOWEST ANNUAL ANNUAL ANNUAL ANNUAL 10 PERC	ANNUAL M DAILY ME DAILY ME SEVEN-DA RUNOFF (RUNOFF (RUNOFF (EAN EAN AN Y MINIMU AC-FT) CFSM) INCHES)	M	7960 8490 2218000 982 13331.5	Oct 15 Oct 11 O		30630 163000 7960 8490 2219000 982 13340.3	Oct 15 Oct 11	1997 1997 1996

(National Water-Quality Assessment Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1996 to current year.

PERIOD OF DAILY RECORD .--

WATER TEMPERATURES.-- May 1996 to current year.

INSTRUMENTATION.-- Water-quality monitor since May 1996, provides continuous recordings. Sensor located in Minnesota channel at Red Wing.

REMARKS.--Records represent water temperature at sensor within 0.5 °C. Temperature at the sensor was compared with the average for the river by temperature cross section on Oct. 7, Nov. 14, May 12, June 2,16, July 7,14, Aug. 6, Sept. 5. Variation was within 0.5 °C. Monthly samples (composited) were

collected from both Wisconsin and Minnesota channels near U.S. Highway 63 bridges.

EXTREMES FOR PERIOD OF DAILY RECORD:

WATER TEMPERATURES.--Maximum, 27.0 °C, July 4, 5, 1996, July 16-18, 1997; minimum, 3.0 °C, Nov. 12,13, 1996.

EXTREMES FOR CURRENT YEAR:

WATER TEMPERATURES.-- Maximum, 27.0 °C, July 16-18; minimum recorded, 3.0 °C, Nov. 12,13.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY MAX	MAX MIN	MIN MEAN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
DECEMBE		CTOBER	JANUARY		OVEMBER					
	18.5	17.0	17.5	7.5	6.5	7.0				
2	18.0	17.0	17.5	6.5	5.5	6.0				
3	17.5 	16.5	17.0	6.5	6.0	6.0				
4	16.5 	16.0	16.0	6.5	6.0	6.5				
5		15.5	16.0	6.5	6.5	6.5				
	17.0	16.0	16.5	6.5	6.5	6.5				
7	16.5 	16.0	16.0	7.0	6.0	6.5				
8	16.0 	15.5	16.0	7.0	6.0	6.5				
9	16.0 	15.5	16.0	6.0	5.5	5.5				
10	15.5 	14.5	15.0	5.5	4.5	5.0				
		14.5	14.5	4.5	3.5	3.5				
12	15.0	14.5	15.0	3.5	3.0	3.0				
13	 15.5 	14.5	15.0	3.5	3.0	3.0				
14	15.5		15.5							

15	16.0 	15.0	15.5	 	 	 	
16	16.5	15.5	16.0	 	 	 	
17	 16.5	15.5	16.0	 	 	 	
18	 15.5 	13.5	14.0	 	 	 	
19	13.5	13.0	13.0	 	 	 	
20	13.0	12.5	12.5	 	 	 	
21	13.0	12.5	12.5	 	 	 	
22	12.5	12.0	12.5	 	 	 	
23	12.0	11.5	12.0	 	 	 	
24	11.5	10.5	11.0	 	 	 	
25	10.5	10.5	10.5	 	 	 	
26	12.0	10.5	11.0	 	 	 	
27	12.0	11.5	11.5	 	 	 	
28	 11.5	11.0	11.0	 	 	 	
29	11.0	10.5	11.0	 	 	 	
30	10.5	8.5	9.5	 	 	 	
31	8.5 	7.0	8.0	 	 	 	
MONTH	H 18.5	7.0	13.9	 	 	 	

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY MAX	MAX MIN	MIN MEAN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
		FEBRUARY			MARCH					
APRIL			MAY							
1										
-										
2										
-										

3			 	 	 	
4			 	 	 	
5			 	 	 	
6			 	 	 	
7			 	 	 	
8			 	 	 	
9			 	 	 	
10			 	 	 	
11			 	 	 	
12		 	 	 	 	
13 13.0	 12.5	 12.5	 	 	 	
14 12.5	12.0	12.5	 	 	 	
15			 	 	 	
12.0	11.5	11.5				
16 12.5	 11.5	 11.5	 	 	 	
17 13.5	 12.0	 12.5	 	 	 	
18 14.5	13.0	 14.0	 	 	 	
19			 	 	 	
14.0	14.0	14.0	 	 	 	
14.5	13.0	14.0				
21 16.0	14.0	 15.0	 	 	 	
22 16.5	 15.0	 15.5	 	 	 	
23 16.5	 15.0	 15.5	 	 	 	
24			 	 	 	
16.5 25	15.5 	16.0 	 	 	 	
16.5	15.5	16.0				
26 16.0	 15.0	 15.5	 	 	 	
27 16.5	15.0	15.5	 	 	 	
28			 	 	 	

MONTH			 	 	 	
18.0	16.0	17.0				
31			 	 	 	
16.5	14.5	15.5				
30			 	 	 	
15.5	15.0	15.0				
29			 	 	 	
16.5	15.5	15.5				

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY MAX	MAX MIN	MIN MEAN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
11111	1111	JUNE			JULY				
AUGUST			SEPTEMB	ER					
1	19.0	17.0	17.5	26.5	25.0	25.5	25.5	24.5	25.0
25.0	24.0	24.5				0.4 =		0= 0	
2 25.0	19.5 24.0	17.5 24.5	18.5	26.0	23.0	24.5	26.0	25.0	25.5
3	20.0	18.5	19.0	23.0	21.0	21.5	26.0	25.5	26.0
24.5	23.0	23.5	17.0	23.0	21.0	21.5	20.0	23.3	20.0
4	21.0	19.5	20.0	21.5	20.5	21.0	26.5	25.5	26.0
23.5	22.5	22.5							
5	21.5	20.0	21.0	22.0	21.0	21.5	26.0	25.5	25.5
23.0	22.0	22.5							
6	22.0	20.5	21.5	22.0	21.0	21.5	26.0	25.0	25.5
23.5	22.5	23.0							
7	22.0	21.0	21.5	21.5	20.5	21.0	26.5	25.0	25.5
23.5	22.5	23.0							
8	22.0	21.0	21.5	20.5	20.0	20.0	26.0	25.0	25.5
22.5	22.5	22.5							
9	23.0	21.0	22.0	21.0	19.5	20.5	25.5	24.0	25.0
22.5	22.0	22.5	00 5	01 5	00 5	01 0	05 0	0.4.0	0.4 5
10	23.5	22.0	22.5	21.5	20.5	21.0	25.0	24.0	24.5
22.0	21.5	22.0							
11	24.0	22.5	23.0	22.0	20.5	21.5	24.0	23.0	23.5
22.0	21.5	21.5							
12	24.0	23.0	23.5	23.0	21.5	22.5	24.0	23.0	23.5
22.0	21.5	21.5							
13	24.5	23.5	24.0	24.5	22.5	23.5	23.5	23.0	23.5
21.5	21.0	21.5	0.4.0	05 0	0.4.0	0.4	02 5	00 0	00 5
14 21.5	24.5 21.0	23.5 21.5	24.0	25.0	24.0	24.5	23.5	22.0	22.5
21.5 15	24.0	23.0	23.5	25.5	24.0	25.0	23.0	22.0	22.5
21.5	24.0	23.0	△ 3.3	∆0.0	44.U	∠J.U	43.∪	∠∠.U	44.5
21.5	21.5	21.5							
16	23.5	22.5	23.0	27.0	25.0	26.0	24.0	22.5	23.5

21.5 17 21.0 18 21.0 19 21.5 20 21.0	21.0 22.5 20.5 22.5 20.5 22.0 21.0 22.5 20.0	21.5 22.0 20.5 22.0 21.0 22.0 21.0 22.0 20.5	22.5 22.0 22.0 22.0	27.0 27.0 26.5 26.5	26.0 26.0 25.5 25.0	26.5 26.5 26.0 25.5	24.0 22.5 21.5 20.5	22.5 21.5 20.5 20.0	23.0 22.0 21.0 20.5	
21 20.0 22 19.5	24.0 19.5 24.5 19.0 25.0	22.5 19.5 23.5 19.0 24.5	23.0 24.0 24.5	26.5 25.5 24.5	25.5 24.0 23.5	26.0 24.5 24.0	21.5 22.0 22.0	20.0 20.5	20.5 21.0 21.5	
19.0 24 19.0 25	19.0 25.5 18.5 25.5	19.0 25.0 19.0 24.5	25.5	24.5	24.0	24.0	22.5	21.0	22.0	
26 19.5 27 19.5 28	25.5 19.0 26.0 19.0 26.0	25.0 19.0 25.0 19.0 24.5	25.0 25.5 25.5	25.5 25.5 26.0	24.5 25.0 25.5	25.5	23.5 24.0 24.5	22.0 22.5 23.0	22.5 23.5 24.0	
19.0 29 19.0 30 17.5	18.5 24.5 17.5 25.0 17.5	19.0 24.0 18.0 23.5 17.5	24.0		25.5 25.5 25.0	25.5	24.5 24.0 25.0	23.0 23.0 23.5	23.5 23.5 24.0	
 MONTH 25.0		17.0 21.0	22.7	27.0	19.5	23.9	26.5	20.0	23.5	

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

		DIS-		SPE-	PH	PH		BARO-	
OXYGEN,		CHARGE,	SPE-	CIFIC	WATER	WATER		METRIC	
DIS-		IN	CIFIC	CON-	WHOLE	WHOLE		PRES-	
SOLVED									
(PER-		CUBIC	CON-	DUCT-	FIELD	LAB	TEMPER-	SURE	OXYGEN,
CENT		FEET	DUCT-	ANCE	(STAND-	(STAND-	ATURE	(MM	DIS-
DATE SATUR-	TIME	PER	ANCE	LAB	ARD	ARD	WATER	OF	SOLVED
		SECOND	(US/CM)	(US/CM)	UNITS)	UNITS)	(DEG C)	HG)	(MG/L)
ATION)		(00060)	(00095)	(90095)	(00400)	(00403)	(00010)	(00025)	(00300)
(00301)									

OCT 07	1100	9300	436	445	8.6	8.2	16.5	750	10.4	108
NOV	1100	9300	430	445	0.0	0.4	10.5	750	10.4	100
14 DEC	1235	19800	412	433	8.1	7.9	2.5	766	12.9	94
03 JAN	1015	26000	458	481	7.8	7.8	0.5	751	9.9	70
02 FEB	1000	16300	457	470	7.6	7.8	1.5	737	11.7	86
03 MAR	1030	15100	456	474	7.5	7.8	0.5	755	11.1	78
12 APR	1100	21400	531	499	7.6	7.8	2.5	758	11.6	86
15	1300	164000	362	376	7.7	7.6	4.5	746	11.8	94
29 MAY	1225	74500	426	447	8.1	8.2	12.5	736	11.0	107
12 JUN	1200	45500	481	500	8.5	7.8	12.5	741	10.6	103
02	1322	30300	522	523	8.3	8.2	18.0	741	10.2	110
16 JUL	1150	18600	536	533	8.4	8.4	22.5		7.9	94
07	1315	39200	506	494	8.0	8.1	21.0	747	7.6	88
14	1230	40000	489	470	8.1	8.1	24.5	744	7.5	92
AUG 06	1215	40300	526	526	8.0	8.1	25.0	751	6.8	84
SEP 05	1050	24100	479	463	8.2	8.3	21.5	746	7.9	93
05	1050	24100	4/9	403	0.4	0.3	41.5	740	7.9	93
		ALKA-		BICAR-	NITRO-	NITRO-	NITRO-	NITRO-	NITRO-	
	HARD-	LINITY	ALKA-	BONATE	GEN,	GEN,	GEN,AM-	GEN,AM-		
	HARD- NESS	LINITY WAT DIS		BONATE WATER		GEN, NITRITE			GEN,	
PHOS-	NESS	WAT DIS	LINITY	WATER	AMMONIA	NITRITE	MONIA +	MONIA +	GEN, NO2+NO3	
PHOS-	NESS TOTAL	WAT DIS	LINITY	WATER DIS IT	AMMONIA DIS-	NITRITE DIS-	MONIA + ORGANIC	MONIA + ORGANIC	GEN, NO2+NO3 DIS-	
	NESS	WAT DIS	LINITY	WATER	AMMONIA	NITRITE	MONIA +	MONIA +	GEN, NO2+NO3	
PHORUS	NESS TOTAL (MG/L AS	WAT DIS TOT IT FIELD MG/L AS	LINITY LAB (MG/L AS	WATER DIS IT	AMMONIA DIS- SOLVED (MG/L	NITRITE DIS-	MONIA + ORGANIC	MONIA + ORGANIC TOTAL (MG/L	GEN, NO2+NO3 DIS-	
PHORUS TOTAL DATE	NESS TOTAL (MG/L	WAT DIS TOT IT FIELD	LINITY LAB (MG/L	WATER DIS IT FIELD	AMMONIA DIS- SOLVED	NITRITE DIS- SOLVED	MONIA + ORGANIC DIS.	MONIA + ORGANIC TOTAL	GEN, NO2+NO3 DIS- SOLVED	AS
PHORUS TOTAL DATE (MG/L	NESS TOTAL (MG/L AS CACO3)	WAT DIS TOT IT FIELD MG/L AS	LINITY LAB (MG/L AS CACO3)	WATER DIS IT FIELD MG/L AS HCO3	AMMONIA DIS- SOLVED (MG/L AS N)	NITRITE DIS- SOLVED (MG/L AS N)	MONIA + ORGANIC DIS. (MG/L AS N)	MONIA + ORGANIC TOTAL (MG/L AS N)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	AS
PHORUS TOTAL DATE (MG/L P)	NESS TOTAL (MG/L AS CACO3)	WAT DIS TOT IT FIELD MG/L AS CACO3	LINITY LAB (MG/L AS CACO3)	WATER DIS IT FIELD MG/L AS HCO3	AMMONIA DIS- SOLVED (MG/L AS N)	NITRITE DIS- SOLVED (MG/L AS N)	MONIA + ORGANIC DIS. (MG/L AS N)	MONIA + ORGANIC TOTAL (MG/L AS N)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	AS
PHORUS TOTAL DATE (MG/L P) (00665)	NESS TOTAL (MG/L AS CACO3) (00900)	WAT DIS TOT IT FIELD MG/L AS CACO3	LINITY LAB (MG/L AS CACO3) (90410)	WATER DIS IT FIELD MG/L AS HCO3 (00453)	AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRITE DIS- SOLVED (MG/L AS N) (00613)	MONIA + ORGANIC DIS. (MG/L AS N) (00623)	MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	AS
PHORUS TOTAL DATE (MG/L P) (00665) OCT 07	NESS TOTAL (MG/L AS CACO3)	WAT DIS TOT IT FIELD MG/L AS CACO3	LINITY LAB (MG/L AS CACO3)	WATER DIS IT FIELD MG/L AS HCO3	AMMONIA DIS- SOLVED (MG/L AS N)	NITRITE DIS- SOLVED (MG/L AS N)	MONIA + ORGANIC DIS. (MG/L AS N)	MONIA + ORGANIC TOTAL (MG/L AS N)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	AS
PHORUS TOTAL DATE (MG/L P) (00665) OCT 07 0.200	NESS TOTAL (MG/L AS CACO3) (00900)	WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	LINITY LAB (MG/L AS CACO3) (90410)	WATER DIS IT FIELD MG/L AS HCO3 (00453)	AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRITE DIS- SOLVED (MG/L AS N) (00613)	MONIA + ORGANIC DIS. (MG/L AS N) (00623)	MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	AS
PHORUS TOTAL DATE (MG/L P) (00665) OCT 07 0.200 NOV	NESS TOTAL (MG/L AS CACO3) (00900)	WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	LINITY LAB (MG/L AS CACO3) (90410)	WATER DIS IT FIELD MG/L AS HCO3 (00453)	AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRITE DIS- SOLVED (MG/L AS N) (00613)	MONIA + ORGANIC DIS. (MG/L AS N) (00623)	MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	AS
PHORUS TOTAL DATE (MG/L P) (00665) OCT 07 0.200 NOV 14	NESS TOTAL (MG/L AS CACO3) (00900)	WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	LINITY LAB (MG/L AS CACO3) (90410)	WATER DIS IT FIELD MG/L AS HCO3 (00453)	AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRITE DIS- SOLVED (MG/L AS N) (00613)	MONIA + ORGANIC DIS. (MG/L AS N) (00623)	MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	AS
PHORUS TOTAL DATE (MG/L P) (00665) OCT 07 0.200 NOV	NESS TOTAL (MG/L AS CACO3) (00900)	WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	LINITY LAB (MG/L AS CACO3) (90410)	WATER DIS IT FIELD MG/L AS HCO3 (00453)	AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRITE DIS- SOLVED (MG/L AS N) (00613)	MONIA + ORGANIC DIS. (MG/L AS N) (00623)	MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	AS
PHORUS TOTAL DATE (MG/L P) (00665) OCT 07 0.200 NOV 14 0.100 DEC 03	NESS TOTAL (MG/L AS CACO3) (00900)	WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	LINITY LAB (MG/L AS CACO3) (90410)	WATER DIS IT FIELD MG/L AS HCO3 (00453)	AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRITE DIS- SOLVED (MG/L AS N) (00613)	MONIA + ORGANIC DIS. (MG/L AS N) (00623)	MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	AS
PHORUS TOTAL DATE (MG/L P) (00665) OCT 07 0.200 NOV 14 0.100 DEC 03 0.100	NESS TOTAL (MG/L AS CACO3) (00900)	WAT DIS TOT IT FIELD MG/L AS CACO3 (39086) 155	LINITY LAB (MG/L AS CACO3) (90410)	WATER DIS IT FIELD MG/L AS HCO3 (00453) 182 173	AMMONIA DIS- SOLVED (MG/L AS N) (00608) 0.020	NITRITE DIS- SOLVED (MG/L AS N) (00613)	MONIA + ORGANIC DIS. (MG/L AS N) (00623)	MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	AS
PHORUS TOTAL DATE (MG/L P) (00665) OCT 07 0.200 NOV 14 0.100 DEC 03	NESS TOTAL (MG/L AS CACO3) (00900)	WAT DIS TOT IT FIELD MG/L AS CACO3 (39086) 155	LINITY LAB (MG/L AS CACO3) (90410)	WATER DIS IT FIELD MG/L AS HCO3 (00453) 182 173	AMMONIA DIS- SOLVED (MG/L AS N) (00608) 0.020	NITRITE DIS- SOLVED (MG/L AS N) (00613)	MONIA + ORGANIC DIS. (MG/L AS N) (00623)	MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	AS

0.100 FEB 03	210	190	178	232	0.300	0.070	0.80	0.80	1.70	
0.110 MAR 12	210	174	182	212	0.290	0.080	0.70	0.90	2.20	
0.100 APR 15	180	113	114	138	0.240	0.040	0.70	1.0	2.00	
0.160 29 0.140	210	134	144	159	<0.015	0.022	0.62	1.1	1.63	
MAY 12 0.134	220	149	155	179	<0.015	0.013	0.69	1.3	0.798	
JUN 02 0.105	240	174	185	212	<0.015	0.026	0.56	1.2	3.12	
16 0.114 JUL	250	176	187	207	<0.015	0.029	0.37	1.1	1.60	
07 0.225	200	164	172	200	<0.015	0.050	0.55	1.0	4.27	
14 0.233	240	160	168	195	<0.015	0.029	0.61	0.81	2.61	
AUG 06 0.227	250	172	192	210	0.020	0.032	0.60	1.2	2.21	
SEP 05 0.186	220	183	186	223	0.015	0.021	0.51	1.0	1.33	
		PHOS-		CARBON,						
CHLO-	PHOS-	PHORUS				MAGNE-		SODIUM	POTAS-	
RIDE,	PHORUS					SIUM,			SIUM,	
DIS-		DIS- SOLVED	DIS-	PENDED	DIS- SOLVED	DIS-	DIS- SOLVED	SORP-	DIS-	
SOLVED DATE	SOLVED	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	RATIO	(MG/L	
(MG/L	AS P)	AS P)	AS C)	AS C)	AS CA)	AS MG)	AS NA)		AS K)	AS
CL) (00940)	(00666)	(00671)	(00681)	(00689)	(00915)	(00925)	(00930)	(00931)	(00935)	
OCT										
07 NOV	0.100	0.090	6.6	3.0	42	18	18	0.6	2.6	24
14 DEC	0.060	0.060	7.6	0.70	45	18	12	0.4	2.5	16
03 JAN	0.070	0.070	8.1	0.70	49	18	18	0.6	2.8	28

02 FEB	0.090	0.080	8.0	0.40	49	19	13	0.4	2.5	19
03 MAR	0.080	0.090	6.4	0.30	52	19	17	0.5	2.4	22
12 APR	0.080	0.100	6.2	0.60	53	19	17	0.5	2.6	26
15 29 MAY	0.080 0.047	0.080 0.042	7.8 8.4	2.0	45 52	16 20	6.9 9.2	0.2	3.7 3.6	9.2 11
12 JUN	<0.010	<0.010	7.9	2.9	52	23	12	0.3	3.2	14
02 16 JUL	<0.010 0.018	0.016 0.016	6.8 8.1	1.9 1.7	58 56	23 26	12 16	0.3	2.7	16 19
07 14 AUG	0.092 0.068	0.093 0.078	7.0 9.3	2.3	51 64	18 20	9.6 10	0.3	2.4	16 15
06 SEP	0.102	0.113	9.1	1.1	61	23	11	0.3	3.4	16
05	0.070	0.074	7.2	1.5	54	21	12	0.3	2.8	18

DATE	,	DIS- SOLVED (MG/L AS F)	SIO2)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	RESIDUE AT 180 DEG. C DIS- SOLVED	CONSTI- TUENTS, DIS- SOLVED (MG/L)	MENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT									
07	34	0.20	9.3	<3.0	2.0	266	245	48	77
NOV 14	43	0.20	11	49	29	260	239	9	99
DEC	13	0.20		15	20	200	233		
03	36	0.20	13	85	33	276	270	11	88
JAN 02	37	0.20	14	100	44	285	261	44	88
FEB									
03	33	0.20	15	74	62	289	283	6	81
MAR 12	34	0.20	15	44	56	298	282	12	85
APR									
15	53	0.17	13	86	36	236	224	35	93
29	67	0.18	11	85	8.9	289	263	44	93
MAY 12	77	0.17	5.1	52	7.8	318	279	81	97
JUN									
02	61	0.25	7.4	14	3.6	335	299	36	93
16 JUL	63	0.22	6.2	3.8	1.6	333	302	37	99

07	50	0.29	14	<3.0	1.5	346	279	90	99
14	52	0.23	16	11	1.7	323	288	78	99
AUG		0 05	1.0	1.0	0 0	250	200	60	0.0
06	55	0.35	19	12	2.8	352	302	62	99
SEP 05	36	0.22	1 5	5.9	-1 0	303	274	45	100
05	30	0.22	10	5.9	<1.0	303	2/4	45	100