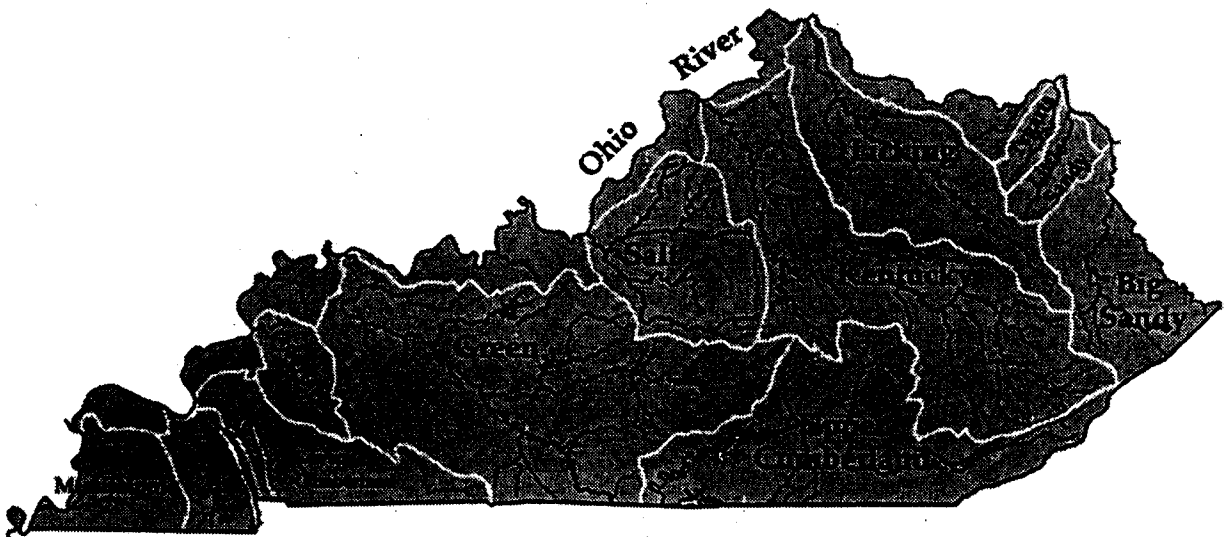


ANNUAL AMBIENT WATER QUALITY REPORT WATER YEAR 1993



**NATURAL RESOURCES and
ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT for ENVIRONMENTAL PROTECTION
DIVISION of WATER
January 1995**

PREFACE

This the first in a series of annual reports to document water quality data gathered by the Kentucky Division of Water's (DOW) fixed-station ambient monitoring network. These data provide information used by the DOW to establish background water quality conditions, detect trends in water quality, and detect excursions from state water quality standards.

This report is the culmination of a concerted effort by field and central office personnel of the DOW who collected and organized the data, and who typed, edited, and assembled the report.

The data were collected and processed by the following personnel:

Gary Morgan, Paducah District Office

Don Hayes, Madisonville District Office

John Martin

Peyton Adams

Allen Kidd

Bob Adams, Bowling Green District Office

Jim Woody, Columbia District Office

Todd Giles, Florence District Office

Bob Wells, Morehead District Office

Joan Garrison, London District Office

Darvin Messer, Hazard District Office

Giles Miller, Water Quality Branch, Standards & Specifications

Cliff Schneider

Jeff Grubbs

Karen Smathers

The data were analyzed by the Division of Environmental Services, William Davis, Director.

Fecal coliform samples, collected by Water Quality Branch personnel, were analyzed by Gary Beck, Microbiologist, Ecological Support Section.

WATER YEAR 1993 EVALUATION

This report presents water quality information about rivers and streams in Kentucky during water year 1993 (WY93) (October 1992 - September 93) monitored by the Kentucky Division of Water (DOW).

Data are collected through the DOW's ambient monitoring program. Sampling sites are located on major rivers (excluding the Ohio River) in the Commonwealth and minor tributaries (Table 1 and Figure 1).

The ambient monitoring network consists of 44 stations. Samples are collected monthly by DOW personnel for certain physical, chemical and biological variables. Analyses of chemical samples are performed by the Division of Environmental Services. Fecal coliform analyses are performed by personnel in the Division of Water Regional Offices and Ecological Support Section of the Water Quality Branch.

The DOW utilizes a single midchannel grab sampling approach. Midchannel grab samples have not been found to consistently differ from samples obtained by cross sectionally integrated sampling. However, concentrations of suspended sediment and the total forms of some sediment-associated constituents, such as phosphorus, iron, and manganese, have been found to significantly differ between sampling approaches, particularly under high flow conditions ("A comparison of surface-grab and cross sectionally integrated stream-water-quality sampling methods". Martin, G. R. et al. 1992. Water Environment Research 64:7).

Criteria used in water quality evaluation

Kentucky Division of Water selected criteria for variables monitored in this water quality evaluation are presented in Table 2.

The DOW has adopted dual criteria for several metals to protect against chronic (long term) and acute (short term) toxicity to aquatic life. Based on results of tests of toxicity to aquatic organisms, the criteria for cadmium, copper, lead, and zinc vary with the hardness of the ambient water. Stream criteria for chromium place limits on the hexavalent form while ambient samples are analyzed for total chromium.

The DOW has adopted fecal coliform criteria for primary and secondary contact recreation. Primary contact recreation waters

Table 1
Fixed-Station Monitoring Network

Map No.	Station Name	RMI	Road Location
1	Tug Fork at Kermit	35.1	KY 40
2	Levisa Fork near Louisa	29.6	KY 644
3	Levisa Fork near Pikeville	114.6	KY 1426
4	Little Sandy River near Argillite	13.2	KY 1
5	Tygart's Creek near Load	28.1	KY 7
6	Kinniconick Creek near Tannery	10.4	KY 1149
7	Licking River at Claysville	78.2	US 62
8	N. Fork Licking River at Milford	6.9	KY 19
9	S. Fork Licking River at Morgan	11.7	KY 1054
10	Licking River at West Liberty	226.4	US 460
11	Kentucky River at Frankfort	66.4	St. Clair St. Bridge
12	Kentucky River at Camp Nelson	135.1	Old US 27
13	Eagle Creek at Glencoe	21.5	US 127
14	South Elkhorn Creek near Midway	25.3	Moores Mill Rd. Bridge
15	Dix River near Danville	34.6	KY 52
16	Red River at Clay City	21.6	KY 11/15
17	Kentucky River at confluence with Red River	191.2	-
18	N. Fork Kentucky River at Jackson	304.5	Old KY 30
19	M. Fork Kentucky River at Tallega	8.3	KY 708
20	S. Fork Kentucky River at Booneville	12.1	KY 28
21	Salt River at Shepherdsville	22.9	KY 61
22	Salt River at Glensboro	82.5	KY 53
23	Rolling Fork near Lebanon Junction	12.3	KY 434
24	Beech Fork near Maud	48.1	KY 55
25	Pond Creek near Louisville	15.5	Manslick Rd. Bridge
26	Green River near Island	74.4	KY 85
27	Pond River near Sacramento	12.4	KY 85
28	Rough River near Dundee	62.5	Barrets Ford Bridge
29	Mud River near Gus	17.4	KY 949
30	Barren River at Bowling Green	37.5	College St. Bridge
31	Green River at Munfordville	225.9	US 31W
32	Nolin River at White Mills	80.9	White Mills Bridge
33	Bacon Creek near Priceville	7.2	C. Avery Rd. Bridge
34	Tradewater River near Sullivan	15.1	US 60/641
35	Little River near Cadiz	24.4	KY 272
36	Cumberland River at Turkey Neck Bend	393.7	KY 214 Ferry Crossing
37	S. Fork Cumberland River at Blue Heron	44.7	Old Rail Bridge
38	Rockcastle River at Billows	24.4	Old KY 80
39	Horse Lick Creek near Lamero	7.5	Daugherty Rd. Ford
40	Cumberland River at Cumberland Falls	562.3	KY 90
41	Cumberland River at Pineville	654.4	Pine St. Bridge
42	Clarks Piver at Almo	53.5	Almo-Shiloh Rd. Bridge
43	Mayfield Creek near Magee Springs	10.8	KY 121
44	Bayou de Chien near Clinton	15.1	US 51

Figure 1

Fixed-Station Monitoring Network

Stream Station Locations

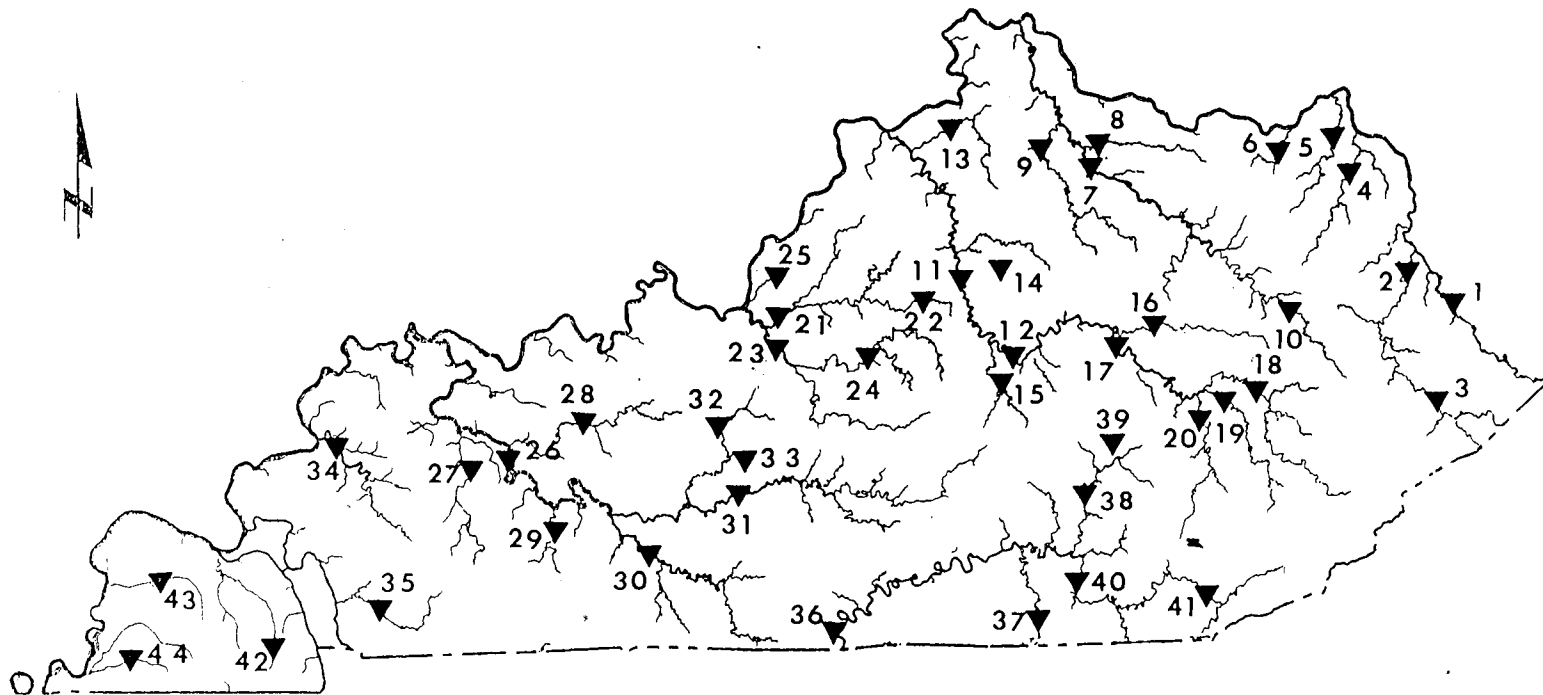


Table 2

**Kentucky Surface Water Selected Criteria
(from 401 KAR 5:031)**

<u>Variable</u>	<u>Criteria</u>
In-stream temperature	> 30 C
Dissolved oxygen	< 4.0 mg/l
pH	< 6 or > 9 SU
Un-ionized ammonia	> .05 mg/l

Variables	Chronic Criteria Concentration (ug/L)	Acute Criteria Concentration (ug/L)
Cadmium	e (.7852[In Hard.]-3.490)	e (1.128[In Hard.]-3.828)
Copper	e (.8545[In Hard.]-1.465)	e (.9422[In Hard.]-1.464)
Lead	e (1.272[In Hard.]-4.705)	e (1.273[In Hard.]-1.460)
Zinc	e (.8473[In Hard.]+.7614)	e (.8473[In Hard.]+.8604)
Chromium (hexavalent)	11	16
Mercury	.012	2.4

are waters suitable for full body contact recreation during the recreation season of May 1 through October 31. Fecal coliform bacteria are not to exceed 400 colonies per 100 ml in twenty (20) percent or more of all samples taken during a month in the recreation season.

Secondary contact recreation waters are suitable for partial body contact recreation, with minimal threat to public health due to water quality. Criteria apply to waters classified for secondary contact recreation the entire year. Fecal coliform bacteria are not to exceed 2000 colonies per 100 ml in twenty (20) percent or more of all samples taken during a month.

Results of evaluation

Analytical results of monthly samples collected during water year (WY) 1993 (October 1992 - September 1993) are listed in Appendix A.

Tables 3 and 4 present the frequency of excursions for the water quality variables outside DOW standards. Variables have been grouped for presentation purposes. A field variable group includes temperature, dissolved oxygen, pH, and un-ionized ammonia. Metals (cadmium, chromium, copper, lead, mercury, and zinc) form a second group. Fecal coliforms are addressed as a third group.

Warm water aquatic life criteria for dissolved oxygen and stream temperature were exceeded on only a few occasions. Dissolved oxygen was reported below 4.0 mg/l once each in Pond Creek, Beech Fork, and the Tradewater River. Temperatures above 30 C were reported once each in the Green River near Island and Clarks River.

Total recoverable metal results from the ambient network indicate that the DOW's aquatic life criterion for lead was exceeded on 29 occasions. Copper exceeded the acute criterion in four samples, with three chronic excursions. Three of the acute copper excursions occurred on the same day in Little Sandy River, Tygarts Creek, and Kinniconick Creek. Sample contamination is suggested. Chromium exceeded the chronic criterion four times, with one acute excursion. Mercury exceeded the chronic criterion once.

The fecal coliform stream criterion to protect primary contact recreation was exceeded 48 times during the WY93 recreation season (May - October). The secondary contact recreation criterion was exceeded 26 times during the water year.

Table 3

Frequency of Values Exceeding KY DOW Stream Criteria WY93 Field and Fecal Coliform Group Results						
Station	TEMP	D.O.	pH	NH3-N	PC	SC
Jackson Purchase Region						
Bayou de Chein (MP 15.1)	0	0	0	0	0	0
Clarks River (MP 53.5)	1	0	0	0	0	0
Mayfield Creek (MP 10.8)	0	0	0	0	0	0
Cumberland River Basin						
Cumberland River (MP 393.7)	0	0	0	0	0	0
Cumberland River (MP 562.3)	0	0	0	0	0	0
Cumberland River (MP 654.4)	0	0	0	0	0	0
SF Cumberland River (MP 44.7)	0	0	0	0	0	0
Rockcastle River (MP 24.4)	0	0	0	0	0	0
Horse Lick Creek (MP 7.5)	0	0	0	0	1	0
Little River (MP 24.4)	0	0	0	0	0	0
Tradewater River Basin						
Tradewater River (MP 15.1)	0	1	0	0	0	0
Green River Basin						
Green River (MP 225.9)	0	0	0	0	2	1
Nolin River (MP 80.9)	0	0	0	0	1	0
Bacon Creek (MP 7.2)	0	0	0	0	0	0
Barren River (MP 37.5)	0	0	0	0	0	0
Mud River (MP 17.4)	0	0	0	0	0	0
Green River (MP 74.4)	1	0	0	0	0	0
Rough River (MP 62.5)	0	0	0	0	0	0
Pond River (MP 12.4)	0	0	0	0	0	0

Table 3 (Continued)

Frequency of Values Exceeding KY DOW Stream Criteria WY93 Field and Fecal Coliform Group Results						
Station	TEMP	D.O.	pH	NH3-N	PC	SC
Salt River Basin						
Salt River (MP 82.5)	0	0	0	0	1	1
Salt River (MP 22.9)	0	0	0	0	3	2
Pond Creek (MP 15.5)	0	1	0	0	3	4
Beech Fork (MP 48.1)	0	1	0	0	3	1
Rolling Fork (MP 12.3)	0	0	0	0	3	4
Kentucky River Basin						
NF Kentucky River (MP 304.5)	0	0	0	0	2	0
MF Kentucky River (MP 8.3)	0	0	0	0	0	0
SF Kentucky River (MP 12.1)	0	0	0	0	1	1
Kentucky River (MP 191.2)	0	0	0	0	1	0
Red River (MP 21.6)	0	0	0	0	1	0
Kentucky River (MP 135.1)	0	0	0	0	1	1
Dix River (MP 34.6)	0	0	0	0	2	1
Kentucky River (MP 66.4)	0	0	0	0	0	0
So. Elkhorn Creek (MP 25.3)	0	0	0	0	3	1
Eagle Creek (MP 21.5)	0	0	0	0	1	0
Licking River Basin						
Licking River (MP 226.4)	0	0	0	0	2	1
Licking River (MP 78.2)	0	0	0	0	1	1
NF Licking River (MP 6.9)	0	0	0	0	2	2
SF Licking River (MP 11.7)	0	0	0	0	1	0

Table 3 (Continued)

Frequency of Values Exceeding KY DOW Stream Criteria WY93 Field and Fecal Coliform Group Results						
Station	TEMP	D.O.	pH	NH3-N	PC	SC
Teays River Region						
Tug Fork (MP 35.1)	0	0	0	0	3	3
Levisa Fork (MP 114.6)	0	0	0	0	4	1
Levisa Fork (MP 29.6)	0	0	0	0	4	1
Little Sandy River (MP 13.2)	0	0	0	0	1	0
Tygarts Creek (MP 28.1)	0	0	0	0	0	0
Kinniconick Creek (MP 10.4)	0	0	0	0	1	0

Table 4

**Frequency of Values Exceeding KY DOW Stream Criteria
WY93 Metals Group Results**

Station	Cd	Cr	Cu	Hg	Pb	Zn
Jackson Purchase Region						
Bayou de Chein (MP 15.1)	0	0	0	0	1(CH)	0
Clarks River (MP 53.5)	0	0	0	0	1(CH)	0
Mayfield Creek (MP 10.8)	0	0	1(CH)	0	1(CH)	0
Cumberland River Basin						
Cumberland River (MP 393.7)	0	0	0	0	0	0
Cumberland River (MP 562.3)	0	0	0	0	1(CH)	0
Cumberland River (MP 654.4)	0	0	0	0	0	0
SF Cumberland River (MP 44.7)	0	0	0	0	1(CH)	0
Rockcastle River (MP 24.4)	0	0	1(AC)	0	3(CH)	0
Horse Lick Creek (MP 7.5)	0	0	0	0	2(CH)	0
Little River (MP 24.4)	0	0	0	0	0	0
Tradewater River Basin						
Tradewater River (MP 15.1)	0	0	0	0	0	0
Green River Basin						
Green River (MP 225.9)	0	0	0	0	0	0
Nolin River (MP 80.9)	0	0	0	0	0	0
Bacon Creek (MP 7.2)	0	0	0	0	0	0
Barren River (MP 37.5)	0	0	0	0	1(CH)	0
Mud River (MP 17.4)	0	0	0	0	1(CH)	0
Green River (MP 74.4)	0	0	0	0	0	0
Rough River (MP 62.5)	0	0	0	0	1(CH)	0
Pond River (MP 12.4)	0	0	0	0	0	0

Table 4 (Continued)

Frequency of Values Exceeding KY DOW Stream Criteria WY93 Metals Group Results						
Station	Cd	Cr	Cu	Hg	Pb	Zn
Salt River Basin						
Salt River (MP 82.5)	0	0	0	1(CH)	0	0
Salt River (MP 22.9)	0	1(CH)	0	0	2(CH)	0
Pond Creek (MP 15.5)	0	1(AC) 1(CH)	1(CH)	0	3(CH)	0
Beech Fork (MP 48.1)	0	0	0	0	0	0
Rolling Fork (MP 12.3)	0	0	0	0	0	0
Kentucky River Basin						
NF Kentucky River (MP 304.5)	0	0	0	0	0	0
MF Kentucky River (MP 8.3)	0	0	0	0	1(CH)	0
SF Kentucky River (MP 12.1)	0	0	0	0	0	0
Kentucky River (MP 191.2)	0	0	0	0	1(CH)	0
Red River (MP 21.6)	0	0	0	0	1(CH)	0
Kentucky River (MP 135.1)	0	0	0	0	1(CH)	1(AC)
Dix River (MP 34.6)	0	0	0	0	0	0
Kentucky River (MP 66.4)	0	0	0	0	0	0
So. Elkhorn Creek (MP 25.3)	0	0	0	0	0	0
Eagle Creek (MP 21.5)	0	1(CH)	0	0	1(CH)	0
Licking River Basin						
Licking River (MP 226.4)	0	0	0	0	1(CH)	0
Licking River (MP 78.2)	0	0	0	0	1(CH)	0
NF Licking River (MP 6.9)	0	0	0	0	0	0
SF Licking River (MP 11.7)	0	0	0	0	0	0

Table 4 (Continued)

Frequency of Values Exceeding KY DOW Stream Criteria WY93 Metals Group Results						
Station	Cd	Cr	Cu	Hg	Pb	Zn
Teays River Region						
Tug Fork (MP 35.1)	0	1(CH)	1(CH)	0	1(CH)	0
Levisa Fork (MP 114.6)	0	0	0	0	0	0
Levisa Fork (MP 29.6)	0	0	0	0	1(CH)	0
Little Sandy River (MP 13.2)	0	0	1(AC)	0	0	0
Tygarts Creek (MP 28.1)	0	0	1(AC)	0	0	0
Kinniconick Creek (MP 10.4)	0	0	1(AC)	0	2(CH)	0

APPENDIX A

JACKSON PURCHASE REGION

JACKSON PURCHASE REGION
BAYOU DE CHEIN NEAR CLINTON

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI037 921012	3.2	4.3	4	84 2K		20 1K		1	1	1000
PRI037 921111	3.1	5.2	8	76 2K		25 1K		1K	2	1280
PRI037 921215	4.3	5.1	4	82 1K		25 1K		3	1K	1070
PRI037 930114	7.6	19	9	449 2K		37 1K		8	1K	1090
PRI037 930209	4.7	8.79	2	248	4	21 1K		5	2	786
PRI037 930309	6.1	33.5	18	413	4	35 1K		3	1	965
PRI037 930412	4.6	8.5	34	1090 2K		31 1K		1	4	1820
PRI037 930511	4.9	12.2	53	785	3	52 1K		1	2	2430
PRI037 930616	4.1	4.69	10	296 2K		30 1K		1	2	1480
PRI037 930712	3.1	6.99	2	120	2	18 1K		1K	1	1380
PRI037 930810	2.8	13.2	7	193 2K		20 1K		1K	1	1300
PRI037 930914	2.1 2K		5	127 2K		14 1K		1K	1	804

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921012	2K	277 .1K	10	10	22.8 .05K		0.127	0.109	60
921111	2K	305 .1K	4	4	28.2 .05K		0.027	0.081	400L
921215	1K	276 .1K	6	6	28 .05K		0.113	0.026	440L
930114	2K	183 .1K	3	3	31.9 0.547		0.896	0.088	260
930209	2K	230 .1K	2K	2	22.5 .05K		0.349	0.041	400L
930309	2K	109 .1K		2	29.3 .05K		1.24	0.078	170
930412	2K	145 .1K		6	28.5 0.058		1.07	0.133	280
930511		9.5 .1K		5	35.5 0.057		0.462	0.086	190
930616	2K	430 .1K	1K		26.6 .05K		0.39	0.069	160
930712	2K	330 .1K	1K		23.2 .05K		0.091	0.103	100
930810	2K	384 .1K		3	22.3 .05K		0.042	0.044	53
930914	2K	217 .1K	1K		18.1 .05K		0.064	0.038	48

JACKSON PURCHASE REGION
MAYFIELD CREEK NEAR MAGEE SPRINGS

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI042 921012	9.2	9.3	8	447 2K		33 1K		1	2	1840
PRI042 921111	12.4	11.9	14	382	3	39 1K		3	2	2390
PRI042 921215	11.1	10.8 1K		176 1K		31 1K		4	1	939
PRI042 930114	8.5	26.8	9	918 2K		30 1K		4 1K		1640
PRI042 930209	9.9	14.3	5	374	4	23 1K		4	2	931
PRI042 930309	6.2	35.6	5	1060 2K		26 1K		3	2	1260
PRI042 930412	2.6	16	19	2480	3	25 1K		1	4	2820
PRI042 930511	7.6	18.4	25	820	4	54 1K		1	2	2130
PRI042 930616	10.2	9.05	71	1640	3	48 1K		1	8	3140
PRI042 930712	9.4	6.99	44	1200	5	39 1K		1K	1K	2860
PRI042 930810	10.6	17.8	60	1650 2K		35 1K		2	2	2840
PRI042 930914	10.4	11.1	52	1410	3	29 1K		1K	3	2230

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 -N	NO2+NO3 -N	TP	FECAL
YMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921012	2K	493 .1K		6	30.6 .05K		0.265	0.196	50
921111	2K	335 .1K		10	36.2 .05K		0.18	0.184	70
921215	1K	140 .1K		2	37 .05K		0.364	0.064	42
930114		63 .1K		4	33.5 .05K		0.947	0.114	33
930209	2K	158 .1K	2K	3	31.5 .05K		0.739	0.062	33K
930309	2K	78 .1K		9	30.7 .05K		0.389	0.108	33K
930412	2K	39 .1K		5	24.5 0.053		0.548	0.195	190
930511	2K	529 .1K		5	45.8 0.059		0.549	0.167	130
930616	2K	969 .1K	1K	20	39.9 .05K		0.368	0.136	160
930712	2K	697 .1K		9	36.7 0.065		0.158	0.138	100
930810	2K	433	0.1	4	23.1 .05K		0.177	0.12	55
930914	2K	306 .1K		4	21.6 .05K		0.192	0.091	88

JACKSON PURCHASE REGION
CLARKS RIVER AT ALMO

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI038 921012	19.6	5.6	7	590	2	42	1K	1	3	1050
PRI038 921111	20.3	17.3	12	260	3	53	1K	5	4	1020
PRI038 921215	19	13.8	6	153	1K	65	1K	4	2	601
PRI038 930114	11.9	24.3	10	1070	2K	70	1K	5	1K	1340
PRI038 930209	16.4	14.3	7	273	3	68	1K	4	5	589
PRI038 930309	12	33	7	452	2K	74	1K	2	2	816
PRI038 930412	7.3	3.9	28	1080	2	47	1K	1	3	1030
PRI038 930511	12.5	16.2	15	389	2K	110	1K	1	1	803
PRI038 930616	14.4	5.21	8	422	2K	61	1K	1K	3	625
PRI038 930712	16.7	7.97	4	489	4	51	1K	1K	4	712
PRI038 930810	17.4	23.8	11	402	2K	49	1K	1K	3	823
PRI038 930914	18.2	20.4	7	451	3	41	1K	1K	2	886

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921012	2K	179	.1K	14	40.7	.05K	0.491	1.78	130
921111	2K	181	.1K	11	52	.05K	2.5	1.83	90
921215	1K	137	.1K	14	49.6	.05K	2.29	0.373	48
930114	2	143	.1K	9	42.8	.05K	1.56	0.286	400L
930209	2K	186	.1K	5	42	.05K	4.23	0.346	33K
930309	2K	162	.1K	6	42.1	.05K	3.52	0.252	33K
930412	2K	100	.1K	6	31.7	0.055	2.22	0.167	44L
930511	2K	278	.1K	6	48.8	.05K	2.85	0.186	100
930616	2K	226	.1K	1K	42.4	0.079	2.4	0.39	97
930712	2K	351	.1K	11	37.3	0.083	0.894	0.494	130
930810	2K	327	.1K	6	33.4	.05K	0.412	0.662	88
930914	2K	206	.1K	3	29.3	.05K	2.62	0.471	95

CUMBERLAND RIVER BASIN

CUMBERLAND RIVER BASIN
LITTLE RIVER NEAR CADIZ

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI043 921008	9.8	13.9	16	349 2K		61 1K		1	2	732
PRI043 921110	11.1	14	11	229 2K		64 1K		2	3	737
PRI043 921210	16.3	17.9	4	1K		58 1K			1	283
PRI043 930112	8.7		80	863 2K		49 1K		1K	1K	819
PRI043 930209	9.2	17.1	16	443	3	38 1K		4	2	455
PRI043 930309	7.6	24.3	41	941	4	37 1K		4	1	928
PRI043 930413	6.2	10.4	30	727 2K		25 1K		8	3	662
PRI043 930518	8.7	14.7	9	315 2K		60 1K		5	1K	566
PRI043 930616	12	9.65	34	96 2K		50 1K		1	9	737
PRI043 930720	6.7	9.6	33	1190 2K		47 1K		1K	5	1470
PRI043 930810	12.5	20.2	17	450 2K		51 1K		1K	1K	509
PRI043 930914	15.2	11.8	17	430 2K		54 1K		1K	1K	503

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921008	2K	70	.1K	5	241	.05K	2.97	0.35	40
921110	2K	67	.1K	14	237	.05K	1.71	0.447	60
921210	1K	44	.1K	9	159	.05K	3	0.126	80
930112	2K	69	.1K	5	220	.05K	3.53	0.124	70
930209	2K	42	.1K		197	.05K	3.91	0.094	100
930309	2K	64	.1K	5	163	.05K	3.89	0.112	33K
930413	2K	33	.1K	4	133	.05K	2.6	0.052	33K
930518	2K	68	.1K	5	242	.05K	3.93	0.083	400L
930616	2K	65	.1K		210	.05K	3.41	0.128	85
930720	2K	83	.1K	21	138	.05K	1.96	0.2	97
930810	2K	60	.1K	3	218	.05K	2.91	0.125	200
930914	2K	62	.1K	2	224	.05K	2.2	0.066	87

CUMBERLAND RIVER BASIN
 CUMBERLAND RIVER AT BURKESVILLE (MOVED TO TURKEY NECK BEND IN JANUARY)

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI007	921013	1K	4	32	2K	24	1K	1	1	106
PRI007	921111		3	160	2K	28	1K	2	1	419
PRI007	921215		2	74	1K	26	1K	6	2	101
PRI007	930121			71	2K	14	1K	5	1K	128
PRI007	930217			171	2K	16	1K	1K	1	174
PRI007	930309			88	2K	17	1K	8	1	154
PRI007	930413		2	103	2K	11	1K	1K	2	146
PRI007	930510		1	46	2K	26	1K	1	1	138
PRI007	930615			67	2K	19	1K	1K	3	5K
PRI007	930713		1	101	2K	18	1K	1K	1	96
PRI007	930810		4	43	2K	21	1K	1K	2	141
PRI007	930914		4	81	2K	19	1K	1K	1	140

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921013	2K	25	.1K	2	91	.05K	0.358	0.008	1K
921111	2K	40	.1K	3	95	.05K	0.285	0.012	
921215	1K	30	.1K	3	80.2	.05K	0.24	0.006	15
930121		14	.1K	3	57	.05K	0.268	0.006	26
930217	2K	11	.1K		76.7	.05K	0.318	0.026	30
930309	2K	12	.1K		71.6	.05K	0.358	0.033	1K
930413	2K	8	.1K	3	63.7	.05K	0.391	0.009	3
930510	2K	11	.1K	2	84.3	.05K	0.355	.005K	11
930615	2K	6	.1K		71.4	.05K	0.406	0.016	40
930713	2K	8	.1K	7	71.3	.05K	0.387	0.026	1
930810	2K	13	.1K	4	77.2	.05K	0.385	.005K	17
930914	2K	14	.1K		74.6	.05K	0.396	0.916	17

CUMBERLAND RIVER BASIN
 CUMBERLAND RIVER AT CUMBERLAND FALLS

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI009 921022	1.5		16	31 2K		38 1K	1K		1	295
PRI009 921110	5.61	107	8	42 2K		45		3	5	3060
PRI009 921215	5.7	71.3	12	164 1K		37 1K		4	1	542
PRI009 930111	2.6		27	336	2	27 1K		4	1K	1050
PRI009 930211	4	116 1K		71	3	24 1K	1K	6	2	272
PRI009 930317	5.5	77.6	30	599 2K		25 1K			4	1370
PRI009 930413	2.6	77.2	22	464 2K		17 1K	1K		4	823
PRI009 930519	4.5	112	1	64 2K		44 1K		9	1K	272
PRI009 930614	5.6	40	3	166 2K		32 1K		6	4	204
PRI009 930715	7.3	108	4	46 2K		37 1K	1K		2	219
PRI009 930812	8	120	3	37 2K		35 1K		1	3	141
PRI009 930914	8.3	129	3	103 2K		35 1K	1K		2	139

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921022	2K	37	.1K	4	140	.05K	0.072	0.018	10K
921110	2K	73	.1K	100	149	.05K	0.229	0.035	10K
921215	1K	96	.1K	9	118	0.107	0.354	0.01	50
930111		118	.1K	22	79.3	.05K	0.325	0.087	10
930211	2K	89	.1K		110	0.019	0.286	.005K	150
930317	2K	257	.1K	11	79.9	.05K	0.3	0.028	10K
930413	2K	62	.1K	10	89.8	.05K	0.366	0.077	10K
930519	2K	69	.1K	5	132	.05K	0.319	.005K	70
930614	2K	63	.1K		131	.05K	0.295	0.02	50
930715	2K	56	.1K	10	142	.05K	0.211	0.043	9
930812	2K	38	.1K	5	131	.05K	0.38	.005K	350
930914	2K	30	.1K	2	149	.05K	0.242	0.01	30

CUMBERLAND RIVER BASIN
 CUMBERLAND RIVER AT PINEVILLE

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI011 921027	2.6		12	69 2K		61 1K		1	3	467
PRI011 921111	5.09	93.8	7	32 2K		48 1K		1	4	1740
PRI011 921216	6.5	68.8	8	386 1K		37 1K		4	1	1250
PRI011 930112	2.9	75	50	800	2	36 1K		3	1K	1650
PRI011 930209	4.2	132 1K		69	4	27 1K	1K	4	1K	281
PRI011 930318	5	75.8	19	699 2K		24 1K				1170
PRI011 930419	3.3	83.2	7	145 2K		21 1K	1K		3	413
PRI011 930513	3.7	120	35	796 2K		58 1K		5	3	1530
PRI011 930616	4.2	23.2	67	785 2K		41 1K		1	3	1590
PRI011 930714	8.5	199	3	38 2K		53 1K	1K		5	179
PRI011 930809	8.4	149	5	100 2K		50 1K	1K		4	246
PRI011 930915	8	168	8	168 2K		49 1K	1K		3	351

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 -N	NO2+NO3 -N	TP	FECAL
YMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921027	2K	39 .1K		6	185		0.128		10K
921111	2K	45 .1K		59	140 .05K		0.225 .005K		40
921216	1K	98 .1K		11	100 .05K		0.34	0.015	20
930112	2	84 .1K		18	102 .05K		0.393	0.043	20
930209	2K	68 1K	2K		131 .05K		0.302 .005K		20
930318	2K	82 .1K		10	71.8 .05K		0.411	0.026	50
930419	2K	35 .1K		9	115 .05K		0.344	0.02	130
930513	2K	70 .1K		11	142 .05K		0.449	0.019	170
930616	2K	66 .1K		4	102 .05K		0.57	0.056	90
930714	2K	34 .1K		3	187 .05K		0.188	0.04	250
930809	2K	32 .1K		7	173 .05K		0.362 .005K		30
930915	2K	37 .1K		5	178 .05K		0.228	0.016	20

CUMBERLAND RIVER BASIN
BIG SOUTH FORK CUMBERLAND RIVER AT BLUE HERON

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI008 921026	1K		4	27	2K	28	1K	1	2	274
PRI008 921110	1.27	25.1	4	76	2K	28	1K	1	1	342
PRI008 921215	3.4	31.5	6	67	1K	34	1K	5	2	340
PRI008 930111	2		8	95	2K	23	1K	3	2	312
PRI008 930211	2.8	36.2		111	2K	15	1K		1	155
PRI008 930317	3	58.2	3	189	2K	20	1K		2	341
PRI008 930419	2.4	43	7	158	2K	17	1K		1	549
PRI008 930519	3.4	34.5		149	2K	30	1K	1	1K	212
PRI008 930614	3.1	31.5		117	2K	27	1K		3	139
PRI008 930716	5.3	37.5	2	103	2K	32	1K		1	349
PRI008 930811	6.5	50.3	2	55	2K	34	1K	1	2	229
PRI008 930914	4	38.5	1	94	2K	24	1K		1	175

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921026	2K	37	.1K	4	57.9	.05K	0.02	.005K	10K
921110	2K	51	.1K	6	52	.05K	0.108	.005K	10K
921215	1K	83	.1K	9	60.9	.05K	0.16	.005K	20
930111	2K	58	.1K	4	34.5	.05K	0.164	0.02	50
930211	2K	49	.1K		36.6	0.085	0.172	.005K	10K
930317	2K	131	.1K	8	34.7	.05K	0.2	0.02	
930419	2K	48	.1K	6	44.5	.05K	0.163	0.024	10K
930519	2K	85	.1K	6	48.6	.05K	0.046	.005K	100
930614	2K	38	.1K	2	44.4	.05K	0.139	0.017	10K
930716		81	.1K	5	49.5	.05K	0.142	0.034	30
930811	2K	43	.1K	4	63.1	.05K	0.053	0.032	200
930914	2K	32	.1K	2	52.5	.05K	0.076	.005K	10K

CUMBERLAND RIVER BASIN
ROCKCASTLE RIVER AT BILLOWS

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI010 921020	1K			10	2K	25	1K	2	4	106
PRI010 921110	1.58	48.2	3	29	2K	30	1K	2	2	2860
PRI010 921216	4.5	24.6	1K	122	1K	27	1K	4	1	199
PRI010 930111	2.7		18	84	2K	14	1K	3	1K	318
PRI010 930208	3.1	33.8	5	69	2K	12	1K	5	1K	168
PRI010 930317	5.1	56.7	36	695	2K	18	1K			2 1290
PRI010 930413	3.4	23.6	9	248	2K	9	1K			5 289
PRI010 930513	3.4	28.3	2	154	2K	25	1K			2 211
PRI010 930615	2.9	23.9	44	2350	2K	31	1K	3	5	3270
PRI010 930714	4.9	26.6	5	36		22	1K	1	1K	175
PRI010 930811	5.9	27.6	5	139	2K	24	1K	1	23	257
PRI010 930915	3.8	35	4	108	2K	21	1K		5	210

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 -N	NO2+NO3 -N	TP	FECAL
YYMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921020	2	26	.1K	2	108	.05K	0.101	0.012	10
921110	2K	27	.1K	85	142	.05K	0.139	.005K	180
921216	4	77	.1K	5	68	.05K	0.439	0.005	10
930111	13	54	.1K	23	54.4	.05K	0.444	0.116	10K
930208	2	38	.1K		71.1	.05K	0.39	.005K	150
930317	2K	128	.1K	7	62.1	.05K	0.412	0.045	10K
930413	2K	41	.1K	12	55.4	.05K	0.227	0.014	20
930513	2K	67	.1K	5	82.3	.05K	0.165	0.009	10K
930615	8	86	.1K		82.2	.05K	0.564	0.062	120
930714	2K	87	.1K	1K	98.2	.05K	0.178	0.036	130
930811	2K	64	.1K	9	120	.05K	0.242	.005K	31
930915	2K	53	.1K	12	104	.05K	0.524	0.036	10

CUMBERLAND RIVER BASIN
HORSE LICK CREEK NEAR LAMERO

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI051	921020	4.3	1K	7	2K	31	1K	1	2	323
PRI051	921112	5.94	2	25	2	34	1K	2	2	340
PRI051	921217	2.4	58	874	1K	29	1K	5	2	1980
PRI051	930112	1.9	26	292	2K	18	1K	3	1K	691
PRI051	930208	2.6	2	53	2	13	1K	9	4	121
PRI051	930318	2.6	2	138	2K	12	1K	2	1	259
PRI051	930415	2.4	2	51	2K	13	1K	1	1	167
PRI051	930512	2.8	7	46	2K	25	1K	1	1	239
PRI051	930617	2.9	3	347	2K	22	1K	2	1	526
PRI051	930715	4.5	5	172	2K	27	1K	1	1	294
PRI051	930811	5.2	2	115	2K	29	1K	1	2	346
PRI051	930913	2.5	2	60	2K	23	1K	5	3	216

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921020	2K	28	.1K	4	110	.05K	0.019	0.015	140
921112	2K	26	.1K	8	120	.05K	0.144	0.015	10
921217	2	116	.1K	16	42.3	.05K	0.142	0.029	10
930112	2K	41	.1K	9	38.2	.05K	0.156	0.04	10K
930208	2K	11	.1K	2K	57.7	.05K	0.18	.005K	10K
930318	2K	22	.1K	5	34.7	.05K	0.256	0.013	60
930415	2K	23	.1K	7	63.5	.05K	0.131	.005K	100
930512	2K	41	.1K	6	72.7	.05K	0.093	.005K	100
930617	2K	31	.1K	1K	88.1	.05K	0.362	0.027	410
930715	6	28	.1K	1K	112	.05K	0.25	0.035	300
930811	2K	47	.1K	18	119	.05K	0.225	.005K	180
930913	2K	26	.1K	6	111	.05K	0.267	0.007	10K

GREEN RIVER BASIN, INCLUDING TRADEWATER RIVER

GREEN RIVER BASIN
GREEN RIVER NEAR ISLAND

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI055 921012	7.4	29.1	12	380	2K	36	1K	1	2	859
PRI055 921109	3.9	23.9	15	298	2K	44	1K	1	1	752
PRI055 921210	3.7	35.5	90	1710	1K	52	1K	1K	5	2900
PRI055 930112	6.5		33	475	2	29	1K	5	1K	1050
PRI055 930209	8.5	44.4	7	281	2	23	1K	4	3	389
PRI055 930309	5.6	40	7	603	2K	23	1K	4	1	743
PRI055 930428	7.7	71.9	18	358	2K	23	1K	2	2	685
PRI055 930511	6.5	42.2	96	2110	2	60	1K	4	4	3490
PRI055 930616	8.4	18.4	31	666	2K	32	1K	1K	6	942
PRI055 930720	11.4	141	18	370	2	39	1K	1K	1	563
PRI055 930809	13	107	18	455	2K	48	1K	2	4	584
PRI055 930920	17.2	67.1	16	392	2	46	1K	2	5	510

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921012	2K	84	.1K	5	136	.05K	0.723	0.132	33K
921109	2	81	.1K	6	153	.05K	0.391	0.055	33K
921210	1K	383	.1K	20	141	.05K	0.635	0.146	33K
930112	2K	78	.1K	17	130	.05K	1.23	0.07	110
930209	2K	92	.1K	3	150	.05K	1.53	0.036	33K
930309	2K	34	.1K	7	112	.05K	1.54	0.075	63
930428	2K	153	.1K	19	180	.05K	1.07	0.03	33K
930511	3	508	.1K	19	157	0.075	0.941	0.102	110
930616	2K	113	.1K	9	139	.05K	1.23	0.049	33K
930720	2K	403	.1K	4	233	.05K	0.585	0.092	33K
930809	2K	148	.1K	8	237	.05K	0.542	0.037	33K
930920	2K	98	.1K	8	210	.05K	0.326	0.049	33K

GREEN RIVER BASIN
POND RIVER NEAR SACRAMENTO

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI012 921008	15.4	474	18	422 2K		34 1K		1K	2	999
PRI012 921109	27.2	1190	4	109	2	42 1K		1	1	299
PRI012 921215	16.9	488	14	260 1K		38 1K		1K	2	711
PRI012 930112	11.1	303	53	1460 2K		34 1K		2K	1K	2070
PRI012 930209	10.7	395 1K	1	533	2	20 1K		5	2	1170
PRI012 930309	6.5	111	29	909	3	16 1K		4	1	1180
PRI012 930413	4.8	168	23	1070 2K		16 1K		3	2	1870
PRI012 930511	5	78.7	118	1220	2	34 1K		3	4	2010
PRI012 930616	8.4	45.6	50	3060	3	42 1K		8	8	4990
PRI012 930720	13.9	926	44	1140 2K		49 1K		1K	4	1600
PRI012 930810	13.1		38	1100 2K		52 1K		2	2	1680
PRI012 930914	29.8	1630		614 2K		42 1K		2	2	1010

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921008	2K	253 .1K	15	15	500 .05K	0.176	0.176	0.113	55
921109	2K	822 .1K	7	7	1470 0.079	0.03	0.03	0.012	33K
921215	1K	1340 .1K	17	17	254 0.095	0.441	0.441	0.012	33K
930112	2K	879 .1K	27	27	291 0.259	0.802	0.802	0.218	260
930209	2K	683 .1K	8	8	296 0.326	0.426	0.426	0.02	33K
930309	2K	126 .1K	10	10	129 .05K	0.37	0.37	0.051	33K
930413	2K	222 .1K	15	15	170 0.081	0.213	0.213	0.025	130
930511	2K	235 .1K	17	17	125 .05K	0.143	0.143	0.042	60
930616	2K	923 .1K	23	23	370 0.156	0.855	0.855	0.103	180
930720	2K	834 .1K	34	34	949 .05K	.005K	.005K	0.119	68
930810	2K	744 .1K	11	11	762 0.142	0.005	0.005	0.104	110
930914	2K	326 .1K	5	5	.05K	0.03	0.03	0.053	33K

GREEN RIVER BASIN
ROUGH RIVER NEAR DUNDEE

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI014 921012	3.9	12.7	11	538 2K	45	1K	1	1	4	1050
PRI014 921109	2.7	14	11	206 2K	48	1K	1	1	1	502
PRI014 921210	4.1	24.1	8	126 1K	36	1K	1K	3	3	372
PRI014 930112	6.4		32	494 2K	37	1K	7	1K	1K	1130
PRI014 930209	6.9	26.6	9	588	3	1K	4	3	3	857
PRI014 930309	4.5	35.3	35	1830	4	1K	9	3	3	1850
PRI014 930428	4.3	46.6	21	227 2K	21	1K	1K	1	1	701
PRI014 930511	4.9	21.3	29	649 2K	46	1K	3	3	5	1010
PRI014 930616	4.7	132	47	1220	3	1K	1K	1	1	2070
PRI014 930720	5.1	16.6	39	680	3	1K	1K	1	1	1650
PRI014 930809	5.4	13	33	979 2K	3	1K	1K	3	3	1880
PRI014 930920	4.1	6.3	36	780	3	1K	2	2	2	2110

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+N	NO3-N	TP	FECAL
YMMDD----	1051	1055	71900	1092	900	610	630	665	31616	
921012	2K	238 .1K	.1K	7	112	.05K	0.477	0.069	60	
921109	2K	160 .1K	.1K	6	118	.05K	0.154	0.015	33K	
921210	1K	115 .1K	.1K	4	114	0.064	0.401	0.021	42	
930112	2K	154 .1K	.1K	19	111	0.115	0.694	0.07	200	
930209	2K	90 .1K	.1K	5	103	.05K	0.872	0.068	33K	
930309	2K	74 .1K	.1K	6	67.7	0.114	0.837	0.102	58	
930428	2K	107 .1K	.1K	4	101	.05K	0.335	0.028	33K	
930511	2K	226 .1K	.1K	4	105	.05K	0.594	0.026	120	
930616	2K	136 .1K	.1K	1K	77.2	0.098	0.872	0.071	400L	
930720	2K	266 .1K	.1K	1K	115	.05K	0.513	0.087	140	
930809	2K	349 .1K	.1K	4	128	.05K	0.551	0.073	40	
930920	2K	358 .1K	.1K	3	121	.05K	0.769	0.044	78	

GREEN RIVER BASIN
MUD RIVER NEAR GUS

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI056 921015	16.7			344	3	71	1K	9	5	953
PRI056 921110	21.8	16.1	5	294	2K	72	1K	1	4	1250
PRI056 921215	12.4	33.7	14	353	1K	59	1K	1	1	602
PRI056 930112	7.5		18	769	2K	44	1K	2K	1K	955
PRI056 930209	9.3	36.1	9	439	2	33	1K	4	2	690
PRI056 930309	6.1	36.7	15	869	3	33	1K	3	1	983
PRI056 930413	5.2	22.8	40	895	2K	24	1K	3	2	904
PRI056 930511	6.1	17.8	41	1210	2	65	1K	2	2	1380
PRI056 930616	4.5	78.3	173	4150	3	62	1K	5	7	5410
PRI056 930720	6	16.6	39	1240	2	47	1J	1J	2	1790
PRI056 930809	7.4	20	37	1040	2J	50	1J	2	2	1250
PRI056 930914	25	16.7	21	716	2K	59	1K	1K	3	810

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 -N	NO2+NO3 -N	TP	FECAL
YYMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921015	2K	141	.1K	6	183	.05K	0.347	0.113	87
921110	2	128	.1K	12	202	.05K	0.077	0.07	42
921215	1K	94	.1K	9	147	.05K	1.04	0.036	80
930112	2	65	.1K	3	151	.05K	0.97	0.069	170
930209	2K	78	.1K		159	.05K	1.08	0.027	33K
930309	2K	70	.1K	3	144	.01K	0.934	0.064	65
930413	2K	62	.1K	3	121	.05K	0.584	0.033	110
930511	2K	212	.1K	6	181	0.057	0.78	0.05	83
930616	3	183	.1K	15	78	0.097	1.25	0.17	400L
930720	2K	200	.1K	23	93.4	.05J	0.416	0.118	140
930809	4	225	.1K	7	123	.05K	0.077	0.111	110
930914	2K	201	.1K	2	169	.05K	0.222	0.076	85

GREEN RIVER BASIN
 BARREN RIVER AT BOWLING GREEN

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YVMDD---	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI017 921020	1K		16	216	2K	29	1K	4	3	522
PRI017 921110	52.6	14	15	242	2K	41	1K	1	7	627
PRI017 921214	3	27	4	92	1K	41	1K	4	5	198
PRI017 930114	5.5	17.6	44	943	2K	33	1K	11	1K	1370
PRI017 930224	7.6	14.6	42	759	2K	21	1K	2	1	750
PRI017 930315	7.4	52.6		109	2K	21	1K	2	5	191
PRI017 930413	6.5	12.2	11	404	2K	19	1K	2	3	338
PRI017 930513	6.8	17.6	23	508	2K	47	1K	2	2	690
PRI017 930614	7.8	19.5	47	1470	2K	34	1K	4	11	864
PRI017 930713	7.9	10.6	10	410	2K	34	1K	1K	3	616
PRI017 930809	8.1	21.3	16	395		35	1K	1K	4	508
PRI017 930913	6.3	14.7	31	594	2K	30	1K	3	4	857

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921020	2K	128	.1K	6	115	.05K	0.3	0.062	190
921110	3	229	.1K	11	130	.05K	0.285	0.028	40
921214	1K	111	.1K	2	140	.05K	0.989	0.016	80
930114	2	165	.1K	6	125	.05K	1.57	0.059	240
930224	2K	95	.1K		116	.05K	1.59	0.059	190
930315	2K	26	.1K		133	.05K	1.88		10
930413	3	45	.1K	4	143	.05K	1.5	0.009	50
930513	3	149	.1K	5	186	.05K	1.49	0.018	80
930614	5	158	.1K	2	151	.05K	1.24	0.049	80
930713	2K	155	.1K	34	161	.05K	0.874	0.071	200
930809	8	142	.1K	5	154	.05K	0.851	0.079	120
930913	2K	182	.1K	10	141	.05K	0.538	0.061	90

GREEN RIVER BASIN
NOLIN RIVER AT WHITE MILLS

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI021 921014	8.6	15.9	9	70	2	79	1K	1	1	227
PRI021 921110	22.4	27.3	4	97	2K	78	1K	2	1	169
PRI021 921214	12.2	15.8	4	71	1K	49	1K	2	1	194
PRI021 930120	9.8	19.9	3	83	2K	28	1K	6	1K	182
PRI021 930216	13.4	13.7	4.9	269	2K	30	1K	1K	4	291
PRI021 930308	8.4	39.3	22	855	2K	40	1K	4	2	854
PRI021 930412	9.8	5K	13	326	2K	29	1K	2	2	366
PRI021 930511	14.6	14.3	14	531	2K	81	1K	2	1	591
PRI021 930614	7.29	7.29	17	695	2K	51	1K	1K	17	636
PRI021 930712	28	8.37	13	441	2K	61	1K	1K	1K	565
PRI021 930811	28.5	25.4	17	487	2J	66	1J	1J	3	569
PRI021 930913	29.4	18.7	18	506	2J	86	1J	5	3	645

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 - N	NO2 + NO3 - N	TP	FECAL
YMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921014	2K	28	.1K	3	213	.05 K	3.01	0.497	98
921110	2K	23	.1K	5	252	.05K	2.09	0.394	80
921214	1K	25	.1K	6	159	.05K	2.58	0.08	120
930120	2	17	.1K	3	139	.05K	4.53	0.076	100
930216	2K	17	.1K	2K	150	.05K	2.73	0.082	240
930308	2K	40	.1K	3	142	.05K	3.25	0.079	60
930412	2K	21	.1K	5	135	.05K	2.72	0.035	160
930511	2K	82	.1K	8	262	.05K	2.69	0.064	340
930614	2K	55	.1K	1K	179	.05K	3.54	0.101	520
930712	2K	69	.1K	20	211	.05K	3.26	0.123	190
930811	2J	66	.1J	6	214	.05K	3.34	0.132	54
930913	2J	77	.1J	10	202	.05J	3.21	0.564	

GREEN RIVER BASIN
BACON CREEK NEAR PRICEVILLE

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI020 921014	3.5	4.1	9	57	3	36	1K	1	1	304
PRI020 921110	3.81	6.2	4	42	2K	39	1K	1	1	1080
PRI020 921214	2.2	6.6	1	22	1K	38	1K	2	1	253
PRI020 930120	3.8	17.7	4	13	2K	19	1K	2	1K	159
PRI020 930216	4.2	8.7		353	2K	21	1K	4	1	510
PRI020 930308	4.2	35.6	20	420	2K	32	1K	11	11	690
PRI020 930412	3.9		23	344	2K	19	1K	3	3	467
PRI020 930511	4.4	13.8	25	607	2K	46	1K	2	2	754
PRI020 930614	4.1	4.69	41	1080	2K	42	1K	1	4	1510
PRI020 930712	4.7	6.99	37	752	2J	42	1J		4	1140
PRI020 930811	3.6	14.6	23	544	2K	37	1K	1	1	754
PRI020 930913	3.2	1.5	23	562	2K	37	1K	1	1	826

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921014	2K	30	.1K	3	220	.05K	0.732	0.075	23
921110	2K	32	.1K	5	222	.05K	0.373	0.007	16
921214	1K	46	.1K	7	151	.05K	1.12	0.006	54
930120	2K	24	.1K	4	140	.05K	1.8	0.008	58
930216	2K	57	.1K	2	152	.05K	1.26	0.041	620
930308	2K	57	.1K	3	188	.05K	1.98	0.049	60
930412	2K	48	.1K	4	145	.05K	1.32	0.112	80
930511	3	174		4	250	.05K	1.21	0.021	220
930614	2K	145	.1K	4	190	.05K	1.44	0.058	260
930712	2J	129	.1J	4	206	.05K	0.89	0.078	120
930811	2K	100	.1K	4	190	.05K	0.566	0.009	84
930913	2K	89	.1K	5	189	.05K	0.665	6.75	

GREEN RIVER BASIN
GREEN RIVER AT MUNFORDVILLE

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI018 921014	12.3	17.9	9	36	2K	31	1K	1K	1	482
PRI018 921110	6.86	18.6	16	279	3	34	1K	2	1	643
PRI018 921214	6.1	23.8	2	71	1K	33	1K	3	2	167
PRI018 930120	5.3	23.5	1	122	2K	16	1K	4	1K	173
PRI018 930216	9.8	20.1		344	2K	17	1K	1K	1K	354
PRI018 930308	4.7	37.3	13	454	2K	21	1K	4	1	627
PRI018 930412	8.6	9	9	137	2K	15	1K	6	3	239
PRI018 930511	7	18.5	15	237	2K	32	1K	2	2	422
PRI018 930614	8	14.4	103	57	2K	38	1K	2	4	3070
PRI018 930712	14.1	9.12	32	527	2K	36	1K	2	5	1080
PRI018 930811	24.2	27.9	20	362	2K	30	1K	1K	3	576
PRI018 930913	19.9	18.9	14	325	2K	27	1K	1K	1	434

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+N	NO3-N	TP	FECAL
YMMDD----	1051	1055	71900	1092	900	610	630	665	31616	
921014	2K	31	.1K	5	143	.05K	0.611	0.153	25	
921110	2K	72	.1K	5	118	.05K	0.321	0.069	68	
921214	1K	18	.1K	4	165	.05K	0.814	0.044	88	
930120		16	.1K	4	79.9	.05K	1.11	0.019	25	
930216	2K	18	.1K		118	.05K	1.03	0.065	1000	
930308	2K	46	.1K	3	90.6	.05K	1.22	0.05	56	
930412	2K	14	.1K	3	131	.05K	0.828	0.012	85	
930511	2K	48	.1K	4	97.3	.05K	0.711	0.019	80	
930614	2K	121	.1K		115	.05K	1.21	0.093	700	
930712	2K	102	.1K	11	159	.05K	0.553	0.096	16000L	
930811	2K	58	.1K	4	129	.05K	0.432	0.027	78	
930913	2K	39	.1K	5	131	.05K	0.587	0.055		

GREEN RIVER BASIN
TRADEWATER RIVER NEAR SULLIVAN

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI053 921008	13.9	324	36	771 2K	2	56 1K	1K	2	3	1610
PRI053 921110	12.9	352	22	336	2	58 1K	2	2	2	2070
PRI053 921210	14.4	401	6	143 1K		46 1K	1K	2	2	369
PRI053 930112	10.3	232	33	1410 2K	3	38 1K	2	1K	2	1610
PRI053 930209	10.9	233	22	783	3	22 1K	4	2	2	914
PRI053 930309	5	106	9	800	2	20 1K	3	1	1	938
PRI053 930413	3.9	67.5	46	1470 2K		19 1K	3	2	2	2410
PRI053 930518	8.2		58	1200 2K		48 1K	3	2	2	2320
PRI053 930616	9.4	13.9	67	1430	2	48 1K	1	3	3	2260
PRI053 930720	8.4	181	72	2030	4	69 1K	1K	5	5	3090
PRI053 930810	18.9		82	2290 2K		71 1K	1K	4	4	3530
PRI053 930914	35.7	24.7	42	900	3	71 1K	6	2	2	1530

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921008	2K	470	.1K	10	360	.05K	0.264	0.125	78
921110	2K	325	.1K	45	469	.05K	0.057	0.058	50
921210	1K	318	.1K	8	288	.05K	0.264	0.016	33K
930112	2K	398	.1K	13	217	.05K	0.62	0.088	97
930209	2K	408	.1K	2	208	.05K	0.436	0.042	33K
930309	2K	117	.1K	8	106	.05K	0.316	0.053	33K
930413	2K	135	.1K	11	82.4	0.051	0.278	0.056	170
930518	2K	1210	.1K	14	227	0.053	0.235	0.059	280
930616	2K	853	.1K	1K	240	0.066	0.422	0.069	130
930720	2K	1120	.1K	6	232	.05K	0.12	0.146	200
930810	2K	1060	.1K	13	338	.05K	0.162	0.122	60
930914	2K	1260	.1K	7	0.563		1.06	0.157	33K

SALT RIVER BASIN

SALT RIVER BASIN
SALT RIVER AT SHEPHERDSVILLE

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI029 921015	5.4		28	214	3	34	1K	2	1	440
PRI029 921112	10.2	36.4	14	330	4	32	1K	1	1	751
PRI029 921217	8.6	28.3	12	229	1K	28	1K	2	1K	453
PRI029 930114	7.6	36.4	75	1700	2K	25	1K	2	1K	2190
PRI029 930211	10	46	2	227	2K	15	1K	1K	1	297
PRI029 930311	6.4	51.3	54	1580	6	19	1K	2	3	2300
PRI029 930415	8	35.8		2480	2K	22	1K	6	4	3210
PRI029 930513	5.4	24.2	690	12200	5	116	1K	12	10	3730
PRI029 930617	6	16	108	4640	2K	32	1K	2	4	3690
PRI029 930715	8.2	23	336	8200	7	79	1K	4	7	*****
PRI029 930812	13	38.1	13	215	2K	29	1K	1K	3	351
PRI029 930916	18.4	43.2	32	1030	2K	45	1K	3	1K	1380

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921015	2K	105	.1K	5	198	.05K	1.11	0.654	130
921112	16	104	.1K	10	200	.05K	0.703	0.552	400
921217	2K	95	.1K	4	165	.05K	0.978	0.126	50
930114	2	186	.1K	5	217	.05K	1.54	0.299	1600
930211	2K	40	.1K	2K	212	.05K	1.25	0.113	10K
930311	2K	96	.1K	5	169	.05K	1.72	0.282	280
930415	2K	104	.1K	10	170	.05K	0.876	0.206	600
930513	7	768	.1K	46	164	0.12	0.883	1.14	16000L
930617	3	212	.1K	3	177	.05K	1.16	0.321	1500
930715	2K	403	.1K	52	116	.05K	0.811	0.556	8000
930812	2K	51	.1K	3	175	.05K	0.331	0.128	50
930916	2K	157	.1K	3	207	.05K	0.661	0.171	60

SALT RIVER BASIN
SALT RIVER AT GLENSBORO

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI052 921015	5.6		16	62	2K	31	1K 1K		1	184
PRI052 921112	25.3	60.1	4	78	2K	34	1K	8	3	464
PRI052 921217	12.5	54.5	2	149	1K	33	1K	3	2	218
PRI052 930114	4.3	47.2	42	155	2K	26	1K	3	1K	1860
PRI052 930211	10.4	66	1K	84	2K	14	1K	1K	1	91
PRI052 930311	7.6	60.1	16	676	2K	18	1K	1K	2	796
PRI052 930415	8.7	55.3	13	307	2K	19	1K	1K	2	615
PRI052 930513	13.1	58	8	244	2K	34	1K	1K	2	282
PRI052 930617	6.3	9.12	82	2440	2K	35	1K	3	4	3520
PRI052 930715	19.1	43.5	32	939	3	34	1K	1K	5	1380
PRI052 930812	21.4	50	16	458	2K	34	1K	1K	5	690
PRI052 930916	28	61.5	17	418	2K	30	1K	4	1	657

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 - N	NO2+NO3 - N	TP	FECAL
YMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921015	2K	12	.1K	3	230	.05K	0.534	0.871	30
921112	2K	19	.1K	5	269	.05K	0.674	1.16	13000
921217	1K	10	.1K	4	151	.05K	1.9	0.254	80
930114	2	67	.1K	9	246	.05K	2.22	0.406	1600
930211	2K	6	.1K	2K	228	.05K	2.17	0.151	10K
930311	2K	22	.1K	3	208	.05K	2.64	0.24	140
930415	2K	17	.1K	4	166	.05K	1.24	0.207	240
930513	2K	34	.1K	5	343	.05K	0.777	0.224	380
930617	2	112	.1K	4	170	.05K	2.9	0.527	1400
930715	2K	92	0.2	6	204	0.076	0.154	0.318	270
930812	2K	47	.1K	3	195	0.053	0.076	0.288	210
930916	2K	44	.1K	7	198	.05K	0.065	0.252	30

SALT RIVER BASIN
ROLLING FORK NEAR LEBANON JUNCTION

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD---	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI057 921015	8.3		28	164	2K	37	1K 1K		1	851
PRI057 921112	7.48	46.1	26	405	2K	46	1K	5	3	1320
PRI057 921217	8.8	36.4	12	336	2	36	1K	3	1	830
PRI057 930114	5.4	39.1	104	2230	2K	31	1K	3	1K	3480
PRI057 930211	6.7	48	9	326	2K	19	1K	1K	1	469
PRI057 930311	4.6	56.5	25	821	2K	22	1K	1K	2	1060
PRI057 930415	4.6	43.6	52	1140	2K	18	1K	1K	1	1440
PRI057 930513	4.9	40.6	547		7	106	1K	7	11	
PRI057 930617	4.5	15.4	293	6190	2K	49	1K	6	7	*****
PRI057 930715	7.9		136	3380	5	49	1K	1	13	6580
PRI057 930812	17	32.4	66	1740	3	48	1K	3	5	2800
PRI057 930916	12.7	64.3	71	1820	3	39	1K	6	3	3190

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921015	2K	62	.1K	3	205	.05K	0.46	0.243	40
921112	2K	116	.1K	7	236	.05K	0.169	0.35	16000
921217	1K	45	.1K	3	193	.05K	0.688	0.102	180
930114	2	138	.1K	10	201	.05K	1.14	0.244	1200
930211	2K	43	.1K	2K	210	.05K	0.804	0.069	10K
930311	2K	37	.1K	5	168	.05K	1.48	0.104	70
930415	2K	55	.1K	7	183	.05K	0.475	0.08	150
930513	5		.1K		0.071	0.332	0.489	0.489	4800
930617	5	358	.1K	18	144	.05K	1.03	0.536	2400
930715	2K	182	.1K	43	190	.05K	0.663	0.245	3400
930812	2	185	.1K	10	212	.05K	0.236	0.124	40
930916	2K	189	.1K	14	180	.05K	0.708	0.172	180

SALT RIVER BASIN
BEECH FORK NEAR MAUD

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI041 921015	1K		20	95	2K	22	1K	1	1	364
PRI041 921112	1K	37.6	2	48	2	22	1K	1	4	256
PRI041 921217	6.1	37.5	6	372	1K	22	1K	3	2	618
PRI041 930114	3.5	38.6	71	2310	2K	20	1K	5	1K	2730
PRI041 930211	5.9	69.3	7	172	2K	9	1K	1K	1	180
PRI041 930311	5	62	18	635	2K	13	1K	1	2	832
PRI041 930415	4.7	50.8		548	2K	12	1K	1K	2	978
PRI041 930513	5.4	57.1	18	454	2K	26	1K	1K	2	636
PRI041 930617	3.8	44.4	84	2640	2K	26	1K	4	5	5060
PRI041 930715	6.1	29.3	15	559	2K	21	1K	1K	2	724
PRI041 930812	6.7	28.4	18	501	2K	23	1K	1K	5	808
PRI041 930916	4	18.2	17	524	2K	18	1K	1	1	810

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921015	2K	34	.1K	2	250	.05K	0.093	0.389	20
921112	2K	32	.1K	3	247	.05K	0.017	0.302	290
921217	1K	39	.1K	4	179	.05K	0.661	0.134	200
930114	2	100	.1K	11	226	.05K	0.835	0.265	1200
930211	2K	24	.1K	2K	229	.05K	0.368	0.063	10
930311	2K	26	.1K	2	216	.05K	1.35	0.159	50
930415	2K	40	.1K	4	201	.05K	0.282	0.111	130
930513	2K	83	.1K	5	391	.05K	0.235	0.125	7400
930617	2K	123	.1K	1K	120	.05K	0.957	0.393	1400
930715	2K	115	.1K	7	192	.05K	0.089	0.172	40
930812	2K	96	.1K	6	182	0.076	0.057	0.095	430
930916	2K	97	.1K	6	148	0.064	0.093	0.139	130

SALT RIVER BASIN
POND CREEK NEAR LOUISVILLE

STORSET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI030 921015	40.9		30	370	4	50	1K	2	4	710
PRI030 921112	3.58	41	470	8340	9	118	1	20	23	*****
PRI030 921217	37.6	83.4	5	149	1K	60	1K	6	3	364
PRI030 930114	19	78.8	33	683	2K	36	1K	3	1K	947
PRI030 930211	32.8	95.3	6	221	2K	29	1K	1K	2	303
PRI030 930311	21.2	72.6	44	1470	2	35	1K	4	3	1620
PRI030 930415	15.7	53		2190	3	26	1K	4	4	3150
PRI030 930513	10.7	42.9	176	3060	4	51	1K	6	6	5840
PRI030 930617	22.6	4.69	28	737	3	48	1K	2	10	1070
PRI030 930715	18.2	49.8	60	1380	5	53	1K	1K	5	3160
PRI030 930812	21.5	44.4	662	9080	8	124	1K	13	22	*****
PRI030 930916	33.5	80.8	21	511	3	48	1K	3	5	877

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921015	2K	37	.1K	11	228	0.062	3.81	1.79	150
921112	36	625	.1K	150	151	0.088	0.799	1.65	11000
921217	1K	110	.1K	12	196	0.112	2.61	0.498	20
930114	2K	86	.1K	14	222	0.18	1.64	0.245	360
930211	2K	62	.1K	2K	234	0.089	2.75	0.381	10
930311	2K	80	.1K	15	172	0.118	1.5	0.152	250
930415	2K	81	.1K	22	148	0.112	0.815	1.2	2000
930513	4	278	.1K	39	99	0.231	0.948	0.323	16000L
930617	2K	92	.1K	2	209	0.051	1.09	0.221	280
930715	2K	199	.1K	13	134	0.198	1.09	0.296	9600
930812	29	631	.1K	82	219	0.24	2.9	1.18	16000L
930916	2K	79	.1K	7	205	0.193	1.22	0.244	120

KENTUCKY RIVER BASIN

KENTUCKY RIVER BASIN
EAGLE CREEK AT GLENCOE

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI022 921021	2.6		2	170	2	20	1K	1	1	341
PRI022 921124	4.09	36.8	52	1910	2K	27	1K	9	3	3370
PRI022 921228	3	29.3	8	613	1K	20	1K	6	3	774
PRI022 930113	4.5	51.2	1522	4390	2	25	1K	7	1K	8260
PRI022 930210	8.2	87.9	3	229	2K	10	1K	2	1	275
PRI022 930310	5.6	53.4	34	2250	2K	18	1K	5	3	3040
PRI022 930415	3.8	47	253	5810	2K	26	1K	2	5	4140
PRI022 930512	4.6	55.6	345	10900	3	74	1K	12	9	9020
PRI022 930622	4.8	17.1	23	685	2K	18	1K	4	3	1000
PRI022 930721	5.9	24.1	69	2340	2K	22	1K	1K	5	4960
PRI022 930818	3.5	22.9	56	2010	2K	20	1K	3	5	3180
PRI022 930914	7.8	39.9	9	287	2K	19	1K	3	1	495

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921021	2K	48	.1K	3	191	.05K	0.02	0.182	1K
921124	3	142	.1K	14	179	.05K	0.389	0.468	77
921228	1K	41	.1K	76	174	.05K	0.474	0.092	100
930113	3	190	.1K	2K	192	.05K	0.579	0.269	970
930210	2K	20	.1K	7	234	.05K	0.688	0.148	420
930310	2K	52	.1K	25	174	.05K	0.733	0.166	78
930415	3	192	.1K	36	166	.05K	0.428	0.358	100
930512	10	416	.1K	1K	204	.05K	0.225	0.48	1K
930622	3	59	.1K	24	174	.05K	0.633	0.115	180
930721	2K	117	.1K	94.1	94.1	0.181	0.684	0.311	580
930818	2	107	.1K	10	124	.05K		0.176	66
930914	3	43	.1K	1K	158	.05K	0.062	0.192	240

KENTUCKY RIVER BASIN
SOUTH ELKHORN CREEK NEAR MIDWAY

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI034 921011	33.7		8	90	2K	24	1K	1	3	347
PRI034 921109	25.7	59.5	1	34	2K	23	1K	1	2	595
PRI034 921216	22.3	39.8	4		1K	25	1K	3	2	163
PRI034 930113	12.7	33.7	29	758	2K	23	1K	8	1K	796
PRI034 930208	31.8	49.3	2	130	2K	12	1K	4	4	100
PRI034 930310	17.4	54	18	475	2K	16	1K	3	3	473
PRI034 930414	21.6	37.8		1450	2K	13	1K	1K	2	241
PRI034 930510	33.1	45.9	15	382	2K	29	1K	6	4	458
PRI034 930614	28.1	52.8	17	439	2K	24	1K	1K	3	449
PRI034 930712	52.4	66.9	15	359	2K	26	1K	1K	3	478
PRI034 930809	34.8	67.8	9	251	2K	23	1K	1K	3	330
PRI034 930915	58.6	71.2	10	291	2K	21	1K	1K	4	301

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 - N	NO2+NO3 - N	TP	FECAL
YMMDD---	1051	1055	71900	1092	900	610	630	665	31616
	2K	355	.1K	41	199	.05K	6.26	2.8	30
	2K	25	.1K	43	240	.05K	6.04	2.15	60
	2	35	.1K	16	155	.05K	6.22	0.797	10K
	4	77	.1K	12	195	0.01	4.29	0.663	1000
	2K	24	.1K	9	189	.05K	8.39	0.893	20
	2	42	.1K	6	177	.05K	4.98	0.539	70
	2K	35	.1K	8	167	.05K	5.18	0.574	150
	2K	112	.1K	17	278	0.061	6.21	0.847	300
	3	64	.1K	13	213	.05K	4.73	0.668	570
	2K	87	.1K	15	225	0.073	8.88	1.28	4000
	3	73	.1K	13	190	.05K	4.63	0.968	250
	2K	55	.1K	20	205	.05K		1.48	700

KENTUCKY RIVER BASIN
KENTUCKY RIVER AT FRANKFORT

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI024 921011	5.4		10	166	2K	36	1K	1K	2	532
PRI024 921109	7.8	92.9	8	158	2K	54	1K	1	2	430
PRI024 921215	1.1	54.2	6	46	1K	36	1K	2	1K	489
PRI024 930113	5.4	41.6	32	503	2K	27	1K	3	1K	1050
PRI024 930208	6.7	59.9	7	191	2K	17	1K	3	2	275
PRI024 930310	4.1	55.1	120	2170	5	34	1K	5	5	4370
PRI024 930414	3.5	70.8		340	2K	15	1K	1	3	681
PRI024 930512	4.7	127	15	200	2K	30	1K	7	1	448
PRI024 930614	5.9	99.8	21	672	2K	28	1K	1K	3	1110
PRI024 930712	8	50.8	8	174	2	35	1K	1	1K	336
PRI024 930810	7.8	73.1	9	87	2K	36	1K	1K	4	183
PRI024 930922	5.9	64.3	12	336	2K	33	1K	1K	2	540

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YMMDD---	1051	1055	71900	1092	900	.610	630	665	31616
921011	2K	42	.1K	5	138	.05K	0.694	0.223	10K
921109	2K	47	.1K	4	209	.05K	0.645	0.177	10
921215	1K	58	.1K	3	181	0.062	0.865	0.089	10
930113	2	77	.1K	7	131	.05K	0.916	0.107	110
930208	2K	33	.1K	2K	106	.05K	.009K	0.069	10K
930310	2K	139	.1K	15	92.3	.05K	0.797	0.145	320
930414	2K	28	.1K	5	106	.05K	0.538	0.047	10
930512	2K	55	.1K	13	113	.05K	0.63	0.047	20
930614	2K	53	.1K	1K	138	.05K	0.685	0.118	120
930712	2K	37	.1K	22	180	.05K	0.354	0.087	10
930810	2K	66	.1K	3	157	.05K	.005K	0.038	10K
930922	2K	43	.1K	1K	138	.05K	0.814	0.065	10

KENTUCKY RIVER BASIN
KENTUCKY RIVER AT CAMP NELSON

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI025 921012	8.4		14	170	2	40	1K	2	1	550
PRI025 921110	9.72	90.3	6	176	2	54	1K	2	1	573
PRI025 921214	4.1	54	6	124	1K	30	1K	3	1	618
PRI025 930111	4.8	55	16	405	2K	25	1K	3	1K	*****
PRI025 930209	5.4	66.2	3	206	2K	18	1K	6	4	489
PRI025 930309	3.1	58.5	108	1810	3	29	1K	4	5	4350
PRI025 930413	3	77.6		716	2K	20	1K	2	3	1530
PRI025 930512	4.2	58.8	15	221	2K	34	1K	3	1	568
PRI025 930622	6.1	11.3	30	685	2K	36	1K	1	4	1270
PRI025 930721	8	82.3	8	203	2K	37	1K	1K	1	528
PRI025 930810	10.4	111	7	150	2K	46	1K	1K	3	290
PRI025 930920	6.2	68.9	14	308	2K	35	1K	1	2	591

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 - N	NO2+NO3 - N	TP	FECAL
YYMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921012	2K	56	.1K	4	153	.05K	0.443	0.123	10
921110	5	123	.1K	5	187	.05K	0.495	0.094	10K
921214	1K	43	.1K	4	139	.05K	0.642	0.054	10
930111	2	86	.1K	221	107	.05K	0.586	0.036	40
930209	2K	49	.1K	2K	112	.05K	0.632	0.053	10K
930309	3	140	.1K	14	77.3	.05K	0.531	0.092	190
930413	2K	60	.1K	9	121	.05K	0.377	0.035	30
930512	2K	137	.1K	6	108	.05K	0.296	0.017	50
930622	2K	88	.1K	1K	173	.05K	0.575	0.089	3600
930721	2K	67	.1K	5	152	.05K	0.518	0.074	8
930810	2K	89	.1K	6	182	.05K	0.28	.005K	10K
930920	2K	57	.1K	2	133	.05K	0.493	0.035	8

KENTUCKY RIVER BASIN
DIX RIVER NEAR DANVILLE

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI045 921012	4.3		5	90	2K	34	1K	1K	1	135
PRI045 921110	1K	35.7	2	65	2	39	1K	1	2	131
PRI045 921214	4.1	29.8	2	155	1K	27	1K	2	1K	344
PRI045 930111	4		11	191	2K	22	1K	4	1K	360
PRI045 930209	6.4	29.8	1K	118	2K	15	1K	7	4	150
PRI045 930309	4.1	53	25	693	2K	22	1K	1K	3	1010
PRI045 930413	4	36.6		170	2K	15	1K	1K	1	283
PRI045 930512	5.4	24.5	11	265	2K	42	1K	1K	2K	380
PRI045 930622	6.4	36.2	24	449	2K	34	1K	1	3	736
PRI045 930721	7.3	22.3	11	317	2K	30	1K	1K	5	419
PRI045 930810	9.3	34.1	6	163	2K	35	1K	1K	3	286
PRI045 930920	23.6	27.4	3	114	2K	26	1K	1K	1	225

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
	2K	8	.1K	4	175	.05K	0.64	0.212	10
	2K	5	.1K	5	208	.05K	1.1	0.139	40
	1K	12	.1K	4	166	.05K	1.4	0.044	170
	2K	15	.1K	4	154	.05K	1.59	0.045	210
	2K	7	.1K	2K	148	0.061	1.08	0.032	10K
	2K	27	.1K	5	117	.05K	1.57	0.083	180
	2K	13	.1K	4	150	.05K	0.692	0.026	20
	2K	80	.1K	4	175	0.068	0.789	0.061	1500
	2	83	.1K	1K	166	.05K	1.25	0.141	4000
	3	27	.1K	5	127	.05K	0.923	0.155	49
	2K	21	.1K	3	147	.05K	0.635	0.049	40
	2K	18	.1K	2	130	0.644	2.08	0.048	49

KENTUCKY RIVER BASIN
 KENTUCKY RIVER AT LOCK & DAM NO. 11 (SITE MOVED TO NEAR RED RIVER CONFLUENCE IN AUGUST, 1993)

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI058 921012	7	144	10	44	2K	46	1K	2	1	427
PRI058 921110	7.85	144	10	46	2K	67	1K	3	1	506
PRI058 921214	3.6	76.8	5	101	1K	42	1K	3	1K	543
PRI058 930111	4.6	68	15	384	2K	26	1K	3	1K	739
PRI058 930209	6	76.1	4	124	2K	20	1K	3	1	439
PRI058 930309	3	68.2	70	1260	2K	31	1K	1K	2	2970
PRI058 930413	3.2	75.9	15	452	2K	21	1K	1K	2	1040
PRI058 930512	5.7	84.9	12	248	2K	41	1K	1K	2	656
PRI058 930615	7	12.6	126	2400	2K	47	1K	2	9	5410
PRI058 930721	12	146	6	181	2K	46	1K	1K	4	142
PRI058 930810	11.6	113	6	89	2K	41	1K	1K	3	249
PRI058 930920	12.2	125	14	249	2K	46	1K	1K	1	628

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 -N	NO2+NO3 -N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921012	2K	183	.1K	2	160	.05K	0.351	0.066	10
921110	2K	249	.1K	4	208	.05K	0.12	0.022	30
921214	2	80	.1K	3	132	.05K	0.281	0.007	390
930111	2K	62	.1K	15	81.7	.05K	0.334	0.013	300
930209	2K	81	.1K	17	92.4	.05K	0.277	.005K	10K
930309	3	120	.1K	10	73.5	.05K	0.421	0.063	180
930413	2K	69	.1K	9	119	.05K	0.379	0.013	70
930512	2K	256	.1K	6	114	.05K	0.199	0.012	10
930615	2	124	.1K	14	146	.05K	0.376	0.086	2300
930721	2K	24	.1K	5	194	.05K	0.255	0.057	4
930810	2K	52	.1K	3	164	.05K	0.4	.005K	10
930920	2K	127	.1K	1K	179	.05K	0.317	0.016	4K

KENTUCKY RIVER BASIN
RED RIVER AT CLAY CITY

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI046	921012	9.9	8	40	2K	53	1K	1K	1	1150
PRI046	921110	14.8	1K	33	2K	59	1K	1K	1	1030
PRI046	921214	5.3	7	221	1K	30	1K	4	1K	813
PRI046	930111	6	18	133	2K	22	1K	2	1K	559
PRI046	930209	5.7	1K	59	2K	24	1K	4	1	570
PRI046	930309	3.4	31	813	2K	23	1K	1K	2	1250
PRI046	930413	4	15	267	2K	18	1K	1K	3	875
PRI046	930512	4.9	11	286	2K	40	1K	1K	1	783
PRI046	930615	4.4	120	2700	2K	40	1K	5	5	5650
PRI046	930721	8.5	5	95	2K	39	1K	1K	1	246
PRI046	930811	6.6	11	111	2K	32	1K	1K	2	382
PRI046	930921	6	9	168	2K	38	1K	1K	4	829

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 - N	NO2+NO3 - N	TP	FECAL
YMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921012	2K	80	.1K	3	96.3	.05K	0.073	0.065	40
921110	2K	51	.1K	8	108	.05K	0.055	0.019	20
921214	1K	50	.1K		68.9	.05K	0.566	0.02	140
930111	2K	49	.1K	3	54.4	.05K	0.38	0.014	170
930209	2K	82	.1K	2K	56.5	.05K	0.283	0.013	10K
930309	2K	52	.1K	7	48.4	.05K	0.366	0.048	20
930413	2	51	.1K	7	63.9	.05K	0.245	0.017	70
930512	2K	98	.1K	5	70.9	.05K	0.15	0.012	150
930615	3	119	.1K	17	75.8	.05K	0.361	0.068	1100
930721	2K	30	.1K	1K	95	.05K	0.294	0.053	56
930811	2K	36	.1K	3	71.9	.05K	0.406	0.01	240
930921	2K	62	.1K	3	94.3	.05K	0.296	0.014	52

KENTUCKY RIVER BASIN
NORTH FORK KENTUCKY RIVER AT JACKSON

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI031 921019	4		2	46	2K	51	1K	1	2	320
PRI031 921111	1K	249	8	103	2K	67	1K	3	1	372
PRI031 921215	6.6	138	7	69	1K	36	1K	7	3	645
PRI031 930112	3.8	99.8	33	386	2K	27	1K	2	1K	936
PRI031 930210	6.8	182	2	86	2K	23	1K	1K	1	343
PRI031 930308	3.2	104	51	815	9	26	1K	2	3	1750
PRI031 930412	3	145		496	2K	20	1K	2	2	910
PRI031 930511	4.1	156	307	4240	3	85	1K	6	8	
PRI031 930621	14.5	94.6	44	905	2K	45	1K	1	4	1910
PRI031 930713	9.7	356	35	531	2K	53	1K	1K	5	1340
PRI031 930811	9.3	70.2	30	185	2K	47	1K	1K	3	387
PRI031 930921	9	262	18	354	2K	43	1K	1K	1	811

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 - N	NO2+NO3 - N	TP	FECAL
YYMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921019	2K	47	.1K	7	350	.05K	0.266	0.019	60
921111	2K	36	.1K	4	356	.05K	0.202	0.014	60
921215	1K	59	.1K	13	221	.05K	0.395	0.067	230
930112	2K	75	.1K	5	136	.05K	0.385	0.026	280
930210	2K	106	.1K	2K	208	.05K	0.352	0.026	20
930308	2K	113	.1K	7	118	.05K	0.592	0.053	400
930412	2K	50	.1K	8	176	.05K	0.528	0.016	600
930511	3	300	.1K	40	182	.05K	0.394	0.128	780
930621	2K	113	.1K	1K	277	.05K	0.583	0.04	180
930713	2K	104	.1K	1K	468	.05K	0.356	0.046	380
930811	2K	39	.1K	9	387	.05K	0.588	.005K	750
930921	2K	86	.1K	5	371	0.164	0.851	0.013	320

KENTUCKY RIVER BASIN
MIDDLE FORK KENTUCKY RIVER AT TALLEGA

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI032 921019	6.6	78.7	1K	29	2	48	1K	2	2	433
PRI032 921111	1K	67.6	2	82	2K	65	1K	1	1	363
PRI032 921215	8.5	52.2	5	118	1K	40	1K	5	2	996
PRI032 930112	3.1	75.2	33	544	2K	24	1K	1	1K	1060
PRI032 930210	4	59.4	1	158	2K	18	1K	1K	1	484
PRI032 930308	2.4	59.9	87	1770	5	34	1K	3	4	3710
PRI032 930412	2.2	60.3	9	485	2K	21	1K	1	1	1160
PRI032 930511	3.5	279	3	361	2K	30	1K	1K	1K	468
PRI032 930621	4.9	94.3	1	103	2K	37	1K	3	2	120
PRI032 930713	6.5	81.3	15	40	2K	39	1K	1K	1	213
PRI032 930811	4.8	68.1	9	38	2K	32	1K	1	3	169
PRI032 930921	3.9			172	2K	30	1K	1K	2	475

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921019	2K	103	.1K	87	139	.05K	0.048	0.04	20
921111	2K	52	.1K	12	136	.05K	0.053	.005K	10
921215	1K	110	.1K	4	122	0.084	0.167	0.006	80
930112	2K	60	.1K	6	58.3	.05K	0.252	0.018	200
930210	2K	56	.1K	2K	69.2	.05K	0.28	0.022	10
930308	4	113	.1K	12	42.3	.05K	0.286	0.069	260
930412	2K	55	.1K	22	78.3	.05K	0.266	0.011	120
930511	2K	60	.1K	4	75.3	.05K	0.164	.005K	80
930621	2K	52	.1K	1K	130	.05K	0.192	0.018	20
930713	2K	58	.1K	11	133	.05K	0.158	0.043	10
930811	2K	21	.1K	2	105	.05K	0.277	.005K	270
930921	2K	57	.1K	1K	101	.05K	0.131	0.008	100

KENTUCKY RIVER BASIN
SOUTH FORK KENTUCKY RIVER AT BOONEVILLE

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI033 921019	10.6		1K	45	2K	50	1K	1	1	469
PRI033 921111	9.29	79.5	4	50	2K	66	1K	1	1	527
PRI033 921215	3.2	33.7	2	71	1K	27	1K	3	2	504
PRI033 930112	3.6	41.8	15	137	2K	22	1K	1K	1K	367
PRI033 930210	7	64.8	1K	42	2K	22	1K	1K	1K	266
PRI033 930308	2.5	60.8	21	546	2K	21	1K	1	2	890
PRI033 930412	3	46.8		294	2K	16	1K	1K	2	360
PRI033 930511	6.8	62.7	6	321	2K	37	1K	1K	1K	379
PRI033 930621	6.2	163	17	365	2K	33	1K	1	3	832
PRI033 930713	18.5	54	5	116	2K	48	1K	1K	2	360
PRI033 930811	23.6	81.3	13	78	2K	49	1K	1K	2	208
PRI033 930921	5.5	43.5	13	457	2K	33	1K	1	1	1050

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 -N	NO2+NO3 -N	TP	FECAL
YMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921019	2K	198	.1K	9	105	.05K	0.091	0.024	10
921111	2K	31	.1K	4	145	.05K	0.09	.005K	30
921215	1K	45	.1K	3	70.1	.05K	0.332	0.005	140
930112	2K	59	.1K	7	46.6	.05K	0.3	0.01	460
930210	2K	89	.1K	2K	70.1	.05K	0.274	0.02	30
930308	2K	62	.1K	4	40.4	.05K	0.379	0.039	120
930412	2K	38	.1K	6	59.1	.05K	0.21	.005K	10
930511	2K	54	.1K	4	79.2	.05K	0.088	.005K	40
930621	2K	98	.1K	1K	74.3	.05K	0.452	0.025	30
930713	2K	52	.1K	5	113	.05K	0.254	0.033	10
930811	2K	23	.1K	2	122	.05K	0.212	.005K	2600
930921	2K	71	.1K	2	81.7	.05K	0.533	0.024	100

LICKING RIVER BASIN

LICKING RIVER BASIN
LICKING RIVER AT CLAYSVILLE

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI061 921011	6.2		14	235	2K	22	1K	1	2	611
PRI061 921109	1.1	32	15	235	2	36	1K	1K	1	1140
PRI061 921216	1K	34	10	286	2	30	1K	3	1	764
PRI061 930113	4.8	38.1	64	1570	2K	26	1K	3	1K	2240
PRI061 930208	6.2	45.5	3	122	2K	15	1K	3	1	159
PRI061 930310	5	58.2	47	1440	2	24	1K	5	2	2030
PRI061 930414	3.5	46	43	701	2K	17	1K	1K	1	1610
PRI061 930510	4.4	33.8	11	178	2K	28	1K	3	1	541
PRI061 930614	4.3	6.26	107	1440	2K	33	1K	1	3	718
PRI061 930712	6	16.7	18	399	2K	25	1K	1K	1	1150
PRI061 930809	5.4	38.2	23	653	2K	30	1K	1	3	1150
PRI061 930915	5.3	29.4	19	407	2K	22	1K	2	1K	743

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921011	2K	52	.1K	2	87.4	.05K	0.265	0.081	40
921109	2	231	.1K	7	113	.05K	0.15	0.059	70
921216	1K	76	.1K	13	141	.05K	0.961	0.044	200
930113	2	128	.1K	6	142	0.05	0.833	0.131	1400
930208	2K	25	.1K	2K	97.9	.05K	0.559	0.007	10K
930310	2K	101	.1K	9	92.1	.05K	0.752	0.089	110
930414	2K	84	.1K	9	72.1	.05K	0.399	0.037	40
930510	2K	54	.1K	4	94.6	.05K	0.318	0.017	60
930614	3	203	.1K	5	80.4	.05K	0.545	0.096	2600
930712	2K	67	.1K	1K	88.7	.05K	0.405	0.067	60
930809	2K	76	.1K	6	83.5	.05K	0.429	0.011	40
930915	2K	63	.1K	1K	91.3	.05K	0.296	0.041	20

LICKING RIVER BASIN
NORTH FORK LICKING RIVER AT MILFORD

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI060 921011	8.9		14	288	2	33	1K	2	4	444
PRI060 921109	7.1	32.4	3	244	2	31	1K	1K	2	765
PRI060 921216	6.5	37.6	11	393	2	31	1K	3	1	816
PRI060 930113	4	35.4	208	4770	2K	38	1K	7	1K	9350
PRI060 930208	7.4	62.9	1K	71	2K	16	1K	2	1	107
PRI060 930310	5.2	56.7	64	2210	2	28	1K	11	2	2940
PRI060 930414	5.5	51.4	21	552	2K	18	1K	1K	1	829
PRI060 930510	6.2	52.3	18	221	2K	31	1K	10	1	716
PRI060 930614	4.5	14.7	110	2520	2K	29	1K	2	4	4540
PRI060 930712	8.2	18.9	17	578	2	31	1K	1K	2	1050
PRI060 930809	6.9	59.2	12	355	2K	22	1K	2	3	565
PRI060 930915	6.5	21.7	8	250	2K	24	1K	3	1K	367

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 - N	NO2+NO3 - N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921011	2K	85	.1K	4	238	.05K	0.461	0.26	50
921109	2K	37	.1K	7	317	.05K	0.113	0.231	110
921216	1K	63	.1K	4	173	.05K	1.72	0.102	2000
930113	3	307	.1K	17	215	.05K	1.15	0.329	3000
930208	2K	30	.1K	2K	215	.05K	1.46	0.036	10K
930310	2	100	.1K	8	197	.05K	2.02	0.192	420
930414	2K	39	.1K	6	193	.05K	0.64	0.065	90
930510	2K	81	.1K	6	348	.05K	0.498	0.061	120
930614	2	144	.1K	2	162	.05K	0.978	0.2	3700
930712	2K	162	.1K	7	253	0.074	0.219	0.126	420
930809	2K	98	.1K	3	154	0.082	0.179	0.052	40
930915	2K	110	.1K	1K	180	.05K	0.179	0.075	90

LICKING RIVER BASIN
SOUTH FORK LICKING RIVER AT MORGAN

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI059 921011	4.5	36.7	6	71	2	28	1K	2	2	182
PRI059 921109	13.7	35.5	5	50	3	39	1K	1K	5	338
PRI059 921216	2.2	34.4	8	275	1K	31	1K	3	1	383
PRI059 930113	3.2	43.8	74	1970	2K	26	1K	4	1K	2580
PRI059 930208	7.2	54.6	1	113	2K	15	1K	3	1	111
PRI059 930310	5.8	44.9	42	1710	2K	21	1K	2	2	1760
PRI059 930414	5.8	34.6	18	473	2K	14	1K	1K	1	597
PRI059 930510	9.1	13.7	12	252	2K	26	1K	1K	3	497
PRI059 930614	7.2	42.6	134	2280	2K	37	1K	1	4	4140
PRI059 930715	9.3	35	16	395	2K	26	1K	1K	1K	714
PRI059 930809	9.5		10	299	2K	25	1K	2	3	474
PRI059 930915	10.1		14	358	2K	24	1K	1K	1K	519

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921011	2K	13	.1K	2K	197	.05K	0.797	0.423	30
921109	2K	18	.1K	4	284	.05K	0.289	0.476	90
921216	1K	28	.1K	4	150	.05K	2.22	0.338	150
930113	2	120	.1K	12	233	0.05	1.83	0.318	1000
930208	2K	9	.1K	2K	212	.05K	1.97	0.103	10K
930310	3	68	.1K	4	184	.05K	2.5	0.263	210
930414	2K	25	.1K	3	175	.05K	1.07	0.119	40
930510	2K	49	.1K	7	211	.05K	1.46	0.27	100
930614	3	202	.1K	4	180	.05K	2.37	0.431	600
930715	2K	45	.1K	1K	194	.05K	0.967	0.295	50
930809	2K	33	.1K	5	159	.05K	0.266	0.125	20
930915	2K	32	.1K	6	172	.05K	0.65	0.193	140

LICKING RIVER BASIN
LICKING RIVER AT WEST LIBERTY

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI062 921014	18.7	66.7	8	13	2	58	1K	2	4	1060
PRI062 921110	16.9	90	1	69	2K	63	1K	1K	1	551
PRI062 921216	1K	46.4	1K	59	2	54	1K	6	1	549
PRI062 930113	7.1	47.3	33	323	2K	33	1K	3	1K	1270
PRI062 930209	9.6	67	1K	42	3	29	1K	3	1	433
PRI062 930309	5.1	63.4	31	624	2K	37	1K	3	2	1800
PRI062 930414	5.8	73.4		141	2K	24	1K	1	2	801
PRI062 930511	7.6	71.2	12	199	2K	53	1K	4	1	1040
PRI062 930613	20.2	46.7	148	2290	2K	50	1K	2	5	
PRI062 930713	13.2	58.4	23	382	2K	50	1K	1K	2	1330
PRI062 930811	14.1	52.5	47	1200	2K	46	1K	1	5	2530
PRI062 930914	12.4	62.1	15	233	2K	40	1K	1K	2	986

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 -N	NO2+NO3 -N	TP	FECAL
YMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921014	2K	97	0.1	10	155	.05K	0.278	0.028	12
921110	2K	72	.1K	6	180	.05K	0.052	.005K	140
921216	1K	117	.1K	19	127	.05K	0.431	0.016	420
930113	2	94	.1K	22	72.6	.05K	0.435	0.073	1100
930209	2K	113	.1K	2K	94.8	.05K	0.428	.005K	100
930309	2K	92	.1K	11	67	.05K	0.44	0.047	1300
930414	2K	59	.1K	6	98.3	.05K	0.353	0.019	350
930511	13	129	.1K	6	118	.05K	0.239	0.006	380
930613	3	219	.1K	9	86.4	.05K	0.471	0.079	
930713	2K	200	.1K	10	135	.05K	0.392	0.051	300L
930811	2K	209	.1K	10	117	.05K	0.418	0.008	2400
930914	2K	151	.1K	14	131	.05K	0.335	0.02	420

TEAYS RIVER REGION

TEAYS RIVER BASIN REGION
LEVISA FORK NEAR LOUISA

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI064 921012	17.7	170	16	271	2	62	1K	1	3	1110
PRI064 921110	28.9	177	10	141	2K	85	1K	1	2	634
PRI064 921215	14.1	135	18	271	1K	67	1	5	3	793
PRI064 930113	10	89.4	29	487	2K	36	1K	5	1K	1310
PRI064 930208	15.5	19.5	2	107	2K	39	1K	1K	1K	486
PRI064 930309	9	85.1	56	1170	2K	35	1K	3	3	2510
PRI064 930414	6.8	104		323	2K	26	1K	3	3	843
PRI064 930510	11.5	141	8	158	2K	60	1K	2	1	587
PRI064 930614	15.7	46.9	44	680	2K	49	1K	1K	10	1410
PRI064 930714	24.9	139	40	725	2K	54	1K	1	2	1510
PRI064 930809	21.7	127	50	964	2K	52	1K	1	4	2030
PRI064 930914	24.9	161	23	428	2K	53	1K	1K	3	965

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 - N	NO2+NO3 - N	TP	FECAL
YMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921012	5	74	.1K	11	202	.05K	0.324	0.08	60
921110	2	70	.1K	9	255	.05K	0.235	0.007	60
921215	1K	107	.1K	27	162	.05K	0.546	0.019	900
930113	2	94	.1K	11	106	.05K	0.514	0.034	600
930208	2K	50	.1K	6	146	.05K	0.42	0.007	30
930309	12	138	.1K	13	87.6	.05K	0.638	0.067	270
930414	3	36	.1K	7	128	.05K	0.427	0.023	300
930510	5	66	.1K	7	165	.05K	0.369	0.059	900
930614	3	82	.1K	1K	167	.05K	0.552	0.036	450
930714	2K	68	.1K	14	177	0.051	0.465	0.067	1000
930809	3	77	.1K	12	160	.05K	0.451	.005K	1200
930914	5	101	.1K	4	183	.05K	0.485	0.027	70

TEAYS RIVER BASIN REGION
LEVISA FORK NEAR PIKEVILLE

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI006	14.6	178	6	191	2K	53	1K	2	2	764
PRI006	25.5	186	12	159	2K	87	1K	1K	2	531
PRI006	21	154	14	132	1K	71	1K	2	4	379
PRI006	11.9	114	16	273	2K	40	1K	6	1K	611
PRI006	17.4	126	2	25	2K	37	1K	1K	1K	289
PRI006	8.4	106	13	323	2K	31	1K	2	1	785
PRI006	6	113	6	292	2K	22	1K	1	5	283
PRI006	12.2	170	36	126	2K	65	1K	1	1	368
PRI006	16	170	62	850	2K	52	1K	1K	5	1190
PRI006	21.5	180	32	1130	2	68	1K	1K	2	2300
PRI006	28.2	180	32	493	2K	65	1K	1	3	1060
PRI006	28	198	21	384	2K	61	1K	1K	2	782

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921012	5	81	.1K	7	200	.05K	0.423	0.034	390
921110	2K	106	.1K	6	251	.05K	0.139	.005K	130
921215	1K	131	.1K	11	175	.05K	0.494	0.006	400
930113	2K	78	.1K	6	118	.05K	0.476	0.019	600
930208	2K	69	.1K	2K	156	.05K	0.307	.005K	250
930309	3	73	.1K	6	104	0.083	0.65	0.038	300
930414	2	37	.1K	7	118	.05K	0.386	0.015	600
930510	3	68	.1K	7	180	.05K	0.319	0.021	520
930614	2	85	.1K	1K	177	.05K	0.387	0.035	2100
930714	2K	140	.1K	16	197	.05K	0.318	0.056	700
930809	2	136	.1K	7	198	.05K	0.218	.005K	500
930914	4	97	.1K	6	195	.05K	0.209	0.019	30

TEAYS RIVER BASIN REGION
TUG FORK AT KERMIT, W.VA.

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI002 921012	26.3	184	7	206	2K	65	1K	1K	3	764
PRI002 921110	27.2	201	5	63	2K	88	1K	1K	3	446
PRI002 921215	10.7	114	14	313	1K	62	1	3	4	731
PRI002 930113	12.9	97.6	43	617	2K	47	1K	3	1K	1520
PRI002 930208	19.3	151	1	69	2K	45	1K	1K	1K	499
PRI002 930309	6.2	97.7	39	1000	2K	40	1K	3	4	1750
PRI002 930414	8.2	123		298	2K	27	1K	1	1	511
PRI002 930510	11.1	187	10	141	2K	78	1K	1	2	465
PRI002 930614	17.8	243	102	1600	2K	66	1K	2	5	3530
PRI002 930714	30.1	200	1270	16400	11	176	1K	20	35	
PRI002 930809	23.7	197	42	721	2K	67	1K		5	1440
PRI002 930914	38.5	197	17	294	2K	68	1K	1K	3	647

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921012	3	77	.1K	6	193	.05K	1.11	0.051	130
921110	2K	61	.1K	6	241	.05K	0.837	.005K	290
921215	1K	115	.1K	7	173	.05K	1.03	0.016	3300
930113	2	82	.1K	13	119	0.05	0.652	0.158	1900
930208	2K	97	.1K	2K	162	.05K	0.655	0.013	540
930309	16	82	.1K	12	100	.05K	0.822	0.098	1900
930414	2K	32	.1K	8	143	.05K	0.517	0.019	2100
930510	9	59	.1K	10	220	.05K	0.512	0.03	900
930614	4	123	.1K	3	178	0.059	0.75	0.056	1900
930714	2K	1450	.1K	116	291	.05K	0.686	0.47	6000L
930809	3	79	.1K	8	197	.05K	0.876	.005K	200
930914	2K	69	.1K	4	204	.05K	0.674	0.018	170

TEAYS RIVER BASIN REGION
TYGARTS CREEK NEAR LOAD

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI048 921013	9.7	20.6	14	107	2K	40	1K	1	1	1330
PRI048 921109	11	24.7	15	84	2	47	1K	3	1	1100
PRI048 921214	8.7	30.4	1K	145	1K	44	1K	3	4	626
PRI048 930112	4.9	25.8	7	116	4	26	1K	4	1K	556
PRI048 930208	6	30	5	61	2	18	1K	3	1	605
PRI048 930309	4	46.9	10	529	3	23	1K	3	2	979
PRI048 930413	4.2	29.1	9	231	2K	15	1K	2	2	585
PRI048 930510	5.1	27.3	4	78	2K	40	1K	1K	1	634
PRI048 930614	5.4	12.4	13	1320	2K	31	1K	1K	25	980
PRI048 930713	6.9	24.7	13	271	2K	43	1K	1K	9	1060
PRI048 930810	6.5	26.1	18	486	2K	42	1K	1K	5	1280
PRI048 930913	8	24.7	9	273	2K	38	1K	1K	1	886

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 - N	NO2+NO3 - N	TP	FECAL
YYMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921013	5	179	.1K	11	128	.05K	0.315	0.231	60
921109	2K	87	.1K	22	166	.05K	0.042	.005K	75
921214	1K	53	.1K	32	137	.05K	0.754	0.012	240
930112	2	44	.1K	29	93.3	.05K	0.876	0.022	360
930208	2K	60	.1K	7	95.5	.05K	0.557	.005K	480
930309	2K	43	.1K	3	79	.05K	0.599	0.039	1200
930413	2K	33	.1K	11	83.2	.05K	0.224	0.016	36
930510	2K	92	.1K	11	108	.05K	0.156	.005K	110
930614	2K	130	.1K	1K	108	.05K	0.542	0.024	270
930713	2K	253	.1K	15	127	.05K	0.446	0.041	390
930810	2K	203	.1K	4	124	.05K	0.5	.005K	190
930913	2K	122	.1K	11	123	.05K	0.269	0.644	80

TEAYS RIVER BASIN REGION
LITTLE SANDY RIVER AT ARGILLITE

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YYMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI049 921013	5.1	43	8	65	2K	38	1K	2	1	1050
PRI049 921109	16.3	44.4	4	69	2K	47	1K	1K	1	613
PRI049 921214	13.9	42.8	2	50	1K	54	1K	4	2	659
PRI049 930112	14.1	48.5	11	90	5	31	1K	3	1K	584
PRI049 930208	24.2	54.2	1K	53	2	28	1K	3	1	482
PRI049 930309	5.5	55	63	1470	2	32	1K	4	2	3100
PRI049 930413	8.8	50.8	12	139	2K	19	1K	5	3	607
PRI049 930510	14.7	50.4	5	69	2K	47	1K	1K	2	765
PRI049 930614	12.6	20.7	124	2170	2K	46	1K	2	17	
PRI049 930713	30.6	45.6	15	181	2	46	1K	1K	1	1090
PRI049 930810	32.5	38.9	10	159	2K	41	1K	1K	4	735
PRI049 930913	42	46.5	7	118	2K	34	1K	1K	1	773

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3-N	NO2+NO3-N	TP	FECAL
YYMMDD---	1051	1055	71900	1092	900	610	630	665	31616
921013	2K	395	.1K	9	101	.05K	1.33	0.82	48
921109	2K	345	.1K	7	110	.05K	0.461	0.23	25
921214	1K	180	.1K	62	117	.05K	0.549	0.096	330
930112	2	113	.1K	27	80	.05K	0.565	0.09	860
930208	2K	187	.1K	5	77.1	.05K	0.809	0.057	20
930309	2K	165	.1K	10	45.9	.05K	0.421	0.077	740
930413	2K	85	.1K	7	60.8	.05K	0.439	0.03	120
930510	2K	234	.1K	8	83	.05K	0.47	0.012	170
930614	2	194	.1K	7	72.4	.05K	0.525	0.07	1200L
930713	2K	355	.1K	48	99.9	.05K	0.638	0.07	300L
930810	2K	348	.1K	5	84.8	.05K	0.784	.005K	160
930913	2K	328	.1K	5	79.8	.05K	0.973	0.013	190

TEAYS RIVER BASIN REGION
KINNICONICK CREEK AT TANNERY

STORET DATE	CHLORIDE	SULFATES	TSS	ALUMINUM	ARSENIC	BARIUM	CADMIUM	CHROMIUM	COPPER	IRON
-----YMMDD--	940	946	530	1105	1002	1007	1027	1034	1042	1045
PRI063 921013	6.1	21.2	14	158	4	36	1K	3	2	1130
PRI063 921109	5.06	16.1	2	80	2K	35	1K	1	1	660
PRI063 921214	2.1	23.2	1K	70	1K	27	1K	6	1	259
PRI063 930112	2.8	23.6	11	25	4	18	1K	3	1K	246
PRI063 930208	3.3	25.4	4	57	3	14	1K	8	3	225
PRI063 930309	2.5	50.8	1K	319	6	14	1K	7	3	495
PRI063 930413	2.4	26.9		143	2K	9	1K	1K	2	317
PRI063 930510	3.2	29.3	3	384	2K	25	1K	2	4	479
PRI063 930614	3.8	28.4	10	206	2K	21	1K	5	14	570
PRI063 930713	3.9	20.4	6	126	2	22	1K	1K	1K	781
PRI063 930810	3.4	22.5	9	322	2K	24	1K	1K	2	1180
PRI063 930913	4.1	18.9	18	396	2K	28	1K	1K	1	1320

DATE	LEAD	MANGANESE	MERCURY	ZINC	HARDNESS	NH3 - N	NO2+NO3 - N	TP	FECAL
YMMDD----	1051	1055	71900	1092	900	610	630	665	31616
921013	2K	232	.1K	16	59.4	.05K	0.164	0.033	40
921109	2K	43	.1K	22	59.9	.05K	0.094	.005K	72
921214	1K	23	.1K	20	49.4	.05K	0.697	.005K	230
930112	2K	24	.1K	28	30.5	.05K	0.774	0.01	140
930208	2K	20	.1K	2K	31.6	.05K	0.53	.005K	47
930309	2K	16	.1K	9	23.7	.05K	0.499	0.026	960
930413	2K	14	.1K	13	24.8	.05K	0.267	0.011	15
930510	8	49	.1K	8	38.4	.05K	0.18	.005K	90
930614	2K	49	.1K	1K	34	.05K	0.524	0.018	460
930713	4	92	.1K	15	38.6	.05K	0.368	0.052	320
930810	2K	117	.1K	8	37.7	0.16	0.276	.005K	75
930913	2K	150	.1K	21	48.6	.05K	0.238	0.014	65