BASELINE WATER QUALITY DATA

INVENTORY AND ANALYSIS

RICHMOND NATIONAL BATTLEFIELD PARK

VOLUME II OF II

National Park Service
Water Resources Division
Fort Collins, CO 80525

Technical Report NPS/NRWRD/NRTR-99/241

OCTOBER 1999

United States Department of the Interior
National Park Service
Washington, D.C.

Station Inventory for Station: RICH0082

NPS Station ID: RICH0082 LAT/LON: 37.461115/ -77.466670 Agency: 112WRD Date Created: / /
Location: FALLING CREEK NEAR DREWRYS BLUFF, VA FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02038500
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 17.40 On/Off RF1:
RF3 Index: 02080206171902.11 RF3 Mile Point: 2.65 Distance from RF3: 0.02 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0082

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/09/69-05/09/69	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00060 FLOW, STREAM, MEAN DAILY	CFS	07/30/45-05/09/69	45	65.	81.333	446.	1.	5885.273	76.716	10.6	26.5	115.5	152.8
00080 COLOR (PLATINUM-COBALT UNITS)		07/30/45-05/09/69	45	13.	17.022	63.	5.	133.068	11.535	6.2	9.	24.	30.4
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		10/06/52-05/09/69	5	63.	75.2	139.	51.	1310.2	36.197	**	**	**	**
00400 PH (STANDARD UNITS)		07/30/45-05/09/69	44	6.6	6.605	7.4	6.1	0.146	0.382	6.1	6.3	6.975	7.1
00400 CONVERTED PH (STANDARD UNITS)		07/30/45-05/09/69	44	6.6	6.46	7.4	6.1	0.167	0.409	6.1	6.3	6.975	7.1
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/30/45-05/09/69	44	0.251	0.347	0.794	0.04	0.068	0.26	0.079	0.106	0.501	0.794
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		05/09/69-05/09/69	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00440 BICARBONATE ION (MG/L AS HCO3)		07/30/45-05/09/69	45	12.	13.556	36.	6.	41.662	6.455	7.	8.	18.	20.2
00445 CARBONATE ION (MG/L AS CO3)		05/09/69-05/09/69	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00650 PHOSPHATE, TOTAL (MG/L AS PO4)		05/09/69-05/09/69	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)		07/30/45-05/09/69	45	13.	13.289	38.	10.	19.165	4.378	10.	11.	14.	16.
00902 HARDNESS, NON-CARBONATE (MG/L AS CACO3)		01/14/48-05/09/69	8	0.5	2.5	9.	0.	11.714	3.423	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)		07/30/45-05/09/69	45	3.1	3.298	13.	2.2	2.542	1.595	2.4	2.6	3.4	3.78
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)		07/30/45-05/09/69	45	1.2	1.24	1.7	0.8	0.042	0.206	1.	1.1	1.4	1.5
00930 SODIUM, DISSOLVED (MG/L AS NA)		07/30/45-05/09/69	45	4.4	4.442	7.4	2.7	1.091	1.044	3.26	3.6	5.05	6.02
00931 SODIUM ADSORPTION RATIO		05/09/69-05/09/69	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00932 SODIUM, PERCENT		05/09/69-05/09/69	1	27.	27.	27.	27.	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)		10/01/45-05/09/69	10	1.4	1.65	3.5	0.6	0.823	0.907	0.62	0.95	2.25	3.42
00940 CHLORIDE,TOTAL IN WATER	MG/L	07/30/45-05/09/69	45	4.	3.778	11.	2.	1.768	1.33	3.	3.	4.	4.
00945 SULFATE, TOTAL (MG/L AS SO4)		07/30/45-05/09/69	45	6.	6.444	14.	2.	3.753	1.937	4.	5.	7.5	8.
00950 FLUORIDE, DISSOLVED (MG/L AS F)		07/30/45-05/09/69	45	0.1	0.144	0.8	0.	0.015	0.122	0.	0.1	0.2	0.2
00955 SILICA, DISSOLVED (MG/L AS SI02)		07/30/45-05/09/69	45	12.	12.778	18.	8.1	6.253	2.501	9.72	11.	14.5	16.4
01046 IRON, DISSOLVED (UG/L AS FE)		05/09/69-05/09/69	1	370.	370.	370.	370.	0.	0.	**	**	**	**
70300 RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L		07/30/45-05/09/69	45	46.	47.022	93.	38.	74.022	8.604	39.6	41.5	51.	52.4
70301 SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)		05/09/69-05/09/69	1	83.	83.	83.	83.	0.	0.	**	**	**	**
70302 SOLIDS, DISSOLVED-TONS PER DAY		05/09/69-05/09/69	1	2.51	2.51	2.51	2.51	0.	0.	**	**	**	**
70303 SOLIDS, DISSOLVED-TONS PER ACRE-FT		05/09/69-05/09/69	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
71835 OXYGEN CONSUMED, FILTERED	MG/L	10/01/45-09/21/46	36	3.45	3.411	5.2	1.8	0.891	0.944	2.17	2.6	3.975	4.83
71840 OXYGEN CONSUMED, UNFILTERED	MG/L	10/01/45-09/21/46	36	3.95	4.161	6.4	2.6	1.221	1.105	2.7	3.325	4.975	6.2
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)		07/30/45-05/09/69	45	0.2	0.307	1.7	0.1	0.083	0.289	0.1	0.2	0.35	0.64
71885 IRON (UG/L AS FE)		07/30/45-01/11/56	44	40.	129.318	550.	10.	27992.548	167.31	10.	20.	215.	455.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0082

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400 PH	Fresh Chronic	9.	44	0	0.00	15	0	0.00	17	0	0.00	12	0	0.00			
	Other-Lo Lim.	6.5	44	19	0.43	15	4	0.27	17	11	0.65	12	4	0.33			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	45	0	0.00	15	0	0.00	17	0	0.00	13	0	0.00			
	Drinking Water	250.	45	0	0.00	15	0	0.00	17	0	0.00	13	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	45	0	0.00	15	0	0.00	17	0	0.00	13	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	45	0	0.00	15	0	0.00	17	0	0.00	13	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	45	0	0.00	15	0	0.00	17	0	0.00	13	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0082

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00060	FLOW, STREAM, MEAN DAILY CFS	07/30/45-05/09/69	15	21.	39.667	117.	1.	1557.381	39.464	2.2	11.	64.	115.2
00080	COLOR (PLATINUM-COBALT UNITS)	07/30/45-05/09/69	15	25.	24.867	63.	8.	188.552	13.731	8.6	12.	30.	46.8
00400	PH (STANDARD UNITS)	07/30/45-05/09/69	15	6.8	6.74	7.3	6.1	0.155	0.394	6.1	6.3	7.1	7.18
00400	CONVERTED PH (STANDARD UNITS)	07/30/45-05/09/69	15	6.8	6.569	7.3	6.1	0.187	0.432	6.1	6.3	7.1	7.18
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/30/45-05/09/69	15	0.158	0.27	0.794	0.05	0.066	0.256	0.068	0.079	0.501	0.794
00440	BICARBONATE ION (MG/L AS HCO3)	07/30/45-05/09/69	15	18.	17.6	29.	7.	29.971	5.475	10.	14.	19.	27.8
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/30/45-05/09/69	15	14.	14.867	20.	13.	4.267	2.066	13.	14.	15.	19.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/30/45-05/09/69	15	3.4	3.613	5.2	3.2	0.323	0.568	3.2	3.3	3.6	4.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/30/45-05/09/69	15	1.4	1.407	1.7	1.2	0.031	0.175	1.2	1.2	1.5	1.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/30/45-05/09/69	15	4.4	4.347	5.5	3.2	0.503	0.709	3.32	3.7	5.	5.32
00940	CHLORIDE,TOTAL IN WATER MG/L	07/30/45-05/09/69	15	4.	3.467	4.	2.	0.41	0.64	2.6	3.	4.	4.
00945	SULFATE, TOTAL (MG/L AS SO4)	07/30/45-05/09/69	15	5.	5.267	10.	2.	3.067	1.751	3.2	4.	6.	8.2
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/30/45-05/09/69	15	0.1	0.127	0.3	0.	0.006	0.08	0.	0.1	0.2	0.24
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/30/45-05/09/69	15	15.	14.32	17.	9.8	4.793	2.189	11.12	12.	16.	17.
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/30/45-05/09/69	15	51.	50.8	59.	46.	10.457	3.234	46.6	48.	52.	56.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/30/45-05/09/69	15	0.2	0.367	1.	0.2	0.07	0.264	0.2	0.2	0.5	0.88
71885	IRON (UG/L AS FE)	07/30/45-01/11/56	15	120.	214.667	550.	10.	38640.952	196.573	10.	30.	380.	532.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0082

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00060	FLOW, STREAM, MEAN DAILY CFS	07/30/45-05/09/69	17	89.	114.412	446.	23.	9647.757	98.223	26.2	65.5	135.5	258.8
00080	COLOR (PLATINUM-COBALT UNITS)	07/30/45-05/09/69	17	10.	12.235	45.	5.	89.066	9.437	5.	6.	13.	25.
00400	PH (STANDARD UNITS)	07/30/45-05/09/69	17	6.3	6.418	7.2	6.1	0.11	0.332	6.1	6.15	6.65	7.04
00400	CONVERTED PH (STANDARD UNITS)	07/30/45-05/09/69	17	6.3	6.325	7.2	6.1	0.119	0.345	6.1	6.15	6.65	7.04
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/30/45-05/09/69	17	0.501	0.473	0.794	0.063	0.066	0.256	0.093	0.225	0.713	0.794
00440	BICARBONATE ION (MG/L AS HCO3)	07/30/45-05/09/69	17	9.	10.412	19.	6.	20.007	4.473	6.	7.	13.5	18.2
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/30/45-05/09/69	17	11.	11.176	13.	10.	1.154	1.074	10.	10.	12.	13.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/30/45-05/09/69	17	2.7	2.741	3.7	2.2	0.158	0.397	2.28	2.45	3.	3.38
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/30/45-05/09/69	17	1.1	1.082	1.3	0.8	0.017	0.129	0.96	1.	1.2	1.3
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/30/45-05/09/69	17	4.6	4.629	6.4	3.1	1.242	1.115	3.26	3.55	5.75	6.24
00940	CHLORIDE,TOTAL IN WATER MG/L	07/30/45-05/09/69	17	4.	3.882	7.	3.	0.86	0.928	3.	3.	4.	4.6
00945	SULFATE, TOTAL (MG/L AS SO4)	07/30/45-05/09/69	17	7.	6.882	9.	4.	1.985	1.409	4.8	5.5	8.	8.2
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/30/45-05/09/69	17	0.1	0.118	0.2	0.	0.005	0.073	0.	0.1	0.2	0.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/30/45-05/09/69	17	11.	11.835	18.	8.1	8.315	2.884	8.18	9.7	13.5	16.4
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/30/45-05/09/69	17	41.	43.118	50.	38.	16.36	4.045	38.	40.	46.5	49.2
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/30/45-05/09/69	17	0.2	0.235	0.6	0.1	0.017	0.132	0.1	0.15	0.3	0.44
71885	IRON (UG/L AS FE)	07/30/45-01/11/56	17	30.	115.294	530.	10.	27576.471	166.062	10.	20.	175.	490.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0082

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00060	FLOW, STREAM, MEAN DAILY CFS	07/30/45-05/09/69	13	61.	86.154	205.	10.	3153.308	56.154	19.6	48.5	132.5	187.
00080	COLOR (PLATINUM-COBALT UNITS)	07/30/45-05/09/69	13	15.	14.231	23.	7.	31.359	5.6	7.4	9.	18.	23.
00400	PH (STANDARD UNITS)	07/30/45-05/09/69	12	6.75	6.7	7.4	6.1	0.124	0.352	6.16	6.425	6.95	7.28
00400	CONVERTED PH (STANDARD UNITS)	07/30/45-05/09/69	12	6.747	6.577	7.4	6.1	0.14	0.374	6.16	6.425	6.95	7.28
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/30/45-05/09/69	12	0.179	0.265	0.794	0.04	0.045	0.213	0.058	0.115	0.378	0.706
00440	BICARBONATE ION (MG/L AS HCO3)	07/30/45-05/09/69	13	11.	13.	36.	7.	56.333	7.506	7.4	8.5	15.	28.
00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/30/45-05/09/69	13	12.	14.231	38.	10.	53.359	7.305	10.4	11.	13.5	29.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/30/45-05/09/69	13	2.8	3.662	13.	2.4	8.029	2.834	2.44	2.6	3.2	9.36
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/30/45-05/09/69	13	1.2	1.254	1.5	0.9	0.028	0.166	0.98	1.15	1.4	1.46

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0082

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/30/45-05/09/69	13	4.	4.308	7.4	2.7	1.676	1.295	2.86	3.35	5.05	6.8
00940	CHLORIDE,TOTAL IN WATER MG/L	07/30/45-05/09/69	13	3.	4.	11.	3.	4.667	2.16	3.	3.	4.	8.2
00945	SULFATE, TOTAL (MG/L AS SO4)	07/30/45-05/09/69	13	7.	7.231	14.	5.	4.859	2.204	5.4	6.	7.5	11.6
00950	FLUORIDE, DISSOLVED (MG/L AS F)	07/30/45-05/09/69	13	0.2	0.2	0.8	0.1	0.035	0.187	0.1	0.1	0.2	0.56
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/30/45-05/09/69	13	12.	12.231	14.	11.	1.692	1.301	11.	11.	14.	14.
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	07/30/45-05/09/69	13	43.	47.769	93.	39.	197.359	14.048	39.4	42.	47.5	76.6
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/30/45-05/09/69	13	0.2	0.331	1.7	0.1	0.189	0.435	0.1	0.1	0.4	1.22
71885	IRON (UG/L AS FE)	07/30/45-01/11/56	12	20.	42.5	140.	10.	1675.	40.927	10.	12.5	72.5	125.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: RICH0083

NPS Station ID: RICH0083 LAT/LON: 37.462781/ -77.466392 Agency: 21VASWCB Date Created: 08/26/89
Location: NEAR DAM-FALLING CREEK RESEVOIR CHESTERFIELD CO. FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/LAKE STORET Station ID(s): 2-FAC003.85
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080207 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080207 RF1 Mile Point: 0.000 Distance from RF1: 1.10 On/Off RF1:
RF3 Index: 02080207027003.01 RF3 Mile Point: 3.51 Distance from RF3: 0.00 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: FALLING CREEK SECTION: 071 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0083

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/29/80-08/08/94	29	19.5	18.634	26.6	9.	27.963	5.288	11.	13.85	23.1	26.
00070	TURBIDITY, (JACKSON CANDLE UNITS)	08/14/89-08/14/89	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00078	TRANSPARENCY, SECCHI DISC (METERS)	04/29/80-08/08/94	8	0.8	0.875	1.4	0.5	0.096	0.311	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/29/80-08/14/89	9	89.	91.889	145.	66.	534.361	23.116	66.	76.	99.	145.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/08/94-08/08/94	1	74.	74.	74.	74.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	08/14/89-08/08/94	8	0.95	3.663	10.2	0.1	19.583	4.425	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	04/29/80-08/14/89	23	0.5	3.104	10.4	0.2	15.4	3.924	0.24	0.3	7.3	10.32
00340	COD, .25N K2CR2O7 MG/L	08/08/94-08/08/94	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/29/80-08/08/94	19	6.9	7.158	9.	6.2	0.737	0.858	6.3	6.5	8.	8.6
00400	CONVERTED PH (STANDARD UNITS)	04/29/80-08/08/94	19	6.9	6.712	9.	6.2	0.947	0.973	6.3	6.5	8.	8.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/29/80-08/08/94	19	0.126	0.194	0.631	0.001	0.035	0.187	0.003	0.01	0.316	0.501
00403	PH, LAB, STANDARD UNITS SU	04/29/80-08/14/89	10	7.	7.02	8.	6.6	0.173	0.416	6.6	6.675	7.2	7.92
00403	CONVERTED PH, LAB, STANDARD UNITS	04/29/80-08/14/89	10	6.989	6.892	8.	6.6	0.191	0.437	6.6	6.675	7.2	7.92
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/29/80-08/14/89	10	0.103	0.128	0.251	0.01	0.007	0.084	0.015	0.063	0.212	0.251
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/29/80-08/08/94	10	20.	25.3	61.	15.	177.789	13.334	15.3	18.	27.5	57.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/29/80-09/09/80	9	9.	9.111	18.	2.5	23.799	4.878	2.5	4.75	12.	18.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/29/80-09/09/80	9	5.	5.	10.	1.	9.938	3.152	1.	2.25	7.5	10.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/29/80-09/09/80	9	5.	4.667	10.	0.	11.438	3.382	0.	1.75	7.5	10.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/29/80-08/08/94	11##	0.05	0.213	1.9	0.02	0.313	0.56	0.02	0.05	0.05	1.53
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/29/80-08/08/94	8##	0.005	0.01	0.03	0.005	0.	0.01	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/14/89-08/08/94	2##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/29/80-08/08/94	11	0.5	0.664	2.7	0.4	0.459	0.677	0.4	0.4	0.5	2.26
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/29/80-08/14/89	10##	0.038	0.875	7.96	0.025	6.21	2.492	0.025	0.025	0.2	7.205
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/29/80-08/08/94	11	0.02	0.025	0.04	0.02	0.	0.007	0.02	0.02	0.03	0.038
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/29/80-09/09/80	8	0.01	0.011	0.03	0.005	0.	0.008	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/94-08/08/94	1	6.7	6.7	6.7	6.7	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/08/94-08/08/94	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	08/08/94-08/08/94	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/26/80-08/14/89	3	12.1	11.3	14.8	7.	15.69	3.961	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	08/08/94-08/08/94	1##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/26/80-08/14/89	3##	0.075	0.212	0.5	0.06	0.062	0.25	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/26/80-08/14/89	3	20.3	23.133	31.	18.1	47.623	6.901	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	08/08/94-08/08/94	1##	25.	25.	25.	25.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0083

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01042 COPPER, TOTAL (UG/L AS CU)	08/08/94-08/08/94	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/26/80-08/14/89	3	34.7	40.3	53.	33.2	121.53	11.024	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	04/29/80-08/08/94	10	0.8	86.47	836.	0.2	69411.653	263.461	0.21	0.3	6.75	754.8
01051 LEAD, TOTAL (UG/L AS PB)	08/08/94-08/08/94	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/26/80-08/14/89	3	68.	69.733	76.	65.2	31.413	5.605	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	04/29/80-08/08/94	10	0.1	7.756	71.	0.04	494.815	22.244	0.041	0.065	2.025	64.2
01067 NICKEL, TOTAL (UG/L AS NI)	08/08/94-08/08/94	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/26/80-08/14/89	3	10.6	11.48	14.	9.84	4.907	2.215	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	08/08/94-08/08/94	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/26/80-08/14/89	3	107.	111.	123.	103.	112.	10.583	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	08/08/94-08/08/94	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/29/80-08/08/94	5##	50.	151.8	600.	9.	63091.2	251.18	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/29/80-08/08/94	5##	1.699	1.766	2.778	0.954	0.424	0.651	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	58.326								
32210 CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	04/29/80-08/08/94	9	21.1	23.489	53.5	9.3	239.744	15.484	9.3	10.75	35.2	53.5
32211 CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/08/94-08/08/94	1	37.6	37.6	37.6	37.6	0.	0.	**	**	**	**
32218 PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/08/94-08/08/94	1	24.8	24.8	24.8	24.8	0.	0.	**	**	**	**
32219 PHEOPHYTIN RATIO(OD 663)SPECTRO,BEFORE/AFTER ACID	08/08/94-08/08/94	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
34259 DELTA BENZENE HEXACHLORIDE TOTWUG/L	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
34351 ENDOSULFAN SULFATE TOTWUG/L	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
34356 ENDOSULFAN, BETA TOTWUG/L	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
34361 ENDOSULFAN, ALPHA TOTWUG/L	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
34366 ENDRIN ALDEHYDE TOTWUG/L	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
34671 PCB - 1016 TOTWUG/L	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39061 PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/14/89-08/08/94	2##	12.503	12.503	25.	0.005	312.375	17.674	**	**	**	**
39300 P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39310 P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39320 P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39333 ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/08/94-08/08/94	1##	40.	40.	40.	40.	0.	0.	**	**	**	**
39337 ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39338 BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39340 GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39350 CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/08/94-08/08/94	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39351 CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/14/89-08/08/94	2##	25.25	25.25	50.	0.5	1225.125	35.002	**	**	**	**
39363 DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/14/89-08/08/94	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39368 DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/14/89-08/08/94	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39373 DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/14/89-08/08/94	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39380 DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39383 DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/14/89-08/08/94	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39390 ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39393 ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/14/89-08/08/94	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39400 TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39403 TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/14/89-08/08/94	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39410 HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39413 HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/14/89-08/08/94	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39488 PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39492 PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39496 PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39500 PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39508 PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	08/14/89-08/08/94	2##	5.003	5.003	10.	0.005	49.95	7.068	**	**	**	**
39516 PCBS IN WHOLE WATER SAMPLE (UG/L)	08/08/94-08/08/94	1##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39526 PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	08/14/89-08/08/94	2##	253.75	253.75	500.	7.5	121278.125	348.25	**	**	**	**
46570 HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	08/08/94-08/08/94	1	21.	21.	21.	21.	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	08/08/94-08/08/94	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
71900 MERCURY, TOTAL (UG/L AS HG)	08/08/94-08/08/94	1##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/26/80-08/14/89	3	0.09	0.133	0.3	0.01	0.022	0.15	**	**	**	**
75045 HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	08/14/89-08/14/89	1##	50.	50.	50.	50.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0083

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	8	5	0.63	8	5	0.63									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	23	15	0.65	14	10	0.71				9	5	0.56			
00400	PH	Fresh Chronic	9.	19	1	0.05	10	1	0.10				9	0	0.00			
		Other-Lo Lim.	6.5	19	8	0.42	10	4	0.40				9	4	0.44			
00403	PH, LAB	Fresh Chronic	9.	10	0	0.00	7	0	0.00				3	0	0.00			
		Other-Lo Lim.	6.5	10	0	0.00	7	0	0.00				3	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	8	0	0.00	7	0	0.00				1	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	2	0	0.00	2	0	0.00									
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	10	0	0.00	7	0	0.00				3	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	0&	0	0.00												
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	5	1	0.20	3	0	0.00				2	1	0.50			
34356	ENDOSULFAN, BETA	Fresh Acute	0.22	1&	0	0.00	1	0	0.00									
34361	ENDOSULFAN, ALPHA	Fresh Acute	0.22	1&	0	0.00	1	0	0.00									
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	2	0	0.00	2	0	0.00									
		Drinking Water	1.	1&	0	0.00	1	0	0.00									
39300	P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	1&	0	0.00	1	0	0.00									
39310	P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	1&	0	0.00	1	0	0.00									
39320	P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	2	0	0.00	2	0	0.00									
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	1&	0	0.00	1	0	0.00									
39340	GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1&	0	0.00	1	0	0.00									
		Drinking Water	0.2	1&	0	0.00	1	0	0.00									
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	1	0	0.00	1	0	0.00									
		Drinking Water	2.	1	0	0.00	1	0	0.00									
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	1&	0	0.00	1	0	0.00									
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	1&	0	0.00	1	0	0.00									
		Drinking Water	2.	1&	0	0.00	1	0	0.00									
39400	TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1&	0	0.00	1	0	0.00									
		Drinking Water	3.	1&	0	0.00	1	0	0.00									
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1&	0	0.00	1	0	0.00									
		Drinking Water	0.4	1&	0	0.00	1	0	0.00									
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1&	0	0.00	1	0	0.00									
		Drinking Water	0.2	1&	0	0.00	1	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00	1	0	0.00									
		Drinking Water	2.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0084

NPS Station ID: RICH0084 LAT/LON: 37.468060/ -77.208892 Agency: 112WRD Date Created: 01/26/85
Location: WHITE OAK SWAMP AT RT 156 AT ELKO, VA FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02042455
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.40 On/Off RF1:
RF3 Index: 02080206156700.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0084

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/11/84-09/04/91	11	20.	19.955	25.	12.	15.723	3.965	12.9	16.5	23.	25.
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/11/84-09/04/91	8	22.75	21.188	26.5	9.	33.067	5.75	**	**	**	**
00025 BAROMETRIC PRESSURE (MM OF HG)	04/08/87-09/04/91	7	754.	754.714	765.	746.	45.238	6.726	**	**	**	**
00061 FLOW, STREAM, INSTANTANEOUS CFS	09/11/84-09/13/89	11	7.	9.73	37.	0.025	112.37	10.6	0.42	2.	16.	32.8
00080 COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/04/91	7	100.	89.857	140.	0.	2296.81	47.925	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/11/84-09/04/91	11	66.	64.091	79.	48.	94.091	9.7	48.8	56.	72.	78.
00300 OXYGEN, DISSOLVED MG/L	04/08/87-09/04/91	7	5.4	5.886	8.3	2.2	5.391	2.322	**	**	**	**
00400 PH (STANDARD UNITS)	04/08/87-09/04/91	7	6.	5.987	6.8	5.5	0.184	0.429	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/08/87-09/04/91	7	6.	5.85	6.8	5.5	0.206	0.454	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-09/04/91	7	1.	1.414	3.162	0.158	1.036	1.018	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	04/08/87-09/13/89	6	6.7	6.867	8.	6.3	0.351	0.592	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	04/08/87-09/13/89	6	6.689	6.665	8.	6.3	0.4	0.632	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-09/13/89	6	0.205	0.216	0.501	0.01	0.028	0.166	**	**	**	**
00556 OIL & GREASE (FREON EXTR.-GRAV METH) TOT.REC,MG/L	09/04/91-09/04/91	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/11/84-09/13/89	7	0.02	0.031	0.09	0.01	0.001	0.027	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/04/91-09/04/91	1	0.024	0.024	0.024	0.024	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/11/84-09/04/91	8	0.65	0.65	0.9	0.4	0.031	0.177	**	**	**	**
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/04/91-09/04/91	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/11/84-09/13/89	7	0.05	0.069	0.2	0.02	0.004	0.063	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	09/11/84-09/04/91	8	0.031	0.028	0.044	0.005	0.	0.014	**	**	**	**
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/13/89	6	0.012	0.013	0.02	0.006	0.	0.005	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/11/84-09/13/89	7	0.005	0.005	0.01	0.001	0.	0.003	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	09/11/84-09/04/91	8	11.5	11.275	15.	6.7	9.448	3.074	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	04/08/87-09/13/89	6	5.55	5.983	9.6	3.6	5.49	2.343	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/08/87-09/13/89	6	0.9	0.85	1.	0.7	0.015	0.122	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	04/08/87-09/13/89	6	5.1	5.217	6.3	4.4	0.634	0.796	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/08/87-09/13/89	6	0.8	0.9	1.8	0.3	0.384	0.62	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	04/08/87-09/04/91	7	8.	7.571	10.	5.	3.619	1.902	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	04/08/87-09/04/91	7	9.	8.071	14.	0.5	26.036	5.103	**	**	**	**
00950 FLUORIDE, DISSOLVED (MG/L AS F)	04/08/87-09/13/89	6	0.1	0.083	0.1	0.05	0.001	0.026	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	04/08/87-09/13/89	6	5.25	5.35	9.	2.9	5.683	2.384	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/04/91	5	1.	0.8	1.	0.5	0.075	0.274	**	**	**	**
01025 CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	2##	1.75	1.75	3.	0.5	3.125	1.768	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	04/12/88-09/04/91	5##	0.5	1.3	3.	0.5	1.325	1.151	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-09/04/91	5	3.	3.1	5.	0.5	2.8	1.673	**	**	**	**
01037 COBALT, TOTAL (UG/L AS CO)	04/12/88-09/13/89	4##	1.25	1.5	3.	0.5	1.5	1.225	**	**	**	**
01040 COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	2	5.	5.	9.	1.	32.	5.657	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	04/12/88-09/04/91	5	6.	7.	11.	4.	11.	3.317	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0084

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01045 IRON, TOTAL (UG/L AS FE)	04/08/87-09/04/91	7	1800.	2015.714	4400.	810.	1274061.905	1128.744	**	**	**	**
01046 IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/04/91	7	890.	812.857	1400.	380.	122090.476	349.414	**	**	**	**
01049 LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	2##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	04/12/88-09/04/91	5##	2.5	6.5	20.	2.5	58.125	7.624	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/04/91	7	50.	60.	170.	20.	2633.333	51.316	**	**	**	**
01056 MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-09/04/91	7	43.	52.571	160.	11.	2582.286	50.816	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	04/12/88-09/04/91	5	3.	3.5	7.	0.5	5.5	2.345	**	**	**	**
01090 ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	2	28.5	28.5	39.	18.	220.5	14.849	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/04/91	5	10.	34.	130.	5.	2917.5	54.014	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	04/12/88-09/13/89	4##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
32730 PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/04/91-09/04/91	1	2.	2.	2.	2.	0.	0.	**	**	**	**
70331 SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/13/89	4	81.5	76.25	91.	51.	304.917	17.462	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	09/04/91-09/04/91	1	0.021	0.021	0.021	0.021	0.	0.	**	**	**	**
71890 MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
71900 MERCURY, TOTAL (UG/L AS HG)	04/12/88-09/04/91	5##	0.05	0.13	0.4	0.05	0.023	0.152	**	**	**	**
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-09/04/91	5	8.	7.8	10.	6.	2.2	1.483	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0084

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	7	1	0.14	4	1	0.25				3	0	0.00			
00400 PH	Fresh Chronic	9.	7	0	0.00	4	0	0.00				3	0	0.00			
	Other-Lo Lim.	6.5	7	6	0.86	4	4	1.00				3	2	0.67			
00403 PH, LAB	Fresh Chronic	9.	6	0	0.00	3	0	0.00				3	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	3	1	0.33				3	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	7	0	0.00	4	0	0.00				3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	7	0	0.00	4	0	0.00				3	0	0.00			
	Drinking Water	250.	7	0	0.00	4	0	0.00				3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	7	0	0.00	4	0	0.00				3	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	6	0	0.00	3	0	0.00				3	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	5	0	0.00	3	0	0.00				2	0	0.00			
	Drinking Water	50.	5	0	0.00	3	0	0.00				2	0	0.00			
01025 CADMIUM, DISSOLVED	Fresh Acute	3.9	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	5.	2	0	0.00	1	0	0.00				1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	5	0	0.00	3	0	0.00				2	0	0.00			
	Drinking Water	5.	5	0	0.00	3	0	0.00				2	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	5	0	0.00	3	0	0.00				2	0	0.00			
01040 COPPER, DISSOLVED	Fresh Acute	18.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	1300.	2	0	0.00	1	0	0.00				1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	5	0	0.00	3	0	0.00				2	0	0.00			
	Drinking Water	1300.	5	0	0.00	3	0	0.00				2	0	0.00			
01049 LEAD, DISSOLVED	Fresh Acute	82.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	15.	2	0	0.00	1	0	0.00				1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	5	0	0.00	3	0	0.00				2	0	0.00			
	Drinking Water	15.	5	1	0.20	3	1	0.33				2	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	5	0	0.00	3	0	0.00				2	0	0.00			
	Drinking Water	100.	5	0	0.00	3	0	0.00				2	0	0.00			
01090 ZINC, DISSOLVED	Fresh Acute	120.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	5000.	2	0	0.00	1	0	0.00				1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	5	1	0.20	3	1	0.33				2	0	0.00			
	Drinking Water	5000.	5	0	0.00	3	0	0.00				2	0	0.00			
01147 SELENIUM, TOTAL	Fresh Acute	20.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	50.	4	0	0.00	2	0	0.00				2	0	0.00			
71890 MERCURY, DISSOLVED	Fresh Acute	2.4	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	2.	2	0	0.00	1	0	0.00				1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	5	0	0.00	3	0	0.00				2	0	0.00			
	Drinking Water	2.	5	0	0.00	3	0	0.00				2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0085

NPS Station ID: RICH0085 LAT/LON: 37.468337/ -77.208892 Agency: 21VASWCB Date Created: 09/14/96
Location: WHITE OAK SWAMP, RT. 156 BRIDGE FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-WOS002.69
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: WHITE OAK SWAMP SECTION: 04 TOPO MAP #: 0141 TOPO MAP NAME: ROXBURY, VA

Parameter Inventory for Station: RICH0085

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/19/94-12/14/98	34	15.05	15.312	25.4	4.3	44.65	6.682	6.25	8.95	21.65	24.7
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		05/29/96-12/14/98	32	9.55	9.381	17.2	2.8	12.189	3.491	5.	6.6	10.825	14.68
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		10/19/94-12/14/98	33	70.	74.667	117.	41.	295.854	17.2	53.8	63.	86.	98.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		05/29/96-12/14/98	32	70.	70.625	105.	43.	190.306	13.795	53.	61.25	79.75	88.2
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/19/94-12/14/98	34	7.4	7.597	11.5	4.7	4.175	2.043	5.1	5.8	9.625	10.7
00310 BOD, 5 DAY, 20 DEG C	MG/L	05/29/96-12/14/98	32##	1.	1.484	5.	0.5	1.379	1.174	0.5	0.5	2.	3.
00340 COD, .25N K2CR2O7	MG/L	05/29/96-12/14/98	32	26.	27.906	56.	10.	109.959	10.486	13.5	21.	35.	42.7
00400 PH (STANDARD UNITS)		07/19/94-12/14/98	34	6.18	6.122	6.49	5.29	0.072	0.268	5.74	5.975	6.333	6.42
00400 CONVERTED PH (STANDARD UNITS)		07/19/94-12/14/98	34	6.18	6.023	6.49	5.29	0.082	0.286	5.74	5.975	6.333	6.42
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/19/94-12/14/98	34	0.661	0.948	5.129	0.324	0.777	0.882	0.38	0.465	1.059	1.824
00403 PH, LAB, STANDARD UNITS	SU	05/29/96-12/14/98	32	6.5	6.531	7.2	5.9	0.067	0.258	6.2	6.4	6.7	6.8
00403 CONVERTED PH, LAB, STANDARD UNITS		05/29/96-12/14/98	32	6.5	6.456	7.2	5.9	0.073	0.27	6.2	6.4	6.7	6.8
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/29/96-12/14/98	32	0.316	0.35	1.259	0.063	0.055	0.234	0.158	0.2	0.398	0.631
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		05/29/96-12/14/98	32	13.	13.156	23.	4.	27.362	5.231	6.3	9.	16.75	21.
00500 RESIDUE, TOTAL (MG/L)		05/29/96-12/14/98	32	72.5	73.594	106.	52.	182.701	13.517	56.3	61.25	84.75	89.7
00505 RESIDUE, TOTAL VOLATILE (MG/L)		05/29/96-12/14/98	31	36.	33.258	50.	13.	70.531	8.398	20.2	28.	40.	42.6
00510 RESIDUE, TOTAL FIXED (MG/L)		05/29/96-12/14/98	31	41.	40.871	68.	18.	146.516	12.104	25.	32.	47.	59.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/29/96-12/14/98	31	7.	7.194	19.	1.5	16.211	4.026	3.	5.	8.	13.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/29/96-12/14/98	31##	1.5	2.452	5.	1.5	1.189	1.091	1.5	1.5	3.	4.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/29/96-12/14/98	31	4.	4.581	16.	1.5	11.252	3.354	1.5	1.5	5.	10.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/29/96-12/14/98	32##	0.02	0.031	0.11	0.02	0.	0.022	0.02	0.02	0.04	0.06
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/29/96-12/14/98	32##	0.005	0.006	0.02	0.005	0.	0.003	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/29/96-12/14/98	32	0.125	0.149	0.45	0.02	0.01	0.1	0.04	0.073	0.215	0.292
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/29/96-12/14/98	32	0.5	0.609	1.8	0.3	0.078	0.28	0.33	0.425	0.7	0.87
00665 PHOSPHORUS, TOTAL (MG/L AS P)		05/29/96-12/14/98	32	0.04	0.042	0.07	0.02	0.	0.014	0.03	0.03	0.05	0.067
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		05/29/96-08/22/96	4	12.95	14.125	19.7	10.9	15.029	3.877	**	**	**	**
00687 CARBON, ORGANIC, IN BED MATERIAL (GM/KG AS C)		11/10/97-11/10/97	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)		05/29/96-12/14/98	32	21.	20.688	29.	12.	13.706	3.702	15.	19.	22.75	26.
00940 CHLORIDE,TOTAL IN WATER	MG/L	05/29/96-12/14/98	32	8.	7.984	11.	2.5	3.008	1.734	6.	7.	9.75	10.
00945 SULFATE, TOTAL (MG/L AS SO4)		05/29/96-12/14/98	32##	2.75	4.844	17.	2.5	13.104	3.62	2.5	2.5	6.	11.4
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)		11/10/97-11/10/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01013 BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)		11/10/97-11/10/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)		11/10/97-11/10/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0085

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	11/10/97-11/10/97	1	9.31	9.31	9.31	9.31	0.	0.	**	**	**	**
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	11/10/97-11/10/97	1	8.35	8.35	8.35	8.35	0.	0.	**	**	**	**
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	11/10/97-11/10/97	1	18.79	18.79	18.79	18.79	0.	0.	**	**	**	**
01053 MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	11/10/97-11/10/97	1	46.92	46.92	46.92	46.92	0.	0.	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	11/10/97-11/10/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01078 SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	11/10/97-11/10/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	11/10/97-11/10/97	1	15.21	15.21	15.21	15.21	0.	0.	**	**	**	**
01098 ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	11/10/97-11/10/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01108 ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	11/10/97-11/10/97	1	4480.	4480.	4480.	4480.	0.	0.	**	**	**	**
01148 SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	11/10/97-11/10/97	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170 IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	11/10/97-11/10/97	1	5720.	5720.	5720.	5720.	0.	0.	**	**	**	**
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/29/96-12/14/98	32	420.	1352.125	16000.	9.	8562343.661	2926.148	71.	130.	1247.5	3500.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/29/96-12/14/98	32	2.622	2.612	4.204	0.954	0.469	0.685	1.85	2.114	3.084	3.544
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	408.982								
34480 THALLIUM DRY WGTBOTMG/KG	11/10/97-11/10/97	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
39061 PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	11/10/97-11/10/97	1##	30.	30.	30.	30.	0.	0.	**	**	**	**
39333 ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	11/10/97-11/10/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39351 CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	11/10/97-11/10/97	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
39363 DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	11/10/97-11/10/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39368 DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	11/10/97-11/10/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39373 DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	11/10/97-11/10/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39383 DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	11/10/97-11/10/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39393 ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	11/10/97-11/10/97	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
39403 TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	11/10/97-11/10/97	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
39413 HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	11/10/97-11/10/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39526 PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	11/10/97-11/10/97	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/29/96-12/14/98	32	0.03	0.028	0.05	0.01	0.	0.01	0.02	0.02	0.03	0.04
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	11/10/97-11/10/97	1##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
75045 HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	11/10/97-11/10/97	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
79799 DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	11/10/97-11/10/97	1##	65.	65.	65.	65.	0.	0.	**	**	**	**
82007 PERCENT SAND IN SEDIMENT ON A DRY WEIGHT BASIS	11/10/97-11/10/97	1	79.47	79.47	79.47	79.47	0.	0.	**	**	**	**
82008 SEDIMENT PRCTL.SIZE CLASS .0039-.0625 SILT %DRY WT	11/10/97-11/10/97	1	9.29	9.29	9.29	9.29	0.	0.	**	**	**	**
82009 SEDIMENT PRCTL.SIZE CLASS <.0039 CLAY %DRY WT	11/10/97-11/10/97	1	11.24	11.24	11.24	11.24	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0085

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	32	0	0.00	10	0	0.00	13	0	0.00	9	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	34	0	0.00	10	0	0.00	14	0	0.00	10	0	0.00			
00400 PH	Fresh Chronic	9.	34	0	0.00	10	0	0.00	14	0	0.00	10	0	0.00			
	Other-Lo Lim.	6.5	34	34	1.00	10	10	1.00	14	14	1.00	10	10	1.00			
00403 PH, LAB	Fresh Chronic	9.	32	0	0.00	10	0	0.00	13	0	0.00	9	0	0.00			
	Other-Lo Lim.	6.5	32	17	0.53	10	4	0.40	13	9	0.69	9	4	0.44			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	32	0	0.00	10	0	0.00	13	0	0.00	9	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	32	0	0.00	10	0	0.00	13	0	0.00	9	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	32	0	0.00	10	0	0.00	13	0	0.00	9	0	0.00			
	Drinking Water	250.	32	0	0.00	10	0	0.00	13	0	0.00	9	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	32	0	0.00	10	0	0.00	13	0	0.00	9	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	32	21	0.66	10	7	0.70	13	10	0.77	9	4	0.44			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0086

NPS Station ID: RICH0086 LAT/LON: 37.472503/ -77.335560 Agency: 21VASWCB Date Created: 05/06/95
Location: FOURMILE CREEK, DARBYTOWN RD FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-FOM006.87
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: FOURMILE CREEK SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0086

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		12/07/94-06/04/97	3	12.6	12.933	14.2	12.	1.293	1.137	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		12/07/94-06/04/97	3	47.	48.333	52.	46.	10.333	3.215	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	12/07/94-06/04/97	3	6.7	7.7	10.	6.4	3.99	1.997	**	**	**	**
00400	PH (STANDARD UNITS)		12/07/94-06/04/97	3	5.02	5.063	5.38	4.79	0.088	0.297	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)		12/07/94-06/04/97	3	5.02	5.001	5.38	4.79	0.094	0.307	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		12/07/94-06/04/97	3	9.55	9.979	16.218	4.169	36.435	6.036	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0086

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	3	0	0.00				1	0	0.00	2	0	0.00			
00400	PH	Fresh Chronic	9.	3	0	0.00				1	0	0.00	2	0	0.00			
		Other-Lo Lim.	6.5	3	3	1.00				1	1	1.00	2	2	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0087

NPS Station ID: RICH0087 LAT/LON: 37.475560/ -77.341392 Agency: 21VASWCB Date Created: 05/06/95
Location: FOUR MILE CK, LOST COUNTRY DR.ABOVE DARBYTOWN RD FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-FOM007.33
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: FOURMILE CREEK SECTION: 02B TOPO MAP #: 0137 TOPO MAP NAME: DUTCH GAP, VA

Parameter Inventory for Station: RICH0087

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/07/94-03/27/95	2	12.55	12.55	12.8	12.3	0.125	0.354	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/07/94-03/27/95	2	62.5	62.5	69.	56.	84.5	9.192	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	12/07/94-03/27/95	2	6.05	6.05	8.8	3.3	15.125	3.889	**	**	**	**
00400	PH (STANDARD UNITS)	12/07/94-03/27/95	2	4.125	4.125	4.13	4.12	0.	0.007	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	12/07/94-03/27/95	2	4.125	4.125	4.13	4.12	0.	0.007	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/07/94-03/27/95	2	74.994	74.994	75.858	74.131	1.491	1.221	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0087

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	1	0.50				1	1	1.00	1	0	0.00			
00400	PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	2	2	1.00				1	1	1.00	1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0088

NPS Station ID: RICH0088 LAT/LON: 37.484170/ -77.268059 Agency: 112WRD Date Created: 02/01/92
Location: WHITE OAK SWAMP NEAR WHITE OAK SWAMP, VA FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02042450
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 1.50 On/Off RF1:
RF3 Index: 02080206006201.68 RF3 Mile Point: 1.67 Distance from RF3: 0.00 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0088

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/16/80-08/01/83	5	21.5	21.7	24.5	19.5	3.325	1.823	**	**	**	**
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)		07/16/80-08/01/83	5	27.	27.1	29.	25.	2.8	1.673	**	**	**	**
00061 FLOW, STREAM, INSTANTANEOUS	CFS	07/16/80-08/01/83	5	1.	3.76	14.	0.8	32.988	5.744	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/16/80-08/01/83	5	65.	66.	80.	52.	119.5	10.932	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

********** No EPA Water Quality Criteria exist to compare against the data at this station. **********

Station Inventory for Station: RICH0089

NPS Station ID: RICH0089 LAT/LON: 37.491420/ -77.422560 Agency: 21VASWCB Date Created: / /
Location: BUOY 168 FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS107.04 /VA2-02-X0140/VA2-4X0140
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206046 RF1 Mile Point: 4.160 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 02080206004600.54 RF3 Mile Point: 2.27 Distance from RF3: 0.03 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD INTENSIVE SURVEY NO. 835108 BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0089

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/08/68-09/20/83	75	24.	22.519	30.6	5.6	37.337	6.11	11.6	18.9	26.7	29.
00070 TURBIDITY, (JACKSON CANDLE UNITS)		05/06/71-07/16/80	4	10.35	13.175	30.	2.	170.789	13.069	**	**	**	**
00078 TRANSPARENCY, SECCHI DISC (METERS)		11/18/82-10/12/83	7##	0.275	0.39	1.1	0.23	0.099	0.315	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-09/20/83	14	198.5	201.857	280.	134.	2761.363	52.549	134.5	155.75	256.25	280.
00300 OXYGEN, DISSOLVED	MG/L	07/08/68-09/20/83	77	7.8	7.76	13.8	1.	5.223	2.285	5.32	7.	8.85	10.68
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-06/28/83	25	2.	2.576	7.6	0.5	3.446	1.856	1.	1.	3.65	5.8
00340 COD, .25N K2CR2O7	MG/L	05/19/80-06/28/83	13	11.	14.	27.	6.	43.667	6.608	6.	9.5	20.	24.6
00400 PH (STANDARD UNITS)		07/08/68-09/20/83	77	7.5	7.662	9.	6.8	0.271	0.52	7.	7.3	8.	8.5
00400 CONVERTED PH (STANDARD UNITS)		07/08/68-09/20/83	77	7.5	7.418	9.	6.8	0.331	0.576	7.	7.3	8.	8.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/08/68-09/20/83	77	0.032	0.038	0.158	0.001	0.002	0.04	0.003	0.01	0.05	0.1
00403 PH, LAB, STANDARD UNITS	SU	03/20/69-05/29/74	6	7.35	7.25	7.4	6.9	0.043	0.207	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		03/20/69-05/29/74	6	7.347	7.204	7.4	6.9	0.046	0.213	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/20/69-05/29/74	6	0.045	0.062	0.126	0.04	0.001	0.035	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		03/20/69-09/20/83	8	48.5	51.	79.	30.	329.143	18.142	**	**	**	**
00415 ALKALINITY, PHENOLPHTHALEIN (MG/L)		08/16/83-09/20/83	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00480 SALINITY - PARTS PER THOUSAND		11/18/82-11/18/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		03/20/69-06/28/83	36	115.	120.028	202.	78.	1039.628	32.243	85.	93.5	135.	181.9
00505 RESIDUE, TOTAL VOLATILE (MG/L)		03/20/69-06/28/83	36	38.5	38.75	95.	18.	226.707	15.057	21.4	29.25	46.	53.
00510 RESIDUE, TOTAL FIXED (MG/L)		03/20/69-06/28/83	36	77.5	81.417	170.	0.	1192.536	34.533	46.7	56.	96.5	141.1
00515 RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L		07/27/81-09/20/83	3	133.	149.667	187.	129.	1049.333	32.393	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-10/12/83	59	8.	13.856	121.	1.	298.121	17.266	2.5	6.	16.	28.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-10/12/83	59	4.	5.025	22.	0.	22.676	4.762	1.	2.	6.	13.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-06/28/83	54	5.5	9.648	104.	0.	235.695	15.352	0.5	2.375	10.25	23.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		04/21/70-09/20/83	70	0.12	0.204	1.299	0.01	0.051	0.225	0.05	0.05	0.3	0.4
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		04/21/70-09/20/83	69	0.005	0.012	0.14	0.	0.	0.02	0.005	0.005	0.01	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		04/21/70-09/20/83	70	0.345	0.403	1.509	0.005	0.109	0.33	0.041	0.185	0.543	0.872
00623 NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		08/16/83-09/20/83	2	0.95	0.95	1.	0.9	0.005	0.071	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		04/21/70-09/20/83	70	0.4	0.506	2.299	0.05	0.187	0.433	0.2	0.2	0.6	1.
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)		08/16/83-09/20/83	2	0.45	0.45	0.6	0.3	0.045	0.212	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		05/19/80-09/20/83	15	0.2	0.205	0.4	0.03	0.014	0.12	0.042	0.1	0.27	0.4
00667 PHOSPHORUS, SUSPENDED (MG/L AS P)		08/16/83-09/20/83	2	0.35	0.35	0.4	0.3	0.005	0.071	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		05/19/80-09/20/83	15	0.12	0.156	0.4	0.04	0.012	0.107	0.04	0.1	0.2	0.364
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		05/19/80-09/20/83	15	5.	6.	11.	3.	5.286	2.299	3.	4.	8.	9.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0089

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CACO3)		05/19/80-05/19/80	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER	MG/L	07/08/72-04/24/79	38	8.	9.	22.	2.	22.595	4.753	4.	5.75	10.25	18.2
01002	ARSENIC, TOTAL (UG/L AS AS)		06/13/71-10/28/82	5##	1.	1.5	2.5	0.5	0.875	0.935	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)		05/02/72-10/28/82	7##	5.	4.357	5.	0.5	2.893	1.701	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)		04/21/70-10/28/82	15##	5.	4.8	10.	0.5	7.564	2.75	0.5	5.	5.	10.
01042	COPPER, TOTAL (UG/L AS CU)		04/21/70-10/28/82	15##	5.	9.333	40.	5.	88.81	9.424	5.	5.	10.	28.
01051	LEAD, TOTAL (UG/L AS PB)		06/13/71-10/28/82	13##	5.	5.654	11.	1.	13.224	3.637	1.	1.75	9.5	10.6
01055	MANGANESE, TOTAL (UG/L AS MN)		04/21/70-04/21/70	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)		05/03/73-05/22/78	4##	50.	50.	50.	50.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)		11/16/81-10/28/82	4##	35.	33.75	60.	5.	656.25	25.617	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)		04/21/70-10/28/82	15	10.	19.667	100.	5.	640.952	25.317	5.	5.	20.	70.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)		07/08/68-09/09/70	13	11000.	915107.692	9300000.	2400.	**********	2547735.9	5840.	11000.	695000.	6020000.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150		07/08/68-09/09/70	13	4.041	4.678	6.968	3.38	1.184	1.088	3.645	4.041	5.816	6.598
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506				GEOMETRIC MEAN =	47588.303								
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.		08/16/83-09/20/83	2	161.5	161.5	230.	93.	9384.5	96.874	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.		08/16/83-09/20/83	2	2.165	2.165	2.362	1.968	0.077	0.278	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.				GEOMETRIC MEAN =	146.253								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-09/20/83	62	300.	2662.839	76000.	3.	94601644.892	9726.338	50.	50.	1625.	6000.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/71-09/20/83	62	2.477	2.585	4.881	0.477	0.747	0.864	1.699	1.699	3.211	3.778
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	384.888								
32209	CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED		08/16/83-10/03/83	4	0.65	0.8	1.3	0.1	0.527	0.726	**	**	**	**
32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		08/16/83-10/03/83	4	0.6	0.8	1.6	0.4	0.293	0.542	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)		05/13/82-10/28/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)		05/06/71-05/06/71	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)		05/13/82-10/28/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)		05/01/75-09/20/83	3	0.	0.067	0.2	0.	0.013	0.115	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		04/21/70-04/24/79	55	0.05	0.127	0.8	0.05	0.02	0.14	0.05	0.05	0.1	0.3
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		04/21/70-04/24/79	55	0.05	0.092	0.6	0.005	0.01	0.1	0.02	0.05	0.1	0.204
71900	MERCURY, TOTAL (UG/L AS HG)		09/09/70-10/28/82	15##	0.25	0.713	7.6	0.15	3.632	1.906	0.15	0.15	0.25	3.19

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0089

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	3	0	0.00				1	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	77	6	0.08	38	4	0.11	9	0	0.00	30	2	0.07			
00400	PH	Fresh Chronic	9.	77	1	0.01	38	0	0.00	9	0	0.00	30	1	0.03			
		Other-Lo Lim.	6.5	77	0	0.00	38	0	0.00	9	0	0.00	30	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	6	0	0.00	1	0	0.00				5	0	0.00			
		Other-Lo Lim.	6.5	6	0	0.00	1	0	0.00				5	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	69	0	0.00	34	0	0.00	8	0	0.00	27	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	70	0	0.00	33	0	0.00	9	0	0.00	28	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	38	0	0.00	19	0	0.00	4	0	0.00	15	0	0.00			
		Drinking Water	250.	38	0	0.00	19	0	0.00	4	0	0.00	15	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	5	0	0.00				1	0	0.00	4	0	0.00			
		Drinking Water	50.	5	0	0.00				1	0	0.00	4	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1&	0	0.00				1	0	0.00						
		Drinking Water	5.	1&	0	0.00				1	0	0.00						
01034	CHROMIUM, TOTAL	Drinking Water	100.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	15	2	0.13	4	0	0.00	2	1	0.50	9	1	0.11			
		Drinking Water	1300.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	13	0	0.00	4	0	0.00	2	0	0.00	7	0	0.00			
		Drinking Water	15.	13	0	0.00	4	0	0.00	2	0	0.00	7	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	4	0	0.00							4	0	0.00			
		Drinking Water	100.	4	0	0.00							4	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	4	0	0.00				2	0	0.00	2	0	0.00			
		Drinking Water	100.	4	0	0.00				2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: RICH0089

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01092 ZINC, TOTAL	Fresh Acute	120.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
	Drinking Water	5000.	15	0	0.00	4	0	0.00	2	0	0.00	9	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	13	13	1.00	7	7	1.00				6	6	1.00			
31506 COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	0	0.00	2	0	0.00									
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	62	37	0.60	30	17	0.57	8	3	0.38	24	17	0.71			
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	2	0	0.00				1	0	0.00	1	0	0.00			
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	1	0	0.00							1	0	0.00			
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	2	0	0.00				1	0	0.00	1	0	0.00			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	3	1	0.33	2	1	0.50				1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	15	1	0.07	5	1	0.20	2	0	0.00	8	0	0.00			
	Drinking Water	2.	15	1	0.07	5	1	0.20	2	0	0.00	8	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0089

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/08/68-09/20/83	37	26.5	26.046	30.6	19.4	9.153	3.025	21.1	24.2	28.15	30.
00300 OXYGEN, DISSOLVED MG/L	07/08/68-09/20/83	38	7.3	6.808	9.4	1.	3.856	1.964	2.9	6.6	8.	8.23
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-06/28/83	9	1.	2.811	7.6	0.5	6.161	2.482	0.5	1.	4.6	7.6
00400 PH (STANDARD UNITS)	07/08/68-09/20/83	38	7.5	7.676	8.5	6.8	0.209	0.457	7.	7.475	8.	8.5
00400 CONVERTED PH (STANDARD UNITS)	07/08/68-09/20/83	38	7.5	7.466	8.5	6.8	0.254	0.504	7.	7.475	8.	8.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/08/68-09/20/83	38	0.032	0.034	0.158	0.003	0.001	0.035	0.003	0.01	0.034	0.1
00500 RESIDUE, TOTAL (MG/L)	03/20/69-06/28/83	10	131.	135.1	202.	92.	1260.1	35.498	92.1	110.25	154.	200.2
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/28/83	10	38.	36.4	46.	24.	57.378	7.575	24.1	30.25	42.5	45.8
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/28/83	10	93.	98.7	170.	59.	1179.344	34.342	59.8	73.75	111.5	167.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-10/12/83	27	8.	14.519	121.	2.5	516.528	22.727	2.5	6.	11.	27.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-10/12/83	27	4.	5.778	22.	1.	36.141	6.012	1.	2.5	6.	18.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-06/28/83	22	5.	10.614	104.	1.	460.998	21.471	2.	2.875	8.25	21.1
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/21/70-09/20/83	33	0.14	0.233	1.299	0.05	0.066	0.257	0.05	0.065	0.315	0.52
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/20/83	34	0.01	0.013	0.14	0.	0.001	0.023	0.005	0.005	0.013	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/20/83	33	0.36	0.479	1.509	0.005	0.139	0.373	0.082	0.205	0.685	1.063
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-09/20/83	33	0.4	0.571	2.299	0.05	0.269	0.519	0.1	0.2	0.75	1.059
00940 CHLORIDE,TOTAL IN WATER MG/L	07/08/72-04/24/79	19	9.	9.684	22.	2.	27.228	5.218	4.	5.	13.	20.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-09/20/83	30	400.	1599.867	8000.	3.	5505074.395	2346.289	50.	50.	[illegible]	6000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-09/20/83	30	2.588	2.535	3.903	0.477	0.821	0.906	1.699	1.699	3.286	3.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	342.652								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	27	0.1	0.159	0.8	0.05	0.03	0.174	0.05	0.05	0.2	0.35
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-04/24/79	27	0.07	0.113	0.6	0.01	0.014	0.12	0.028	0.05	0.13	0.252

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0089

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/08/68-09/20/83	9	11.	11.667	18.9	5.6	21.33	4.618	5.6	7.75	16.	18.9
00300 OXYGEN, DISSOLVED MG/L	07/08/68-09/20/83	9	11.	10.478	12.9	7.4	3.424	1.851	7.4	8.8	11.8	12.9
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-06/28/83	4	2.	2.	2.	2.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	07/08/68-09/20/83	9	7.5	7.456	8.	6.9	0.113	0.336	6.9	7.2	7.65	8.
00400 CONVERTED PH (STANDARD UNITS)	07/08/68-09/20/83	9	7.5	7.336	8.	6.9	0.129	0.359	6.9	7.2	7.65	8.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/08/68-09/20/83	9	0.032	0.046	0.126	0.01	0.002	0.039	0.01	0.023	0.07	0.126
00500 RESIDUE, TOTAL (MG/L)	03/20/69-06/28/83	7	117.	123.571	181.	101.	738.286	27.171	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/28/83	7	30.	31.429	51.	18.	136.619	11.688	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/28/83	7	91.	92.143	153.	51.	1150.81	33.924	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-10/12/83	8	7.	7.75	16.	4.	13.929	3.732	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-10/12/83	8	4.	3.75	6.	0.	3.643	1.909	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-06/28/83	8	3.5	4.	11.	0.	13.429	3.665	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/21/70-09/20/83	9	0.1	0.157	0.3	0.01	0.016	0.127	0.01	0.05	0.3	0.3
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/20/83	8##	0.008	0.019	0.1	0.005	0.001	0.033	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/20/83	9	0.37	0.481	1.24	0.13	0.151	0.389	0.13	0.19	0.76	1.24
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-09/20/83	9	0.4	0.417	0.7	0.2	0.028	0.166	0.2	0.25	0.525	0.7
00940 CHLORIDE,TOTAL IN WATER MG/L	07/08/72-04/24/79	4	8.5	10.5	18.	7.	25.667	5.066	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-09/20/83	8##	75.	987.5	6400.	50.	4845535.714	2201.258	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-09/20/83	8##	1.849	2.268	3.806	1.699	0.607	0.779	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	185.467								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	5##	0.05	0.07	0.1	0.05	0.001	0.027	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-04/24/79	5	0.04	0.06	0.16	0.02	0.003	0.057	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0089

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/08/68-09/20/83	29	21.5	21.386	29.4	9.	25.192	5.019	16.1	17.8	25.85	27.2
00300	OXYGEN, DISSOLVED MG/L	07/08/68-09/20/83	30	8.	8.15	13.8	2.	4.187	2.046	6.44	7.45	9.025	9.99
00310	BOD, 5 DAY, 20 DEG C MG/L	03/20/69-06/28/83	12	2.15	2.592	5.8	1.	2.872	1.695	1.	1.05	3.225	5.8
00400	PH (STANDARD UNITS)	07/08/68-09/20/83	30	7.5	7.707	9.	6.8	0.396	0.629	6.84	7.2	8.075	8.7
00400	CONVERTED PH (STANDARD UNITS)	07/08/68-09/20/83	30	7.5	7.387	9.	6.8	0.501	0.708	6.84	7.2	8.075	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/08/68-09/20/83	30	0.032	0.041	0.158	0.001	0.002	0.045	0.002	0.009	0.063	0.149
00500	RESIDUE, TOTAL (MG/L)	03/20/69-06/28/83	19	100.	110.789	191.	78.	924.175	30.4	83.	89.	129.	161.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/28/83	19	42.	42.684	95.	18.	326.339	18.065	22.	31.	52.	70.
00510	RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/28/83	19	67.	68.368	139.	0.	955.134	30.905	39.	47.	82.	115.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-10/12/83	24	11.5	15.146	44.	1.	148.423	12.183	2.25	7.	21.	40.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-10/12/83	24	4.	4.604	15.	0.	13.804	3.715	0.5	2.	6.75	10.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-06/28/83	24	9.5	10.646	36.	0.	105.097	10.252	0.	2.125	15.	30.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/21/70-09/20/83	28	0.11	0.186	0.9	0.04	0.044	0.21	0.05	0.05	0.2	0.44
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/20/83	27##	0.005	0.009	0.02	0.005	0.	0.006	0.005	0.005	0.01	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/21/70-09/20/83	28	0.3	0.287	0.74	0.01	0.045	0.213	0.025	0.083	0.445	0.585
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/21/70-09/20/83	28	0.35	0.457	1.699	0.1	0.142	0.376	0.19	0.2	0.475	1.04
00940	CHLORIDE,TOTAL IN WATER MG/L	07/08/72-04/24/79	15	7.	7.733	20.	3.	16.21	4.026	3.6	5.	9.	14.6
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-09/20/83	24	400.	4550.	76000.	50.	236317826.087	15372.632	50.	100.	1775.	7000.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-09/20/83	24	2.588	2.754	4.881	1.699	0.694	0.833	1.699	2.	3.249	3.841
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	567.709								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	04/21/70-04/24/79	23##	0.05	0.102	0.4	0.05	0.009	0.097	0.05	0.05	0.1	0.29
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/21/70-04/24/79	23	0.05	0.074	0.35	0.005	0.006	0.078	0.014	0.04	0.05	0.206

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: RICH0090

NPS Station ID: RICH0090 LAT/LON: 37.491420/ -77.422560 Agency: 21VASWCB Date Created: 11/08/80
Location: JAMES RIVER, BUOY 168 FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XPL9554 /Y4151000
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206046 RF1 Mile Point: 4.160 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 02080205000100.61 RF3 Mile Point: 0.88 Distance from RF3: 0.06 On/Off RF3:
Description:
CHESAPEAKE BAY PROGRAM TISSUE AND SEDIMENT DATA ALL DATA FROM VIRGINIA STATE WATER CONTROL BOARD UNLESS OTHERWISE DESIGNATED
SPECIAL STUDY 70-040 DES LAB SHEETS 3674-3684,3687,3688 APR-AUG 1971/

Parameter Inventory for Station: RICH0090

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71918 ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	04/26/71-04/26/71	13##	0.25	0.289	0.695	0.03	0.034	0.184	0.076	0.183	0.318	0.671
71930 MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/26/71-04/26/71	13	0.36	0.476	1.96	0.02	0.255	0.505	0.04	0.185	0.595	1.512
71936 LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-04/26/71	13	1.35	2.544	7.03	0.31	6.32	2.514	0.358	0.645	4.48	6.99
71937 COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-04/26/71	13	7.03	6.744	9.09	3.96	2.332	1.527	4.06	5.88	7.87	8.79
71938 ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-04/26/71	13	101.	101.669	128.	57.	482.022	21.955	64.48	84.5	119.5	127.2
71939 CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-04/26/71	13	3.52	3.861	5.57	1.4	1.808	1.345	1.772	2.82	5.23	5.558
71940 CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/26/71-04/26/71	13	1.4	2.855	11.6	0.35	13.128	3.623	0.406	0.59	2.74	10.928
81614 NUMBER OF INDIVIDUALS IN THE SAMPLE	04/26/71-04/26/71	13	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

********** No EPA Water Quality Criteria exist to compare against the data at this station. **********

Station Inventory for Station: RICH0091

NPS Station ID: RICH0091 LAT/LON: 37.493892/ -77.433893 Agency: 21VASWCB Date Created: 05/31/97
Location: GOODE CREEK, COMMERCE ROAD FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-GOD000.77
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: GOODE CREEK SECTION: 07 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0091

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/06/97-12/07/98	9	17.6	17.189	25.8	8.7	27.634	5.257	8.7	13.1	20.95	25.8
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/06/97-12/07/98	9	10.2	11.044	25.	1.1	59.905	7.74	1.1	4.8	17.25	25.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/06/97-12/07/98	9	133.	159.667	240.	125.	1923.	43.852	125.	128.5	198.5	240.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/06/97-12/07/98	9	141.	161.333	242.	119.	2144.25	46.306	119.	125.	207.5	242.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	08/06/97-12/07/98	9	9.8	9.611	11.7	7.8	2.089	1.445	7.8	8.3	11.05	11.7
00310 BOD, 5 DAY, 20 DEG C MG/L	08/06/97-12/07/98	9##	1.	1.778	7.	1.	3.944	1.986	1.	1.	1.5	7.
00340 COD, .25N K2CR2O7 MG/L	08/06/97-12/07/98	9	10.	17.278	59.	2.5	320.069	17.89	2.5	7.5	24.5	59.
00400 PH (STANDARD UNITS)	08/06/97-12/07/98	9	7.06	7.144	7.71	6.91	0.064	0.254	6.91	6.95	7.285	7.71
00400 CONVERTED PH (STANDARD UNITS)	08/06/97-12/07/98	9	7.06	7.092	7.71	6.91	0.068	0.26	6.91	6.95	7.285	7.71
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/06/97-12/07/98	9	0.087	0.081	0.123	0.019	0.001	0.034	0.019	0.052	0.112	0.123
00403 PH, LAB, STANDARD UNITS SU	08/06/97-12/07/98	9	6.8	6.756	7.2	6.4	0.07	0.265	6.4	6.55	6.95	7.2
00403 CONVERTED PH, LAB, STANDARD UNITS	08/06/97-12/07/98	9	6.8	6.691	7.2	6.4	0.075	0.274	6.4	6.55	6.95	7.2
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/06/97-12/07/98	9	0.158	0.204	0.398	0.063	0.012	0.11	0.063	0.119	0.284	0.398
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	08/06/97-12/07/98	9	27.	31.444	61.	19.	161.028	12.69	19.	24.	36.5	61.
00500 RESIDUE, TOTAL (MG/L)	08/06/97-12/07/98	9	104.	110.111	151.	76.	643.861	25.374	76.	88.5	132.5	151.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	08/06/97-12/07/98	9	30.	29.889	48.	19.	81.611	9.034	19.	21.	34.	48.
00510 RESIDUE, TOTAL FIXED (MG/L)	08/06/97-12/07/98	9	73.	80.222	116.	49.	596.694	24.427	49.	61.	107.5	116.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/06/97-12/07/98	9	6.	6.056	13.	1.5	10.403	3.225	1.5	4.	7.5	13.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/06/97-12/07/98	9##	1.5	2.056	4.	1.5	1.215	1.102	1.5	1.5	2.75	4.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	08/06/97-12/07/98	9	4.	3.833	9.	1.5	5.813	2.411	1.5	1.5	5.	9.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/06/97-12/07/98	9##	0.02	0.027	0.05	0.02	0.	0.013	0.02	0.02	0.035	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	08/06/97-12/07/98	9	0.01	0.011	0.02	0.005	0.	0.006	0.005	0.005	0.015	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	08/06/97-12/07/98	9	0.63	0.626	1.07	0.02	0.098	0.313	0.02	0.465	0.85	1.07
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/06/97-12/07/98	9	0.4	0.411	0.6	0.2	0.019	0.136	0.2	0.3	0.55	0.6
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/06/97-12/07/98	9	0.06	0.158	1.	0.03	0.1	0.316	0.03	0.035	0.075	1.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	08/06/97-12/07/98	9	40.	43.444	70.	31.	159.028	12.611	31.	35.	51.	70.
00940 CHLORIDE,TOTAL IN WATER MG/L	08/06/97-12/07/98	9	15.	16.778	29.	8.	62.194	7.886	8.	9.5	25.	29.
00945 SULFATE, TOTAL (MG/L AS SO4)	08/06/97-12/07/98	9	12.	12.222	18.	7.	10.444	3.232	7.	10.	14.5	18.
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	08/06/97-12/07/98	9	1300.	3337.778	16000.	110.	25448619.444	5044.662	110.	465.	4450.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	08/06/97-12/07/98	9	3.114	3.106	4.204	2.041	0.489	0.699	2.041	2.522	3.638	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		1275.627								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	08/06/97-12/07/98	9	0.05	0.07	0.32	0.01	0.009	0.095	0.01	0.025	0.06	0.32

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0091

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	9	2	0.22	3	0	0.00	4	1	0.25	2	1	0.50			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
	Drinking Water	250.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	9	7	0.78	3	2	0.67	4	3	0.75	2	2	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0092

NPS Station ID: RICH0092 LAT/LON: 37.496115/ -77.423615 Agency: 1113JAWQ Date Created: / /
Location: BELOW GOODE CREEK N"172" J03 FIPS State/County: 51000 VIRGINIA/
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): JAMES J03 /J03 /J3
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 1 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206046 RF1 Mile Point: 4.600 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 02080205020800.11 RF3 Mile Point: 1.70 Distance from RF3: 0.04 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0092

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-11/04/71	22	23.3	20.7	26.7	3.3	38.606	6.213	9.45	17.975	25.15	26.52
00070 TURBIDITY, (JACKSON CANDLE UNITS)	07/23/71-07/23/71	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00077 TRANSPARENCY, SECCHI DISC (INCHES)	10/19/71-11/04/71	4	30.	27.	36.	12.	108.	10.392	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/22/68-11/04/71	22	8.1	8.164	12.8	3.8	4.521	2.126	6.	6.75	9.025	12.17
00310 BOD, 5 DAY, 20 DEG C MG/L	03/20/69-11/04/71	11	2.	2.6	7.	0.5	2.88	1.697	0.74	1.7	3.3	6.34
00400 PH (STANDARD UNITS)	07/22/68-11/02/71	19	8.5	8.389	9.3	6.6	0.498	0.705	6.8	8.2	8.8	9.
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-11/02/71	19	8.5	7.599	9.3	6.6	1.157	1.075	6.8	8.2	8.8	9.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-11/02/71	19	0.003	0.025	0.251	0.001	0.004	0.065	0.001	0.002	0.006	0.158
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/17/70-11/04/71	15	0.8	0.834	1.7	0.001	0.418	0.647	0.001	0.172	1.5	1.7
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/17/70-11/04/71	16	0.565	0.789	2.1	0.2	0.299	0.547	0.284	0.4	1.3	1.68
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	02/17/70-11/04/71	16	0.16	0.213	0.7	0.01	0.031	0.177	0.031	0.083	0.313	0.49
00650 PHOSPHATE, TOTAL (MG/L AS PO4)	02/17/70-11/04/71	16	0.1	0.139	0.4	0.05	0.007	0.083	0.085	0.1	0.185	0.267
00660 PHOSPHATE, ORTHO (MG/L AS PO4)	02/17/70-11/04/71	17	0.05	0.081	0.21	0.01	0.004	0.064	0.018	0.035	0.135	0.202
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	10/21/71-11/04/71	4	6.	6.5	9.1	4.9	3.813	1.953	**	**	**	**
00690 CARBON, TOTAL (MG/L AS C)	10/21/71-11/04/71	4	12.9	13.575	16.6	11.9	4.716	2.172	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	02/17/70-05/03/70	2	8753.5	8753.5	8957.	8550.	82824.5	287.792	**	**	**	**
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-11/04/71	24	430.	14942.542	93000.	30.	937910955.042	30625.332	30.	91.	11000.	91800.
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	07/22/68-11/04/71	24	2.633	2.951	4.968	1.477	1.47	1.212	1.477	1.959	4.041	4.963
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	893.561								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/11/71-11/04/71	9	100.	13233.333	91800.	10.	929028025.	30479.961	10.	100.	13050.	91800.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	05/11/71-11/04/71	9	2.	2.729	4.963	1.	1.652	1.285	1.	2.	3.851	4.963
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	536.057								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/19/71-11/02/71	2	57900.	57900.	91800.	24000.	2298420000.	47941.84	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/19/71-11/02/71	2	4.672	4.672	4.963	4.38	0.17	0.412	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	46938.257								
32210 CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	10/19/71-11/02/71	3	6.	6.	9.	3.	9.	3.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0092

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00									
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	22	1	0.05	10	1	0.10	5	0	0.00	7	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: RICH0092

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00400 PH	Fresh Chronic	9.	19	3	0.16	10	3	0.30	3	0	0.00	6	0	0.00			
	Other-Lo Lim.	6.5	19	0	0.00	10	0	0.00	3	0	0.00	6	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	16	0	0.00	6	0	0.00	5	0	0.00	5	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	2	2	1.00				1	1	1.00	1	1	1.00			
	Drinking Water	250.	2	2	1.00				1	1	1.00	1	1	1.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	24	10	0.42	10	1	0.10	7	7	1.00	7	2	0.29			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	9	4	0.44	3	0	0.00	4	4	1.00	2	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	2	2	1.00				2	2	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0093

NPS Station ID: RICH0093 LAT/LON: 37.498337/ -77.423338 Agency: 21VASWCB Date Created: 06/25/94
Location: JAMES RIVER, BUOY 173 OFF GOODE CREEK FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS107.51
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0132 TOPO MAP NAME: DREWRYS BLUFF, VA

Parameter Inventory for Station: RICH0093

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-10/26/98	51	24.3	23.529	30.2	14.7	19.834	4.454	16.26	20.5	27.5	28.66
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/94-06/01/95	11	3.3	5.291	12.	1.4	14.101	3.755	1.46	2.	8.8	11.62
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-10/26/98	47	215.	218.745	403.	89.	4705.933	68.6	139.6	161.	274.	308.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/94-06/01/95	11	198.	198.818	282.	124.	2824.564	53.147	124.2	141.	252.	276.2
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	50	8.2	8.392	10.5	6.4	0.85	0.922	7.4	7.875	9.	9.89
00310 BOD, 5 DAY, 20 DEG C MG/L	06/28/94-06/01/95	12	1.	1.225	2.7	0.5	0.693	0.832	0.5	0.5	1.925	2.67
00400 PH (STANDARD UNITS)	06/28/94-10/26/98	51	7.68	7.71	8.65	6.7	0.125	0.354	7.328	7.44	7.93	8.234
00400 CONVERTED PH (STANDARD UNITS)	06/28/94-10/26/98	51	7.68	7.572	8.65	6.7	0.145	0.38	7.328	7.44	7.93	8.234
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/94-10/26/98	51	0.021	0.027	0.2	0.002	0.001	0.028	0.006	0.012	0.036	0.047
00403 PH, LAB, STANDARD UNITS SU	07/28/94-06/01/95	10	7.55	7.44	8.1	6.7	0.172	0.414	6.72	7.125	7.65	8.07
00403 CONVERTED PH, LAB, STANDARD UNITS	07/28/94-06/01/95	10	7.547	7.253	8.1	6.7	0.211	0.459	6.72	7.125	7.65	8.07
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/28/94-06/01/95	10	0.028	0.056	0.2	0.008	0.004	0.061	0.009	0.023	0.079	0.192
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	10	52.	52.2	73.	23.	223.289	14.943	24.2	44.	64.	72.4
00500 RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	10	138.	134.1	167.	89.	617.656	24.853	90.	118.5	152.25	166.2
00505 RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	10	39.	35.6	51.	17.	185.156	13.607	17.3	20.	48.5	50.9
00510 RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	10	91.5	98.5	142.	69.	622.5	24.95	69.5	77.75	120.75	140.1
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/14/94-06/01/95	11	5.	6.864	18.	1.5	28.755	5.362	1.5	1.5	11.	17.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/14/94-06/01/95	11##	1.5	1.727	3.	1.	0.468	0.684	1.	1.5	2.	3.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/14/94-06/01/95	11	4.	5.682	15.	1.5	19.564	4.423	1.5	1.5	10.	14.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/28/94-06/01/95	12	0.19	0.228	0.72	0.02	0.037	0.193	0.032	0.083	0.315	0.627
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/14/94-06/01/95	11	0.01	0.015	0.03	0.005	0.	0.01	0.005	0.005	0.02	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/14/94-06/01/95	11	0.17	0.17	0.35	0.02	0.012	0.109	0.02	0.08	0.25	0.342
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/14/94-06/01/95	11	0.5	0.491	1.	0.3	0.041	0.202	0.3	0.3	0.6	0.92
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/14/94-06/01/95	11	0.08	0.091	0.16	0.05	0.001	0.035	0.052	0.06	0.11	0.156
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/14/94-07/14/94	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	07/28/94-06/01/95	10	14.5	14.	23.	6.	36.222	6.018	6.1	7.	19.5	22.8
00945 SULFATE, TOTAL (MG/L AS SO4)	07/28/94-06/01/95	10	21.5	21.5	35.	11.	76.944	8.772	11.1	12.	30.5	34.7
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	53	700.	3772.038	16000.	20.	35227881.614	5935.308	110.	230.	5400.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	53	2.845	2.953	4.204	1.301	0.599	0.774	2.041	2.362	3.732	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	896.409								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/14/94-06/01/95	11	0.06	0.068	0.12	0.04	0.001	0.026	0.04	0.05	0.09	0.116

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0093

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	50	0	0.00	30	0	0.00	5	0	0.00	15	0	0.00			
00400 PH	Fresh Chronic	9.	51	0	0.00	31	0	0.00	5	0	0.00	15	0	0.00			
	Other-Lo Lim.	6.5	51	0	0.00	31	0	0.00	5	0	0.00	15	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	250.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	53	43	0.81	32	28	0.88	5	3	0.60	16	12	0.75			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1994 - Station RICH0093

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/94-10/26/98	9	25.1	24.156	29.2	17.2	18.658	4.319	17.2	20.05	27.45	29.2
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	9	8.	8.122	9.8	6.4	0.932	0.965	6.4	7.7	8.7	9.8
00400 PH (STANDARD UNITS)		06/28/94-10/26/98	9	7.68	7.794	8.65	7.31	0.181	0.425	7.31	7.525	8.035	8.65
00400 CONVERTED PH (STANDARD UNITS)		06/28/94-10/26/98	9	7.68	7.663	8.65	7.31	0.2	0.448	7.31	7.525	8.035	8.65
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/94-10/26/98	9	0.021	0.022	0.049	0.002	0.	0.014	0.002	0.012	0.03	0.049
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	9	790.	4596.667	16000.	230.	44288075.	6654.929	230.	475.	10700.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	9	2.898	3.19	4.204	2.362	0.472	0.687	2.362	2.676	3.968	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		1549.603									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station RICH0093

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/94-10/26/98	8	22.6	22.638	30.2	15.1	29.406	5.423	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	8	8.45	8.6	10.4	6.9	1.289	1.135	**	**	**	**
00400 PH (STANDARD UNITS)		06/28/94-10/26/98	8	7.415	7.545	8.13	7.26	0.098	0.313	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		06/28/94-10/26/98	8	7.414	7.465	8.13	7.26	0.106	0.325	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/94-10/26/98	8	0.039	0.034	0.055	0.007	0.	0.018	**	**	**	**
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	9	490.	3230.	16000.	110.	27749600.	5267.789	110.	170.	5400.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	9	2.69	2.918	4.204	2.041	0.634	0.796	2.041	2.23	3.732	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		828.475									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station RICH0093

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/94-10/26/98	12	21.15	22.042	28.	15.1	18.632	4.316	15.43	19.05	26.575	27.85
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	12	8.5	8.7	10.2	7.4	0.767	0.876	7.46	7.95	9.475	10.05
00400 PH (STANDARD UNITS)		06/28/94-10/26/98	12	7.57	7.565	8.33	6.7	0.135	0.367	6.913	7.448	7.715	8.159
00400 CONVERTED PH (STANDARD UNITS)		06/28/94-10/26/98	12	7.568	7.397	8.33	6.7	0.165	0.406	6.913	7.448	7.715	8.159
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/94-10/26/98	12	0.027	0.04	0.2	0.005	0.003	0.051	0.008	0.019	0.036	0.151
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	12	490.	4370.833	16000.	110.	49314917.424	7022.458	110.	155.	12325.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	12	2.69	2.95	4.204	2.041	0.696	0.834	2.041	2.176	3.932	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		890.694									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0093

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/28/94-10/26/98	10	23.65	23.4	28.8	14.7	21.171	4.601	15.18	20.55	27.525	28.68
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	9	8.1	8.289	9.9	7.4	0.566	0.752	7.4	7.8	8.7	9.9
00400 PH (STANDARD UNITS)		06/28/94-10/26/98	10	7.64	7.655	8.05	7.36	0.071	0.267	7.361	7.408	7.945	8.044
00400 CONVERTED PH (STANDARD UNITS)		06/28/94-10/26/98	10	7.633	7.588	8.05	7.36	0.076	0.276	7.361	7.407	7.945	8.044
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/28/94-10/26/98	10	0.023	0.026	0.044	0.009	0.	0.014	0.009	0.011	0.039	0.044
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	11	790.	2945.273	16000.	78.	25979293.818	5096.989	96.4	260.	3500.	14640.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	11	2.898	2.923	4.204	1.892	0.513	0.716	1.96	2.415	3.544	4.156
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		837.193									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station RICH0093

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-10/26/98	12	26.25	25.25	29.3	16.5	15.361	3.919	17.7	22.6	28.075	29.3
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	12	7.95	8.225	10.5	7.1	0.875	0.935	7.13	7.525	8.725	10.05
00400	PH (STANDARD UNITS)	06/28/94-10/26/98	12	7.955	7.948	8.42	7.63	0.069	0.263	7.636	7.67	8.12	8.372
00400	CONVERTED PH (STANDARD UNITS)	06/28/94-10/26/98	12	7.953	7.88	8.42	7.63	0.074	0.273	7.636	7.67	8.12	8.372
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/94-10/26/98	12	0.011	0.013	0.023	0.004	0.	0.007	0.004	0.008	0.021	0.023
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	12	515.	3719.167	16000.	20.	39333808.333	6271.667	47.	230.	7097.5	16000.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	12	2.682	2.83	4.204	1.301	0.799	0.894	1.523	2.362	3.697	4.204
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		675.888									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: RICH0094

NPS Station ID: RICH0094 LAT/LON: 37.506642/ -77.412227 Agency: 21VASWCB Date Created: / /
Location: RT. 5 BRIDGE
Station Type: /TYPA/AMBNT/STREAM FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
RMI-Indexes: STORET Station ID(s): 2-ALM000.42 /VA2-07-X0002/VA2-4X0002
RMI-Miles: Within Park Boundary: No
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206046 RF1 Mile Point: 5.420 Distance from RF1: 0.50 On/Off RF1: ON
RF3 Index: 02080205000103.48 RF3 Mile Point: 3.90 Distance from RF3: 0.06 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: ALMOND CREEK SECTION: 07 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/03/69-12/07/98	246	15.	14.737	29.	0.1	42.612	6.528	5.45	9.25	20.425	23.
00061 FLOW, STREAM, INSTANTANEOUS	CFS	04/21/82-04/22/85	13	2.	3.992	16.	0.9	17.884	4.229	0.94	1.	6.	12.4
00070 TURBIDITY, (JACKSON CANDLE UNITS)		02/21/89-05/05/94	56	4.5	19.432	390.	1.2	3989.813	63.165	1.94	3.	6.775	23.3
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		09/12/94-12/07/98	21	5.	8.395	58.	1.4	162.902	12.763	1.78	3.55	6.7	25.64
00080 COLOR (PLATINUM-COBALT UNITS)		02/13/91-05/05/94	21	31.	38.286	186.	11.	1241.214	35.231	18.2	22.5	40.5	47.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/07/98	128	253.5	250.25	476.	19.	3267.008	57.158	190.5	215.25	281.	305.7
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/27/89-12/07/98	63	244.	251.159	416.	183.	1548.426	39.35	213.2	226.	266.	295.6
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	02/10/92-12/07/98	33	9.6	9.576	13.5	6.5	3.071	1.753	7.22	8.05	11.15	11.8
00300p OXYGEN, DISSOLVED	MG/L	02/03/69-12/07/98	216	9.	9.231	14.8	0.	4.725	2.174	7.	7.9	10.575	12.2
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/03/69-12/07/98	177	2.	3.315	90.	0.5	52.631	7.255	1.	1.	3.	6.2
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/07/98	172	12.	15.753	204.	0.5	368.048	19.185	5.	8.25	18.	23.7
00400p PH (STANDARD UNITS)		02/03/69-12/07/98	241	7.	7.257	12.	4.2	0.997	0.999	6.5	6.705	7.5	8.15
00400p CONVERTED PH (STANDARD UNITS)		02/03/69-12/07/98	241	7.	6.339	12.	4.2	1.843	1.358	6.5	6.705	7.5	8.15
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	241	0.1	0.458	63.096	0.	16.928	4.114	0.007	0.032	0.197	0.316
00403 PH, LAB, STANDARD UNITS	SU	02/03/69-12/07/98	148	6.9	7.193	12.3	4.2	1.512	1.23	6.49	6.7	7.2	7.7
00403 CONVERTED PH, LAB, STANDARD UNITS		02/03/69-12/07/98	148	6.9	6.185	12.3	4.2	2.535	1.592	6.49	6.7	7.2	7.7
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	148	0.126	0.653	63.096	0.	27.412	5.236	0.02	0.063	0.2	0.324
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/03/69-12/07/98	148	31.	72.682	1695.	0.	43232.994	207.925	17.9	25.25	37.75	66.
00415 ALKALINITY, PHENOLPHTHALEIN (MG/L)		07/21/74-07/21/74	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00435 ACIDITY, TOTAL (MG/L AS CACO3)		07/24/69-08/15/79	4	44.5	65.	162.	9.	4490.	67.007	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		02/03/69-12/07/98	145	165.	227.166	2067.	31.	66765.75	258.391	131.6	148.	192.5	301.4
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/03/69-12/07/98	147	38.	49.109	408.	0.	2347.139	48.447	22.	29.	49.	85.6
00510 RESIDUE, TOTAL FIXED (MG/L)		02/03/69-12/07/98	146	127.	203.158	2410.	4.	101189.182	318.102	81.7	103.75	151.	258.2
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/24/69-12/07/98	240	5.	26.576	705.	0.	5824.059	76.316	1.5	2.5	11.	57.2
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/24/69-12/07/98	237	2.5	7.27	384.	0.	720.372	26.84	0.5	1.5	5.	12.2
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		07/24/69-12/07/98	239	2.5	20.059	643.	0.	4272.976	65.368	0.5	1.5	7.	36.
00545 RESIDUE, SETTLEABLE (ML/L)		02/03/69-02/03/69	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-12/07/98	236	0.1	0.379	2.9	0.02	0.354	0.595	0.04	0.05	0.4	1.311
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	236	0.01	0.031	0.51	0.005	0.004	0.06	0.005	0.005	0.03	0.08
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	219	1.08	1.08	2.649	0.02	0.165	0.407	0.6	0.8	1.38	1.5
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-12/07/98	233	0.5	0.832	7.	0.05	1.015	1.007	0.2	0.3	0.9	2.1
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		06/15/77-06/07/79	16	1.25	1.163	1.6	0.6	0.08	0.283	0.67	0.925	1.375	1.53
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/07/98	170	0.05	0.114	1.	0.01	0.025	0.159	0.05	0.05	0.1	0.2

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Parameter Inventory for Station: RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	152	0.02	0.097	5.	0.005	0.178	0.421	0.01	0.01	0.06	0.181
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	154	5.	6.449	77.	1.	53.309	7.301	2.4	3.2	7.	11.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	78	74.	75.346	148.	21.	294.541	17.162	58.	65.5	82.25	96.2
00940 CHLORIDE,TOTAL IN WATER MG/L	03/24/75-12/07/98	78	21.	21.782	59.	9.	48.173	6.941	15.	18.	24.	30.
00945 SULFATE, TOTAL (MG/L AS SO4)	02/21/89-12/07/98	75	41.	46.213	164.	21.	501.63	22.397	27.2	34.	54.	65.4
00951 FLUORIDE, TOTAL (MG/L AS F)	11/29/88-05/26/93	47	0.13	0.129	0.25	0.025	0.004	0.06	0.05	0.1	0.15	0.22
00955 SILICA, DISSOLVED (MG/L AS SI02)	04/19/89-02/09/93	42	10.2	10.412	15.1	7.8	3.062	1.75	8.16	9.275	11.1	13.32
01002 ARSENIC, TOTAL (UG/L AS AS)	05/06/72-04/28/93	18##	5.	3.361	6.	1.	4.171	2.042	1.	1.	5.	5.1
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-08/27/92	4	4.6	4.155	6.	1.42	3.867	1.966	**	**	**	**
01013 BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	08/27/92-08/27/92	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	05/06/72-04/28/93	18##	5.	5.056	10.	0.5	5.32	2.307	0.5	5.	5.	10.
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-08/27/92	4##	0.068	0.671	2.5	0.05	1.487	1.219	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-08/27/92	4	5.44	5.715	9.	2.98	6.218	2.494	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/06/72-04/28/93	23##	5.	5.022	10.	0.5	2.056	1.434	5.	5.	5.	5.
01042 COPPER, TOTAL (UG/L AS CU)	05/06/72-04/28/93	23##	5.	6.13	13.	5.	6.755	2.599	5.	5.	5.	11.8
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-08/27/92	4	9.675	9.163	13.7	3.6	20.956	4.578	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	11/01/78-04/28/93	10	585.	646.	1260.	380.	61026.667	247.036	392.	500.	725.	1217.
01051 LEAD, TOTAL (UG/L AS PB)	05/06/72-04/28/93	23##	5.	24.761	414.	0.5	7268.906	85.258	1.	4.	5.	32.2
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-08/27/92	4	5.75	6.825	15.	0.8	49.563	7.04	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	11/01/78-04/28/93	10	90.	118.1	274.	40.	5625.433	75.003	43.	75.25	155.	269.6
01065 NICKEL, DISSOLVED (UG/L AS NI)	01/29/73-11/01/78	9##	50.	40.556	50.	5.	352.778	18.782	5.	30.	50.	50.
01067 NICKEL, TOTAL (UG/L AS NI)	05/18/82-04/28/93	11##	5.	5.455	10.	5.	2.273	1.508	5.	5.	5.	9.
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-08/27/92	4##	1.65	5.238	16.9	0.75	61.112	7.817	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/06/72-04/28/93	23	30.	30.087	60.	5.	262.356	16.197	5.	20.	42.	54.8
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-08/27/92	4	23.	22.85	28.	17.4	26.017	5.101	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	10/25/90-04/28/93	8##	10.	8.75	10.	5.	5.357	2.315	**	**	**	**
01148 SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	08/27/92-08/27/92	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/03/69-07/24/69	2	33000.	33000.	43000.	23000.	200000000.	14142.136	**	**	**	**
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	02/03/69-07/24/69	2	4.498	4.498	4.633	4.362	0.037	0.192	**	**	**	**
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	31448.37								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/12/94-12/07/98	21	490.	2798.095	16000.	110.	30898786.19	5558.668	130.	230.	1375.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/12/94-12/07/98	21	2.69	2.824	4.204	2.041	0.461	0.679	2.114	2.362	3.116	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	666.48								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	218	500.	2032.339	8000.	50.	7574905.562	2752.255	50.	100.	2950.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	218	2.699	2.752	3.903	1.699	0.617	0.786	1.699	2.	3.47	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	564.407								
32240 TANNIN AND LIGNIN (MG/L)	01/12/94-05/05/94	2	0.9	0.9	1.3	0.5	0.32	0.566	**	**	**	**
32730 PHENOLICS, TOTAL, RECOVERABLE (UG/L)	01/22/74-06/02/74	5	175.	204.8	520.	25.	40920.2	202.287	**	**	**	**
34259 DELTA BENZENE HEXACHLORIDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34351 ENDOSULFAN SULFATE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34356 ENDOSULFAN, BETA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34361 ENDOSULFAN, ALPHA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34366 ENDRIN ALDEHYDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34480 THALLIUM DRY WGTBOTMG/KG	08/27/92-08/27/92	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34671 PCB - 1016 TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
38442 DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38451 DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38745 2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39061 PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/27/92-08/27/92	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
39062 CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39065 CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39068 CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39071 CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39300 P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39305 O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39310 P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39315 O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320 P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39327 ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39333 ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/06/81-08/27/92	2##	25.	25.	50.	0.	1250.	35.355	**	**	**	**
39337 ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

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Parameter Inventory for Station: RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39338 BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39340 GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39350 CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39351 CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/27/92-08/27/92	1##	250.	250.	250.	250.	0.	0.	**	**	**	**
39363 DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
39368 DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
39373 DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
39380 DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39383 DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/27/92-08/27/92	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
39390 ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39393 ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
39400 TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39403 TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/27/92-08/27/92	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39410 HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39413 HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39488 PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39492 PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39496 PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39500 PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39508 PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39516 PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39526 PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	08/27/92-08/27/92	1##	250.	250.	250.	250.	0.	0.	**	**	**	**
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/18/82-05/18/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39631 ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/06/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39730 2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39740 2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39760 SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	08/22/74-08/22/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/07/79	63##	0.05	0.166	3.6	0.05	0.243	0.493	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-12/07/98	84	0.045	0.058	0.9	0.005	0.011	0.107	0.005	0.01	0.05	0.1
71900 MERCURY, TOTAL (UG/L AS HG)	05/06/72-04/28/93	23##	0.25	0.204	0.3	0.15	0.003	0.054	0.15	0.15	0.25	0.25
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-08/27/92	4##	0.063	0.071	0.15	0.01	0.004	0.066	**	**	**	**
75045 HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	08/27/92-08/27/92	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77825 ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
79799 DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	08/27/92-08/27/92	1##	50.	50.	50.	50.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0094

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	56	4	0.07	13	0	0.00	23	3	0.13	20	1	0.05			
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	21	1	0.05	6	0	0.00	7	1	0.14	8	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	33	0	0.00	9	0	0.00	11	0	0.00	13	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	216	3	0.01	53	1	0.02	90	2	0.02	73	0	0.00			
00400 PH	Fresh Chronic	9.	241	21	0.09	62	5	0.08	96	9	0.09	83	7	0.08			
	Other-Lo Lim.	6.5	241	32	0.13	62	7	0.11	96	13	0.14	83	12	0.14			
00403 PH, LAB	Fresh Chronic	9.	148	10	0.07	34	3	0.09	63	5	0.08	51	2	0.04			
	Other-Lo Lim.	6.5	148	20	0.14	34	3	0.09	63	11	0.17	51	6	0.12			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	236	0	0.00	61	0	0.00	96	0	0.00	79	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	219	0	0.00	57	0	0.00	92	0	0.00	70	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	16	0	0.00	4	0	0.00	4	0	0.00	8	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	78	0	0.00	17	0	0.00	31	0	0.00	30	0	0.00			
	Drinking Water	250.	78	0	0.00	17	0	0.00	31	0	0.00	30	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	75	0	0.00	17	0	0.00	29	0	0.00	29	0	0.00			
00951 FLUORIDE, TOTAL AS F	Drinking Water	4.	47	0	0.00	11	0	0.00	18	0	0.00	18	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

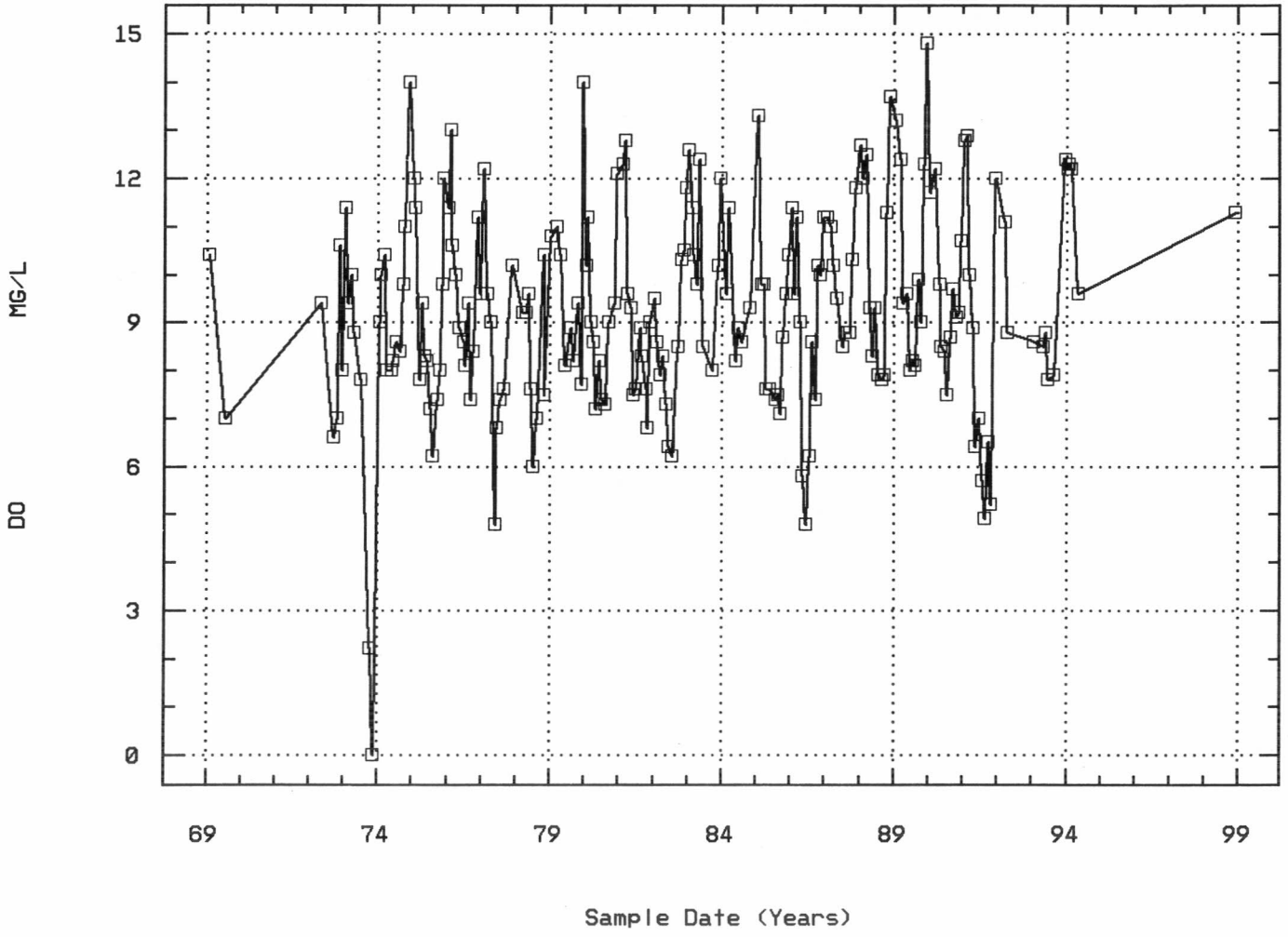
EPA Water Quality Criteria Analysis for Station: RICH0094

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01002	ARSENIC, TOTAL	Fresh Acute	360.	18	0	0.00	2	0	0.00	7	0	0.00	9	0	0.00			
		Drinking Water	50.	18	0	0.00	2	0	0.00	7	0	0.00	9	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	4&	2	0.50							4	2	0.50			
		Drinking Water	5.	4&	2	0.50							4	2	0.50			
01034	CHROMIUM, TOTAL	Drinking Water	100.	23	0	0.00	2	0	0.00	10	0	0.00	11	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	23	0	0.00	2	0	0.00	10	0	0.00	11	0	0.00			
		Drinking Water	1300.	23	0	0.00	2	0	0.00	10	0	0.00	11	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	23	1	0.04	2	0	0.00	10	0	0.00	11	1	0.09			
		Drinking Water	15.	23	4	0.17	2	0	0.00	10	1	0.10	11	3	0.27			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	9	0	0.00				5	0	0.00	4	0	0.00			
		Drinking Water	100.	9	0	0.00				5	0	0.00	4	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	11	0	0.00	2	0	0.00	4	0	0.00	5	0	0.00			
		Drinking Water	100.	11	0	0.00	2	0	0.00	4	0	0.00	5	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	23	0	0.00	2	0	0.00	10	0	0.00	11	0	0.00			
		Drinking Water	5000.	23	0	0.00	2	0	0.00	10	0	0.00	11	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	8	0	0.00	2	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	50.	8	0	0.00	2	0	0.00	3	0	0.00	3	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	2	1.00	1	1	1.00	1	1	1.00						
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	21	17	0.81	6	6	1.00	7	6	0.86	8	5	0.63			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	218	156	0.72	56	44	0.79	89	57	0.64	73	55	0.75			
34356	ENDOSULFAN, BETA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
34361	ENDOSULFAN, ALPHA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39300	P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39310	P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39320	P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
39340	GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	2.	2	0	0.00	1	0	0.00	1	0	0.00						
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39400	TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0.00							1	0	0.00			
		Drinking Water	3.	1	0	0.00							1	0	0.00			
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
		Drinking Water	0.4	1	0	0.00							1	0	0.00			
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	2	0	0.00	1	0	0.00	1	0	0.00						
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	1	0	0.00							1	0	0.00			
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	1.	2	0	0.00	1	0	0.00	1	0	0.00						
39730	2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0.00							1	0	0.00			
39760	SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0.00							1	0	0.00			
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00	1	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	23	0	0.00	2	0	0.00	10	0	0.00	11	0	0.00			
		Drinking Water	2.	23	0	0.00	2	0	0.00	10	0	0.00	11	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station: RICH0094 Parameter Code: 00300

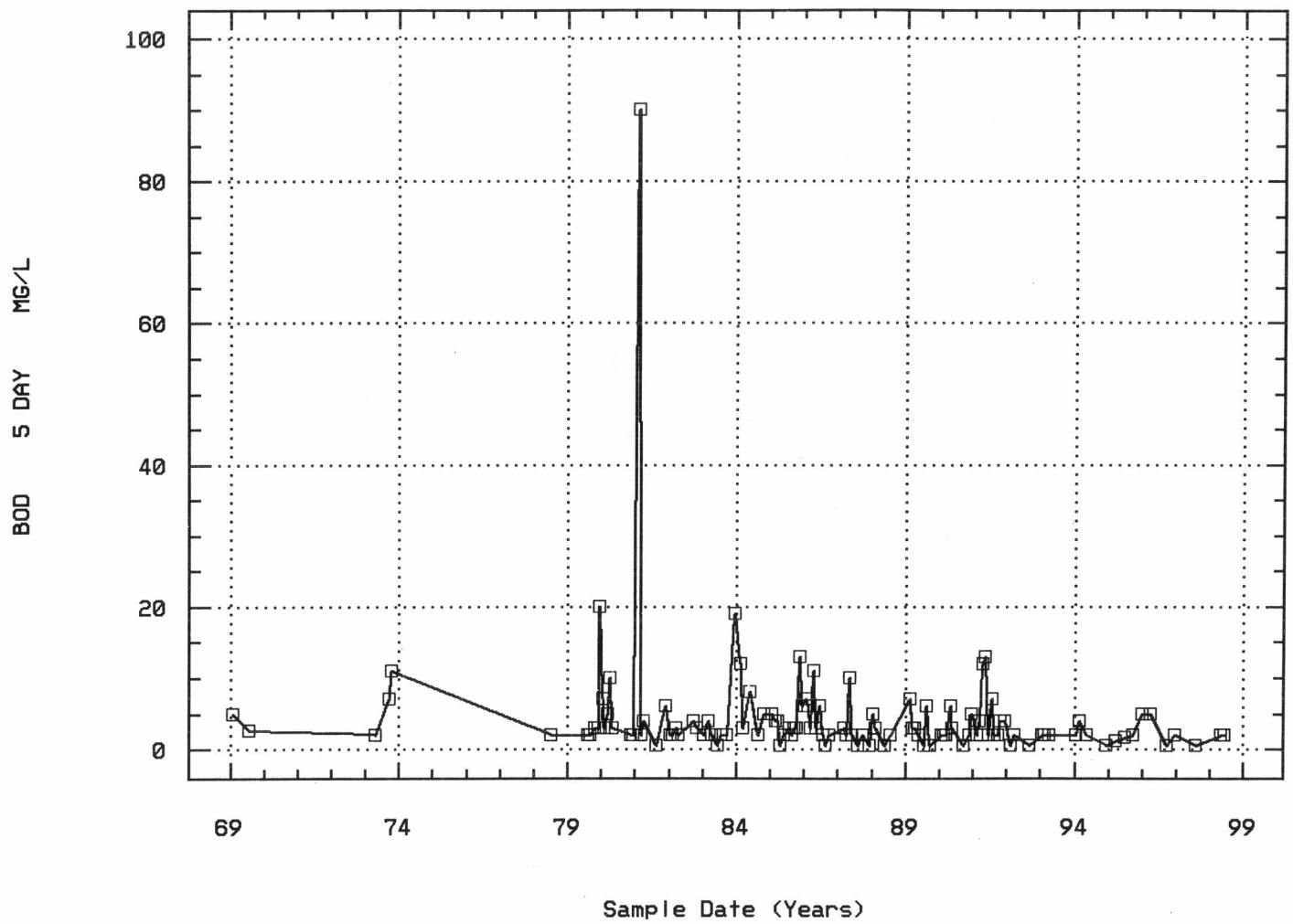
OXYGEN, DISSOLVED



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00310

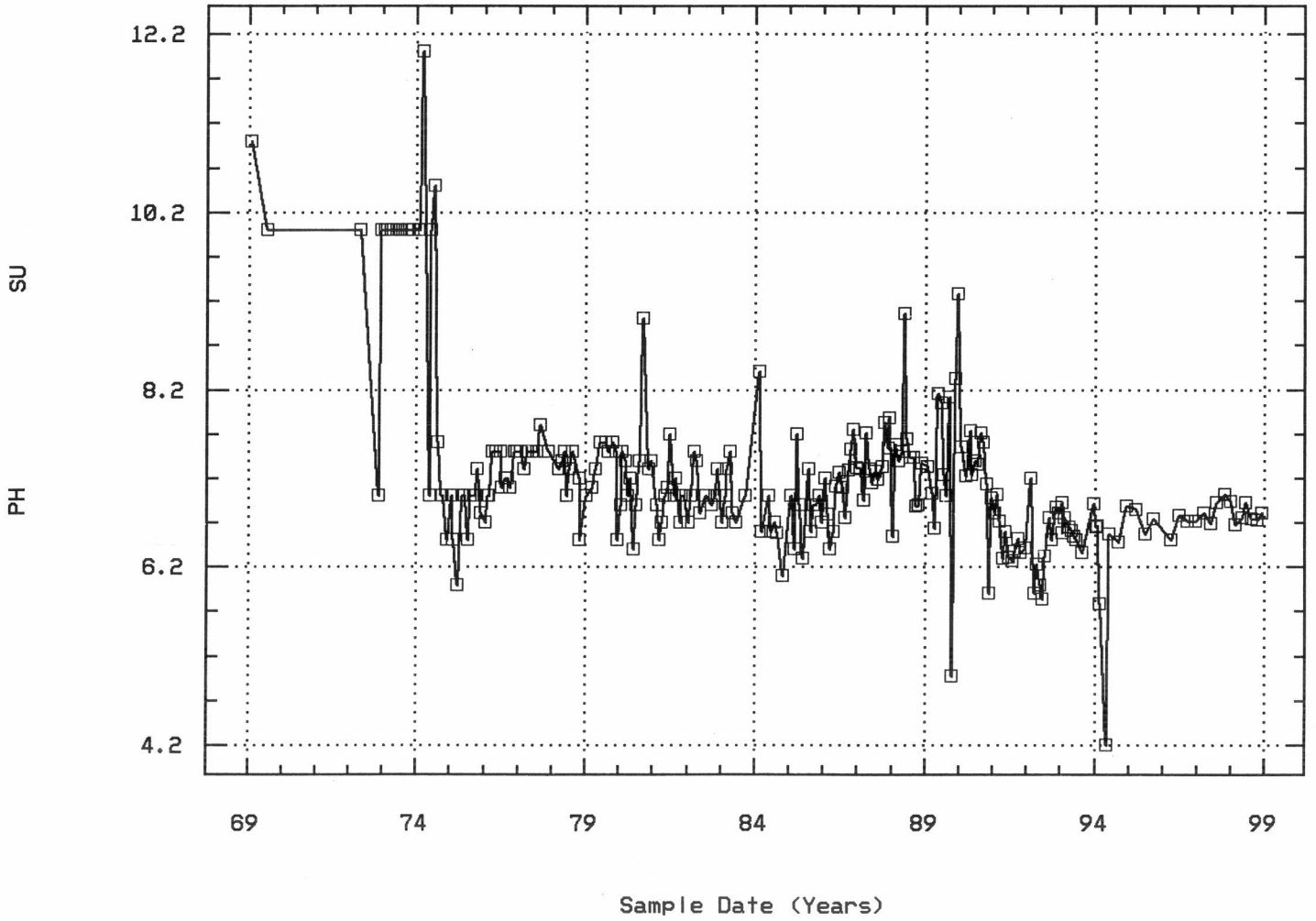
BOD, 5 DAY, 20 DEG C



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00400

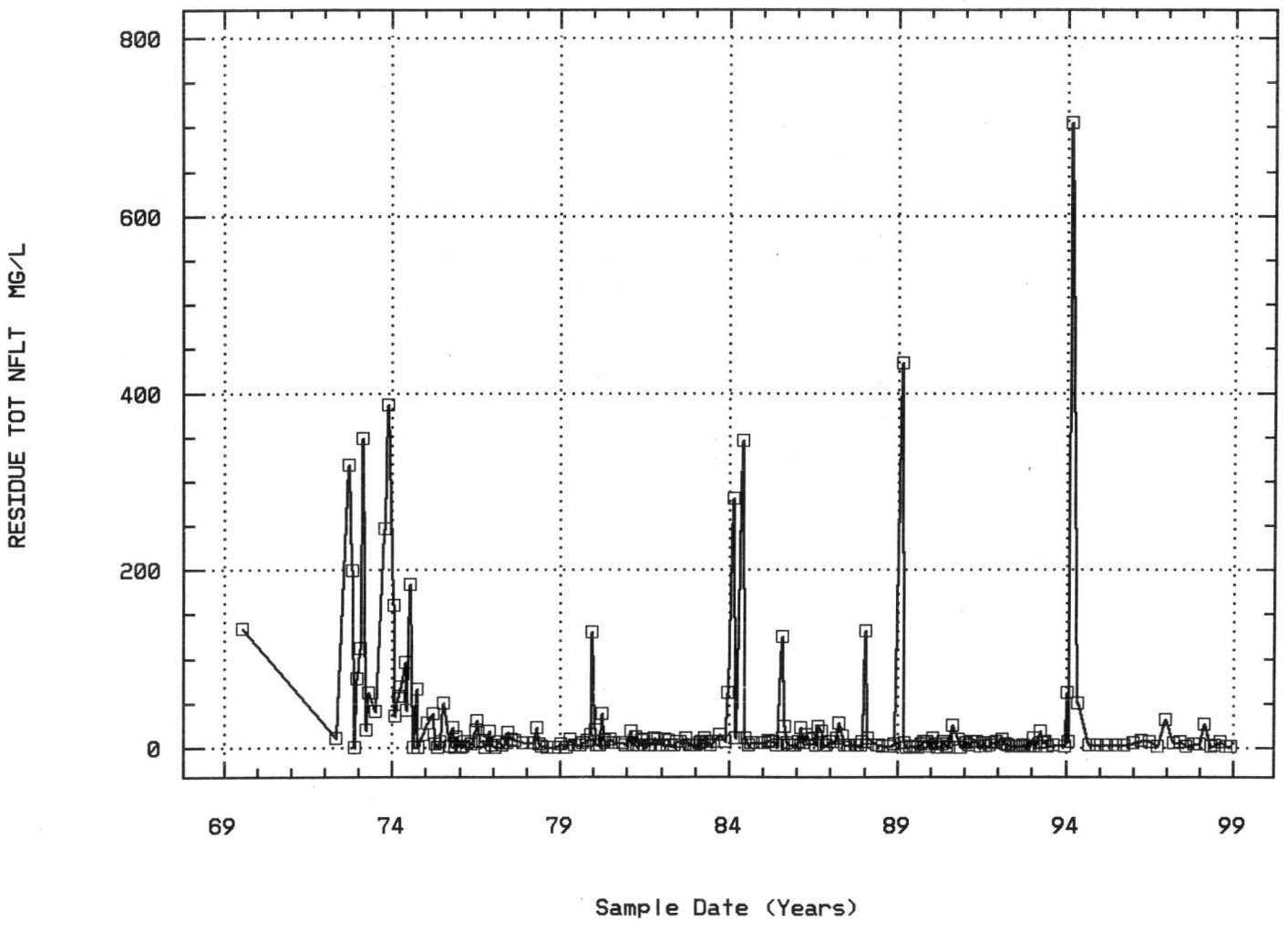
PH (STANDARD UNITS)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00530

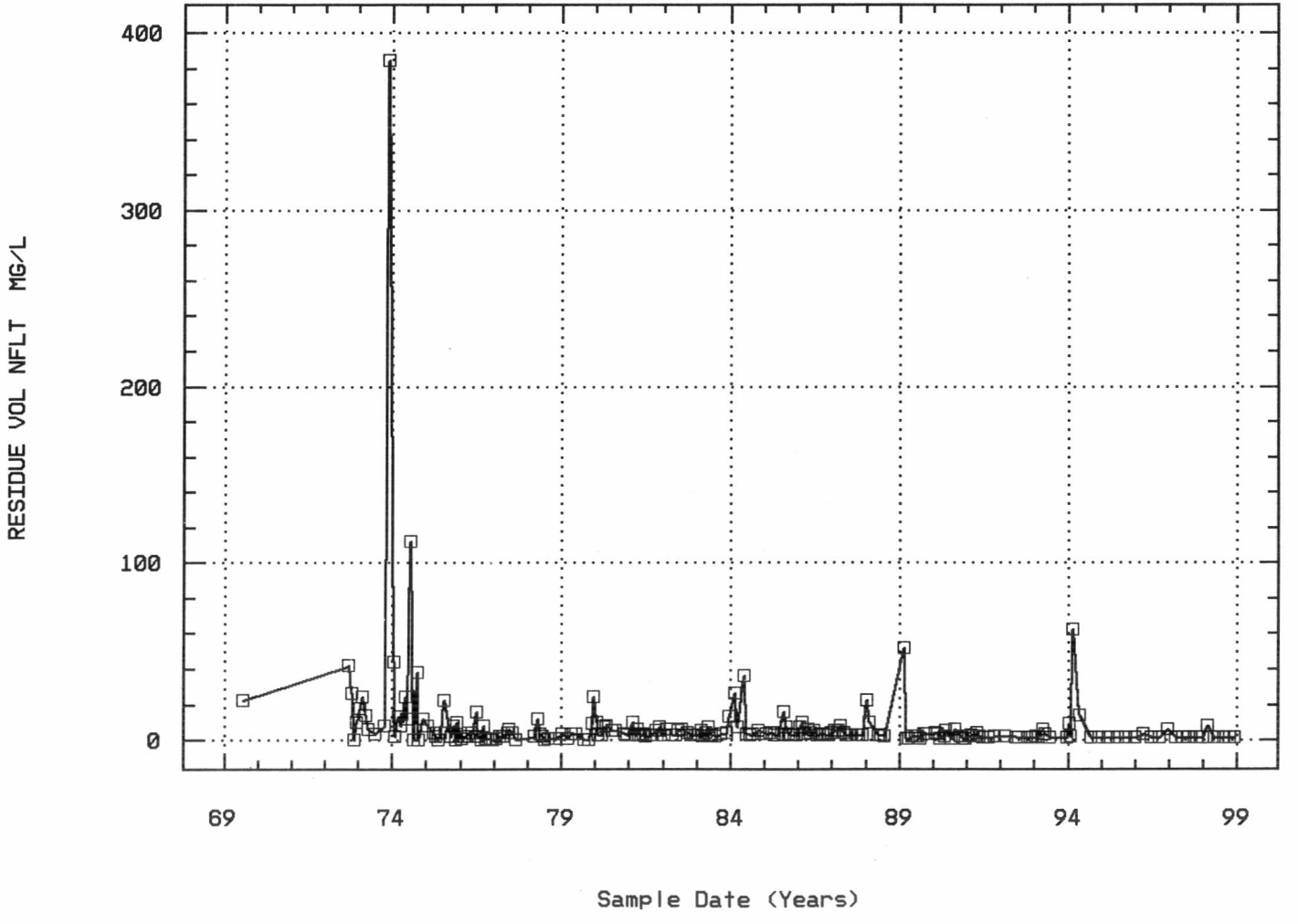
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00535

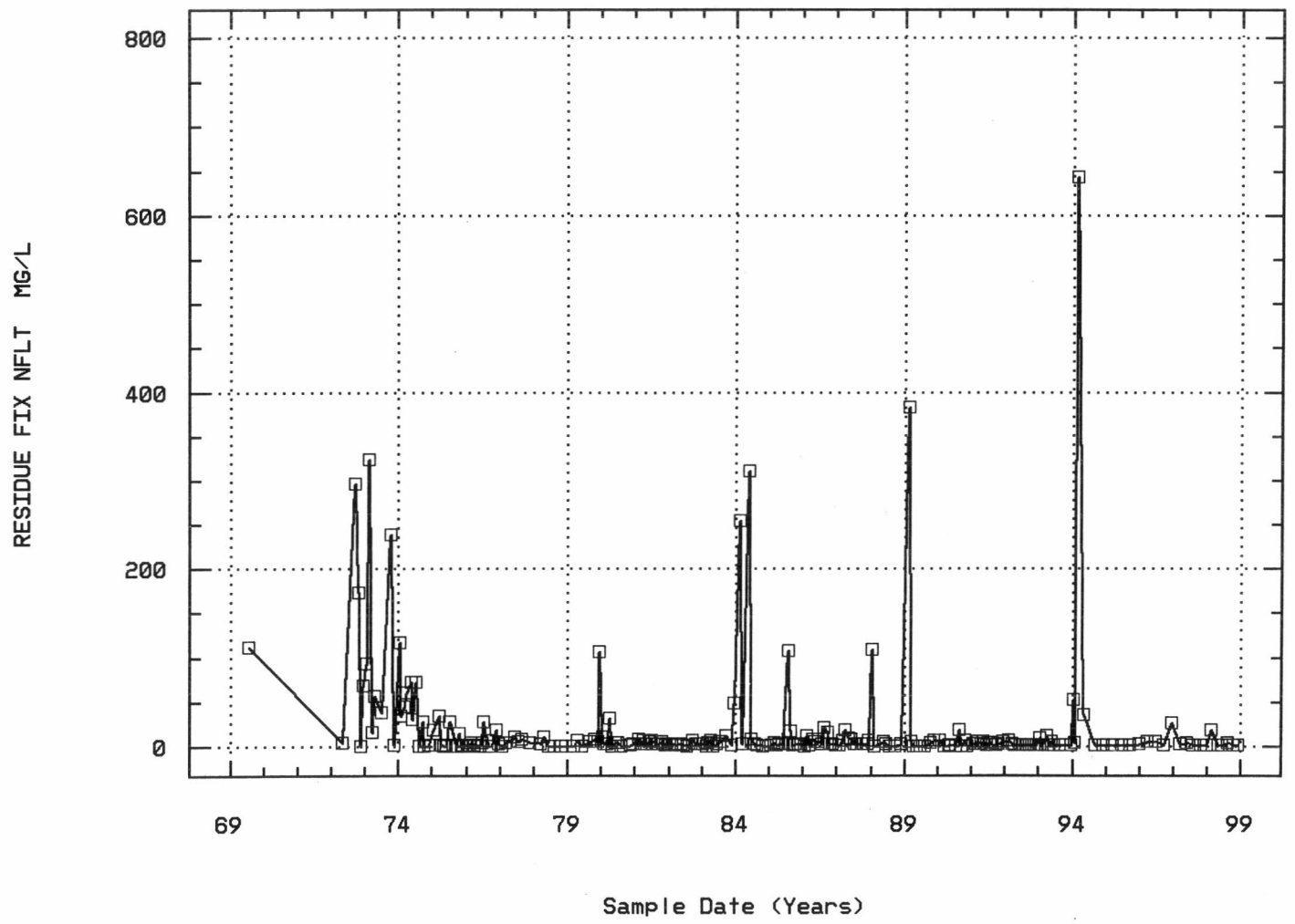
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00540

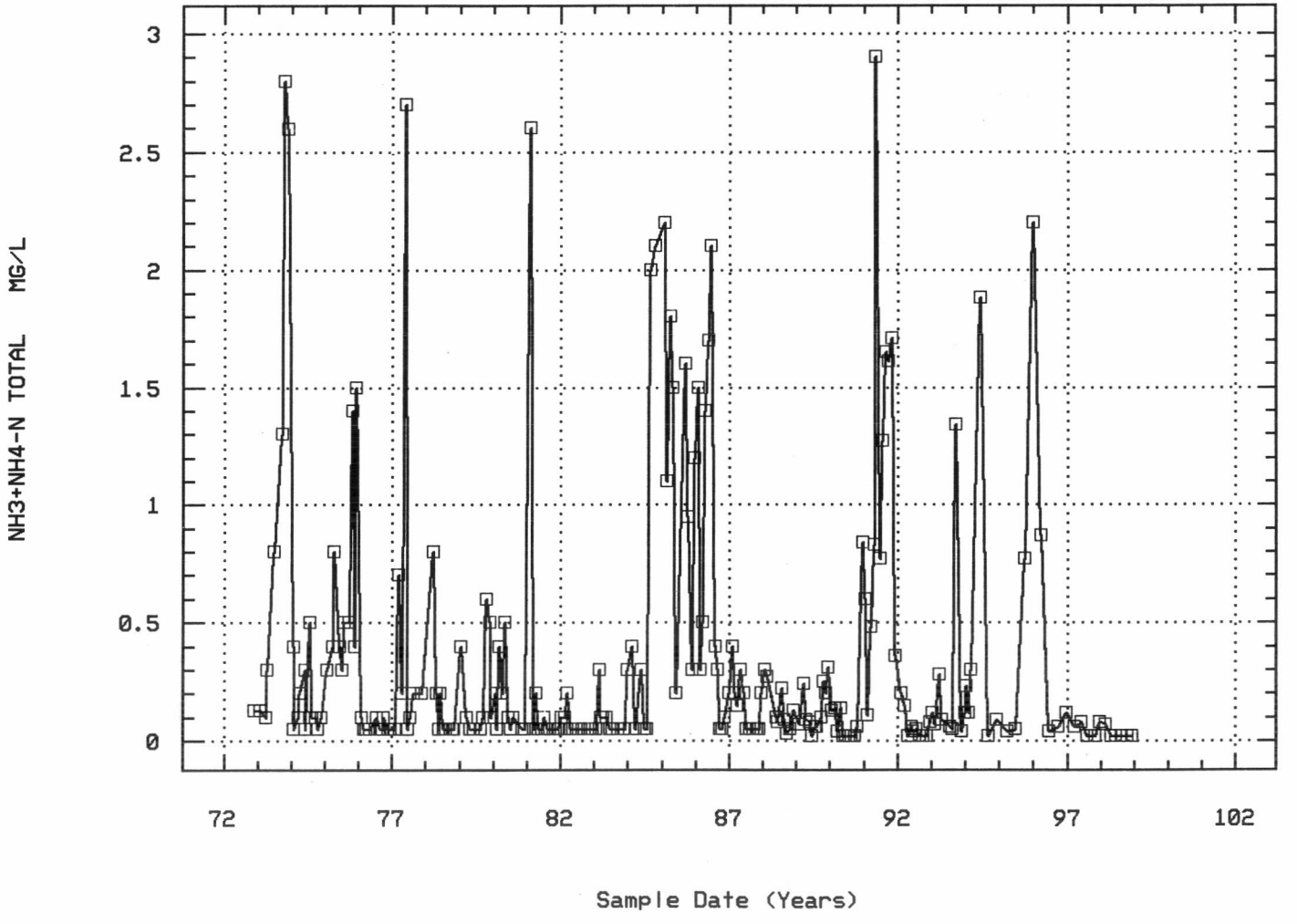
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00610

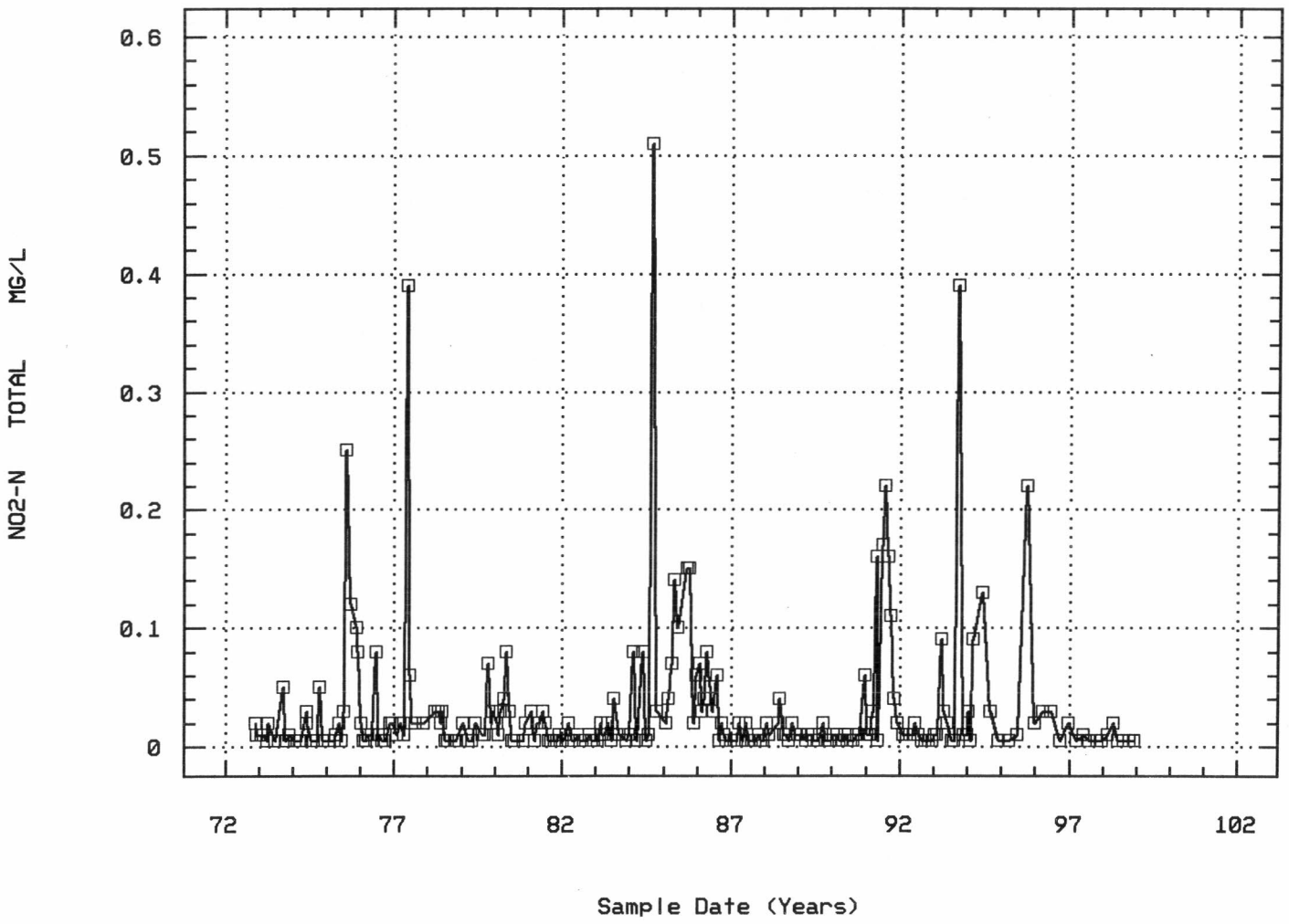
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00615

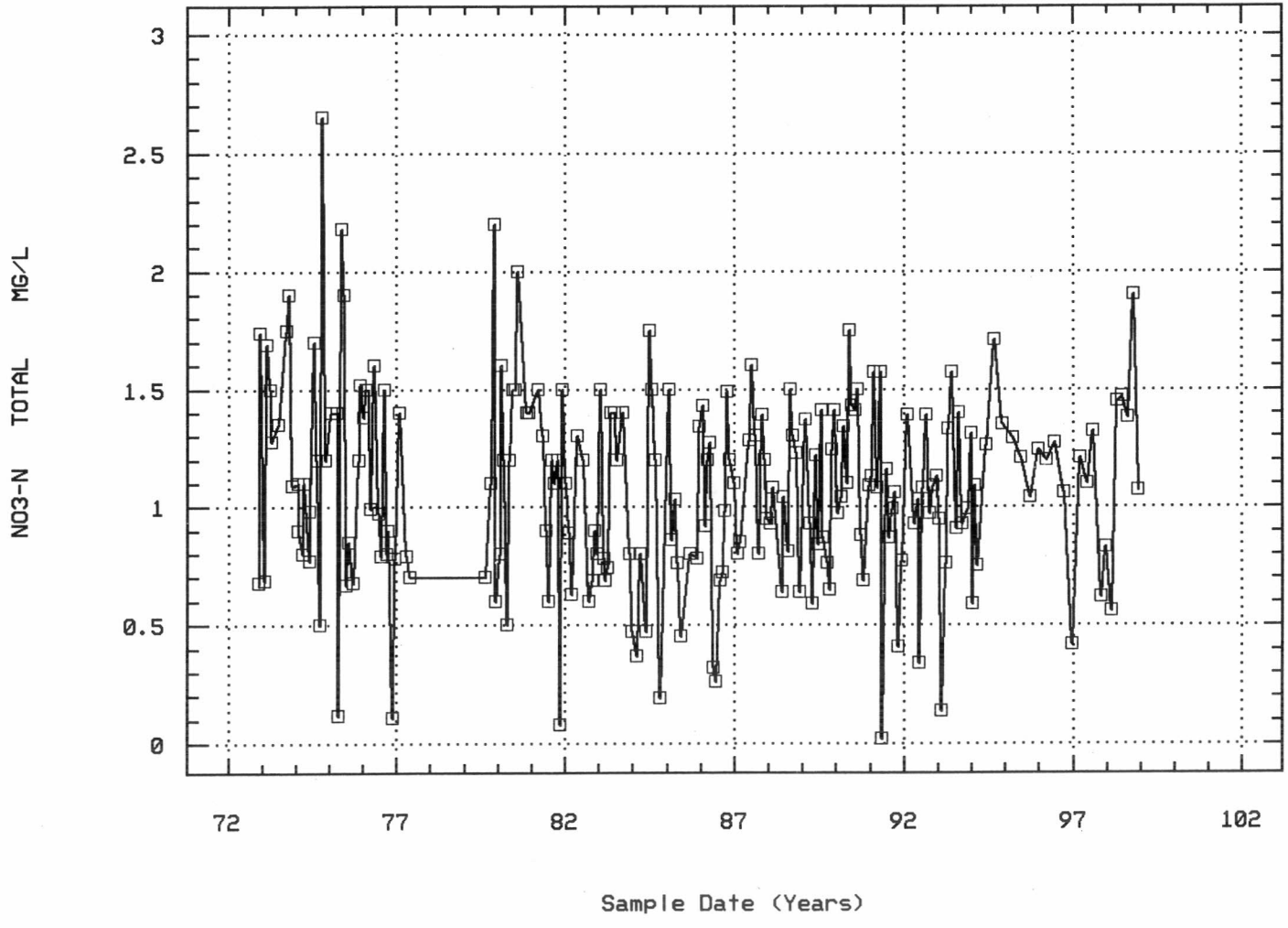
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00620

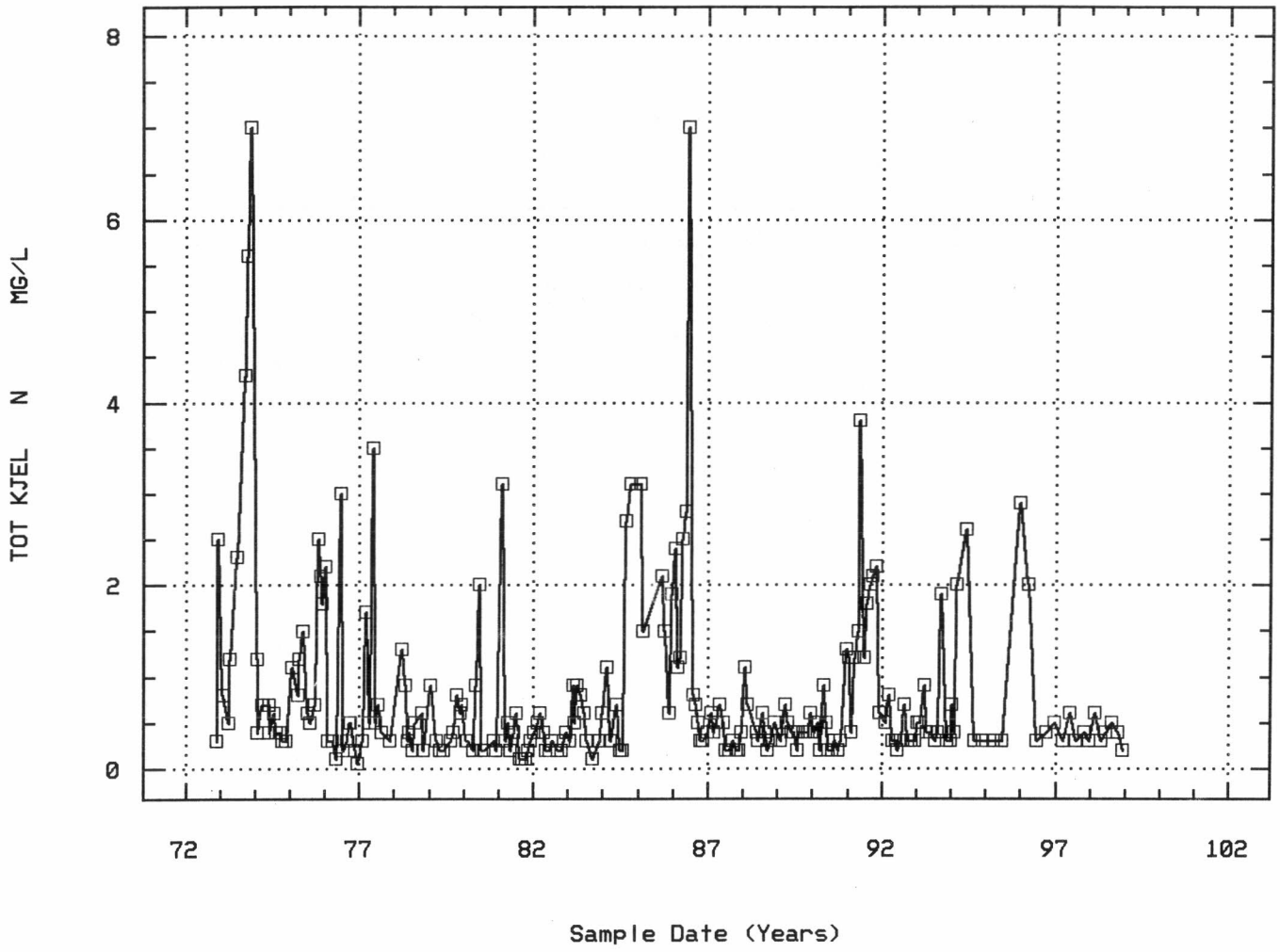
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00625

NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 5 BRIDGE

Annual Analysis for 1969 - Station RICH0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/03/69-12/07/98	2	16.95	16.95	25.	8.9	129.605	11.384	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	02/03/69-12/07/98	2	8.7	8.7	10.4	7.	5.78	2.404	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	02/03/69-12/07/98	2	3.85	3.85	5.	2.7	2.645	1.626	**	**	**	**
00400p PH (STANDARD UNITS)		02/03/69-12/07/98	2	10.5	10.5	11.	10.	0.5	0.707	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		02/03/69-12/07/98	2	10.26	10.26	11.	10.	0.616	0.785	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	02/03/69-12/07/98	2	9.75	9.75	10.	9.5	0.125	0.354	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/03/69-12/07/98	2	9.682	9.682	10.	9.5	0.134	0.367	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/03/69-12/07/98	2	31.5	31.5	36.	27.	40.5	6.364	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		02/03/69-12/07/98	2	240.5	240.5	280.	201.	3120.5	55.861	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/03/69-12/07/98	2	44.	44.	53.	35.	162.	12.728	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		02/03/69-12/07/98	2	118.5	118.5	227.	10.	23544.5	153.442	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/24/69-12/07/98	1	133.	133.	133.	133.	0.	0.	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/24/69-12/07/98	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		07/24/69-12/07/98	1	111.	111.	111.	111.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station RICH0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/03/69-12/07/98	5	12.2	13.34	22.2	6.7	38.723	6.223	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	02/03/69-12/07/98	5	8.	8.32	10.6	6.6	2.792	1.671	**	**	**	**
00400p PH (STANDARD UNITS)		02/03/69-12/07/98	3	10.	9.	10.	7.	3.	1.732	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		02/03/69-12/07/98	3	10.	7.476	10.	7.	6.483	2.546	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	3	0.	0.033	0.1	0.	0.003	0.058	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	02/03/69-12/07/98	2	12.25	12.25	12.3	12.2	0.005	0.071	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/03/69-12/07/98	2	12.247	12.247	12.3	12.2	0.005	0.071	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/03/69-12/07/98	2	1473.5	1473.5	1695.	1252.	98124.5	313.248	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		02/03/69-12/07/98	5	713.	1013.2	2067.	142.	886790.2	941.695	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/03/69-12/07/98	5	42.	125.4	408.	31.	25785.8	160.58	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		02/03/69-12/07/98	5	671.	887.8	2036.	79.	770660.7	877.873	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/24/69-12/07/98	5	78.	121.24	318.	0.2	18358.588	135.494	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/24/69-12/07/98	4	18.	19.5	42.	0.	339.667	18.43	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		07/24/69-12/07/98	5	68.	108.24	296.	0.2	15901.388	126.101	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-12/07/98	2	0.565	0.565	1.	0.13	0.378	0.615	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	2	1.21	1.21	1.739	0.68	0.561	0.749	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-12/07/98	2	1.4	1.4	2.5	0.3	2.42	1.556	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/72-06/06/94	5##	50.	330.	1100.	50.	208250.	456.344	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/72-06/06/94	5##	1.699	2.148	3.041	1.699	0.402	0.634	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		140.628									

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Annual Analysis for 1973 - Station RICH0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/03/69-12/07/98	8	15.3	14.388	25.	4.4	44.65	6.682	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	02/03/69-12/07/98	8	8.3	6.325	11.4	0.	20.342	4.51	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	02/03/69-12/07/98	3	7.	6.667	11.	2.	20.333	4.509	**	**	**	**
00400p PH (STANDARD UNITS)		02/03/69-12/07/98	8	10.	10.	10.	10.	0.	0.	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		02/03/69-12/07/98	8	10.	10.	10.	10.	0.	0.	**	**	**	**

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Annual Analysis for 1973 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	8	0.	0.	0.	0.	0.	0.	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	1	12.2	12.2	12.2	12.2	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	1	12.2	12.2	12.2	12.2	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	1	1320.	1320.	1320.	1320.	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	5	297.	540.4	1331.	146.	239329.3	489.213	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	7	25.	85.286	391.	13.	19060.238	138.059	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	7	674.	893.857	2410.	46.	712025.476	843.816	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	7	111.	173.429	386.	20.	23053.286	151.833	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	7	14.	65.286	384.	3.	19804.238	140.728	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	7	56.	109.571	324.	2.	15177.952	123.199	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	8	0.9	1.128	2.799	0.1	1.121	1.059	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	8	0.01	0.014	0.05	0.005	0.	0.015	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	8	1.425	1.406	1.899	0.69	0.155	0.393	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	7	2.299	3.099	7.	0.5	6.533	2.556	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	8##	50.	262.5	1400.	50.	226250.	475.657	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	8##	1.699	1.993	3.146	1.699	0.317	0.563	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		98.345									

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Annual Analysis for 1974 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	10	17.5	16.	25.	6.7	31.904	5.648	7.03	11.65	19.725	24.72
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	11	9.	9.582	14.	8.	3.204	1.79	8.	8.2	10.4	13.4
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	10	8.8	8.76	12.	6.5	3.765	1.94	6.55	7.	10.125	11.85
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	10	7.899	7.193	12.	6.5	6.494	2.548	6.55	7.	10.125	11.85
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	10	0.013	0.064	0.316	0.	0.01	0.1	0.	0.	0.1	0.295
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	9	10.5	9.422	12.	6.6	5.809	2.41	6.6	6.9	11.6	12.
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	9	10.5	7.211	12.	6.6	11.308	3.363	6.6	6.9	11.6	12.
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	9	0.	0.061	0.251	0.	0.008	0.089	0.	0.	0.126	0.251
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	10	68.	159.4	575.	14.	33139.156	182.042	14.8	26.5	272.5	547.
00500 RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	11	319.	312.909	678.	115.	23873.691	154.511	129.	198.	374.	627.6
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	11	38.	53.545	148.	0.	1828.273	42.758	5.2	27.	68.	141.
00510 RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	11	206.	259.364	610.	84.	21216.455	145.659	96.6	171.	348.	566.6
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	58.	65.818	184.	0.	3661.964	60.514	0.	14.	96.	179.2
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	12.	24.091	112.	0.	1064.091	32.62	0.	2.	38.	98.4
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	34.	41.727	116.	0.	1314.018	36.249	0.	2.	72.	107.2
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	0.1	0.177	0.5	0.05	0.024	0.156	0.05	0.05	0.3	0.48
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11##	0.005	0.013	0.05	0.005	0.	0.015	0.005	0.005	0.02	0.046
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	1.099	1.172	2.649	0.5	0.333	0.577	0.554	0.8	1.199	2.459
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	11	0.4	0.554	1.199	0.3	0.071	0.266	0.3	0.4	0.7	1.099
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11##	50.	1372.727	6000.	50.	4246681.818	2060.748	50.	50.	2300.	5660.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11##	1.699	2.439	3.778	1.699	0.805	0.897	1.699	1.699	3.362	3.749
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		274.531									

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Annual Analysis for 1975 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	11	14.4	15.4	22.2	6.7	29.532	5.434	7.14	10.	20.	22.2
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	12	8.25	8.975	12.	6.2	3.797	1.948	6.5	7.5	11.	12.
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	10	7.	6.81	7.3	6.	0.141	0.375	6.05	6.5	7.	7.27

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Annual Analysis for 1975 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	10	7.	6.631	7.3	6.	0.177	0.42	6.05	6.5	7.	7.27
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	10	0.1	0.234	1.	0.05	0.081	0.285	0.055	0.1	0.316	0.932
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	11	6.8	6.773	7.3	6.4	0.062	0.249	6.42	6.6	6.9	7.24
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	11	6.8	6.714	7.3	6.4	0.066	0.257	6.42	6.6	6.9	7.24
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	11	0.158	0.193	0.398	0.05	0.01	0.101	0.06	0.126	0.251	0.382
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	11	23.	29.545	88.	8.	442.873	21.045	9.8	17.	33.	77.8
00500 RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	10	155.	166.	285.	128.	1993.778	44.652	128.9	140.	170.25	274.8
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	10	78.	73.2	133.	24.	943.956	30.724	25.1	52.25	88.5	128.7
00510 RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	10	86.	92.8	195.	47.	1773.289	42.11	47.3	67.25	105.75	187.2
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	10	9.	16.1	50.	0.	307.211	17.527	0.	1.5	29.75	48.8
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	10	4.	6.	22.	0.	43.556	6.6	0.	1.5	8.5	20.8
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	10	2.	10.1	34.	0.	165.433	12.862	0.	0.	21.25	33.4
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	0.5	0.682	1.5	0.3	0.189	0.435	0.3	0.4	1.	1.48
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	10	0.025	0.063	0.25	0.005	0.006	0.079	0.005	0.005	0.105	0.237
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	10	1.299	1.191	2.179	0.12	0.385	0.621	0.175	0.678	1.614	2.151
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	11	1.099	1.254	2.5	0.5	0.422	0.65	0.52	0.7	1.799	2.42
00940 CHLORIDE,TOTAL IN WATER MG/L	03/24/75-12/07/98	1	15.	15.	15.	15.	0.	0.	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	1900.	2790.909	6000.	50.	6474409.091	2544.486	50.	500.	5800.	6000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	3.279	3.068	3.778	1.699	0.619	0.787	1.699	2.699	3.763	3.778
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		1170.258									

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Annual Analysis for 1976 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	12	16.4	15.5	25.6	5.6	48.211	6.943	6.08	7.75	21.925	24.91
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	12	9.5	9.717	13.	7.4	2.583	1.607	7.61	8.45	11.05	12.52
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	12	7.2	7.233	7.5	6.7	0.072	0.267	6.79	7.025	7.5	7.5
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	12	7.2	7.154	7.5	6.7	0.078	0.28	6.79	7.025	7.5	7.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	12	0.063	0.07	0.2	0.032	0.002	0.049	0.032	0.032	0.095	0.17
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	11	6.6	6.627	7.1	6.2	0.088	0.297	6.22	6.3	6.9	7.08
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	11	6.6	6.541	7.1	6.2	0.096	0.311	6.22	6.3	6.9	7.08
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	11	0.251	0.288	0.631	0.079	0.034	0.183	0.084	0.126	0.501	0.605
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	12	35.	35.833	66.	22.	133.788	11.567	22.9	27.	40.75	59.1
00500 RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	12	161.5	176.833	261.	124.	2239.061	47.319	126.4	137.75	207.5	261.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	12	68.5	68.167	127.	26.	782.333	27.97	26.6	50.75	84.25	116.8
00510 RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	11	87.	104.091	179.	55.	1854.491	43.064	57.4	69.	153.	176.8
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	12	6.	8.667	30.	0.5	84.015	9.166	0.5	2.25	15.5	27.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	12	2.	3.25	16.	0.	21.614	4.649	0.	0.125	4.	13.6
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	12	2.5	5.5	28.	0.	75.136	8.668	0.	0.125	5.5	25.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	12##	0.05	0.221	1.	0.05	0.133	0.365	0.05	0.05	0.1	1.
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	12	0.01	0.016	0.08	0.005	0.	0.021	0.005	0.005	0.02	0.062
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	12	0.98	1.068	1.599	0.11	0.194	0.44	0.311	0.793	1.5	1.569
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	12	0.3	0.721	3.	0.05	0.86	0.928	0.065	0.2	0.875	2.76
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	12	1300.	2058.333	6000.	300.	4259015.152	2063.738	300.	400.	3050.	6000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	12	3.092	3.094	3.778	2.477	0.229	0.478	2.477	2.569	3.479	3.778
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		1240.463									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station RICH0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/03/69-12/07/98	9	5.	8.689	21.	1.1	63.839	7.99	1.1	2.2	16.5	21.
00300p OXYGEN, DISSOLVED	MG/L	02/03/69-12/07/98	9	7.6	8.267	12.2	4.8	4.88	2.209	4.8	6.8	9.9	12.2
00400p PH (STANDARD UNITS)		02/03/69-12/07/98	9	7.5	7.511	7.8	7.3	0.016	0.127	7.3	7.5	7.5	7.8
00400p CONVERTED PH (STANDARD UNITS)		02/03/69-12/07/98	9	7.5	7.496	7.8	7.3	0.016	0.128	7.3	7.5	7.5	7.8
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	9	0.032	0.032	0.05	0.016	0.	0.009	0.016	0.032	0.032	0.05
00403 PH, LAB, STANDARD UNITS	SU	02/03/69-12/07/98	5	7.	6.94	7.3	6.4	0.113	0.336	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/03/69-12/07/98	5	7.	6.822	7.3	6.4	0.13	0.361	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	5	0.1	0.151	0.398	0.05	0.02	0.141	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/03/69-12/07/98	4	47.5	51.	73.	36.	318.	17.833	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		02/03/69-12/07/98	8	170.5	174.75	212.	135.	655.071	25.594	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/03/69-12/07/98	8	42.	46.5	73.	35.	147.429	12.142	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		02/03/69-12/07/98	8	132.	128.25	170.	94.	837.071	28.932	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/24/69-12/07/98	8	5.5	6.688	17.	0.5	24.496	4.949	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/24/69-12/07/98	8	2.	2.438	6.	0.	4.246	2.06	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		07/24/69-12/07/98	8	4.	4.313	11.	0.5	13.638	3.693	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-12/07/98	8	0.2	0.525	2.699	0.05	0.815	0.903	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	8	0.02	0.069	0.39	0.01	0.017	0.131	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	4	0.895	0.972	1.399	0.7	0.097	0.311	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-12/07/98	8	0.5	0.987	3.5	0.3	1.238	1.113	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/72-06/06/94	7	4700.	3350.	6000.	50.	6770833.333	2602.082	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/72-06/06/94	7	3.672	3.214	3.778	1.699	0.593	0.77	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		1638.274									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station RICH0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/03/69-12/07/98	9	18.	18.5	29.	11.	31.688	5.629	11.	14.5	22.75	29.
00300p OXYGEN, DISSOLVED	MG/L	02/03/69-12/07/98	9	7.6	8.222	10.4	6.	2.052	1.432	6.	7.25	9.4	10.4
00310 BOD, 5 DAY, 20 DEG C	MG/L	02/03/69-12/07/98	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)		02/03/69-12/07/98	9	7.3	7.133	7.5	6.5	0.153	0.391	6.5	6.75	7.45	7.5
00400p CONVERTED PH (STANDARD UNITS)		02/03/69-12/07/98	9	7.3	6.955	7.5	6.5	0.188	0.434	6.5	6.75	7.45	7.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	9	0.05	0.111	0.316	0.032	0.014	0.118	0.032	0.036	0.208	0.316
00403 PH, LAB, STANDARD UNITS	SU	02/03/69-12/07/98	6	7.35	7.25	7.4	6.8	0.055	0.235	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/03/69-12/07/98	6	7.347	7.186	7.4	6.8	0.06	0.245	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	6	0.045	0.065	0.158	0.04	0.002	0.047	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/03/69-12/07/98	5	44.	38.	54.	3.	406.5	20.162	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		02/03/69-12/07/98	8	158.5	166.	220.	135.	740.286	27.208	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/03/69-12/07/98	8	32.5	31.5	38.	25.	18.	4.243	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		02/03/69-12/07/98	8	127.5	134.5	191.	101.	847.429	29.111	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/24/69-12/07/98	8	1.5	4.438	22.	0.5	53.317	7.302	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/24/69-12/07/98	8	1.25	2.563	12.	0.	15.603	3.95	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		07/24/69-12/07/98	8##	0.75	2.125	10.	0.5	10.839	3.292	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-12/07/98	8##	0.05	0.181	0.8	0.05	0.067	0.259	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	8##	0.013	0.016	0.03	0.005	0.	0.012	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-12/07/98	8	0.45	0.55	1.299	0.2	0.146	0.381	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		07/08/78-06/24/96	1	8.	8.	8.	8.	0.	0.	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/72-06/06/94	8	600.	1293.75	6400.	50.	4394598.214	2096.33	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/72-06/06/94	8	2.753	2.751	3.806	1.699	0.366	0.605	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		563.303									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station RICH0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/03/69-12/07/98	9	13.5	14.722	21.5	5.	34.382	5.864	5.	10.5	21.	21.5
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/07/98	5	228.	210.6	266.	109.	3587.8	59.898	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	02/03/69-12/07/98	9	9.4	9.833	14.	7.7	3.908	1.977	7.7	8.15	10.9	14.
00310 BOD, 5 DAY, 20 DEG C	MG/L	02/03/69-12/07/98	5	3.	6.	20.	2.	61.5	7.842	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/07/98	5	20.	32.6	79.	18.	681.8	26.111	**	**	**	**
00400p PH (STANDARD UNITS)		02/03/69-12/07/98	9	7.5	7.3	7.6	6.5	0.14	0.374	6.5	7.05	7.6	7.6
00400p CONVERTED PH (STANDARD UNITS)		02/03/69-12/07/98	9	7.5	7.119	7.6	6.5	0.177	0.421	6.5	7.05	7.6	7.6
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	9	0.032	0.076	0.316	0.025	0.009	0.094	0.025	0.025	0.09	0.316
00403 PH, LAB, STANDARD UNITS	SU	02/03/69-12/07/98	7	7.3	7.357	7.8	7.1	0.053	0.23	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/03/69-12/07/98	7	7.3	7.313	7.8	7.1	0.055	0.235	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	7	0.05	0.049	0.079	0.016	0.	0.021	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/03/69-12/07/98	7	38.	62.143	196.	35.	3515.143	59.289	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		02/03/69-12/07/98	7	138.	131.429	175.	31.	2464.286	49.642	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/03/69-12/07/98	7	31.	51.143	131.	27.	1515.143	38.925	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		02/03/69-12/07/98	7	106.	95.143	148.	4.	2017.143	44.913	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/24/69-12/07/98	9	5.	19.611	130.	0.5	1729.861	41.592	0.5	3.	11.5	130.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/24/69-12/07/98	9	3.	4.833	24.	0.	59.375	7.706	0.	0.25	6.	24.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		07/24/69-12/07/98	8	5.	16.438	106.	0.	1317.96	36.304	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-12/07/98	9	0.1	0.217	0.6	0.05	0.048	0.219	0.05	0.05	0.45	0.6
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	9	0.02	0.021	0.07	0.005	0.	0.02	0.005	0.008	0.025	0.07
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	5	1.	1.12	2.2	0.6	0.407	0.638	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-12/07/98	9	0.4	0.489	0.9	0.2	0.071	0.267	0.2	0.25	0.75	0.9
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/07/98	5	0.1	0.08	0.1	0.05	0.001	0.027	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/06/94	5	0.04	0.048	0.1	0.01	0.001	0.037	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		07/08/78-06/24/96	5	13.	18.4	39.	9.	142.8	11.95	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/72-06/06/94	9	8000.	4588.889	8000.	50.	16402986.111	4050.06	50.	275.	8000.	8000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/72-06/06/94	9	3.903	3.162	3.903	1.699	0.918	0.958	1.699	2.199	3.903	3.903
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		1451.91									

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Annual Analysis for 1980 - Station RICH0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/03/69-12/07/98	11	15.5	14.136	27.	4.5	52.705	7.26	4.9	7.	18.	26.2
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/07/98	10	265.	267.3	418.	164.	5693.122	75.453	165.3	197.25	308.25	408.
00300p OXYGEN, DISSOLVED	MG/L	02/03/69-12/07/98	11	9.	9.055	12.1	7.2	2.551	1.597	7.22	7.4	10.2	11.92
00310 BOD, 5 DAY, 20 DEG C	MG/L	02/03/69-12/07/98	10	2.5	3.5	10.	1.	8.944	2.991	1.	1.	5.5	9.7
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/07/98	10	12.5	15.6	35.	4.	101.822	10.091	4.1	6.5	24.25	34.
00400p PH (STANDARD UNITS)		02/03/69-12/07/98	11	7.3	7.309	9.	6.4	0.419	0.647	6.5	6.9	7.4	8.7
00400p CONVERTED PH (STANDARD UNITS)		02/03/69-12/07/98	11	7.3	7.035	9.	6.4	0.502	0.708	6.5	6.9	7.4	8.7
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	11	0.05	0.092	0.398	0.001	0.012	0.109	0.007	0.04	0.126	0.344
00403 PH, LAB, STANDARD UNITS	SU	02/03/69-12/07/98	3	7.	6.9	7.	6.7	0.03	0.173	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/03/69-12/07/98	3	7.	6.876	7.	6.7	0.031	0.176	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	3	0.1	0.133	0.2	0.1	0.003	0.057	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/03/69-12/07/98	3	26.	165.667	445.	26.	58520.333	241.91	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/24/69-12/07/98	10	5.	9.75	38.	2.5	125.792	11.216	2.5	2.5	11.75	36.2
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/24/69-12/07/98	10	4.	4.65	10.	1.	8.392	2.897	1.15	2.5	7.25	9.8
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		07/24/69-12/07/98	10	2.5	5.85	31.	0.	85.947	9.271	0.	1.5	5.5	28.9
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-12/07/98	10	0.1	0.17	0.5	0.05	0.026	0.16	0.05	0.05	0.25	0.49
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	10	0.02	0.025	0.08	0.005	0.001	0.023	0.005	0.005	0.033	0.076
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	10	1.4	1.31	2.	0.5	0.177	0.42	0.53	1.1	1.525	1.96
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-12/07/98	10	0.3	0.56	2.	0.2	0.345	0.587	0.2	0.2	0.925	1.9
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/07/98	10##	0.075	0.125	0.3	0.05	0.011	0.103	0.05	0.05	0.225	0.3
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/06/94	10	0.03	0.047	0.14	0.01	0.002	0.048	0.01	0.01	0.083	0.138
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		07/08/78-06/24/96	10	9.5	9.5	14.	7.	6.722	2.593	7.	7.	11.5	13.9
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/06/72-06/06/94	9	1500.	2672.222	6900.	50.	7004444.444	2646.591	50.	400.	5450.	6900.

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Annual Analysis for 1980 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	9	3.176	3.054	3.839	1.699	0.59	0.768	1.699	2.423	3.732	3.839
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		1132.37									

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Annual Analysis for 1981 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	11	14.	14.791	26.	2.	71.461	8.453	2.6	5.	22.5	26.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	11	245.	259.455	409.	182.	3105.273	55.725	191.6	240.	272.	382.4
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	11	8.9	9.064	12.8	6.8	3.725	1.93	6.94	7.6	9.6	12.7
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	11	1.	9.864	90.	0.5	709.205	26.631	0.6	1.	4.	73.2
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	11	12.	22.455	124.	5.	1161.073	34.075	5.6	9.	21.	103.6
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	11	7.	6.982	7.7	6.5	0.098	0.312	6.54	6.7	7.1	7.6
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	11	7.	6.894	7.7	6.5	0.106	0.326	6.54	6.7	7.1	7.6
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	11	0.1	0.128	0.316	0.02	0.007	0.082	0.029	0.079	0.2	0.293
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	11	6.9	6.845	7.1	6.5	0.047	0.216	6.52	6.7	7.1	7.1
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	11	6.9	6.797	7.1	6.5	0.049	0.222	6.52	6.7	7.1	7.1
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	11	0.126	0.16	0.316	0.079	0.006	0.079	0.079	0.079	0.2	0.303
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	11	33.	32.364	54.	5.	158.255	12.58	9.	27.	39.	52.6
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	8.	7.136	18.	2.5	26.505	5.148	2.5	2.5	10.	16.8
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	2.5	4.136	10.	2.	6.605	2.57	2.1	2.5	6.	9.4
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	2.5	4.136	8.	2.	4.605	2.146	2.1	2.5	6.	7.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	11##	0.05	0.3	2.6	0.05	0.584	0.764	0.05	0.05	0.1	2.12
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	0.01	0.014	0.03	0.005	0.	0.01	0.005	0.005	0.02	0.03
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	1.1	1.035	1.5	0.08	0.168	0.41	0.184	0.9	1.3	1.5
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	11	0.3	0.536	3.1	0.1	0.751	0.866	0.1	0.1	0.5	2.6
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	11##	0.05	0.059	0.1	0.05	0.	0.02	0.05	0.05	0.05	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	11	0.02	0.474	5.	0.01	2.254	1.501	0.01	0.01	0.02	4.012
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	11	8.	13.455	77.	2.	450.673	21.229	2.4	5.	9.	63.8
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	400.	1131.818	6100.	50.	3437136.364	1853.952	60.	200.	800.	5500.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	2.602	2.656	3.785	1.699	0.359	0.599	1.759	2.301	2.903	3.727
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		452.633									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	11	15.	14.236	26.	0.1	51.035	7.144	1.28	10.5	19.	25.1
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	11	247.	251.818	301.	213.	921.164	30.351	213.8	222.	269.	300.
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	11	8.5	8.664	11.8	6.2	3.039	1.743	6.24	7.3	10.3	11.54
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	10	2.	2.	4.	1.	1.111	1.054	1.	1.	3.	3.9
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	11	16.	14.273	27.	5.	40.218	6.342	5.6	10.	18.	25.6
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	10	7.	7.06	7.5	6.7	0.067	0.259	6.71	6.875	7.325	7.49
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	10	7.	6.998	7.5	6.7	0.071	0.267	6.71	6.875	7.325	7.49
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	10	0.1	0.101	0.2	0.032	0.003	0.052	0.032	0.048	0.134	0.195
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	1	48.	48.	48.	48.	0.	0.	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	11##	2.5	5.091	11.	2.5	10.341	3.216	2.5	2.5	8.	10.6
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	11##	2.5	3.818	6.	2.5	2.614	1.617	2.5	2.5	6	6.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	11##	2.5	2.636	7.	0.	2.705	1.645	0.4	2.	5	6.2
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	11##	0.05	0.073	0.2	0.05	0.002	0.047	0.05	0.05	0.1	0.18

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Annual Analysis for 1982 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.018
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	0.9	0.919	1.3	0.6	0.052	0.229	0.606	0.69	1.1	1.28
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	11	0.3	0.336	0.6	0.2	0.019	0.136	0.2	0.2	0.4	0.58
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	11##	0.05	0.073	0.3	0.05	0.006	0.075	0.05	0.05	0.05	0.25
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	11	0.02	0.02	0.04	0.01	0.	0.01	0.01	0.01	0.03	0.038
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	11	4.	4.091	7.	1.	5.491	2.343	1.	1.	6.	7.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	10	500.	920.	4700.	100.	1879555.556	1370.969	110.	200.	850.	4360.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	10	2.699	2.701	3.672	2.	0.218	0.467	2.03	2.301	2.912	3.616
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		502.499									

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Annual Analysis for 1983 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	9	11.5	12.333	23.	1.	53.25	7.297	1.	6.75	18.75	23.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	10	237.	227.9	291.	109.	3028.767	55.034	115.7	197.	273.5	289.4
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	9	10.4	10.589	12.6	8.	2.731	1.653	8.	9.15	12.2	12.6
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	9	2.	3.722	19.	0.5	33.819	5.815	0.5	1.	3.	19.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	10	13.	16.2	46.	6.	137.956	11.745	6.1	8.5	20.75	43.7
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	7	7.	7.	7.5	6.7	0.093	0.306	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	7	7.	6.921	7.5	6.7	0.101	0.317	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	7	0.1	0.12	0.2	0.032	0.005	0.068	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	1	57.	57.	57.	57.	0.	0.	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	10	6.5	12.2	61.	2.5	307.233	17.528	2.5	4.375	11.25	56.4
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	10	3.5	4.5	13.	2.	11.333	3.367	2.	2.375	5.5	12.4
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	10	3.25	8.2	48.	0.	207.678	14.411	0.	1.5	7.5	44.4
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	10##	0.075	0.115	0.3	0.05	0.01	0.1	0.05	0.05	0.15	0.3
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	10	0.01	0.014	0.04	0.005	0.	0.011	0.005	0.005	0.02	0.038
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	10	1.	1.038	1.5	0.47	0.143	0.378	0.492	0.728	1.4	1.49
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	10	0.55	0.53	0.9	0.1	0.078	0.279	0.12	0.3	0.825	0.9
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	10##	0.05	0.07	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	10	0.02	0.024	0.06	0.01	0.	0.018	0.01	0.01	0.035	0.059
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	10	7.5	7.7	16.	2.	19.567	4.423	2.1	3.	11.25	15.6
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	9	500.	1688.889	8000.	100.	6288611.111	2507.71	100.	300.	2150.	8000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	9	2.699	2.886	3.903	2.	0.332	0.577	2.	2.477	3.318	3.903
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		768.331									

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Annual Analysis for 1984 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	7	21.	18.357	21.5	11.	19.393	4.404	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	7	209.	194.571	283.	101.	3413.286	58.423	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	6	9.1	9.333	11.4	8.2	1.271	1.127	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	7	3.	4.571	12.	1.	16.952	4.117	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	7	12.	20.143	46.	4.	284.81	16.876	**	**	**	**
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	7	6.6	6.854	8.4	6.1	0.535	0.731	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	7	6.6	6.575	8.4	6.1	0.626	0.791	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	7	0.251	0.266	0.794	0.004	0.063	0.252	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	7	10.	94.214	346.	2.5	22709.821	150.698	**	**	**	**

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Annual Analysis for 1984 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	7	5.	11.786	36.	2.5	182.988	13.527	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	7	3.	82.786	310.	0.	18787.488	137.067	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	7	0.3	0.707	2.1	0.05	0.861	0.928	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	7	0.03	0.103	0.51	0.005	0.033	0.183	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	7	0.8	0.897	1.75	0.19	0.359	0.599	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	7	0.7	1.186	3.1	0.2	1.488	1.22	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	7	0.22	0.317	1.	0.05	0.117	0.341	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	7	0.22	0.286	0.89	0.02	0.095	0.308	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	7	6.	10.143	25.	2.	76.476	8.745	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	7	2500.	4050.	8000.	50.	12249166.667	3499.881	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	7	3.398	3.288	3.903	1.699	0.61	0.781	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		1939.877									

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Annual Analysis for 1985 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	11	16.5	15.273	24.5	4.	38.118	6.174	4.6	12.	21.	24.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	11	259.	250.091	281.	203.	857.891	29.29	204.	211.	274.	280.2
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	11	8.7	8.982	13.3	7.1	3.452	1.858	7.16	7.5	9.8	12.72
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	11	3.	4.136	13.	0.5	10.905	3.302	0.8	2.	5.	11.6
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	11	15.	16.091	23.	6.	27.691	5.262	7.2	12.	21.	23.
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	11	6.9	6.882	7.7	6.3	0.156	0.395	6.32	6.6	7.	7.62
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	11	6.9	6.741	7.7	6.3	0.177	0.421	6.32	6.6	7.	7.62
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	11	0.126	0.182	0.501	0.02	0.022	0.148	0.026	0.1	0.251	0.481
00500 RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	2	157.	157.	173.	141.	512.	22.627	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	2	36.	36.	37.	35.	2.	1.414	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	2	121.	121.	138.	104.	578.	24.042	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	5.	17.091	124.	2.5	1294.991	35.986	2.5	2.5	8.	104.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	3.	4.5	16.	2.5	16.35	4.044	2.5	2.5	4.	14.2
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	2.5	13.409	108.	2.	1003.441	31.677	2.	2.	4.	89.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	9	1.2	1.206	2.2	0.2	0.437	0.661	0.2	0.625	1.7	2.2
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	9	0.07	0.083	0.15	0.02	0.003	0.054	0.02	0.03	0.145	0.15
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	9	0.86	0.947	1.5	0.45	0.101	0.318	0.45	0.77	1.185	1.5
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	6	1.7	1.783	3.1	0.6	0.682	0.826	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	6	0.2	0.208	0.4	0.05	0.016	0.128	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	9	0.21	0.214	0.4	0.07	0.01	0.101	0.07	0.145	0.29	0.4
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	11	6.	5.636	10.	1.	5.655	2.378	1.4	5.	7.	9.6
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	1	21.	21.	21.	21.	0.	0.	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	8000.	6300.	8000.	200.	7314000.	2704.441	700.	4800.	8000.	8000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	3.903	3.68	3.903	2.301	0.232	0.481	2.527	3.681	3.903	3.903
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		4789.762									

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Annual Analysis for 1986 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	12	13.	14.617	24.	6.	34.082	5.838	6.9	9.625	20.	22.92
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	12	257.	260.417	362.	194.	1806.447	42.502	198.5	238.25	281.5	340.4
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	12	9.3	8.783	11.4	4.8	5.102	2.259	5.1	6.5	10.95	11.34
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	12	2.5	3.625	11.	0.5	10.324	3.213	0.65	1.	6.	9.8
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	12	11.5	12.75	25.	1.	50.75	7.124	2.5	8.	19.	24.4
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	12	7.155	7.093	7.75	6.4	0.153	0.391	6.46	6.768	7.313	7.684

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Annual Analysis for 1986 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	12	7.153	6.931	7.75	6.4	0.181	0.426	6.46	6.767	7.313	7.684
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	12	0.07	0.117	0.398	0.018	0.013	0.112	0.021	0.049	0.171	0.354
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	12	8.	10.292	24.	2.5	59.612	7.721	2.5	3.125	17.75	23.4
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	12	3.5	4.375	10.	2.5	5.278	2.297	2.5	2.625	5.75	9.1
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	12	3.75	6.542	21.	0.	42.566	6.524	0.6	2.125	11.	19.5
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	12	0.35	0.717	2.1	0.05	0.545	0.738	0.05	0.125	1.475	1.98
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	12	0.03	0.034	0.08	0.005	0.001	0.026	0.005	0.006	0.058	0.077
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	12	1.04	0.965	1.49	0.26	0.16	0.401	0.278	0.698	1.253	1.472
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	12	0.95	1.667	7.	0.3	3.626	1.904	0.3	0.425	2.475	5.74
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	12	0.2	0.288	1.	0.05	0.091	0.302	0.05	0.063	0.3	0.94
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	12	0.1	0.198	1.	0.005	0.084	0.29	0.01	0.03	0.198	0.859
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	12	5.5	5.75	10.	4.	3.477	1.865	4.	4.	6.75	9.4
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	1200.	3540.909	8000.	50.	13945409.091	3734.355	60.	200.	8000.	8000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	3.079	3.065	3.903	1.699	0.702	0.838	1.759	2.301	3.903	3.903
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		1161.498									

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Annual Analysis for 1987 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	11	14.1	14.327	24.5	4.5	49.708	7.05	5.	8.	22.	24.1
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	11	298.	286.909	329.	245.	885.491	29.757	246.6	260.	312.	327.8
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	9	10.2	10.011	11.8	8.5	1.399	1.183	8.5	8.8	11.1	11.8
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	11	1.	2.182	10.	0.5	7.314	2.704	0.5	1.	2.	8.6
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	11	13.	29.818	204.	1.	3378.564	58.125	2.2	7.	20.	167.6
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	11	7.31	7.406	7.88	6.95	0.088	0.297	6.988	7.19	7.71	7.87
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	11	7.31	7.323	7.88	6.95	0.096	0.309	6.988	7.19	7.71	7.87
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	11	0.049	0.048	0.112	0.013	0.001	0.029	0.014	0.019	0.065	0.104
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	11##	2.5	7.273	27.	2.5	57.268	7.568	2.5	2.5	11.	24.2
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	10##	2.5	3.7	8.	2.5	3.4	1.844	2.5	2.5	5.	7.7
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	2.5	5.773	19.	2.	25.968	5.096	2.1	2.5	8.	17.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	0.15	0.155	0.4	0.05	0.014	0.119	0.05	0.05	0.2	0.38
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11##	0.005	0.008	0.02	0.005	0.	0.006	0.005	0.005	0.01	0.02
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	1.	1.106	1.6	0.8	0.07	0.265	0.8	0.85	1.3	1.558
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	11	0.4	0.382	0.7	0.2	0.032	0.178	0.2	0.2	0.5	0.68
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	11##	0.05	0.155	1.	0.05	0.079	0.281	0.05	0.05	0.1	0.82
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	11	0.02	0.02	0.03	0.005	0.	0.007	0.008	0.02	0.02	0.03
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	7	6.	6.429	10.	4.	5.619	2.37	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	10##	50.	1025.	8000.	50.	6160138.889	2481.963	50.	50.	825.	7320.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	10##	1.699	2.172	3.903	1.699	0.649	0.805	1.699	1.699	2.904	3.821
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		148.599									

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Annual Analysis for 1988 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	12	15.75	14.9	23.9	4.2	66.375	8.147	4.29	6.775	23.	23.87
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	8	292.5	317.875	476.	274.	4346.411	65.927	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	12	9.3	10.083	13.7	7.8	4.842	2.2	7.83	8.	12.375	13.4
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	8	1.	1.813	5.	0.5	2.281	1.51	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	8	13.5	13.063	35.	0.5	107.317	10.359	**	**	**	**
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	12	7.435	7.568	9.06	6.55	0.593	0.77	6.649	7.018	7.633	9.06
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	12	7.435	7.188	9.06	6.55	0.75	0.866	6.649	7.018	7.633	9.06

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Annual Analysis for 1988 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	12	0.037	0.065	0.282	0.001	0.006	0.08	0.001	0.023	0.105	0.237
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	1	6.6	6.6	6.6	6.6	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	1	6.6	6.6	6.6	6.6	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	1	0.251	0.251	0.251	0.251	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	8	2.5	19.375	131.	1.	2042.196	45.191	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	8	2.25	5.25	22.	1.	54.714	7.397	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	8	1.75	15.125	109.	0.	1441.768	37.971	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	9	0.1	0.141	0.3	0.03	0.01	0.098	0.03	0.065	0.245	0.3
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	9	0.01	0.016	0.04	0.005	0.	0.011	0.005	0.01	0.02	0.04
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	9	1.04	1.019	1.5	0.64	0.087	0.295	0.64	0.725	1.265	1.5
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	9	0.4	0.5	1.1	0.2	0.075	0.274	0.2	0.3	0.65	1.1
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	9	0.1	0.089	0.2	0.05	0.002	0.049	0.05	0.05	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	9	0.02	0.018	0.03	0.01	0.	0.007	0.01	0.01	0.02	0.03
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	6	3.	3.133	4.4	1.9	1.143	1.069	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	1	78.	78.	78.	78.	0.	0.	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	03/24/75-12/07/98	2	31.5	31.5	42.	21.	220.5	14.849	**	**	**	**
00951 FLUORIDE, TOTAL (MG/L AS F)	11/29/88-05/26/93	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	100.	881.818	8000.	50.	5592636.364	2364.876	50.	50.	400.	6480.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	2.	2.244	3.903	1.699	0.437	0.661	1.699	1.699	2.602	3.643
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		175.287									

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Annual Analysis for 1989 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	11	15.5	14.818	23.	1.2	48.334	6.952	2.78	9.3	22.	22.98
00070 TURBIDITY, (JACKSON CANDLE UNITS)	02/21/89-05/05/94	11	4.	29.655	280.	2.4	6899.063	83.061	2.4	2.5	6.8	225.88
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	7	257.	252.571	288.	191.	1398.952	37.403	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	12	9.75	10.6	14.8	8.	5.244	2.29	8.03	8.4	12.375	14.32
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	10	1.5	2.5	7.	0.5	5.333	2.309	0.5	0.875	3.75	6.9
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	11	12.	13.091	23.	3.	32.491	5.7	4.	10.	18.	22.2
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	11	7.33	7.465	9.28	4.97	1.266	1.125	5.302	7.	8.16	9.088
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	11	7.33	5.989	9.28	4.97	3.663	1.914	5.302	7.	8.16	9.088
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	11	0.047	1.025	10.715	0.001	10.334	3.215	0.001	0.007	0.1	8.619
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	11	6.9	6.618	7.2	5.	0.5	0.707	5.12	6.4	7.1	7.2
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	11	6.9	5.9	7.2	5.	1.067	1.033	5.12	6.4	7.1	7.2
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	11	0.126	1.258	10.	0.063	8.918	2.986	0.063	0.079	0.398	8.502
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	11	25.	22.455	37.	3.	124.673	11.166	3.	16.	28.	36.4
00500 RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	8	179.5	241.875	612.	133.	24637.268	156.963	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	8	44.	46.	98.	16.	564.571	23.761	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	8	151.	195.875	514.	99.	18498.411	136.009	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	2.	42.364	434.	0.5	16877.005	129.912	0.5	2.	7.	348.6
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	2.	6.136	52.	0.5	232.255	15.24	0.5	0.5	3.	42.2
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	1.	36.545	382.	0.5	13131.373	114.592	0.5	0.5	5.	306.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	0.09	0.135	0.31	0.02	0.009	0.097	0.028	0.06	0.24	0.298
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.018
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	0.93	1.026	1.41	0.59	0.097	0.311	0.602	0.76	1.37	1.41
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	11	0.4	0.427	0.7	0.2	0.018	0.135	0.22	0.4	0.5	0.68
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	11##	0.05	0.068	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	11	0.01	0.012	0.02	0.01	0.	0.004	0.01	0.01	0.01	0.02
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	11	4.3	4.355	7.4	2.4	1.861	1.364	2.54	3.2	5.3	6.98
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	10	82.	86.4	148.	56.	591.822	24.327	57.2	72.5	90.5	142.4
00940 CHLORIDE,TOTAL IN WATER MG/L	03/24/75-12/07/98	9	21.	21.667	35.	16.	33.	5.745	16.	17.	23.	35.
00945 SULFATE, TOTAL (MG/L AS SO4)	02/21/89-12/07/98	9	57.	69.444	164.	34.	1425.278	37.753	34.	54.5	73.	164.
00951 FLUORIDE, TOTAL (MG/L AS F)	11/29/88-05/26/93	10	0.135	0.135	0.15	0.12	0.	0.011	0.12	0.128	0.143	0.15

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11##	50.	254.545	1100.	50.	111227.273	333.508	50.	50.	400.	1000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11##	1.699	2.111	3.041	1.699	0.264	0.514	1.699	1.699	2.602	2.989
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		129.027									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	11	15.1	15.136	23.3	7.8	29.373	5.42	7.92	9.4	19.2	23.18
00070 TURBIDITY, (JACKSON CANDLE UNITS)	02/21/89-05/05/94	12	4.85	8.258	24.	1.7	56.383	7.509	2.09	3.9	13.775	22.95
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	11	9.2	9.591	12.2	7.5	2.071	1.439	7.68	8.5	10.7	12.1
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	12	2.	2.208	6.	0.5	2.884	1.698	0.65	1.	2.75	5.7
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	11	10.	11.636	24.	4.	33.655	5.801	4.6	8.	13.	23.2
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	11	7.36	7.257	7.74	5.9	0.261	0.511	6.116	7.13	7.61	7.734
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	11	7.36	6.803	7.74	5.9	0.488	0.699	6.116	7.13	7.61	7.734
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	11	0.044	0.157	1.259	0.018	0.134	0.366	0.018	0.025	0.074	1.028
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	12	6.9	6.883	7.2	6.4	0.06	0.244	6.46	6.725	7.1	7.2
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	12	6.9	6.817	7.2	6.4	0.064	0.254	6.46	6.725	7.1	7.2
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	12	0.126	0.152	0.398	0.063	0.009	0.096	0.063	0.079	0.189	0.354
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	12	32.	33.667	47.	25.	54.061	7.353	25.	28.25	38.75	46.4
00500 RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	12	154.5	151.583	186.	121.	450.629	21.228	122.8	129.5	164.	184.5
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	12	31.	29.167	42.	6.	103.061	10.152	10.2	22.	36.5	41.4
00510 RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	12	124.	122.417	146.	87.	301.356	17.36	90.6	111.25	133.5	145.4
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	12	3.	5.458	25.	0.5	50.657	7.117	0.5	0.625	8.5	20.8
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	12	1.5	2.167	6.	0.5	3.697	1.923	0.5	0.5	3.75	5.7
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	12	1.	3.5	19.	0.5	29.455	5.427	0.5	0.5	5.75	15.4
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	0.04	0.132	0.84	0.02	0.058	0.24	0.02	0.02	0.14	0.7
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	0.01	0.012	0.06	0.005	0.	0.016	0.005	0.005	0.01	0.05
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	1.1	1.2	1.75	0.69	0.097	0.312	0.728	0.97	1.43	1.7
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	11	0.3	0.455	1.3	0.2	0.123	0.35	0.2	0.2	0.5	1.22
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	11##	0.05	0.068	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	11	0.01	0.017	0.06	0.005	0.	0.017	0.005	0.01	0.03	0.054
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	11	3.2	3.364	4.3	2.4	0.413	0.642	2.48	2.9	4.	4.3
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	11	70.	72.818	98.	55.	167.964	12.96	56.	62.	83.	95.2
00940 CHLORIDE,TOTAL IN WATER MG/L	03/24/75-12/07/98	11	23.	21.182	24.	16.	9.564	3.093	16.4	18.	24.	24.
00945 SULFATE, TOTAL (MG/L AS SO4)	02/21/89-12/07/98	12	36.5	36.917	48.	26.	57.902	7.609	26.	30.75	43.5	48.
00951 FLUORIDE, TOTAL (MG/L AS F)	11/29/88-05/26/93	12##	0.075	0.083	0.16	0.025	0.002	0.047	0.025	0.05	0.128	0.151
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	700.	1340.909	4400.	50.	1973409.091	1404.781	60.	200.	2700.	4060.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	2.845	2.814	3.643	1.699	0.4	0.632	1.759	2.301	3.431	3.601
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		651.212									

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Annual Analysis for 1991 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	11	17.2	15.236	23.6	4.2	48.835	6.988	4.32	7.1	21.3	23.2
00070 TURBIDITY, (JACKSON CANDLE UNITS)	02/21/89-05/05/94	11	5.	5.809	12.1	1.2	10.381	3.222	1.6	3.7	8.7	11.64
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	11	7.	8.391	12.9	4.9	9.473	3.078	4.96	5.7	12.	12.88
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	11	4.	5.091	13.	2.	15.691	3.961	2.	2.	7.	12.8
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	11	12.	13.455	24.	3.	31.073	5.574	4.	11.	18.	22.8
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	11	6.42	6.519	7.02	6.27	0.059	0.243	6.276	6.31	6.72	6.978
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	11	6.42	6.467	7.02	6.27	0.062	0.249	6.276	6.31	6.72	6.978

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Annual Analysis for 1991 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	11	0.38	0.341	0.537	0.095	0.023	0.152	0.107	0.191	0.49	0.53
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	10	7.	7.06	7.4	6.7	0.054	0.232	6.71	6.875	7.3	7.39
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	10	7.	7.006	7.4	6.7	0.057	0.239	6.71	6.875	7.3	7.39
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	10	0.1	0.099	0.2	0.04	0.003	0.052	0.041	0.05	0.134	0.195
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	10	33.5	35.2	54.	26.	70.4	8.39	26.	29.75	38.75	53.
00500 RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	11	166.	172.818	216.	145.	522.964	22.868	146.4	153.	191.	212.8
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	11	35.	37.182	57.	22.	114.764	10.713	22.8	29.	48.	55.4
00510 RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	11	140.	135.636	159.	115.	232.455	15.246	115.	118.	148.	157.4
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	5.	4.591	7.	1.5	4.591	2.143	1.5	2.5	7.	7.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	2.	1.864	4.	1.	0.755	0.869	1.	1.	2.	3.7
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	11	3.	3.227	5.	1.5	1.818	1.348	1.5	2.	5.	5.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	0.83	1.117	2.9	0.11	0.654	0.809	0.16	0.48	1.65	2.662
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	0.04	0.085	0.22	0.005	0.006	0.08	0.006	0.01	0.16	0.21
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	11	1.06	0.966	1.57	0.02	0.207	0.455	0.098	0.77	1.16	1.57
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	11	1.5	1.636	3.8	0.4	0.857	0.925	0.44	1.2	2.1	3.48
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	11	0.1	0.132	0.4	0.05	0.011	0.103	0.05	0.05	0.2	0.36
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	11	0.07	0.067	0.14	0.01	0.002	0.041	0.01	0.04	0.1	0.134
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	11	3.8	3.973	5.8	2.6	1.198	1.095	2.68	3.1	5.2	5.72
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	11	82.	80.727	112.	62.	285.818	16.906	62.4	66.	96.	110.
00940 CHLORIDE,TOTAL IN WATER MG/L	03/24/75-12/07/98	11	24.	24.545	31.	18.	20.073	4.48	18.2	20.	30.	30.8
00945 SULFATE, TOTAL (MG/L AS SO4)	02/21/89-12/07/98	11	43.	42.182	61.	28.	98.364	9.918	29.	33.	49.	59.6
00951 FLUORIDE, TOTAL (MG/L AS F)	11/29/88-05/26/93	11	0.18	0.173	0.22	0.11	0.002	0.041	0.112	0.12	0.2	0.22
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	2700.	3572.727	8000.	300.	9572181.818	3093.894	360.	700.	6600.	8000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	3.431	3.334	3.903	2.477	0.259	0.509	2.537	2.845	3.82	3.903
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		2156.448									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	10	16.05	13.94	22.1	2.5	45.34	6.734	2.92	7.225	19.225	22.
00070 TURBIDITY, (JACKSON CANDLE UNITS)	02/21/89-05/05/94	10	4.1	4.53	8.9	1.8	4.187	2.046	1.85	3.275	5.875	8.62
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	1	213.	213.	213.	213.	0.	0.	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	2	9.95	9.95	11.1	8.8	2.645	1.626	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	10	1.	1.	2.	0.5	0.167	0.408	0.5	0.875	1.	1.9
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	10	9.5	9.1	16.	3.	20.989	4.581	3.	5.25	12.75	15.9
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	10	6.41	6.442	7.2	5.84	0.211	0.46	5.846	5.975	6.818	7.167
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	10	6.401	6.25	7.2	5.84	0.252	0.502	5.846	5.975	6.817	7.167
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	10	0.397	0.562	1.445	0.063	0.252	0.502	0.07	0.153	1.065	1.427
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	10	7.1	7.14	7.7	6.7	0.127	0.357	6.71	6.8	7.525	7.69
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	10	7.1	7.026	7.7	6.7	0.141	0.376	6.71	6.8	7.525	7.69
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	10	0.079	0.094	0.2	0.02	0.004	0.063	0.02	0.03	0.158	0.195
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	10	27.	26.8	36.	17.	25.067	5.007	17.7	24.	29.5	35.5
00500 RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	10	154.5	153.8	195.	126.	379.733	19.487	126.9	138.	163.5	192.3
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	10	28.5	29.9	39.	22.	47.878	6.919	22.1	23.	37.	38.8
00510 RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	10	123.	123.9	158.	101.	306.1	17.496	101.2	109.75	134.75	156.5
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	10	2.	2.9	9.	1.5	5.322	2.307	1.5	1.5	3.25	8.5
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	9	1.5	1.333	2.	1.	0.125	0.354	1.	1.	1.5	2.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	10	1.75	2.3	7.	1.	3.011	1.735	1.05	1.5	2.25	6.6
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	10	0.045	0.066	0.2	0.02	0.004	0.062	0.02	0.02	0.098	0.195
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	10	0.01	0.009	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.019
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	9	1.08	1.039	1.39	0.34	0.096	0.309	0.34	0.95	1.26	1.39
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	10	0.3	0.4	0.8	0.2	0.04	0.2	0.21	0.3	0.55	0.79
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	10##	0.05	0.07	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	10	0.01	0.009	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.019
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	10	2.85	3.01	5.4	1.1	1.628	1.276	1.12	2.35	4.025	5.27

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Annual Analysis for 1992 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	11	74.	75.636	102.	60.	140.455	11.851	60.8	69.	80.	99.4
00940 CHLORIDE,TOTAL IN WATER MG/L	03/24/75-12/07/98	10	18.	19.	23.	12.	12.222	3.496	12.5	17.	22.25	23.
00945 SULFATE, TOTAL (MG/L AS SO4)	02/21/89-12/07/98	10	39.5	41.4	70.	31.	121.822	11.037	31.1	35.	43.	67.6
00951 FLUORIDE, TOTAL (MG/L AS F)	11/29/88-05/26/93	10##	0.13	0.125	0.25	0.05	0.006	0.078	0.05	0.05	0.175	0.25
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	10	100.	200.	900.	50.	63888.889	252.763	50.	87.5	200.	830.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	10	2.	2.126	2.954	1.699	0.134	0.366	1.699	1.925	2.301	2.889
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		133.514									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	9	14.6	13.867	23.1	4.1	46.29	6.804	4.1	6.8	19.95	23.1
00070 TURBIDITY, (JACKSON CANDLE UNITS)	02/21/89-05/05/94	8	2.9	5.5	23.	1.3	51.489	7.176	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	5	220.	212.6	257.	175.	1075.3	32.792	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	6	8.55	9.	12.4	7.8	2.932	1.712	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	9	1.	1.333	2.	1.	0.25	0.5	1.	1.	2.	2.
00340 COD, .25N K2CR207 MG/L	08/15/79-12/07/98	9	9.	11.	20.	5.	31.25	5.59	5.	6.	16.5	20.
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	9	6.61	6.649	6.92	6.36	0.034	0.184	6.36	6.525	6.83	6.92
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	9	6.61	6.615	6.92	6.36	0.035	0.188	6.36	6.525	6.83	6.92
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	9	0.245	0.242	0.437	0.12	0.01	0.099	0.12	0.15	0.299	0.437
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	9	7.2	7.267	8.1	6.5	0.313	0.559	6.5	6.8	7.8	8.1
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	9	7.2	7.003	8.1	6.5	0.391	0.625	6.5	6.8	7.8	8.1
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	9	0.063	0.099	0.316	0.008	0.01	0.102	0.008	0.016	0.158	0.316
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	9	28.	28.889	33.	26.	7.111	2.667	26.	26.5	31.5	33.
00500 RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	9	150.	151.	175.	122.	285.25	16.889	122.	140.	165.5	175.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	9	34.	31.667	43.	15.	100.	10.	15.	23.	40.	43.
00510 RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	9	125.	119.333	134.	79.	316.25	17.783	79.	111.5	133.	134.
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	9	3.	5.444	18.	1.5	32.153	5.67	1.5	1.5	8.5	18.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	9	1.5	2.111	6.	1.	2.486	1.577	1.	1.25	2.5	6.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	9	2.	4.	12.	1.5	15.375	3.921	1.5	1.5	7.	12.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	9	0.09	0.241	1.34	0.04	0.175	0.418	0.04	0.055	0.2	1.34
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	10	0.01	0.058	0.39	0.005	0.014	0.119	0.005	0.009	0.045	0.36
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	10	0.97	1.029	1.57	0.14	0.166	0.407	0.202	0.873	1.348	1.553
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	10	0.4	0.59	1.9	0.3	0.243	0.493	0.3	0.3	0.6	1.8
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	10##	0.05	0.075	0.2	0.05	0.002	0.049	0.05	0.05	0.1	0.19
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	10	0.015	0.024	0.09	0.01	0.001	0.025	0.01	0.01	0.025	0.085
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	9	3.7	4.322	9.8	2.2	5.542	2.354	2.2	2.55	5.35	9.8
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	9	75.	72.333	94.	56.	129.	11.358	56.	62.	76.	94.
00940 CHLORIDE,TOTAL IN WATER MG/L	03/24/75-12/07/98	9	20.	23.222	59.	13.	199.194	14.114	13.	14.	24.5	59.
00945 SULFATE, TOTAL (MG/L AS SO4)	02/21/89-12/07/98	8	37.	37.	51.	24.	89.429	9.457	**	**	**	**
00951 FLUORIDE, TOTAL (MG/L AS F)	11/29/88-05/26/93	3	0.1	0.133	0.25	0.05	0.011	0.104	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	200.	940.909	8000.	50.	5508909.091	2347.107	50.	50.	400.	6500.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	11	2.301	2.373	3.903	1.699	0.412	0.642	1.699	1.699	2.602	3.662
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		236.256									

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Annual Analysis for 1994 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	6	14.4	12.883	20.3	4.6	44.086	6.64	**	**	**	**
00070 TURBIDITY, (JACKSON CANDLE UNITS)	02/21/89-05/05/94	4	59.	127.425	390.	1.7	31404.789	177.214	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	1	200.	200.	200.	200.	0.	0.	**	**	**	**

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Annual Analysis for 1994 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	4	12.2	11.575	12.3	9.6	1.736	1.318	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	6	1.45	1.733	4.	0.5	1.567	1.252	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	5	11.	17.4	49.	4.	328.3	18.119	**	**	**	**
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	7	6.57	6.177	6.89	4.2	0.878	0.937	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	7	6.57	5.026	6.89	4.2	2.424	1.557	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	7	0.269	9.413	63.096	0.129	560.633	23.678	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	6	6.45	6.1	6.7	4.2	0.896	0.947	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	6	6.447	4.966	6.7	4.2	2.439	1.562	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	6	0.357	10.815	63.096	0.2	656.002	25.613	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	6	19.	31.5	121.	0.	2001.1	44.734	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	6	218.5	326.167	886.	161.	78173.367	279.595	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	6	46.	53.5	100.	37.	559.1	23.645	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	6	175.5	272.667	786.	117.	65801.467	256.518	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	6	28.	138.	705.	3.	77807.2	278.939	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	6	5.5	15.	62.	1.5	555.9	23.578	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	6	20.	123.	643.	1.5	65339.1	255.615	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	6	0.175	0.44	1.88	0.02	0.508	0.713	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	6	0.03	0.048	0.13	0.005	0.003	0.051	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	6	1.175	1.125	1.71	0.59	0.168	0.41	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	6	0.55	1.05	2.6	0.3	0.995	0.997	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	6	0.05	0.155	0.7	0.01	0.072	0.269	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	4	0.055	0.085	0.21	0.02	0.007	0.085	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	5	5.6	6.98	12.8	2.4	23.222	4.819	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	5	76.	79.8	112.	63.	358.2	18.926	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	03/24/75-12/07/98	6	22.5	21.333	26.	12.	25.467	5.046	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	02/21/89-12/07/98	6	64.	75.833	144.	49.	1237.767	35.182	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	4	1200.	1762.5	4600.	50.	4538958.333	2130.483	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	4	2.822	2.751	3.663	1.699	0.83	0.911	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		564.021									

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Annual Analysis for 1995 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	3	17.6	18.167	22.4	14.5	15.843	3.98	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	2	227.5	227.5	243.	212.	480.5	21.92	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	4	1.8	2.425	5.	1.1	3.083	1.756	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	4	13.5	14.25	20.	10.	21.583	4.646	**	**	**	**
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	3	6.74	6.72	6.85	6.57	0.02	0.141	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	3	6.74	6.705	6.85	6.57	0.02	0.142	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	3	0.182	0.197	0.269	0.141	0.004	0.065	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	4	6.85	6.85	7.	6.7	0.017	0.129	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	4	6.847	6.836	7.	6.7	0.017	0.13	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	4	0.142	0.146	0.2	0.1	0.002	0.043	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	4	33.	32.75	42.	23.	70.917	8.421	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	4	143.	150.75	186.	131.	616.917	24.838	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	4	33.5	29.75	36.	16.	86.917	9.323	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	4	116.5	121.	151.	100.	462.	21.494	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	4	3.	3.5	5.	3.	1.	1.	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	4##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	4##	1.5	1.875	3.	1.5	0.563	0.75	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	4	0.41	0.765	2.2	0.04	1.032	1.016	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	4	0.015	0.064	0.22	0.005	0.011	0.104	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	4	1.225	1.195	1.29	1.04	0.012	0.108	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	4	0.65	1.125	2.9	0.3	1.509	1.228	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	4	0.06	0.065	0.1	0.04	0.001	0.025	**	**	**	**

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Annual Analysis for 1995 - Station RICH0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		07/08/78-06/24/96	4	5.45	5.375	6.9	3.7	2.449	1.565	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)		04/22/85-12/07/98	4	64.	68.75	88.	59.	180.917	13.451	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	03/24/75-12/07/98	4	20.5	21.25	26.	18.	11.583	3.403	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)		02/21/89-12/07/98	4	35.	38.	53.	29.	110.667	10.52	**	**	**	**

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Annual Analysis for 1996 - Station RICH0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/03/69-12/07/98	4	14.9	15.475	23.6	8.5	42.283	6.502	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/07/98	4	281.	273.	324.	206.	2406.	49.051	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	02/03/69-12/07/98	4	1.5	2.125	5.	0.5	4.063	2.016	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/07/98	4	12.5	15.	24.	11.	36.667	6.055	**	**	**	**
00400p PH (STANDARD UNITS)		02/03/69-12/07/98	4	6.71	6.678	6.78	6.51	0.014	0.116	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		02/03/69-12/07/98	4	6.71	6.665	6.78	6.51	0.014	0.117	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	4	0.195	0.216	0.309	0.166	0.004	0.063	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	02/03/69-12/07/98	4	7.1	7.125	7.4	6.9	0.049	0.222	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/03/69-12/07/98	4	7.089	7.085	7.4	6.9	0.051	0.226	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	4	0.082	0.082	0.126	0.04	0.001	0.038	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/03/69-12/07/98	4	29.	27.25	30.	21.	17.583	4.193	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		02/03/69-12/07/98	4	166.5	169.25	182.	162.	90.25	9.5	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/03/69-12/07/98	4	40.5	37.25	43.	25.	69.583	8.342	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		02/03/69-12/07/98	4	132.5	132.	140.	123.	62.	7.874	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/24/69-12/07/98	4	7.5	12.125	32.	1.5	183.729	13.555	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/24/69-12/07/98	4##	2.25	3.	6.	1.5	4.5	2.121	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		07/24/69-12/07/98	4	5.	9.375	26.	1.5	125.563	11.205	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-12/07/98	4	0.09	0.273	0.87	0.04	0.16	0.4	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	4	0.025	0.021	0.03	0.005	0.	0.012	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	4	1.13	0.987	1.27	0.42	0.151	0.388	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-12/07/98	4	0.45	0.8	2.	0.3	0.647	0.804	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/07/98	4	0.06	0.07	0.13	0.03	0.002	0.043	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		07/08/78-06/24/96	2	4.2	4.2	5.5	2.9	3.38	1.838	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)		04/22/85-12/07/98	4	74.	74.5	84.	66.	78.333	8.851	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	03/24/75-12/07/98	4	26.	23.5	33.	9.	121.	11.	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)		02/21/89-12/07/98	4	46.5	45.5	55.	34.	83.	9.11	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/03/69-12/07/98	5	13.6	13.82	20.7	7.	36.997	6.083	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/07/98	5	254.	270.2	334.	236.	1464.2	38.265	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	02/03/69-12/07/98	5##	1.	0.9	1.	0.5	0.05	0.224	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/07/98	5	14.	13.4	19.	9.	16.3	4.037	**	**	**	**
00400p PH (STANDARD UNITS)		02/03/69-12/07/98	5	6.92	6.874	7.01	6.69	0.016	0.125	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		02/03/69-12/07/98	5	6.92	6.859	7.01	6.69	0.016	0.127	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	5	0.12	0.138	0.204	0.098	0.002	0.042	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	02/03/69-12/07/98	5	6.8	6.88	7.2	6.6	0.092	0.303	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/03/69-12/07/98	5	6.8	6.803	7.2	6.6	0.099	0.315	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	5	0.158	0.157	0.251	0.063	0.009	0.094	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/03/69-12/07/98	5	34.	31.2	37.	21.	49.2	7.014	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		02/03/69-12/07/98	5	167.	165.	183.	127.	515.5	22.705	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/03/69-12/07/98	5	39.	39.2	47.	28.	52.7	7.259	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00510 RESIDUE, TOTAL FIXED (MG/L)		02/03/69-12/07/98	5	129.	125.8	139.	99.	247.2	15.723	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/24/69-12/07/98	5	4.	4.1	6.	1.5	2.8	1.673	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/24/69-12/07/98	5##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		07/24/69-12/07/98	5##	1.5	2.3	4.	1.5	1.325	1.151	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-12/07/98	5	0.06	0.052	0.08	0.02	0.001	0.03	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	5##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	5	1.1	1.016	1.32	0.62	0.082	0.287	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-12/07/98	5	0.3	0.38	0.6	0.3	0.017	0.13	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/07/98	5	0.03	0.026	0.04	0.01	0.	0.011	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)		04/22/85-12/07/98	5	75.	80.2	112.	66.	337.2	18.363	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	03/24/75-12/07/98	5	20.	19.2	22.	15.	9.7	3.114	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)		02/21/89-12/07/98	5	40.	46.8	69.	35.	203.2	14.255	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

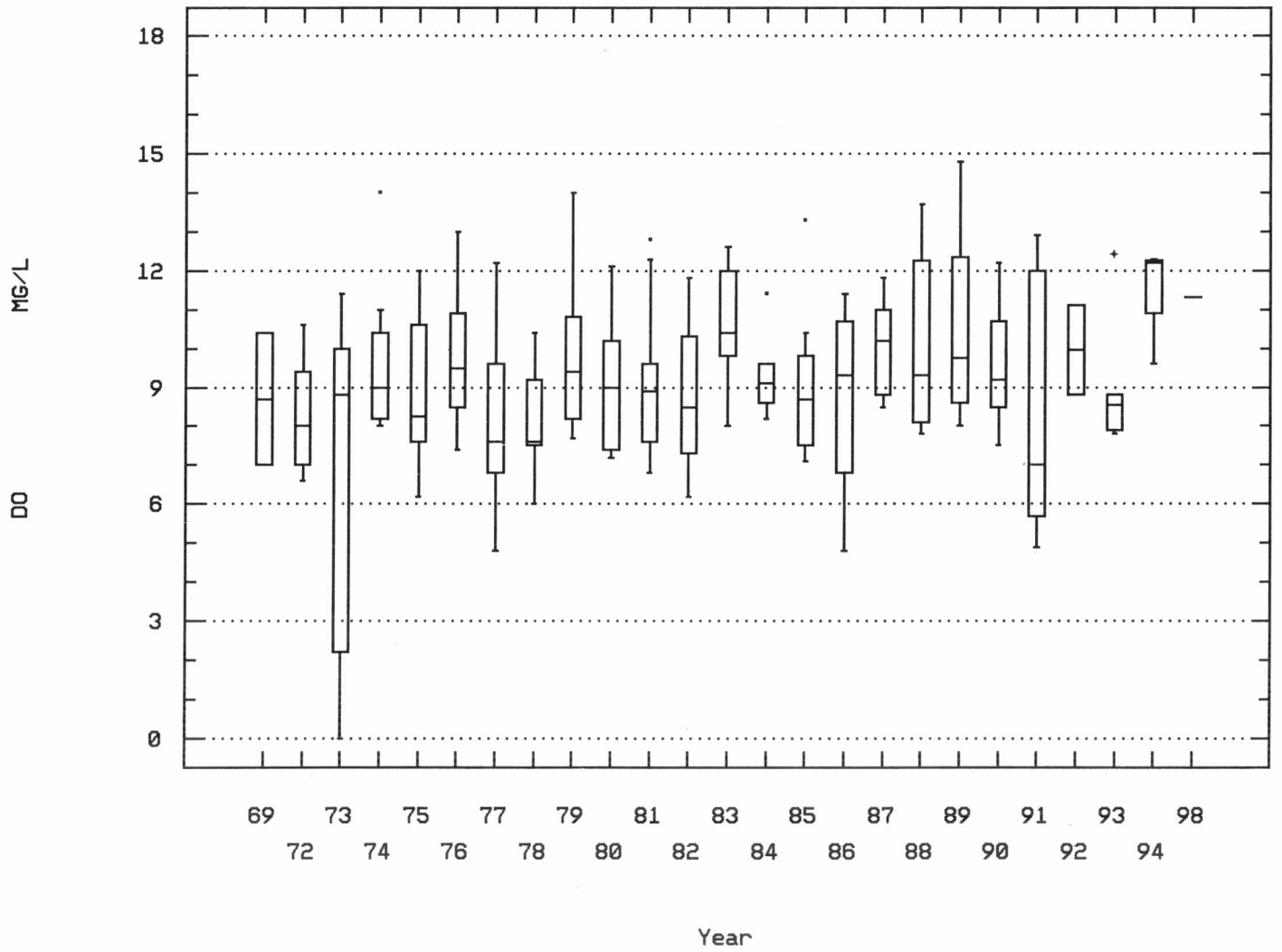
Annual Analysis for 1998 - Station RICH0094

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/03/69-12/07/98	6	15.7	16.467	23.5	11.1	16.711	4.088	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/07/98	6	215.5	217.5	231.	210.	52.3	7.232	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	02/03/69-12/07/98	1	11.3	11.3	11.3	11.3	0.	0.	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	02/03/69-12/07/98	6##	1.	1.333	2.	1.	0.267	0.516	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/07/98	6	7.5	6.667	10.	2.5	11.767	3.43	**	**	**	**
00400p PH (STANDARD UNITS)		02/03/69-12/07/98	6	6.745	6.77	6.92	6.68	0.007	0.083	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		02/03/69-12/07/98	6	6.745	6.764	6.92	6.68	0.007	0.083	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	6	0.18	0.172	0.209	0.12	0.001	0.03	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	02/03/69-12/07/98	6	6.55	6.55	6.7	6.4	0.019	0.138	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/03/69-12/07/98	6	6.547	6.532	6.7	6.4	0.019	0.139	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/03/69-12/07/98	6	0.284	0.294	0.398	0.2	0.008	0.091	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/03/69-12/07/98	6	29.	28.167	36.	18.	39.767	6.306	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		02/03/69-12/07/98	6	155.	148.667	165.	122.	285.467	16.896	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/03/69-12/07/98	6	40.	36.333	45.	22.	69.867	8.359	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		02/03/69-12/07/98	6	114.	112.333	125.	91.	143.067	11.961	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/24/69-12/07/98	6##	2.25	6.583	26.	1.5	93.542	9.672	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/24/69-12/07/98	6##	1.5	2.583	8.	1.5	7.042	2.654	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		07/24/69-12/07/98	6##	1.5	4.667	18.	1.5	43.667	6.608	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-12/07/98	6##	0.02	0.028	0.07	0.02	0.	0.02	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	6##	0.005	0.008	0.02	0.005	0.	0.006	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-12/07/98	6	1.415	1.305	1.9	0.56	0.204	0.451	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-12/07/98	6	0.4	0.4	0.6	0.2	0.02	0.141	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/07/98	6	0.02	0.025	0.05	0.01	0.	0.014	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)		04/22/85-12/07/98	6	58.5	61.5	81.	48.	124.3	11.149	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	03/24/75-12/07/98	6	21.5	20.167	26.	9.	35.767	5.981	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)		02/21/89-12/07/98	6	27.	33.5	63.	21.	260.3	16.134	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: RICH0094 Parameter Code: 00300

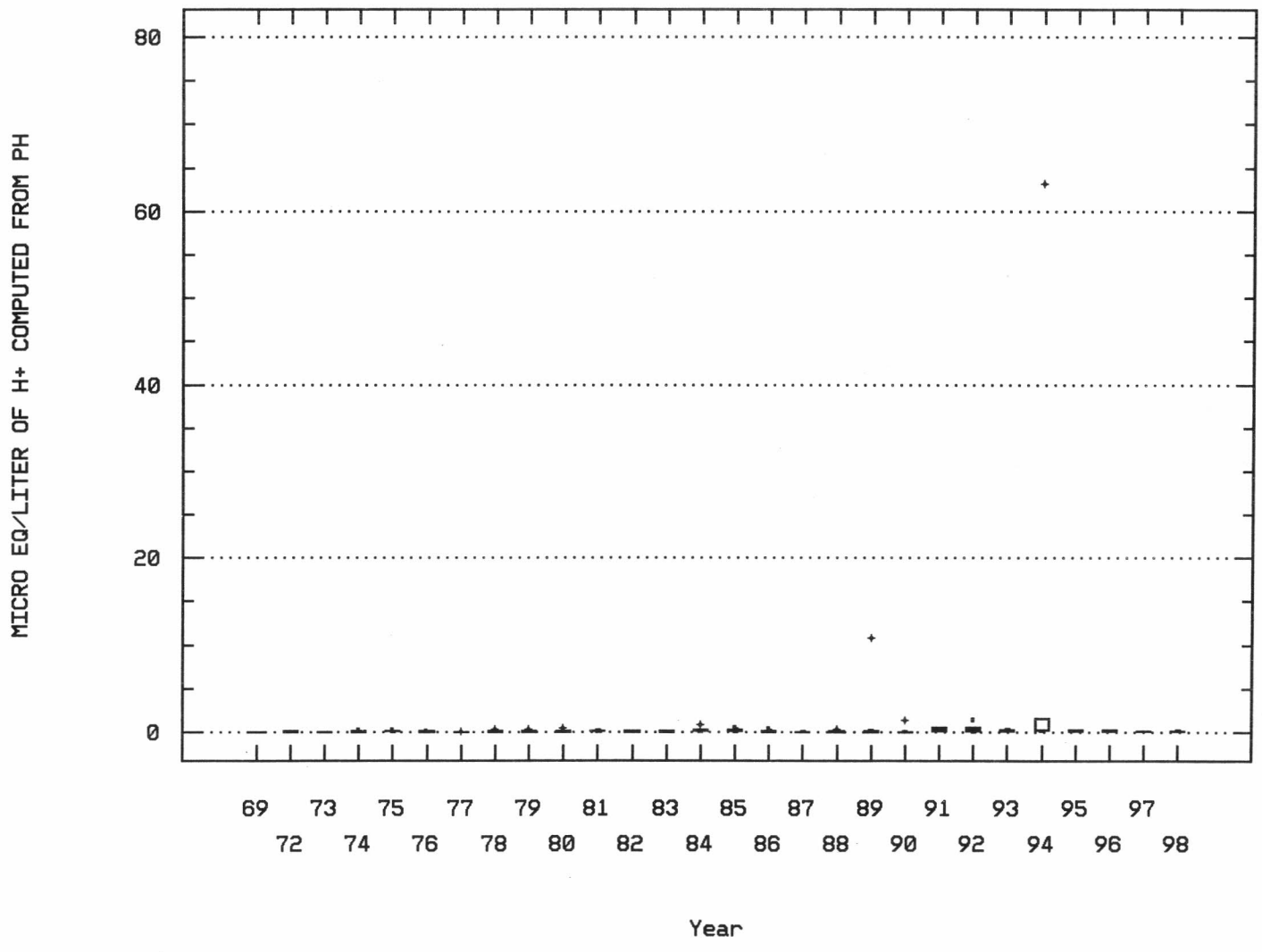
OXYGEN, DISSOLVED



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00400

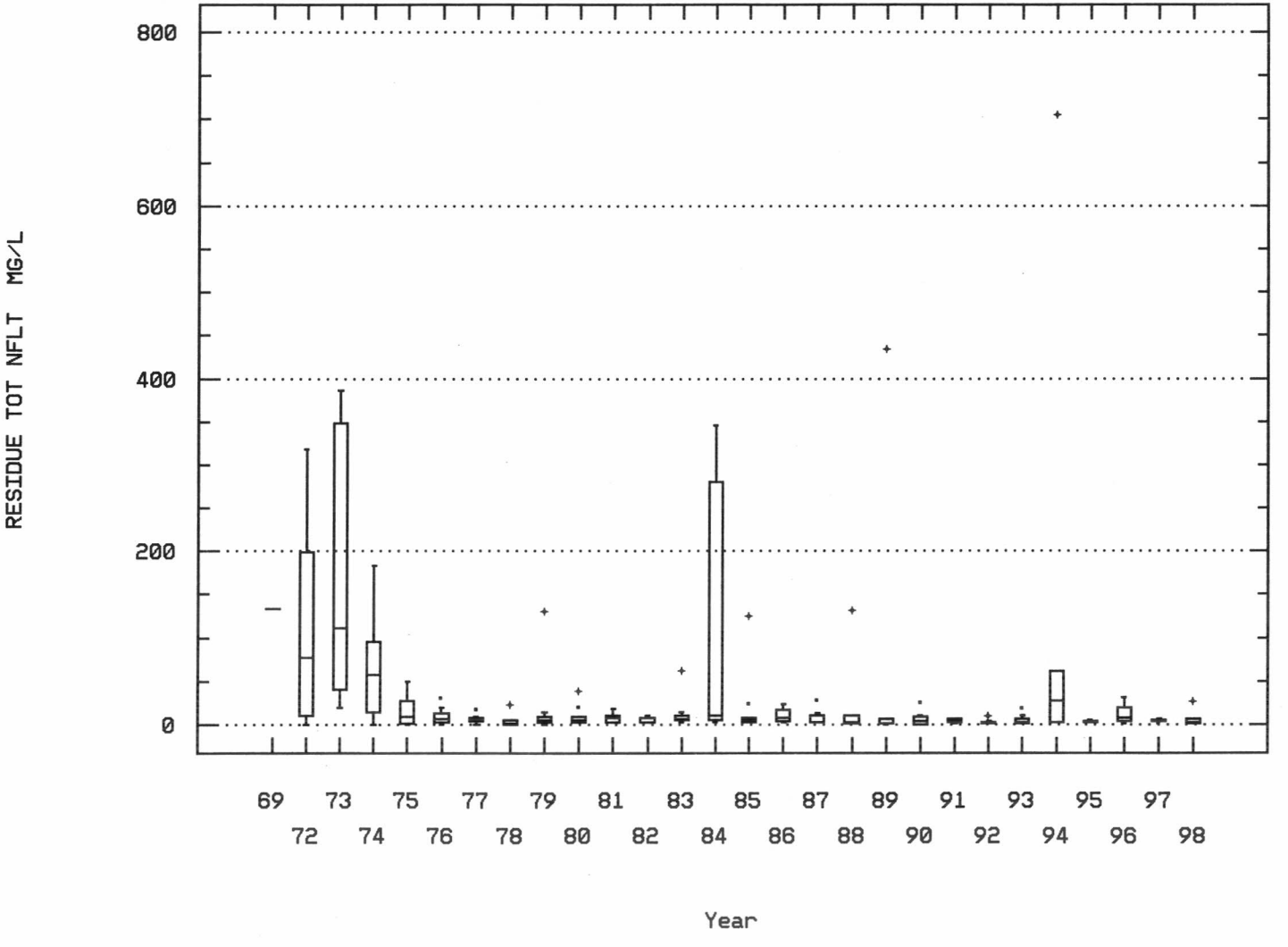
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00530

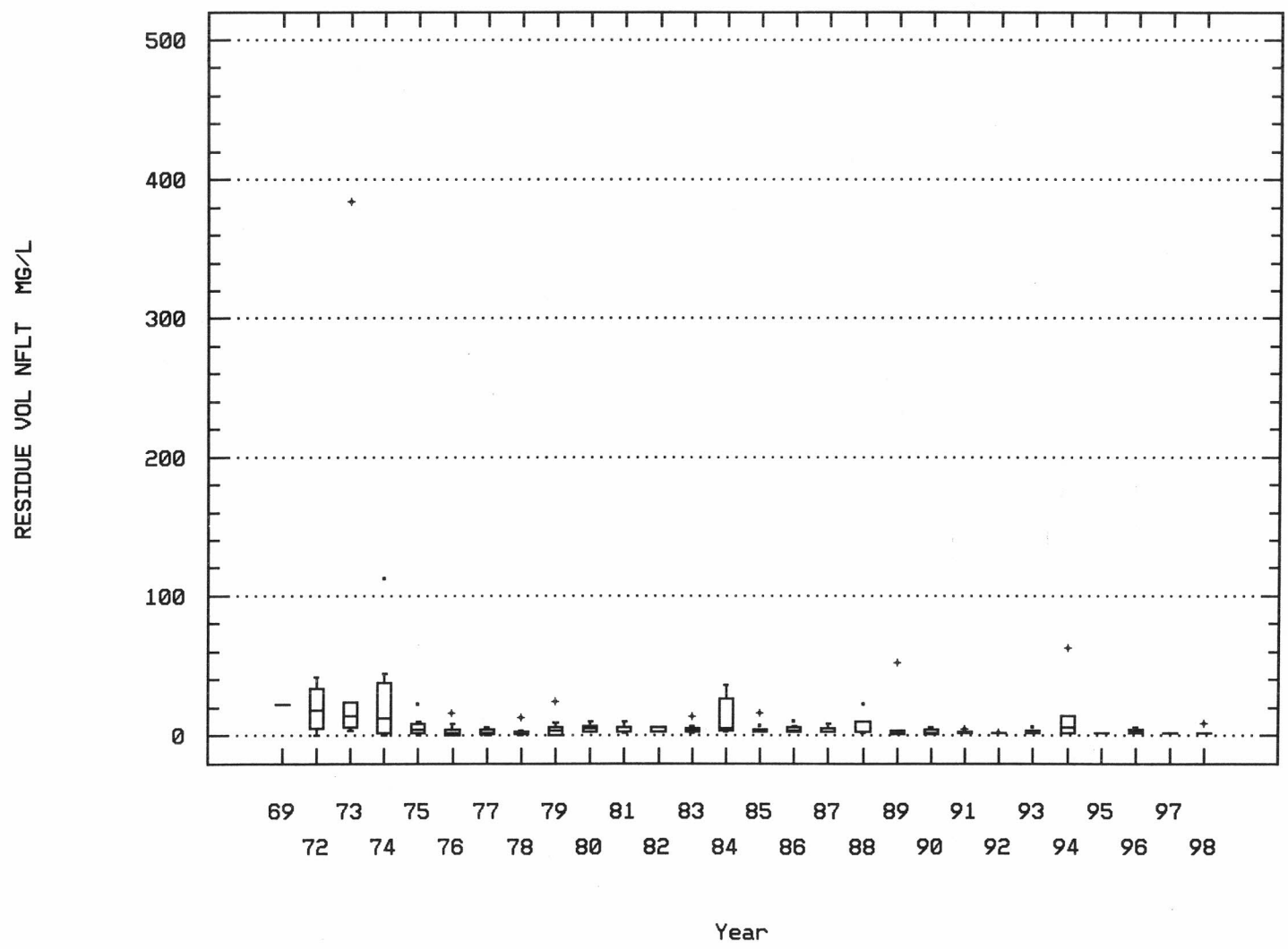
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00535

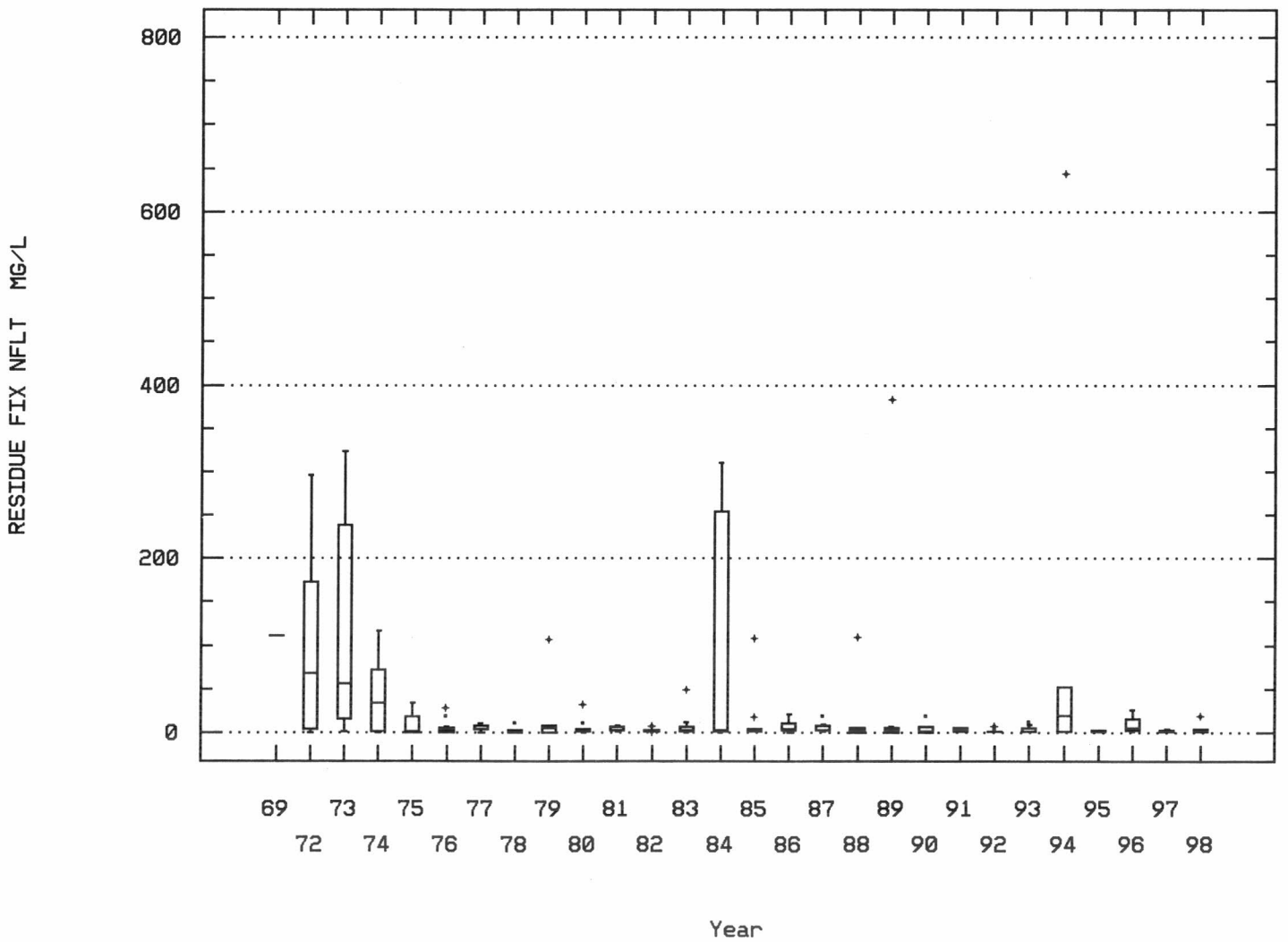
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00540

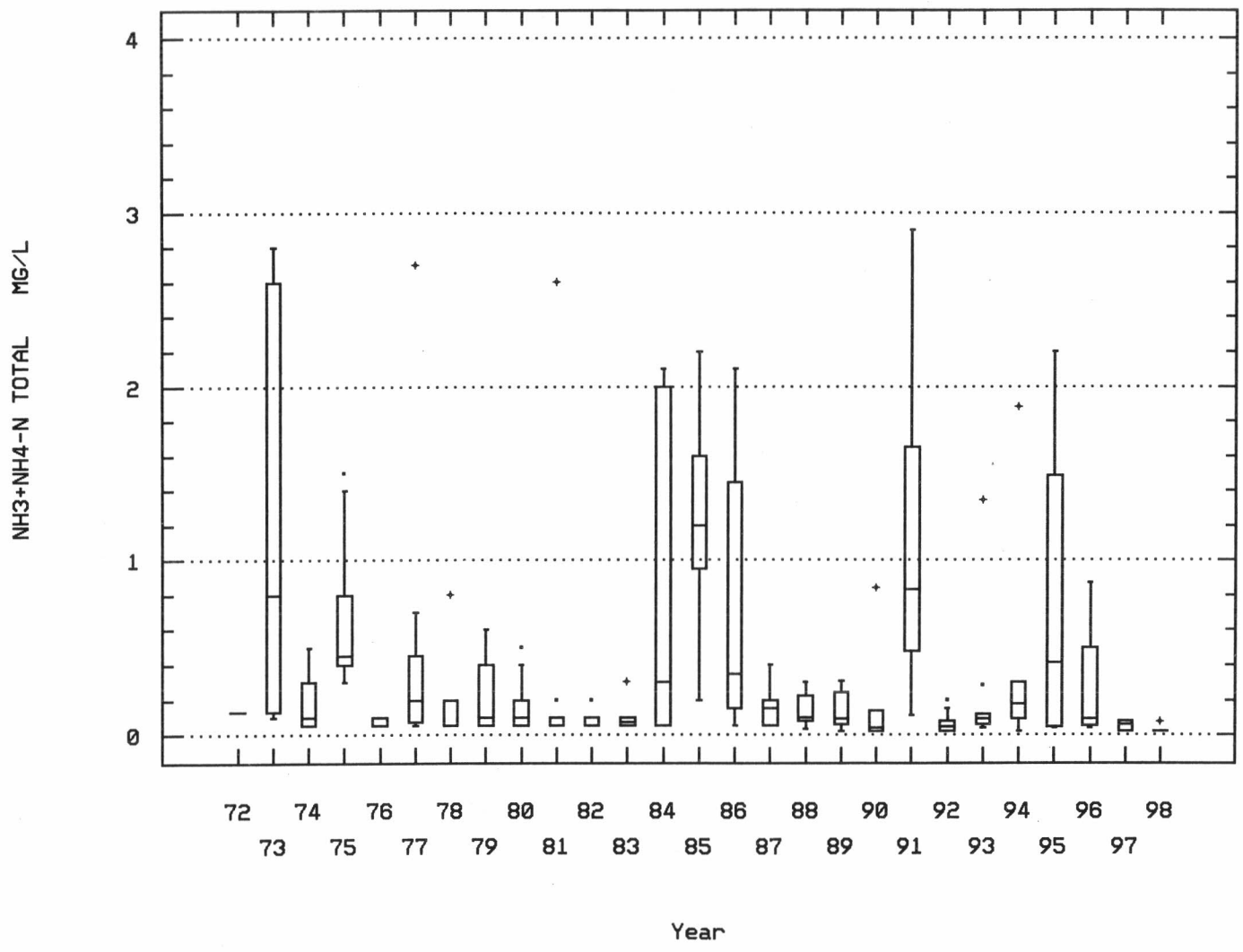
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00610

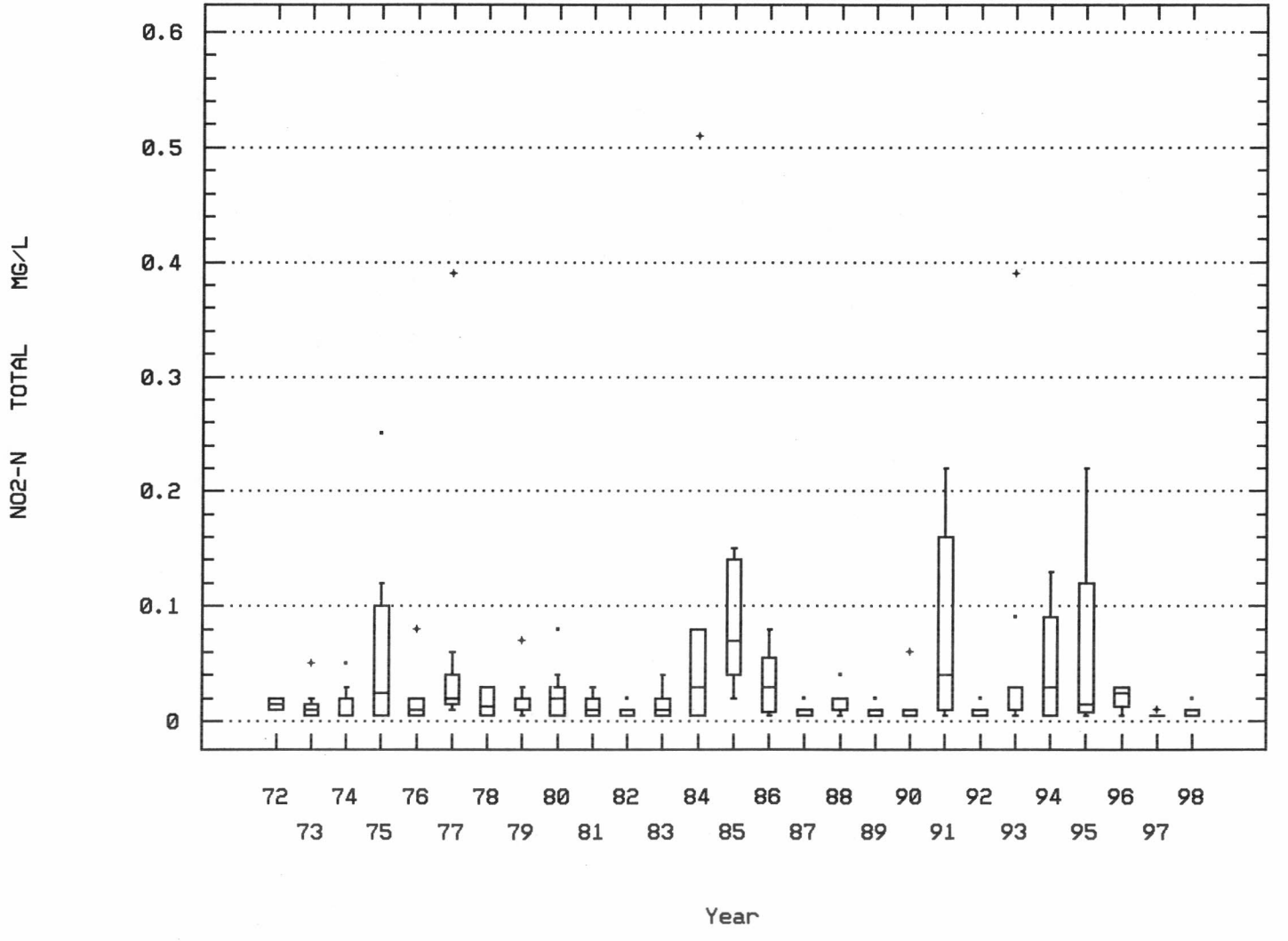
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00615

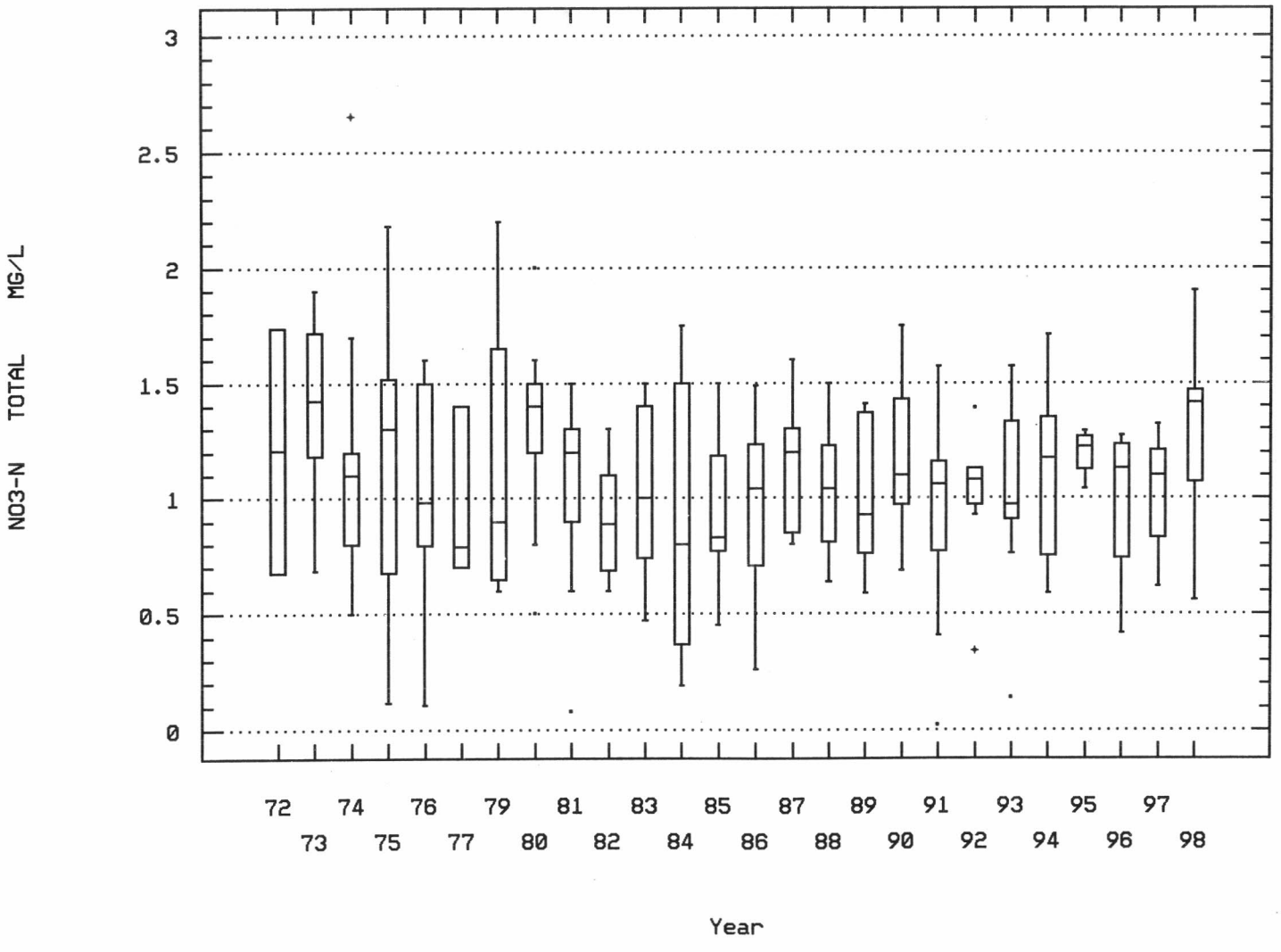
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00620

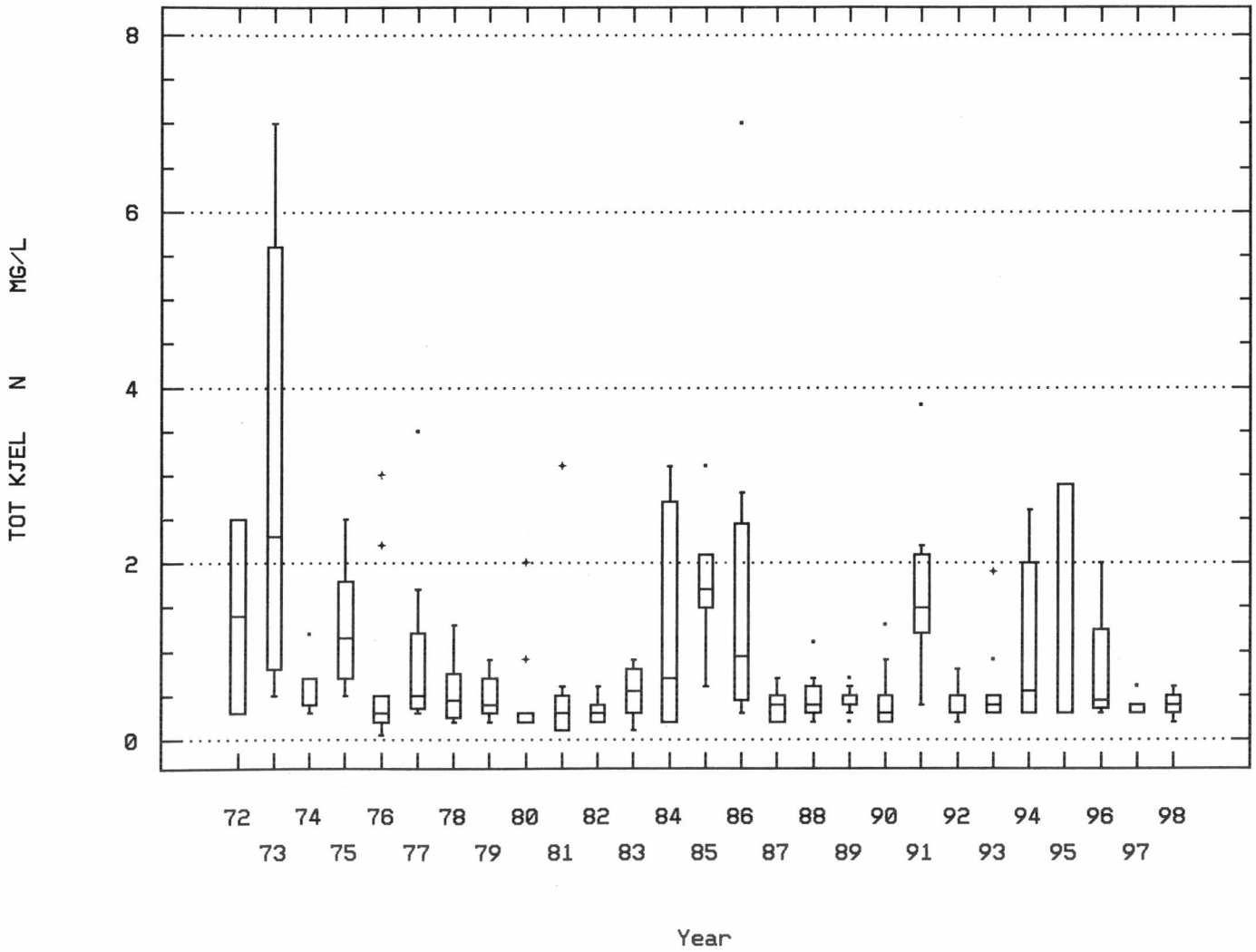
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00625

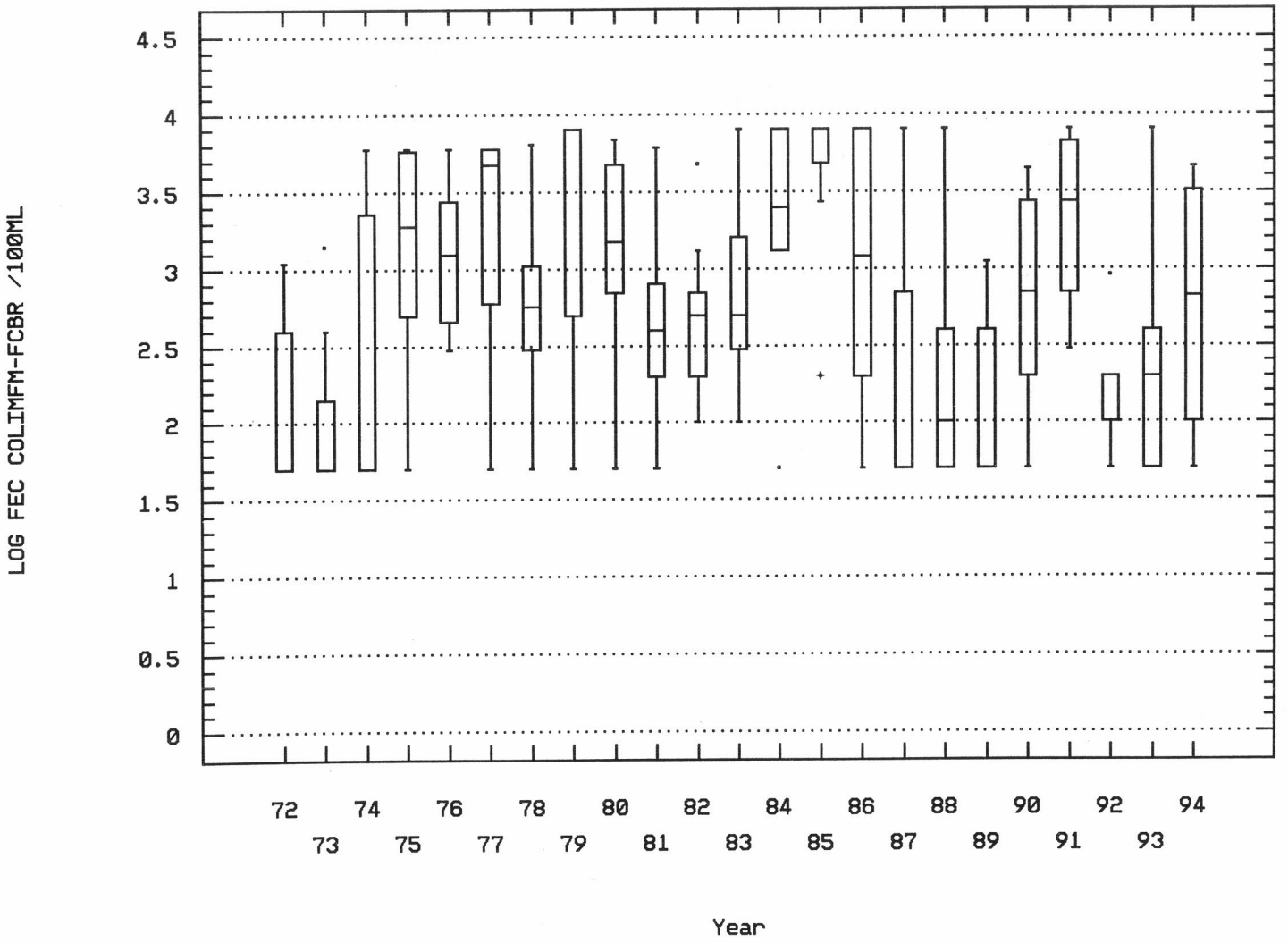
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 31616

LOG FECAL COLIFORM,MEMBR FILTER,M-FC BR



RT. 5 BRIDGE

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	62	22.	20.789	29.	2.2	21.491	4.636	15.58	18.5	23.525	25.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	33	265.	267.97	476.	176.	3986.718	63.14	203.4	220.5	287.5	348.8
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/27/89-12/07/98	16	239.	240.625	291.	183.	664.25	25.773	205.4	227.	261.75	276.3
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	02/10/92-12/07/98	9	8.	8.156	9.8	6.5	1.348	1.161	6.5	7.25	9.4	9.8
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	53	7.9	7.696	9.9	1.	1.974	1.405	6.2	7.25	8.6	8.96
00310p BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	46	1.	1.809	7.	0.5	2.379	1.542	0.5	1.	2.	3.3
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	45	12.	12.089	25.	2.5	35.571	5.964	4.2	8.	15.	22.4
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	62	7.095	7.284	10.5	6.27	0.787	0.887	6.5	6.755	7.455	8.017
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	62	7.095	6.912	10.5	6.27	0.928	0.963	6.5	6.755	7.455	8.017
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	62	0.08	0.122	0.537	0.	0.016	0.125	0.01	0.035	0.176	0.316
00403p PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	34	7.	7.324	12.3	6.2	1.598	1.264	6.55	6.8	7.225	8.5
00403p CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	34	7.	6.899	12.3	6.2	1.783	1.335	6.55	6.8	7.225	8.5
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	34	0.1	0.126	0.631	0.	0.014	0.118	0.016	0.06	0.158	0.284
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	34	33.5	88.559	1695.	8.	82250.739	286.794	22.5	27.25	38.25	56.
00500p RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	34	178.5	254.882	2067.	31.	113497.986	336.895	134.5	153.5	214.	329.5
00505p RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	34	38.5	50.735	148.	20.	1211.655	34.809	22.	28.5	54.5	129.
00510p RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	33	133.	208.667	2036.	4.	118505.979	344.247	79.	115.5	175.	226.6
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	60	3.	20.325	318.	0.	2643.795	51.418	1.	2.	9.	49.1
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	59	2.	6.288	112.	0.	259.881	16.121	0.5	1.	3.	16.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	59	2.5	15.212	296.	0.	1876.459	43.318	0.	1.	7.	28.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	61	0.06	0.305	2.	0.02	0.246	0.496	0.02	0.05	0.3	1.293
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	61##	0.005	0.047	0.51	0.005	0.009	0.096	0.005	0.005	0.025	0.158
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	57	1.06	1.127	2.	0.5	0.126	0.355	0.688	0.83	1.4	1.62
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	61	0.4	0.667	4.299	0.1	0.591	0.769	0.2	0.25	0.65	1.98
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	45	0.1	0.128	1.	0.02	0.027	0.164	0.03	0.05	0.1	0.24
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	39	0.02	0.055	0.46	0.005	0.009	0.097	0.01	0.01	0.04	0.14
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	41	4.3	5.229	18.	1.1	9.339	3.056	2.52	3.1	7.	8.8
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	19	74.	73.737	102.	48.	163.871	12.801	59.	66.	80.	92.
00940 CHLORIDE,TOTAL IN WATER MG/L	03/24/75-12/07/98	17	22.	22.	31.	16.	16.625	4.077	16.	18.	25.	27.
00945 SULFATE, TOTAL (MG/L AS SO4)	02/21/89-12/07/98	17	37.	38.471	55.	21.	99.515	9.976	25.	33.	48.	54.2
01002 ARSENIC, TOTAL (UG/L AS AS)	05/06/72-04/28/93	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	05/06/72-04/28/93	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/06/72-04/28/93	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	05/06/72-04/28/93	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	05/06/72-04/28/93	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/06/72-04/28/93	2	28.	28.	30.	26.	8.	2.828	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	56	600.	1975.	8000.	50.	6804363.636	2608.518	50.	225.	2650.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	56	2.778	2.824	3.903	1.699	0.532	0.73	1.699	2.345	3.423	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	666.447								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/07/79	16##	0.05	0.062	0.1	0.05	0.001	0.022	0.05	0.05	0.088	0.1
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-12/07/98	22	0.025	0.035	0.1	0.005	0.001	0.027	0.005	0.01	0.05	0.07
71900 MERCURY, TOTAL (UG/L AS HG)	05/06/72-04/28/93	2##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	99	8.9	9.148	21.	0.1	18.633	4.317	4.2	6.	12.2	15.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	52	257.	245.865	409.	19.	3822.511	61.826	169.4	213.	276.	303.8
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/27/89-12/07/98	26	246.5	256.654	416.	187.	1927.595	43.904	208.4	235.75	278.	297.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	02/10/92-12/07/98	11	11.2	11.327	13.5	9.6	1.312	1.146	9.64	10.4	11.8	13.32
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	90	10.6	10.462	14.8	0.	5.211	2.283	7.73	9.4	12.	12.8
00310p BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	73	2.	4.596	90.	0.5	116.873	10.811	1.	1.	5.	7.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	72	13.	17.396	124.	0.5	301.098	17.352	7.	10.	20.	26.7
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	96	7.	7.28	11.	4.97	1.038	1.019	6.5	6.72	7.5	8.664
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	96	7.	6.587	11.	4.97	1.523	1.234	6.5	6.72	7.5	8.664

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	96	0.1	0.259	10.715	0.	1.214	1.102	0.003	0.032	0.191	0.316
00403p PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	63	6.9	7.232	12.2	5.	1.814	1.347	6.4	6.6	7.3	8.02
00403p CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	63	6.9	6.46	12.2	5.	2.42	1.555	6.4	6.6	7.3	8.02
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	63	0.126	0.347	10.	0.	1.632	1.277	0.01	0.05	0.251	0.398
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	63	31.	90.413	1320.	3.	55501.375	235.587	21.	27.	44.	100.6
00500p RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	57	165.	257.018	1961.	113.	97385.41	312.066	130.2	148.	191.	625.2
00505p RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	59	35.	52.78	408.	0.	4682.209	68.427	22.	29.	49.	76.
00510p RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	59	128.	263.254	2410.	10.	175815.365	419.303	82.	101.	152.	671.
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	99	5.	39.396	705.	0.	10959.948	104.69	1.5	2.5	14.	130.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	98	2.5	10.077	384.	0.	1558.935	39.483	0.5	1.5	7.25	18.4
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	99	2.5	29.946	643.	0.	8017.117	89.538	0.5	1.5	7.	93.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	97	0.13	0.415	2.799	0.02	0.402	0.634	0.05	0.05	0.4	1.419
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	96	0.01	0.018	0.1	0.005	0.	0.02	0.005	0.005	0.02	0.043
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	92	1.09	1.062	2.649	0.08	0.188	0.434	0.569	0.78	1.387	1.5
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	96	0.5	0.896	7.	0.05	1.199	1.095	0.2	0.3	1.074	2.26
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	72	0.05	0.106	1.	0.01	0.021	0.144	0.05	0.05	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	65	0.02	0.059	0.89	0.005	0.015	0.121	0.01	0.01	0.06	0.164
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	62	5.5	8.002	77.	1.	114.771	10.713	2.26	3.2	8.25	13.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	31	81.	82.839	148.	55.	348.206	18.66	63.2	74.	88.	112.
00940 CHLORIDE,TOTAL IN WATER MG/L	03/24/75-12/07/98	31	21.	22.258	59.	9.	90.865	9.532	12.2	18.	24.	34.
00945 SULFATE, TOTAL (MG/L AS SO4)	02/21/89-12/07/98	29	46.	53.379	164.	22.	663.672	25.762	32.	39.	60.	79.
01002 ARSENIC, TOTAL (UG/L AS AS)	05/06/72-04/28/93	7##	5.	4.	6.	1.	4.333	2.082	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	05/06/72-04/28/93	7##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/06/72-04/28/93	10##	5.	5.5	10.	5.	2.5	1.581	5.	5.	5.	9.5
01042 COPPER, TOTAL (UG/L AS CU)	05/06/72-04/28/93	10##	5.	6.8	13.	5.	9.067	3.011	5.	5.	10.	12.7
01051 LEAD, TOTAL (UG/L AS PB)	05/06/72-04/28/93	10##	5.	5.2	15.	1.	13.956	3.736	1.1	3.5	5.	14.
01092 ZINC, TOTAL (UG/L AS ZN)	05/06/72-04/28/93	10	30.	28.6	58.	5.	279.822	16.728	5.	16.25	35.	57.2
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	89	400.	2252.809	8000.	50.	9097918.156	3016.276	50.	50.	5150.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	89	2.602	2.705	3.903	1.699	0.745	0.863	1.699	1.699	3.71	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	507.273								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/07/79	24##	0.05	0.227	3.6	0.05	0.52	0.721	0.05	0.05	0.1	0.25
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-12/07/98	31	0.05	0.057	0.32	0.005	0.004	0.066	0.005	0.01	0.09	0.108
71900 MERCURY, TOTAL (UG/L AS HG)	05/06/72-04/28/93	10##	0.25	0.215	0.3	0.15	0.003	0.058	0.15	0.15	0.25	0.295

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/03/69-12/07/98	85	17.1	16.832	26.	2.2	18.66	4.32	11.42	14.35	20.	22.44
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/07/98	43	243.	241.953	324.	101.	1858.712	43.113	188.	215.	274.	297.2
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/27/89-12/07/98	21	235.	252.381	366.	198.	1762.848	41.986	219.	224.5	275.	332.6
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	02/10/92-12/07/98	13	8.8	9.077	11.6	7.1	1.604	1.266	7.3	8.05	9.95	11.16
00300p OXYGEN, DISSOLVED MG/L	02/03/69-12/07/98	73	8.8	8.827	12.5	4.8	2.448	1.564	6.88	8.	9.6	11.06
00310p BOD, 5 DAY, 20 DEG C MG/L	02/03/69-12/07/98	58	2.	2.898	13.	0.5	8.894	2.982	1.	1.	3.	8.2
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/07/98	55	12.	16.6	204.	1.	725.096	26.928	5.	7.	19.	21.8
00400p PH (STANDARD UNITS)	02/03/69-12/07/98	83	7.	7.21	12.	4.2	1.127	1.062	6.304	6.61	7.5	8.116
00400p CONVERTED PH (STANDARD UNITS)	02/03/69-12/07/98	83	7.	6.027	12.	4.2	2.543	1.595	6.304	6.61	7.5	8.116
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	83	0.1	0.939	63.096	0.	47.759	6.911	0.008	0.032	0.245	0.497
00403p PH, LAB, STANDARD UNITS SU	02/03/69-12/07/98	51	6.9	7.057	11.8	4.2	1.11	1.053	6.4	6.7	7.2	7.48
00403p CONVERTED PH, LAB, STANDARD UNITS	02/03/69-12/07/98	51	6.9	5.859	11.8	4.2	2.573	1.604	6.4	6.7	7.2	7.48
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/03/69-12/07/98	51	0.126	1.383	63.096	0.	77.707	8.815	0.033	0.063	0.2	0.398
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	02/03/69-12/07/98	51	29.	40.196	295.	0.	2353.841	48.516	16.2	24.	36.	66.
00500p RESIDUE, TOTAL (MG/L)	02/03/69-12/07/98	54	160.	178.204	426.	122.	3941.222	62.779	130.	142.5	182.25	284.5
00505p RESIDUE, TOTAL VOLATILE (MG/L)	02/03/69-12/07/98	54	38.	44.074	113.	6.	544.825	23.341	22.5	31.5	49.75	86.5
00510p RESIDUE, TOTAL FIXED (MG/L)	02/03/69-12/07/98	54	124.	134.13	393.	46.	3991.7	63.18	79.	101.	140.5	213.5
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/24/69-12/07/98	81	6.	15.537	346.	0.	1667.567	40.836	1.6	2.5	10.5	38.

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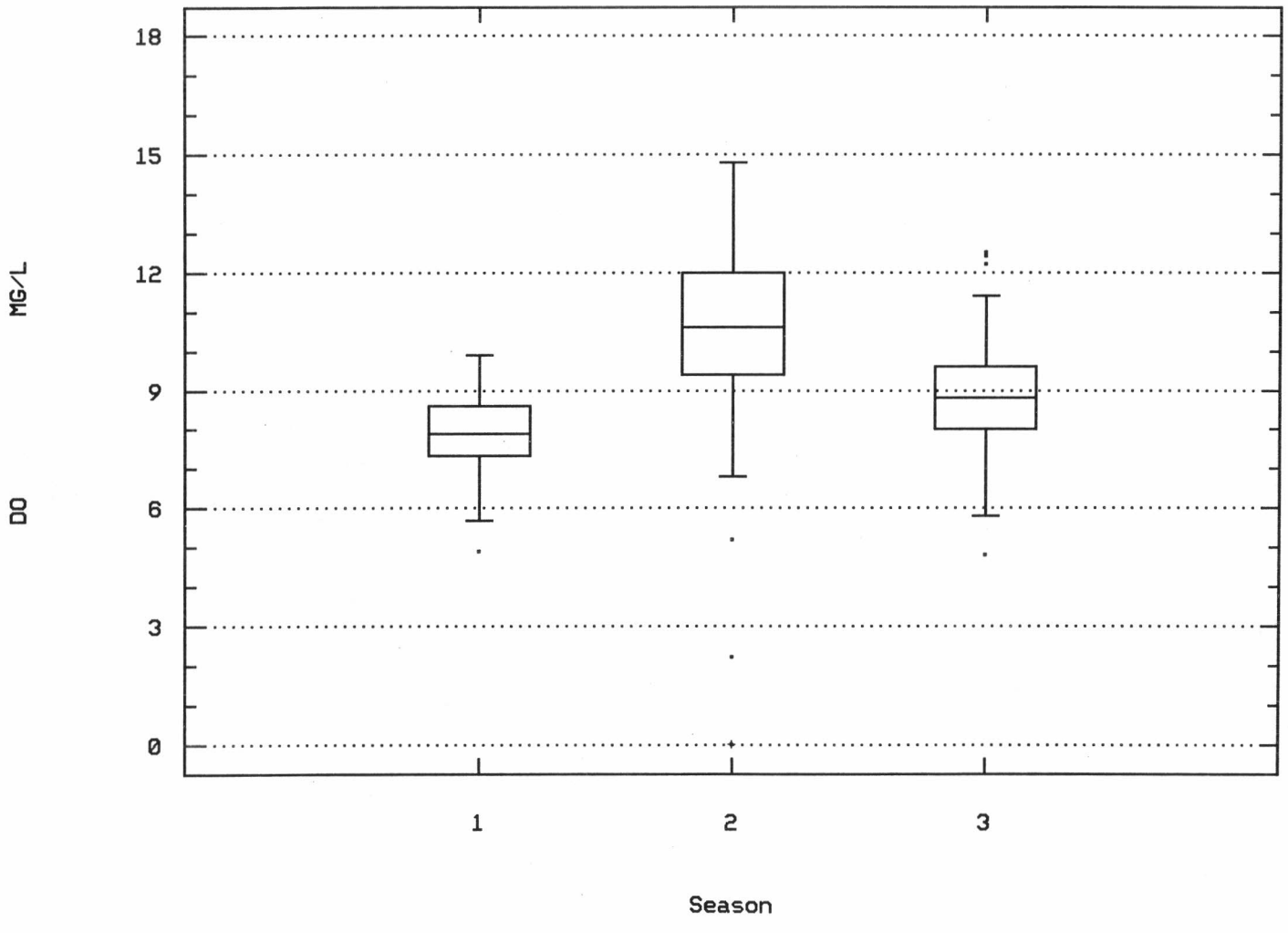
Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/24/69-12/07/98	80	3.	4.556	36.	0.	29.114	5.396	1.	1.5	5.75	11.6
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/24/69-12/07/98	81	2.5	11.506	310.	0.	1318.328	36.309	0.5	1.5	6.	30.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-12/07/98	78	0.1	0.392	2.9	0.02	0.382	0.618	0.04	0.05	0.4	1.41
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	79	0.02	0.034	0.39	0.005	0.003	0.054	0.005	0.005	0.03	0.08
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-12/07/98	70	1.09	1.067	2.179	0.02	0.17	0.412	0.473	0.798	1.308	1.563
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-12/07/98	76	0.5	0.883	7.	0.1	1.117	1.057	0.2	0.3	0.9	2.15
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/07/98	53##	0.05	0.113	1.	0.01	0.031	0.176	0.044	0.05	0.1	0.268
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/06/94	48	0.02	0.183	5.	0.005	0.532	0.73	0.01	0.01	0.07	0.266
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/08/78-06/24/96	51	5.	5.543	20.	1.	10.587	3.254	2.44	3.6	6.	9.96
00900 HARDNESS, TOTAL (MG/L AS CACO3)	04/22/85-12/07/98	28	68.	68.143	102.	21.	223.757	14.958	56.	60.	74.	90.6
00940 CHLORIDE,TOTAL IN WATER MG/L	03/24/75-12/07/98	30	21.	21.167	33.	12.	24.075	4.907	15.	18.	24.	29.5
00945 SULFATE, TOTAL (MG/L AS SO4)	02/21/89-12/07/98	29	36.	43.586	144.	24.	508.466	22.549	26.	32.	51.5	61.
01002 ARSENIC, TOTAL (UG/L AS AS)	05/06/72-04/28/93	9##	1.	2.5	5.	1.	3.75	1.936	1.	1.	5.	5.
01027 CADMIUM, TOTAL (UG/L AS CD)	05/06/72-04/28/93	9##	5.	5.111	10.	0.5	11.299	3.361	0.5	2.75	7.5	10.
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/06/72-04/28/93	11##	5.	4.591	5.	0.5	1.841	1.357	1.4	5.	5.	5.
01042 COPPER, TOTAL (UG/L AS CU)	05/06/72-04/28/93	11##	5.	5.727	13.	5.	5.818	2.412	5.	5.	5.	11.4
01051 LEAD, TOTAL (UG/L AS PB)	05/06/72-04/28/93	11##	5.	46.136	414.	0.5	15015.705	122.539	0.6	1.	28.	338.2
01092 ZINC, TOTAL (UG/L AS ZN)	05/06/72-04/28/93	11	30.	31.818	60.	5.	318.164	17.837	6.	20.	50.	58.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	73	500.	1807.534	8000.	50.	6398588.28	2529.543	50.	150.	2700.	6320.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/72-06/06/94	73	2.699	2.753	3.903	1.699	0.536	0.732	1.699	2.151	3.431	3.801
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	565.896								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/07/79	23##	0.05	0.174	1.8	0.05	0.131	0.361	0.05	0.05	0.2	0.26
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-12/07/98	31	0.05	0.075	0.9	0.005	0.026	0.161	0.01	0.01	0.05	0.164
71900 MERCURY, TOTAL (UG/L AS HG)	05/06/72-04/28/93	11##	0.25	0.205	0.25	0.15	0.003	0.052	0.15	0.15	0.25	0.25

** - Less than 9 observations. ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: RICH0094 Parameter Code: 00300

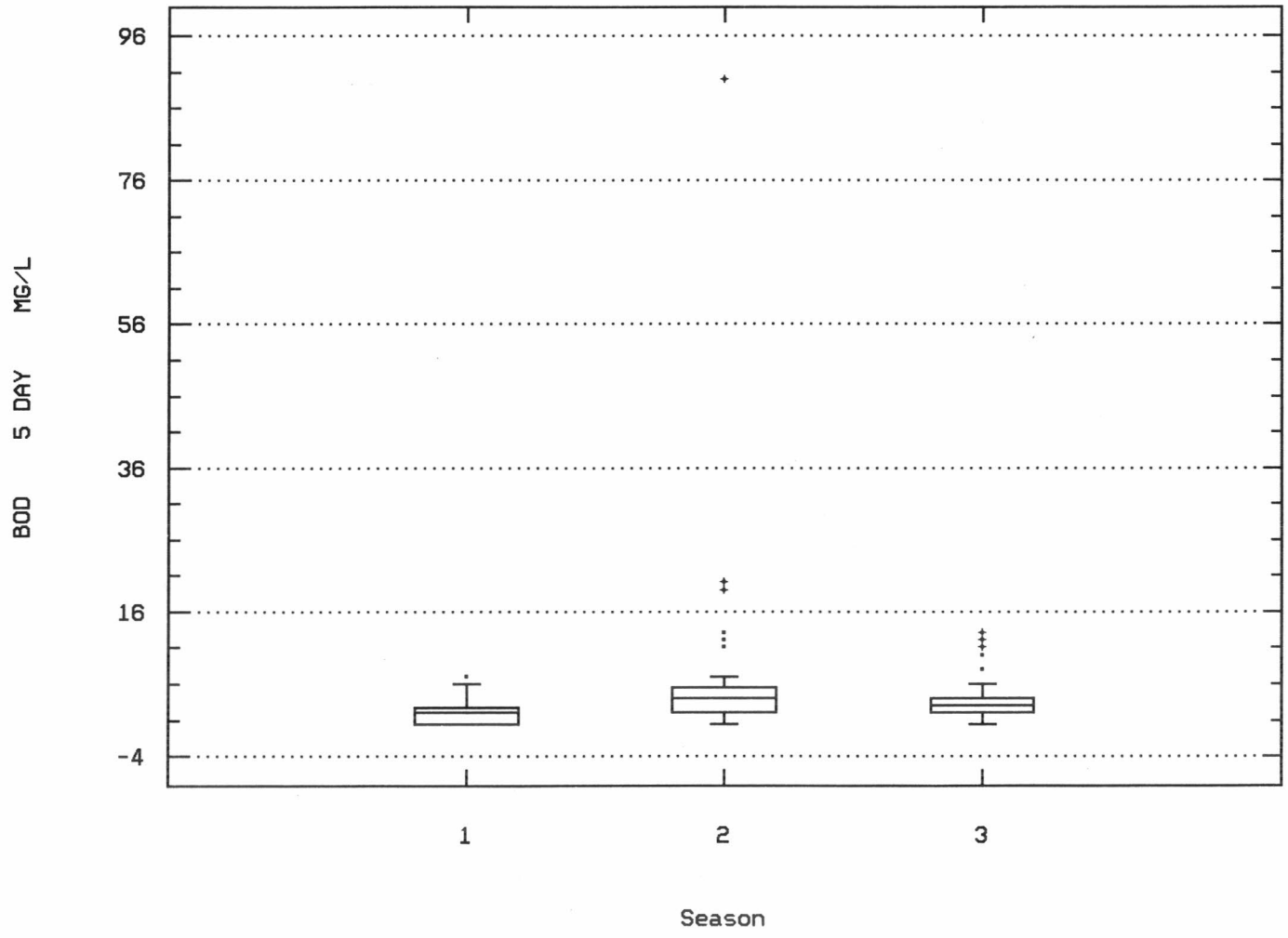
OXYGEN, DISSOLVED



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00310

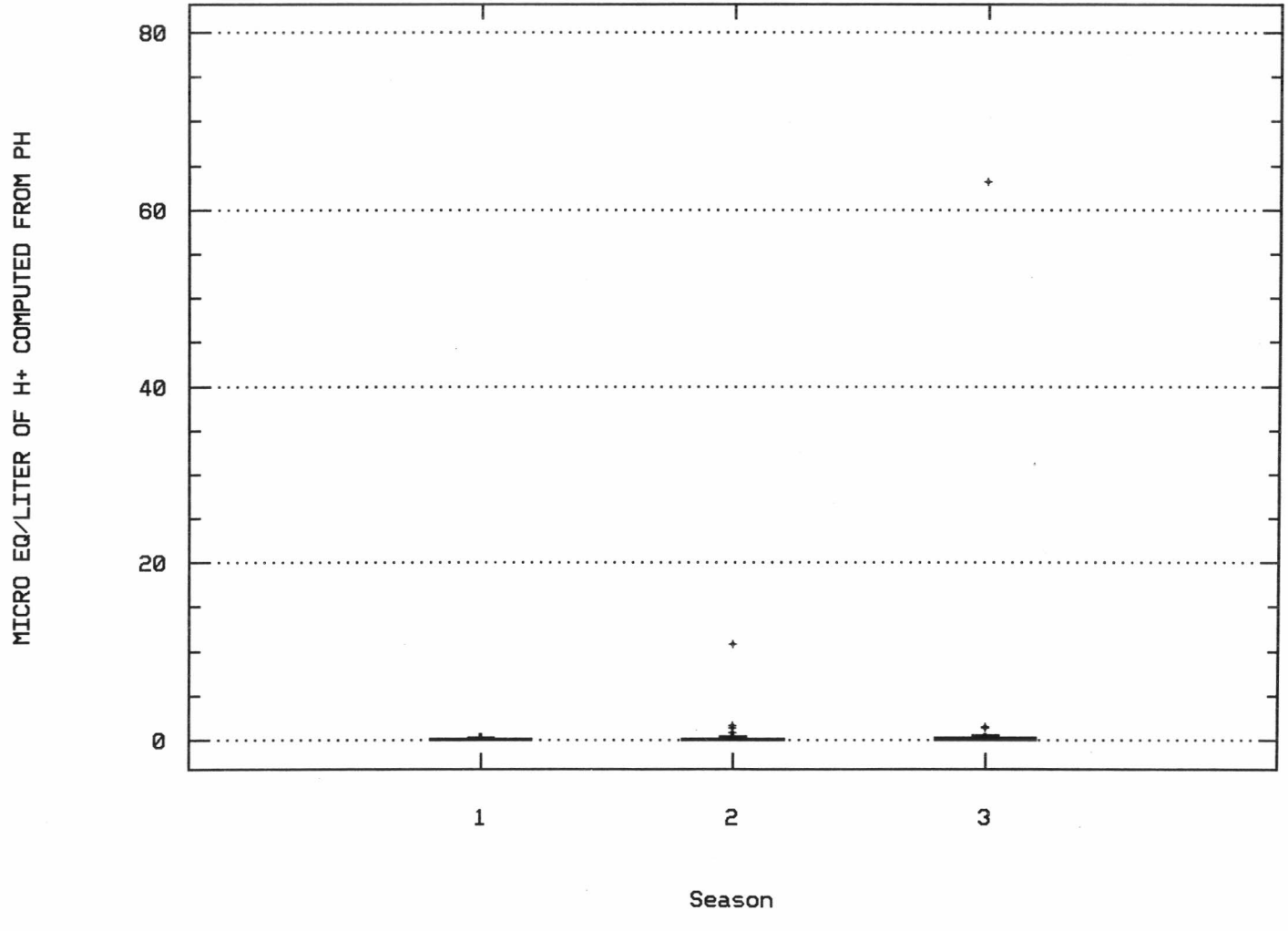
BOD, 5 DAY, 20 DEG C



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00400

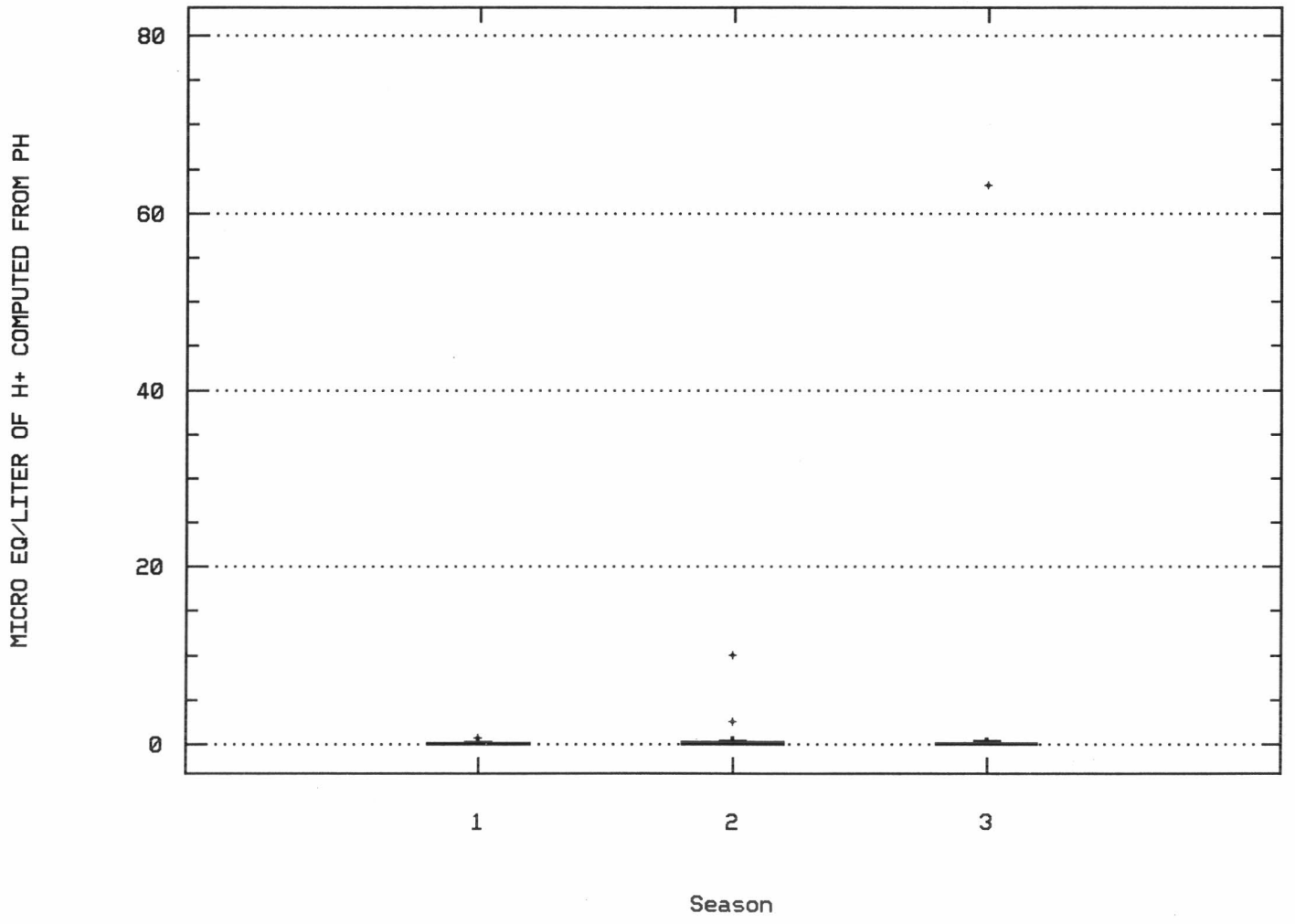
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00403

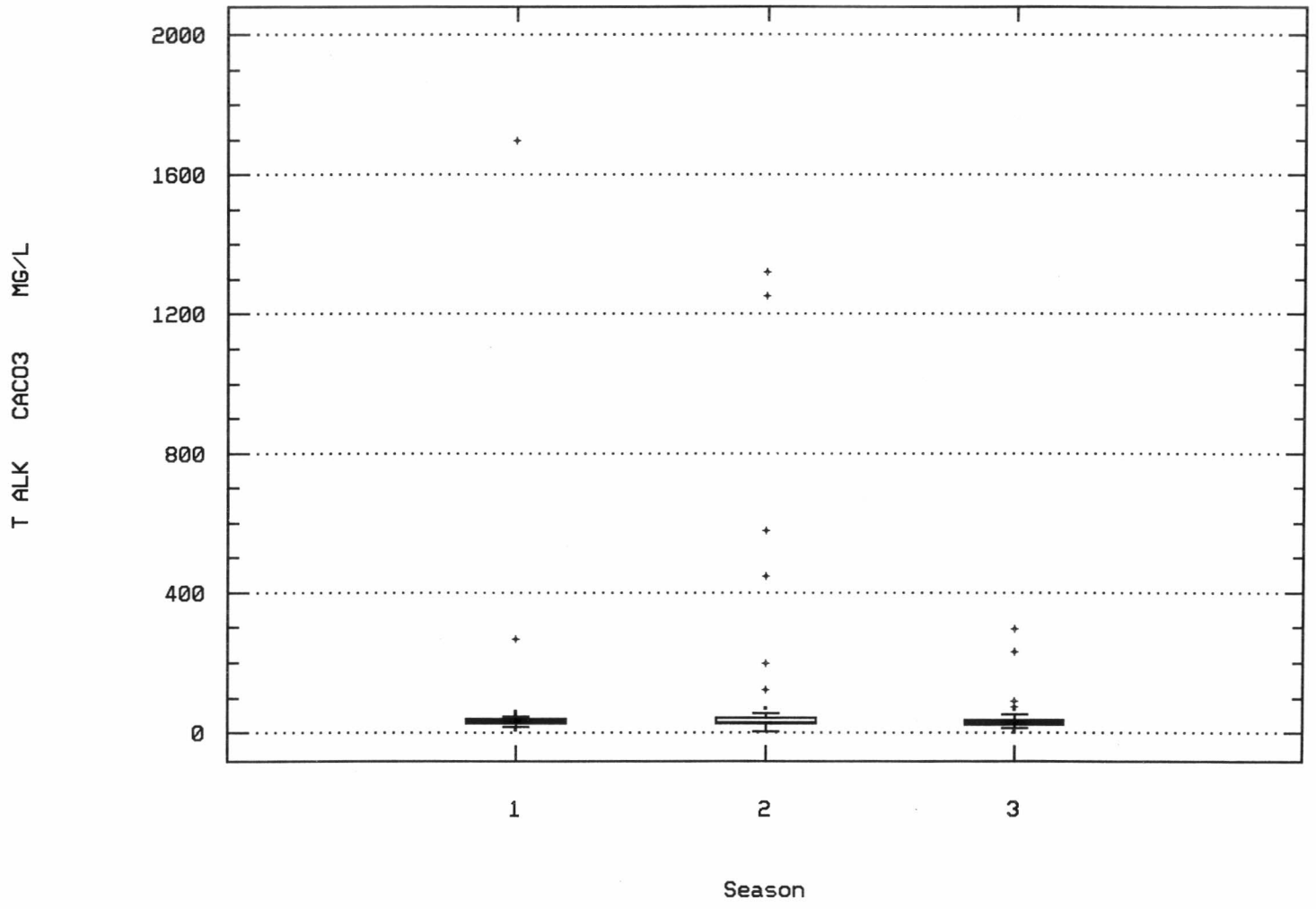
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00410

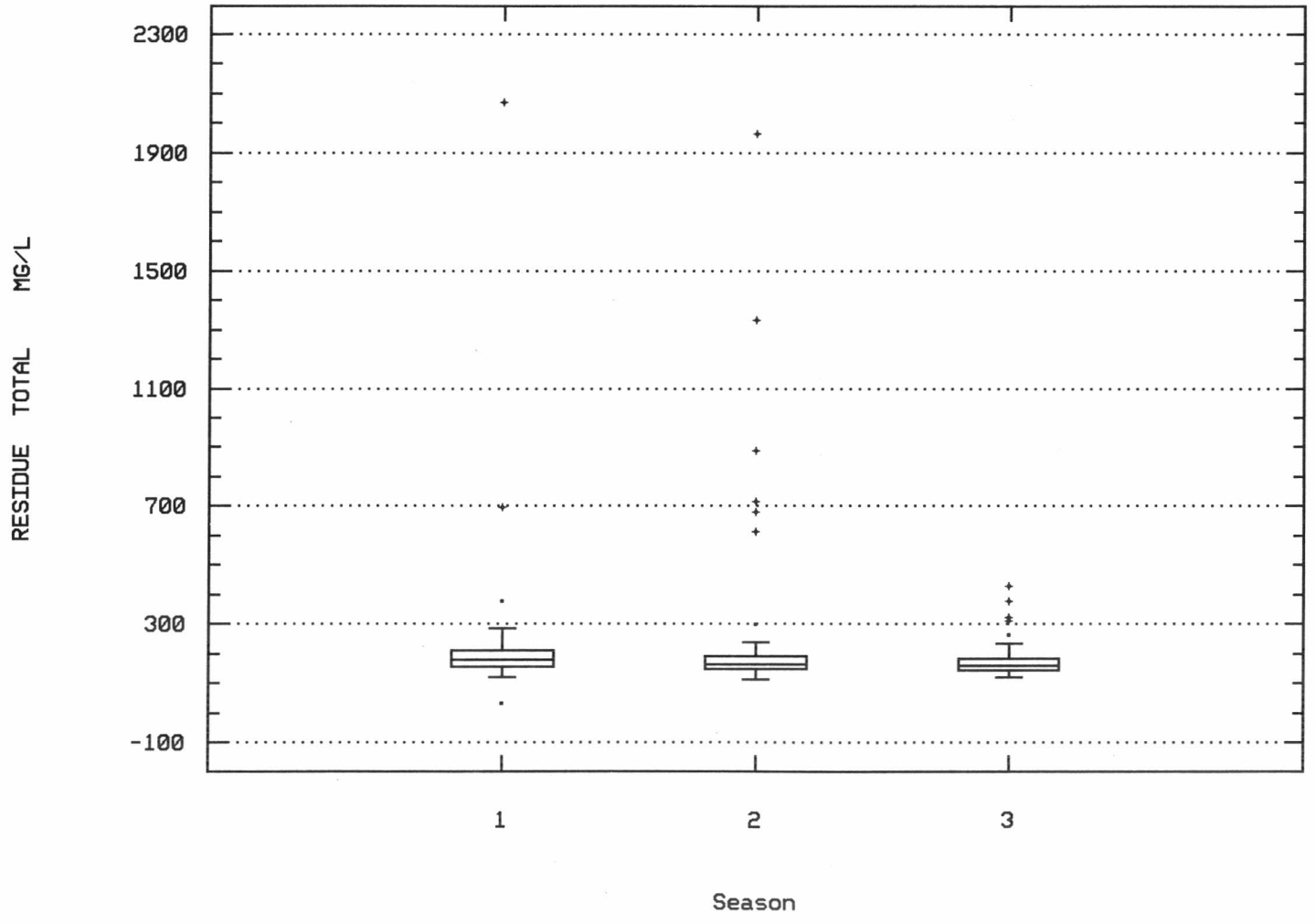
ALKALINITY, TOTAL (MG/L AS CACO3)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00500

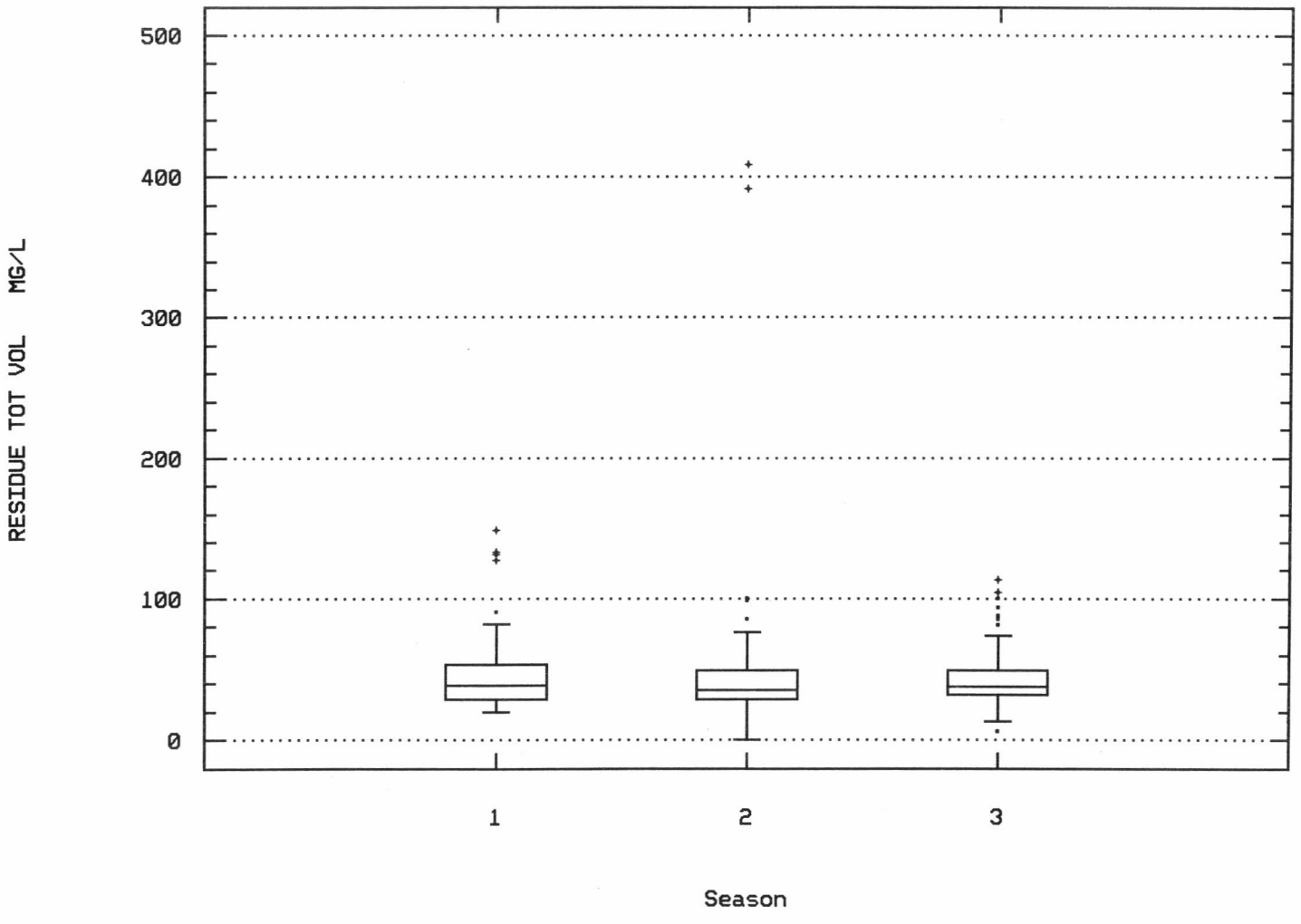
RESIDUE, TOTAL (MG/L)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00505

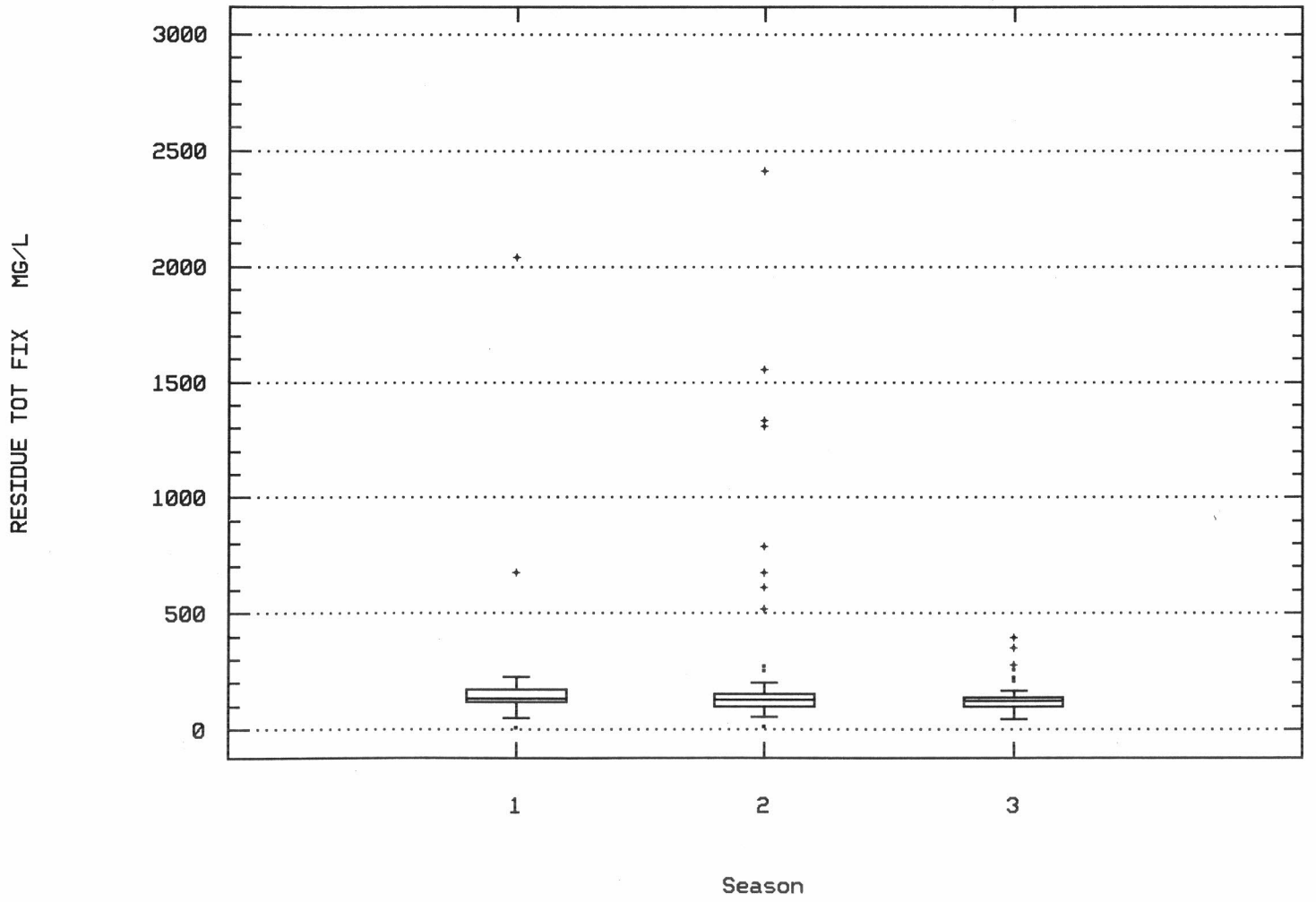
RESIDUE, TOTAL VOLATILE (MG/L)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00510

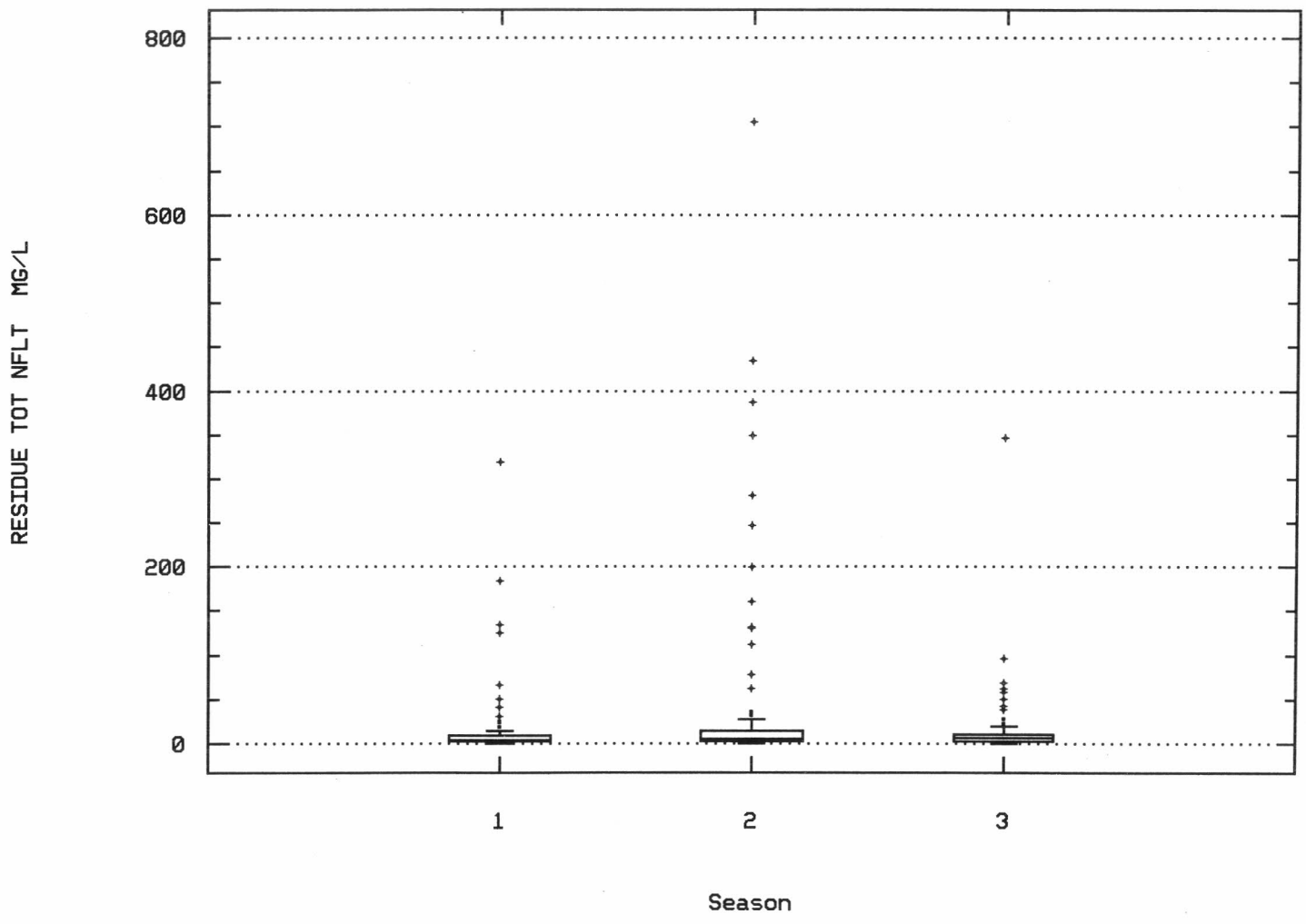
RESIDUE, TOTAL FIXED (MG/L)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00530

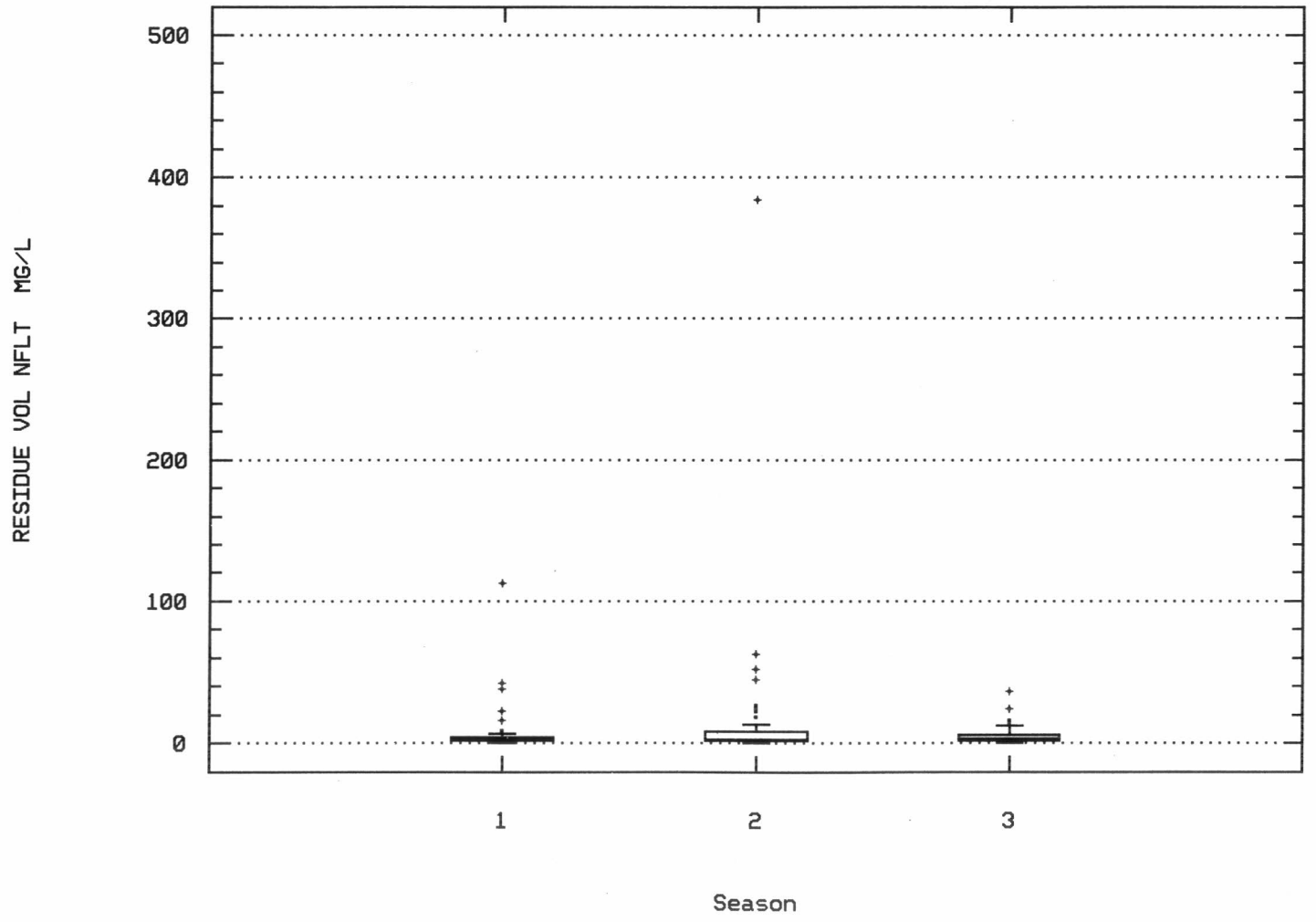
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00535

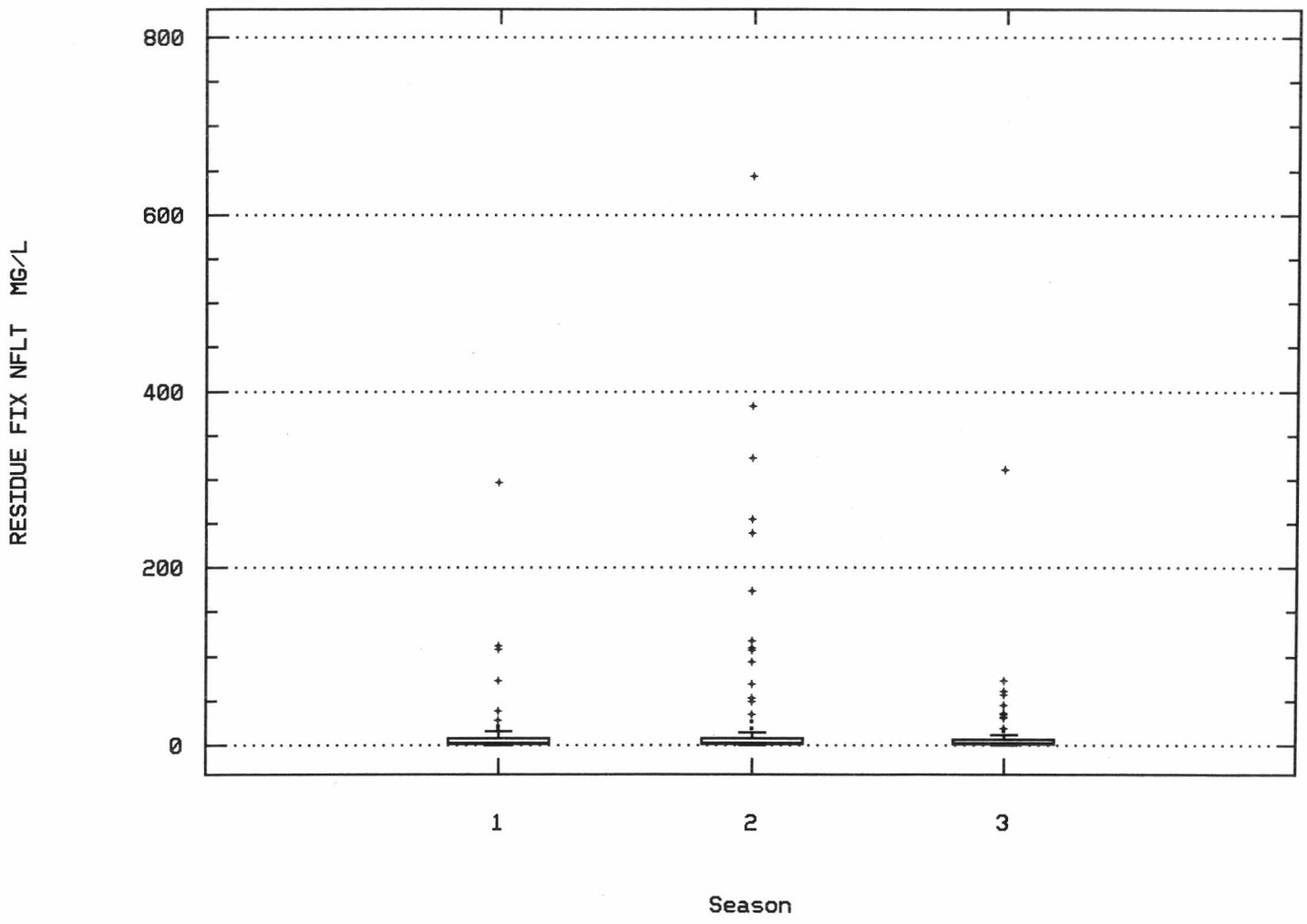
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00540

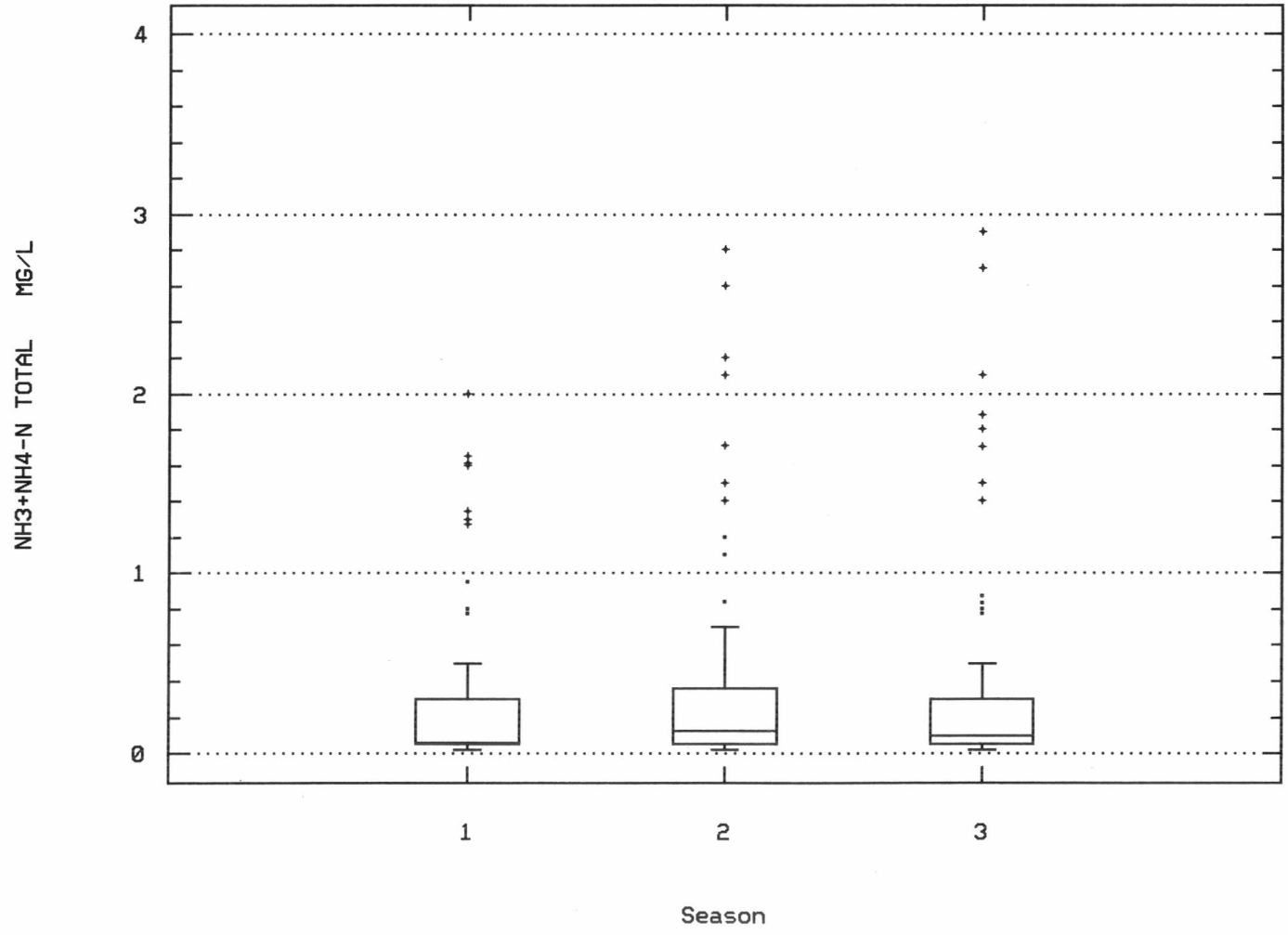
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00610

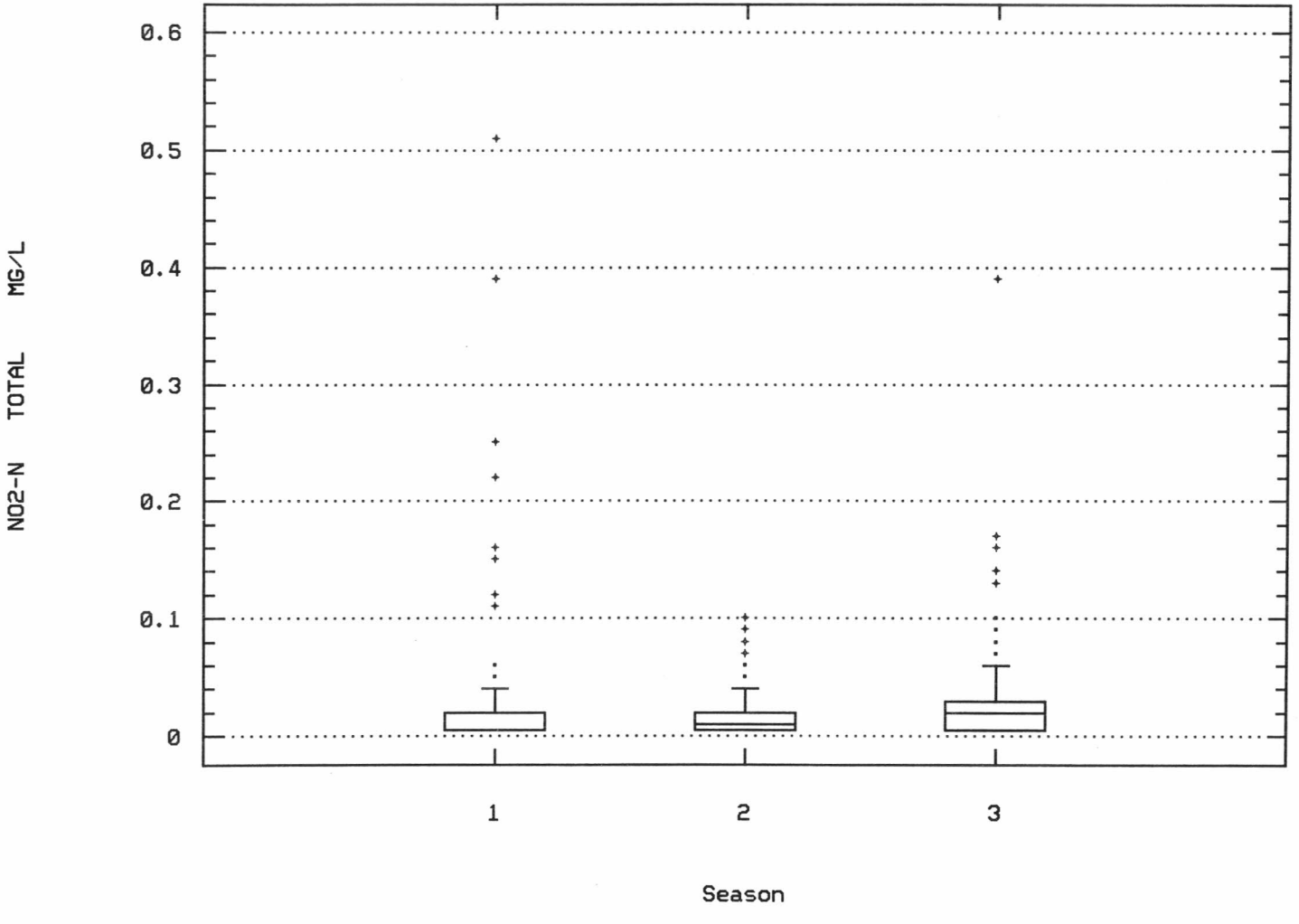
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00615

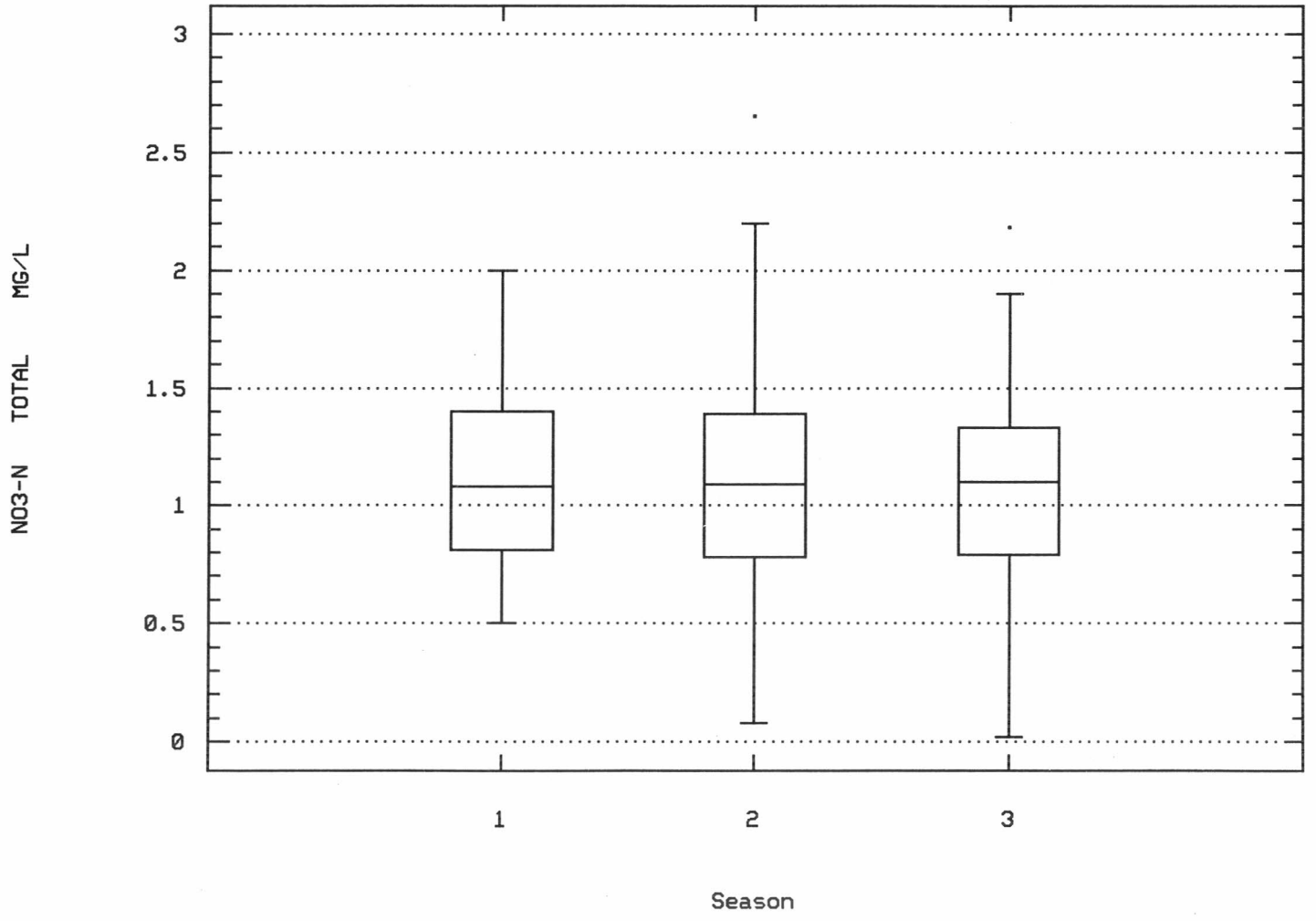
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00620

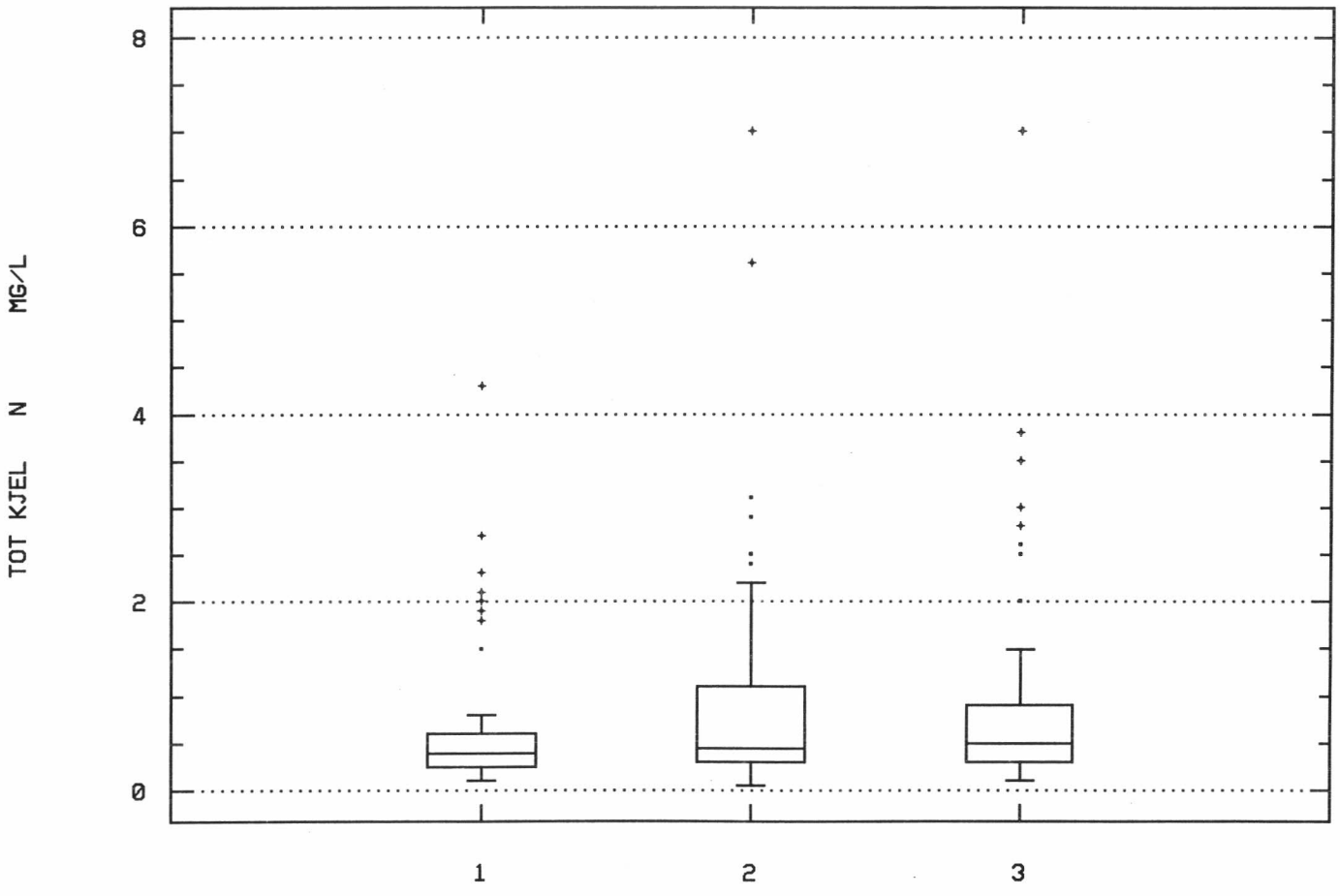
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 00625

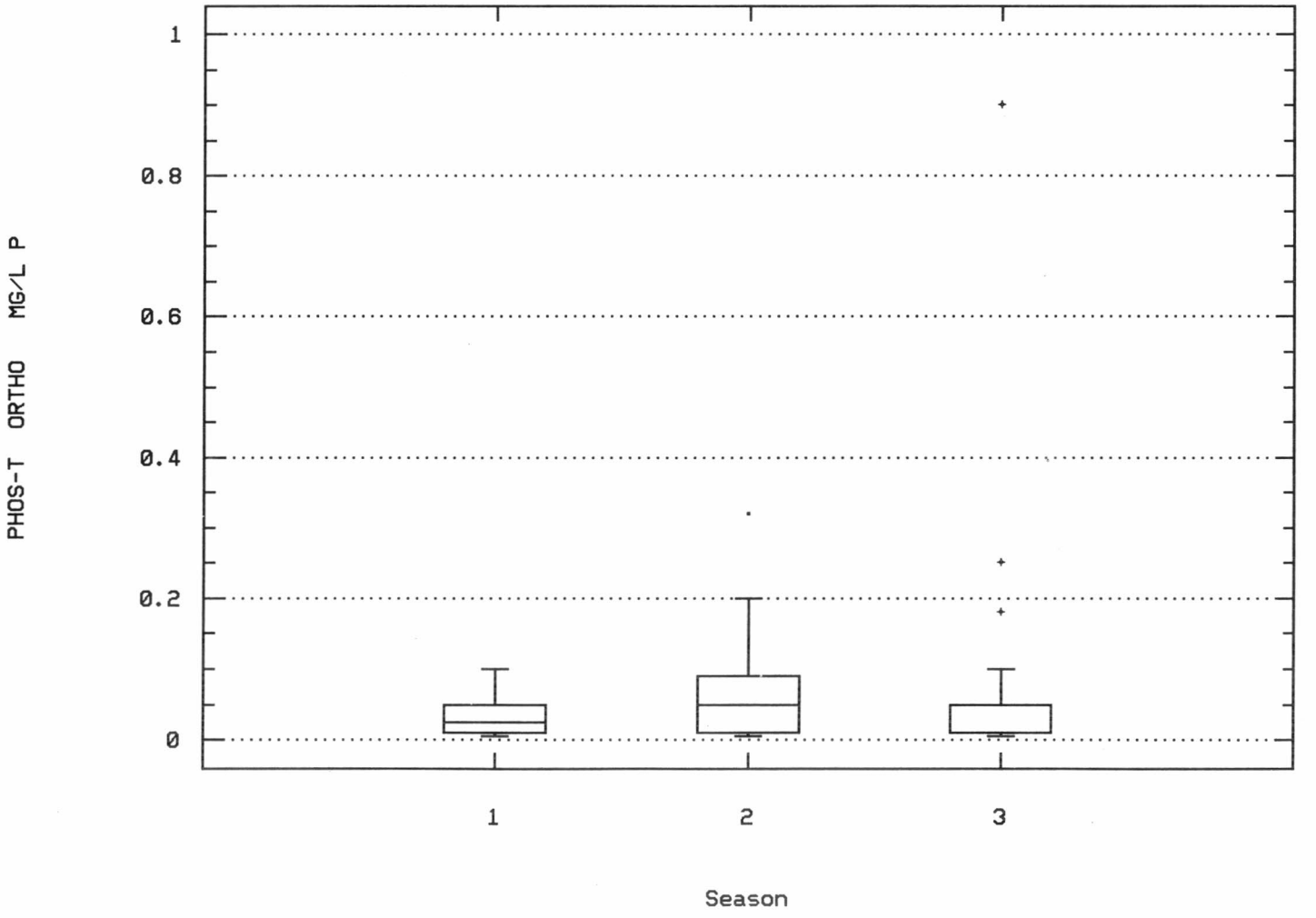
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 5 BRIDGE

Station: RICH0094 Parameter Code: 70507

PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/



RT. 5 BRIDGE

Station Inventory for Station: RICH0095

NPS Station ID: RICH0095 LAT/LON: 37.514726/ -77.205281 Agency: 112WRD Date Created: 02/01/92
Location: CHICKAHOMINY RIV AT RT 60 NR WHITE OAK SWAMP, VA FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02042445
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.20 On/Off RF1:
RF3 Index: 02080206006211.63 RF3 Mile Point: 12.87 Distance from RF3: 0.01 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0095

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/11/84-09/11/84	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/11/84-09/11/84	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/11/84-09/11/84	1	105.	105.	105.	105.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

********** No EPA Water Quality Criteria exist to compare against the data at this station. **********

Station Inventory for Station: RICH0096

NPS Station ID: RICH0096 LAT/LON: 37.514726/ -77.205366 Agency: 21VASWCB Date Created: / /
Location: RT. 60 BRIDGE FIPS State/County: 51127 VIRGINIA/NEW KENT
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-CHK049.59 /VA2-05-X0055/VA2-4X0055
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206062 RF1 Mile Point: 1.720 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080206040600.00 RF3 Mile Point: 0.08 Distance from RF3: 0.03 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: CHICKAHOMINY RI. SECTION: 05 TOPO MAP #: 0140 TOPO MAP NAME: QUINTON, VA

Parameter Inventory for Station: RICH0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-10/19/94	116	17.8	15.733	28.	0.	62.723	7.92	4.4	7.8	22.2	25.6
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		10/19/94-10/19/94	1	153.	153.	153.	153.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/19/94-10/19/94	5	4.5	4.26	4.6	3.2	0.353	0.594	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	109	7.4	8.172	15.	4.	5.546	2.355	5.2	6.4	10.	11.4
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/20/68-07/30/73	12	1.75	2.458	8.	1.	3.819	1.954	1.06	1.325	2.625	6.89
00400 PH (STANDARD UNITS)		09/20/67-10/19/94	117	6.7	6.719	8.8	6.	0.138	0.371	6.3	6.5	7.	7.
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-10/19/94	117	6.7	6.597	8.8	6.	0.153	0.391	6.3	6.5	7.	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-10/19/94	117	0.2	0.253	1.	0.002	0.038	0.195	0.1	0.1	0.316	0.501
00403 PH, LAB, STANDARD UNITS	SU	09/20/67-10/29/70	12	6.7	6.958	9.8	6.	0.926	0.962	6.12	6.5	7.15	9.05
00403 CONVERTED PH, LAB, STANDARD UNITS		09/20/67-10/29/70	12	6.7	6.595	9.8	6.	1.071	1.035	6.12	6.5	7.15	9.05
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-10/29/70	12	0.2	0.254	1.	0.	0.07	0.264	0.015	0.072	0.316	0.819
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		09/20/67-10/29/70	12	19.	19.917	30.	8.	33.174	5.76	9.8	18.	24.5	28.8
00415 ALKALINITY, PHENOLPHTHALEIN (MG/L)		09/20/67-09/20/67	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-06/14/79	105	97.	189.343	9700.	1.	878681.824	937.38	67.2	82.5	115.	129.
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-06/14/79	106	44.	45.057	110.	6.	398.454	19.961	21.7	30.	59.	71.3
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-06/14/79	103	52.	54.214	136.	8.	527.621	22.97	24.	41.	69.	81.6
00515 RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L		03/23/73-03/23/73	1	59.	59.	59.	59.	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-06/14/79	103	5.	9.558	116.	0.	300.751	17.342	0.5	2.	8.	18.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-06/14/79	103	3.	3.767	22.	0.	15.44	3.929	0.5	1.	5.	10.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-06/14/79	101	2.	6.287	115.	0.	274.447	16.566	0.	0.5	4.	11.2
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-06/14/79	104##	0.05	0.058	0.37	0.005	0.002	0.046	0.015	0.05	0.05	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/14/79	104##	0.005	0.008	0.05	0.005	0.	0.006	0.005	0.005	0.01	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/08/77	85	0.12	0.157	0.64	0.005	0.018	0.133	0.025	0.05	0.245	0.304
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-06/14/79	104	0.5	0.554	1.399	0.2	0.065	0.254	0.3	0.4	0.7	0.9
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		08/17/77-06/14/79	18##	0.025	0.064	0.27	0.025	0.005	0.071	0.025	0.025	0.1	0.189
00660 PHOSPHATE, ORTHO (MG/L AS PO4)		10/07/68-07/16/69	4	0.51	0.493	0.7	0.25	0.04	0.199	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)		10/12/67-10/12/67	1	24.	24.	24.	24.	0.	0.	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)		04/28/71-11/20/78	9##	1.5	1.667	2.5	0.5	0.688	0.829	0.5	1.	2.5	2.5
01027 CADMIUM, TOTAL (UG/L AS CD)		11/23/70-11/20/78	13##	5.	5.038	10.	0.5	3.769	1.941	2.3	5.	5.	8.
01034 CHROMIUM, TOTAL (UG/L AS CR)		03/24/70-11/20/78	22##	5.	7.045	20.	5.	20.617	4.541	5.	5.	6.25	17.
01042 COPPER, TOTAL (UG/L AS CU)		03/24/70-11/20/78	21##	5.	8.571	20.	5.	35.357	5.946	5.	5.	10.	20.
01045 IRON, TOTAL (UG/L AS FE)		06/29/70-11/20/78	4	950.	977.25	1209.	800.	30536.917	174.748	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)		06/29/70-11/20/78	18##	5.	9.	25.	1.	42.235	6.499	4.6	5.	10.5	20.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01055 MANGANESE, TOTAL (UG/L AS MN)	03/24/70-11/20/78	4	109.95	119.975	200.	60.	3466.669	58.878	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	01/23/73-11/20/78	9##	50.	40.	50.	5.	393.75	19.843	5.	27.5	50.	50.
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-11/20/78	22	25.	25.227	60.	5.	213.041	14.596	5.	10.	40.	40.
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/20/67-10/28/77	19	930.	2380.895	12000.	36.	11920452.322	3452.601	91.	430.	2300.	11000.
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	09/20/67-10/28/77	19	2.968	2.984	4.079	1.556	0.426	0.653	1.959	2.633	3.362	4.041
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	963.879								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	93##	50.	171.29	6400.	50.	453654.839	673.539	50.	50.	100.	200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	93##	1.699	1.889	3.806	1.699	0.12	0.346	1.699	1.699	2.	2.301
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	77.382								
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	08/11/74-08/11/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	99##	0.05	0.104	0.5	0.025	0.007	0.085	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	100	0.05	0.075	0.28	0.005	0.004	0.06	0.02	0.04	0.1	0.159
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-11/20/78	19##	0.25	0.233	0.25	0.025	0.003	0.055	0.15	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0096

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, [illegible], ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	1	0.20	4	0	0.00	1	1	1.00						
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	109	1	0.01	34	0	0.00	41	1	0.02	34	0	0.00			
00400 PH	Fresh Chronic	9.	117	0	0.00	40	0	0.00	43	0	0.00	34	0	0.00			
	Other-Lo Lim.	6.5	117	43	0.37	40	11	0.28	43	23	0.53	34	9	0.26			
00403 PH, LAB	Fresh Chronic	9.	12	1	0.08	4	1	0.25	3	0	0.00	5	0	0.00			
	Other-Lo Lim.	6.5	12	4	0.33	4	1	0.25	3	2	0.67	5	1	0.20			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	104	0	0.00	31	0	0.00	40	0	0.00	33	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	85	0	0.00	27	0	0.00	32	0	0.00	26	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	18	0	0.00	4	0	0.00	8	0	0.00	6	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	9	0	0.00	2	0	0.00	3	0	0.00	4	0	0.00			
	Drinking Water	50.	9	0	0.00	2	0	0.00	3	0	0.00	4	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	2&	1	0.50	1	0	0.00				1	1	1.00			
	Drinking Water	5.	2&	1	0.50	1	0	0.00				1	1	1.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	22	0	0.00	3	0	0.00	8	0	0.00	11	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	21	4	0.19	3	1	0.33	8	1	0.13	10	2	0.20			
	Drinking Water	1300.	21	0	0.00	3	0	0.00	8	0	0.00	10	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	18	0	0.00	3	0	0.00	8	0	0.00	7	0	0.00			
	Drinking Water	15.	18	3	0.17	3	1	0.33	8	2	0.25	7	0	0.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	9	0	0.00	1	0	0.00	3	0	0.00	5	0	0.00			
	Drinking Water	100.	9	0	0.00	1	0	0.00	3	0	0.00	5	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	22	0	0.00	3	0	0.00	8	0	0.00	11	0	0.00			
	Drinking Water	5000.	22	0	0.00	3	0	0.00	8	0	0.00	11	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	19	9	0.47	10	4	0.40	4	3	0.75	5	2	0.40			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	93	14	0.15	27	4	0.15	38	4	0.11	28	6	0.21			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00	1	0	0.00									
71900 MERCURY, TOTAL	Fresh Acute	2.4	19	0	0.00	4	0	0.00	8	0	0.00	7	0	0.00			
	Drinking Water	2.	19	0	0.00	4	0	0.00	8	0	0.00	7	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1967 - Station RICH0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-10/19/94	2	22.2	22.2	24.4	20.	9.68	3.111	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		09/20/67-10/19/94	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-10/19/94	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-10/19/94	1	0.002	0.002	0.002	0.002	0.	0.	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-06/14/79	2	84.	84.	110.	58.	1352.	36.77	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-06/14/79	2	13.	13.	22.	4.	162.	12.728	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1968 - Station RICH0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-10/19/94	5	25.6	23.56	27.2	18.3	13.823	3.718	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	4	9.25	9.125	11.	7.	3.063	1.75	**	**	**	**
00400 PH (STANDARD UNITS)		09/20/67-10/19/94	5	7.	7.2	7.7	6.8	0.145	0.381	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-10/19/94	5	7.	7.086	7.7	6.8	0.161	0.402	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-10/19/94	5	0.1	0.082	0.158	0.02	0.003	0.057	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-06/14/79	1	92.	92.	92.	92.	0.	0.	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-06/14/79	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-06/14/79	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/14/79	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/08/77	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-06/14/79	1	0.39	0.39	0.39	0.39	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station RICH0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-10/19/94	3	20.	16.133	25.6	2.8	141.173	11.882	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	3	9.	9.333	11.8	7.2	5.373	2.318	**	**	**	**
00400 PH (STANDARD UNITS)		09/20/67-10/19/94	3	6.5	6.667	7.2	6.3	0.223	0.473	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-10/19/94	3	6.5	6.532	7.2	6.3	0.25	0.5	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-10/19/94	3	0.316	0.294	0.501	0.063	0.048	0.22	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-06/14/79	3	104.	105.	135.	76.	871.	29.513	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-06/14/79	3	48.	47.	71.	22.	601.	24.515	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-06/14/79	2	60.	60.	64.	56.	32.	5.657	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-06/14/79	2	4.5	4.5	5.	4.	0.5	0.707	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-06/14/79	3	3.	3.333	5.	2.	2.333	1.528	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-06/14/79	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-06/14/79	3	0.15	0.127	0.2	0.03	0.008	0.087	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/14/79	3##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/08/77	3	0.27	0.287	0.56	0.03	0.07	0.265	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-06/14/79	3	0.59	0.587	0.61	0.56	0.001	0.025	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station RICH0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-10/19/94	11	16.1	14.727	23.3	4.4	55.878	7.475	4.52	5.	22.2	23.08
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	11	7.4	8.382	10.9	6.	3.39	1.841	6.08	7.1	10.6	10.88

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Annual Analysis for 1970 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	09/20/67-10/19/94	11	6.7	6.764	7.	6.5	0.033	0.18	6.52	6.6	7.	7.
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	11	6.7	6.731	7.	6.5	0.034	0.184	6.52	6.6	7.	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	11	0.2	0.186	0.316	0.1	0.005	0.072	0.1	0.1	0.251	0.303
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	11	117.	984.091	9700.	91.	8356474.291	2890.757	93.	105.	120.	7785.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	11	45.	49.	86.	18.	442.	21.024	19.4	30.	70.	83.2
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	11	63.	62.091	107.	15.	708.691	26.621	19.	46.	89.	103.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	11	7.	8.364	19.	1.	31.055	5.573	1.2	5.	13.	18.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	11	4.	5.	12.	1.	11.6	3.406	1.	3.	7.	11.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	11	3.	3.364	8.	0.	5.855	2.42	0.2	2.	4.	7.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	10	0.09	0.116	0.37	0.03	0.01	0.102	0.031	0.04	0.148	0.35
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	10##	0.005	0.009	0.03	0.005	0.	0.008	0.005	0.005	0.01	0.028
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	10	0.14	0.162	0.3	0.1	0.005	0.07	0.1	0.1	0.225	0.294
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	10	0.5	0.55	0.8	0.3	0.036	0.19	0.3	0.375	0.725	0.8
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	2	150.	150.	200.	100.	5000.	70.711	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	2	2.151	2.151	2.301	2.	0.045	0.213	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		141.421									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	10	0.175	0.195	0.5	0.025	0.024	0.155	0.025	0.044	0.3	0.48
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	10	0.135	0.156	0.27	0.04	0.008	0.088	0.041	0.088	0.26	0.269

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Annual Analysis for 1971 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	11	15.6	15.064	26.7	1.1	81.965	9.053	1.76	5.6	21.1	26.7
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	11	7.6	8.164	11.4	5.	5.279	2.298	5.12	6.2	10.6	11.36
00400 PH (STANDARD UNITS)	09/20/67-10/19/94	11	6.7	6.645	6.8	6.	0.067	0.258	6.06	6.7	6.8	6.8
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	11	6.7	6.551	6.8	6.	0.077	0.277	6.06	6.7	6.8	6.8
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	11	0.2	0.281	1.	0.158	0.067	0.258	0.158	0.158	0.2	0.9
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	11	122.	121.091	147.	89.	364.291	19.086	90.8	107.	135.	146.6
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	11	50.	44.727	75.	9.	449.818	21.209	9.	35.	60.	72.4
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	11	70.	76.364	136.	59.	474.255	21.777	59.2	60.	80.	126.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	11	6.	15.545	76.	2.	490.873	22.156	2.4	4.	22.	67.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	11	3.	3.273	10.	1.	6.618	2.573	1.	1.	4.	9.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	11	3.	12.273	75.	1.	488.418	22.1	1.	1.	18.	64.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	11	0.05	0.053	0.12	0.01	0.002	0.042	0.01	0.01	0.09	0.12
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	11	0.01	0.012	0.02	0.01	0.	0.004	0.01	0.01	0.01	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	11	0.19	0.198	0.49	0.01	0.022	0.15	0.013	0.03	0.29	0.45
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	11	0.5	0.509	0.8	0.3	0.021	0.145	0.32	0.4	0.6	0.78
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	11##	50.	677.273	6400.	50.	3614181.818	1901.1	50.	50.	200.	5200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	11##	1.699	2.055	3.806	1.699	0.432	0.657	1.699	1.699	2.301	3.565
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		113.431									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	11	0.2	0.168	0.4	0.05	0.011	0.103	0.05	0.05	0.2	0.36
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	11	0.13	0.134	0.28	0.04	0.006	0.077	0.042	0.05	0.19	0.264

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	11	12.2	13.273	27.8	2.2	68.332	8.266	2.42	6.1	21.1	26.68
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	10	9.5	9.46	13.6	6.8	6.4	2.53	6.8	6.8	11.5	13.42
00400 PH (STANDARD UNITS)	09/20/67-10/19/94	11	6.5	6.573	6.8	6.3	0.032	0.179	6.3	6.5	6.7	6.8
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	11	6.5	6.539	6.8	6.3	0.033	0.183	6.3	6.5	6.7	6.8
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	11	0.316	0.289	0.501	0.158	0.015	0.123	0.158	0.2	0.316	0.501

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Annual Analysis for 1972 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	11	96.	95.091	129.	56.	472.091	21.728	58.6	87.	105.	128.8
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	11	35.	38.545	80.	6.	363.873	19.075	9.6	25.	49.	74.6
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	11	52.	55.636	91.	16.	488.255	22.096	19.2	42.	79.	88.8
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	11	6.	16.818	116.	3.	1099.164	33.154	3.2	4.	12.	96.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	11	2.	2.818	11.	0.	9.164	3.027	0.2	1.	4.	9.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	11	4.	14.	115.	1.	1127.8	33.583	1.	2.	7.	93.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	11	0.01	0.038	0.15	0.005	0.002	0.047	0.005	0.005	0.05	0.14
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	11	0.01	0.011	0.02	0.005	0.	0.005	0.006	0.01	0.01	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	10	0.155	0.188	0.31	0.08	0.008	0.088	0.082	0.115	0.283	0.308
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	11	0.5	0.545	1.199	0.3	0.071	0.266	0.3	0.3	0.6	1.119
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	11	100.	104.545	200.	50.	2727.273	52.223	50.	50.	100.	200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	11	2.	1.973	2.301	1.699	0.044	0.211	1.699	1.699	2.	2.301
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		93.893									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	11	0.1	0.1	0.2	0.05	0.003	0.055	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	11	0.07	0.086	0.16	0.03	0.002	0.048	0.03	0.05	0.15	0.158

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Annual Analysis for 1973 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	12	17.8	15.25	26.7	5.6	65.761	8.109	5.6	6.525	22.075	26.19
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	12	8.1	8.567	13.	5.2	6.464	2.542	5.38	6.2	11.	12.46
00400 PH (STANDARD UNITS)	09/20/67-10/19/94	12	6.7	6.658	7.	6.4	0.034	0.183	6.43	6.5	6.775	6.97
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	12	6.7	6.625	7.	6.4	0.035	0.186	6.43	6.5	6.775	6.97
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	12	0.2	0.237	0.398	0.1	0.009	0.092	0.108	0.169	0.316	0.374
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	12	82.5	86.917	124.	1.	1208.265	34.76	18.7	73.	116.5	123.4
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	12	39.	37.333	47.	23.	68.788	8.294	24.8	30.	46.	46.7
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	12	54.5	58.417	95.	25.	576.992	24.021	26.8	38.	80.25	93.5
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	12	6.5	7.667	26.	1.	53.333	7.303	1.	2.	9.75	23.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	11	4.	4.	10.	0.	9.6	3.098	0.2	1.	6.	9.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	11	1.	4.364	20.	0.	41.055	6.407	0.	1.	8.	18.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	12##	0.05	0.044	0.05	0.005	0.	0.015	0.01	0.05	0.05	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	12##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.009	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	12	0.21	0.237	0.49	0.01	0.02	0.142	0.034	0.133	0.328	0.478
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	12	0.9	0.875	1.299	0.3	0.08	0.283	0.36	0.8	1.	1.299
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	12##	75.	116.667	400.	50.	12878.788	113.485	50.	50.	100.	370.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	12##	1.849	1.939	2.602	1.699	0.099	0.315	1.699	1.699	2.	2.565
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		86.979									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	12##	0.075	0.1	0.2	0.05	0.004	0.064	0.05	0.05	0.175	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	12	0.1	0.082	0.1	0.04	0.001	0.026	0.043	0.05	0.1	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	11	15.	15.236	25.	4.4	54.635	7.392	4.86	7.2	22.2	24.66
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	12	8.2	8.458	15.	6.	6.51	2.551	6.06	6.4	9.825	13.62
00400 PH (STANDARD UNITS)	09/20/67-10/19/94	12	6.7	6.725	7.	6.4	0.051	0.226	6.43	6.5	7.	7.
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	12	6.7	6.674	7.	6.4	0.054	0.232	6.43	6.5	7.	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	12	0.2	0.212	0.398	0.1	0.011	0.104	0.1	0.1	0.316	0.374
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	12	86.5	83.667	112.	64.	235.152	15.335	64.3	67.25	93.75	109.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	11	34.	35.364	87.	10.	427.855	20.685	11.	22.	44.	78.8
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	12	50.5	46.25	72.	8.	400.205	20.005	13.7	28.	64.25	71.4

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Annual Analysis for 1974 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	12	8.	7.917	17.	0.	31.902	5.648	0.3	2.5	13.	16.7
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	11	6.	5.545	12.	0.	23.273	4.824	0.	1.	10.	11.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	12	2.	2.333	6.	0.	5.879	2.425	0.	0.	4.75	6.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	12##	0.05	0.058	0.1	0.05	0.	0.019	0.05	0.05	0.05	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	12##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	12	0.09	0.139	0.64	0.005	0.03	0.173	0.007	0.035	0.163	0.523
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	12	0.55	0.617	0.9	0.4	0.04	0.199	0.4	0.425	0.85	0.9
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	12##	50.	66.667	200.	50.	1969.697	44.381	50.	50.	50.	170.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	12##	1.699	1.774	2.301	1.699	0.035	0.187	1.699	1.699	1.699	2.211
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		59.46									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	11##	0.05	0.077	0.2	0.05	0.002	0.047	0.05	0.05	0.1	0.18
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	12##	0.05	0.062	0.1	0.05	0.001	0.023	0.05	0.05	0.088	0.1

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Annual Analysis for 1975 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	13	16.1	15.885	26.1	0.	71.89	8.479	1.76	8.9	24.15	25.42
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	13	6.	7.238	12.2	4.	6.959	2.638	4.32	5.2	9.4	11.88
00400 PH (STANDARD UNITS)	09/20/67-10/19/94	13	6.5	6.531	6.8	6.	0.042	0.206	6.16	6.5	6.7	6.8
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	13	6.5	6.478	6.8	6.	0.045	0.213	6.16	6.5	6.7	6.8
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	13	0.316	0.333	1.	0.158	0.046	0.214	0.158	0.2	0.316	0.759
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	12	96.	98.667	153.	68.	558.97	23.643	70.4	80.	113.	144.3
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	12	49.5	50.083	92.	15.	346.811	18.623	20.7	40.25	58.	84.5
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	12	48.5	48.583	82.	9.	466.447	21.597	13.2	29.5	67.	79.3
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	12	5.	16.167	82.	2.	561.788	23.702	2.	4.	22.5	69.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	12	3.	4.833	20.	2.	26.515	5.149	2.	2.	5.5	16.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	12	4.	11.833	74.	0.	435.97	20.88	0.	2.	16.5	58.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	12##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	12##	0.005	0.005	0.01	0.005	0.	0.001	0.005	0.005	0.005	0.009
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	12	0.105	0.118	0.31	0.02	0.007	0.083	0.022	0.058	0.138	0.286
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	12	0.4	0.492	1.199	0.2	0.068	0.261	0.23	0.325	0.575	1.049
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	13##	50.	173.077	1500.	50.	159423.077	399.278	50.	50.	100.	940.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	13##	1.699	1.882	3.176	1.699	0.168	0.41	1.699	1.699	2.	2.706
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		76.219									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	12##	0.075	0.108	0.3	0.05	0.007	0.082	0.05	0.05	0.175	0.27
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	12	0.05	0.061	0.1	0.02	0.001	0.025	0.023	0.05	0.08	0.097

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Annual Analysis for 1976 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	10	16.7	15.94	23.3	4.4	42.856	6.546	4.74	10.275	22.35	23.25
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	9	6.5	7.433	11.6	5.2	4.053	2.013	5.2	5.9	8.75	11.6
00400 PH (STANDARD UNITS)	09/20/67-10/19/94	10	7.	6.93	7.5	6.5	0.082	0.287	6.5	6.725	7.	7.45
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	10	7.	6.847	7.5	6.5	0.09	0.3	6.5	6.725	7.	7.45
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	10	0.1	0.142	0.316	0.032	0.009	0.096	0.038	0.1	0.198	0.316
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	10	102.5	101.5	116.	87.	134.056	11.578	87.1	88.75	111.75	115.8
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	10	64.5	65.3	81.	54.	89.789	9.476	54.	54.75	73.75	80.5
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	10	33.5	36.2	55.	15.	161.956	12.726	15.9	27.75	47.25	54.9
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	10##	1.25	2.85	10.	0.5	10.225	3.198	0.5	0.5	4.5	9.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	10##	1.25	2.85	10.	0.5	10.225	3.198	0.5	0.5	4.5	9.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	10##	0.25	0.25	0.5	0.	0.069	0.264	0.	0.	0.5	0.5

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Annual Analysis for 1976 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	10##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	10##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	10##	0.025	0.071	0.27	0.025	0.007	0.084	0.025	0.025	0.115	0.259
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	10	0.4	0.48	1.399	0.2	0.115	0.339	0.21	0.3	0.5	1.309
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	10##	50.	90.	200.	50.	3777.778	61.464	50.	50.	125.	200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	10##	1.699	1.88	2.301	1.699	0.064	0.254	1.699	1.699	2.075	2.301
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		75.786									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	10##	0.05	0.07	0.2	0.05	0.002	0.048	0.05	0.05	0.063	0.19
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	10	0.03	0.034	0.06	0.01	0.	0.014	0.011	0.028	0.043	0.059

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Annual Analysis for 1977 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	8	13.5	12.563	21.	0.6	54.463	7.38	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	8	7.1	7.275	11.2	4.4	4.399	2.097	**	**	**	**
00400 PH (STANDARD UNITS)	09/20/67-10/19/94	8	7.	6.85	7.5	6.	0.194	0.441	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	8	7.	6.623	7.5	6.	0.253	0.503	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	8	0.1	0.238	1.	0.032	0.102	0.319	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	8	97.5	99.375	126.	80.	245.696	15.675	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	8	47.5	46.875	66.	21.	347.268	18.635	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	8	57.	52.5	72.	23.	283.143	16.827	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	8##	1.25	10.5	72.	0.5	620.143	24.903	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	7	2.	2.786	9.	0.5	10.071	3.174	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	8##	0.5	8.25	63.	0.	489.5	22.125	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	8##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	8##	0.005	0.011	0.05	0.005	0.	0.016	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	4##	0.048	0.048	0.07	0.025	0.001	0.026	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	8	0.5	0.5	0.7	0.3	0.023	0.151	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	8##	50.	97.5	430.	50.	18050.	134.35	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	8##	1.699	1.816	2.633	1.699	0.109	0.33	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		65.431									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	8##	0.05	0.056	0.1	0.05	0.	0.018	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	8	0.025	0.028	0.07	0.005	0.	0.022	**	**	**	**

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Annual Analysis for 1978 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	11	15.	14.918	28.	0.1	81.144	9.008	1.08	6.	24.	27.4
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	11	6.8	7.682	14.	4.8	8.44	2.905	4.82	5.2	10.6	13.36
00400 PH (STANDARD UNITS)	09/20/67-10/19/94	11	6.7	6.736	7.5	6.2	0.149	0.385	6.22	6.3	7.	7.4
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	11	6.7	6.598	7.5	6.2	0.17	0.412	6.22	6.3	7.	7.4
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	11	0.2	0.252	0.631	0.032	0.04	0.2	0.045	0.1	0.501	0.605
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	10	92.5	94.4	146.	57.	977.378	31.263	57.3	63.	119.5	145.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	10	32.	39.	71.	16.	367.333	19.166	16.1	23.75	57.25	70.
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	10	50.	55.4	106.	23.	571.378	23.904	23.8	38.5	69.	102.9
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	10	2.	3.15	10.	0.5	9.725	3.118	0.5	0.5	5.25	9.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	10	1.5	1.65	4.	0.5	1.392	1.18	0.5	0.5	2.25	3.9
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	10##	0.75	1.75	7.	0.5	4.625	2.151	0.5	0.5	2.5	6.7
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	10##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	10##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	10	0.4	0.42	0.9	0.2	0.04	0.199	0.21	0.3	0.45	0.87

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Annual Analysis for 1978 - Station RICH0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	10##	50.	70.	200.	50.	2333.333	48.305	50.	50.	62.5	190.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	10##	1.699	1.789	2.301	1.699	0.041	0.203	1.699	1.699	1.774	2.271
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		61.557									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	10##	0.05	0.07	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	10	0.04	0.038	0.12	0.005	0.001	0.034	0.005	0.009	0.05	0.113

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station RICH0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	3	20.	15.333	20.5	5.5	72.583	8.52	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	4	8.95	8.525	9.8	6.4	2.369	1.539	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-10/19/94	4	6.75	6.675	7.	6.2	0.156	0.395	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	4	6.682	6.542	7.	6.2	0.179	0.423	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	4	0.208	0.287	0.631	0.1	0.063	0.251	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	4	76.	71.5	81.	53.	163.667	12.793	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	4	33.	33.	39.	27.	26.667	5.164	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	4	45.	38.5	50.	14.	273.	16.523	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	4##	0.5	0.625	1.	0.5	0.063	0.25	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	4##	0.5	0.625	1.	0.5	0.063	0.25	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	3##	0.5	0.333	0.5	0.	0.083	0.289	**			**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	4##	0.05	0.05	0.05	0.05	0.	0.	**			
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	4##	0.005			0.005	0.	0.	**			
00625	[illegible]JELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	4	0.45	0.4		0.2	0.02	0.141	**	**		
31615	[illegible]RM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	4##	50.	50.		50.	0.	0.	**	**	**	
31616	[illegible]FORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	4##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616	GM [illegible]FORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		50.									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	4##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	4	0.035	0.033	0.05	0.01	0.	0.017	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station RICH0096

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	5	25.7	22.72	25.9	12.4	34.142	5.843	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-10/19/94	5	6.28	6.23	6.38	6.08	0.016	0.126	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	5	6.28	6.215	6.38	6.08	0.016	0.127	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	5	0.525	0.609	0.832	0.417	0.031	0.177	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	41	23.3	22.527	28.	2.9	21.954	4.686	15.56	21.1	25.65	26.7
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	34	6.55	6.747	11.	4.8	2.075	1.441	4.95	5.8	7.4	8.95
00400p PH (STANDARD UNITS)	09/20/67-10/19/94	40	6.7	6.779	8.8	6.	0.235	0.485	6.208	6.5	7.	7.18
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	40	6.7	6.595	8.8	6.	0.27	0.52	6.208	6.5	7.	7.18
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	40	0.2	0.254	1.	0.002	0.057	0.238	0.067	0.1	0.316	0.62
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	31	105.	106.935	153.	56.	538.129	23.198	78.2	92.	124.	143.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	32	54.	49.906	110.	9.	615.314	24.806	18.5	30.	68.	84.9
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	30	58.5	58.6	136.	8.	619.076	24.881	28.4	44.	75.75	80.9
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	30	6.	9.95	76.	0.5	210.73	14.517	0.5	1.75	10.25	21.7
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	31	3.	4.532	22.	0.	21.682	4.656	0.5	1.	6.	10.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	30	2.	6.233	75.	0.	197.444	14.051	0.	0.5	6.	17.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	31##	0.05	0.051	0.12	0.005	0.001	0.027	0.01	0.05	0.05	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	31##	0.005	0.008	0.03	0.005	0.	0.006	0.005	0.005	0.01	0.018
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	27	0.14	0.152	0.49	0.005	0.013	0.113	0.025	0.05	0.22	0.294
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	31	0.5	0.563	1.199	0.2	0.064	0.254	0.3	0.4	0.8	0.98
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	27##	50.	90.741	300.	50.	4045.584	63.605	50.	50.	100.	200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	27##	1.699	1.884	2.477	1.699	0.057	0.24	1.699	1.699	2.	2.301
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	76.539								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	29	0.1	0.138	0.5	0.05	0.012	0.107	0.05	0.05	0.2	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	29	0.09	0.098	0.28	0.01	0.005	0.068	0.03	0.05	0.13	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	43	6.1	7.719	18.	0.	22.781	4.773	1.54	4.4	11.5	14.76
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	41	10.4	9.734	15.	4.	6.761	2.6	6.08	7.3	11.4	12.84
00400p PH (STANDARD UNITS)	09/20/67-10/19/94	43	6.5	6.609	7.5	6.	0.081	0.284	6.3	6.5	6.8	7.
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	43	6.5	6.525	7.5	6.	0.088	0.297	6.3	6.5	6.8	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	43	0.316	0.298	1.	0.032	0.037	0.193	0.1	0.158	0.316	0.501
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	41	97.	97.732	147.	1.	650.201	25.499	72.	82.5	115.	127.6
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	41	39.	40.878	76.	10.	290.91	17.056	18.6	29.5	50.	66.8
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	40	59.5	59.325	107.	9.	398.789	19.97	35.2	50.25	68.	86.5
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	40	4.	6.588	72.	0.	138.358	11.763	0.5	1.25	6.	14.5
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	40	2.	2.875	12.	0.	8.176	2.859	0.5	1.	4.	7.9
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	39	1.	4.026	63.	0.	108.762	10.429	0.	0.5	4.	7.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	40##	0.05	0.06	0.37	0.005	0.004	0.061	0.011	0.043	0.05	0.135
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	40##	0.005	0.007	0.01	0.005	0.	0.002	0.005	0.005	0.01	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	32	0.115	0.184	0.64	0.01	0.026	0.162	0.025	0.08	0.288	0.478
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	40	0.4	0.452	1.299	0.2	0.044	0.211	0.3	0.3	0.5	0.7
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	38##	50.	120.526	1500.	50.	60010.526	244.97	50.	50.	100.	220.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	38##	1.699	1.857	3.176	1.699	0.106	0.325	1.699	1.699	2.	2.331
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	72.027								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	38##	0.05	0.086	0.3	0.025	0.005	0.07	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	39	0.05	0.054	0.26	0.005	0.003	0.051	0.01	0.03	0.06	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-10/19/94	32	18.9	17.797	24.4	7.8	18.955	4.354	10.33	15.6	21.075	22.97
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	34	7.5	7.715	11.2	5.2	2.539	1.594	5.2	6.4	8.725	10.2
00400p PH (STANDARD UNITS)	09/20/67-10/19/94	34	6.8	6.788	7.5	6.3	0.079	0.28	6.45	6.5	7.	7.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

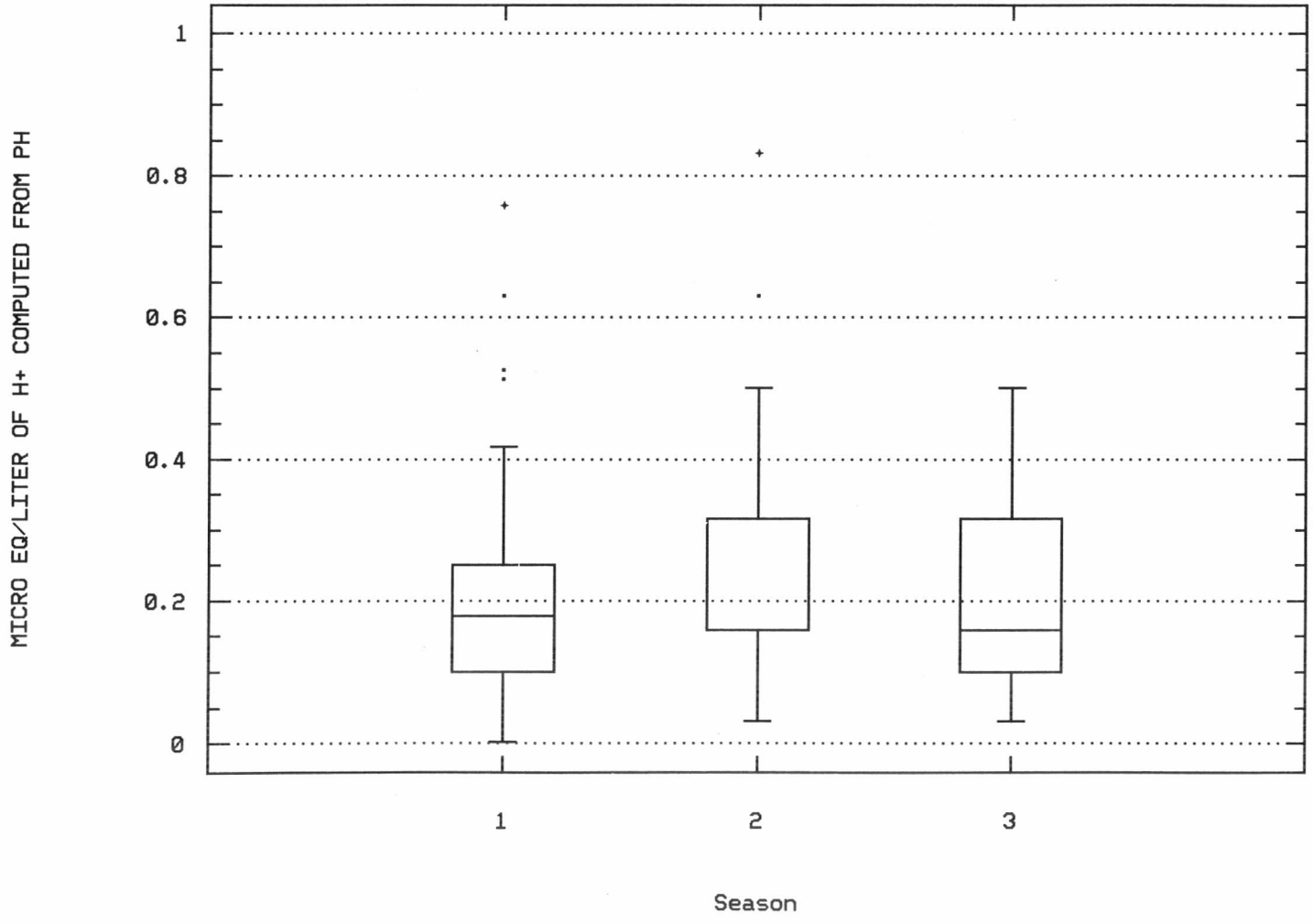
Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-10/19/94	34	6.8	6.71	7.5	6.3	0.085	0.291	6.45	6.5	7.	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-10/19/94	34	0.158	0.195	0.501	0.032	0.013	0.113	0.1	0.1	0.316	0.357
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	33	88.	380.576	9700.	53.	2799354.064	1673.127	60.	72.	109.5	120.4
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	33	45.	45.545	86.	6.	301.568	17.366	24.6	35.	55.	69.2
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	33	42.	44.03	95.	14.	477.093	21.842	18.8	27.5	55.5	83.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	33	5.	12.803	116.	0.5	577.015	24.021	0.7	2.	12.	34.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	32	2.5	4.141	20.	0.5	17.778	4.216	0.65	1.	5.75	10.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	32	2.	9.094	115.	0.	552.717	23.51	0.	0.5	5.75	20.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	33##	0.05	0.061	0.2	0.01	0.001	0.038	0.044	0.05	0.05	0.132
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	33##	0.005	0.008	0.05	0.005	0.	0.008	0.005	0.005	0.01	0.016
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	26	0.11	0.129	0.34	0.005	0.012	0.109	0.017	0.025	0.235	0.303
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	33	0.6	0.67	1.399	0.3	0.066	0.258	0.4	0.5	0.8	1.079
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	28##	50.	317.857	6400.	50.	1427261.905	1194.681	50.	50.	100.	220.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	28##	1.699	1.935	3.806	1.699	0.204	0.451	1.699	1.699	2.	2.331
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	86.197								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	32##	0.05	0.095	0.3	0.025	0.005	0.072	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-06/14/79	32	0.05	0.08	0.27	0.01	0.003	0.055	0.03	0.05	0.1	0.167

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: RICH0096 Parameter Code: 00400

MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 60 BRIDGE

Station Inventory for Station: RICH0097

NPS Station ID: RICH0097 LAT/LON: 37.515448/ -77.417476 Agency: 21VASWCB Date Created: 10/25/80
Location: JAMES RIVER, TERMINAL BOUY 175 FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XOL0950 /X320000 /Y4154000
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 7.70 On/Off RF1:
RF3 Index: 02080206139200.11 RF3 Mile Point: 0.10 Distance from RF3: 0.30 On/Off RF3:
Description:

CHESAPEAKE BAY PROGRAM TISSUE AND SEDIMENT DATA ALL DATA FROM VIRGINIA STATE WATER CONTROL BOARD UNLESS OTHERWISE DESIGNATED SPECIAL STUDY 70-040 DES LAB SHEETS 3657-3664,3666-3668,3671,3673,3676 APR-AUG 1971/BIOLOGICAL STUDY 75-010 DES LAB SHEET 33757,33770,33777, 33810,33817,33838,33845,33859,33913,33939,33946, APR-AUG 1975

Parameter Inventory for Station: RICH0097

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00023 SAMPLE WEIGHT IN POUNDS	05/23/75-08/27/75	11	0.1	0.109	0.2	0.1	0.001	0.03	0.1	0.1	0.1	0.18
00024 SAMPLE LENGTH IN INCHES	05/23/75-08/27/75	11	5.2	5.318	6.5	4.3	0.49	0.7	4.34	4.8	6.	6.44
71918 ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	04/26/71-04/27/71	13##	0.16	0.168	0.39	0.085	0.005	0.073	0.097	0.133	0.183	0.31
71930 MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/26/71-04/27/71	14	0.125	0.126	0.33	0.04	0.006	0.076	0.045	0.068	0.158	0.26
71936 LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-08/27/75	25	1.85	4.971	41.	0.335	78.666	8.869	0.494	0.89	5.305	14.72
71937 COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-08/27/75	25	29.4	531.737	2510.	4.34	630112.802	793.796	4.628	5.65	905.5	2190.8
71938 ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-08/27/75	25	102.	146.52	331.	56.	6866.76	82.866	69.	76.5	206.	272.
71939 CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	04/26/71-08/27/75	25	4.58	7.168	30.3	1.51	52.204	7.225	2.6	3.16	7.56	19.14
71940 CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/26/71-08/27/75	25	1.86	2.519	7.55	0.5	4.112	2.028	0.614	1.048	3.348	6.45
81614 NUMBER OF INDIVIDUALS IN THE SAMPLE	04/26/71-08/27/75	25	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
81665 VANADIUM IN FISH TISSUE WET WEIGHT MG/KG	05/23/75-08/27/75	11##	33.5	39.591	76.	10.	532.541	23.077	10.2	14.	61.5	74.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

********** No EPA Water Quality Criteria exist to compare against the data at this station. **********

Station Inventory for Station: RICH0098

NPS Station ID: RICH0098 LAT/LON: 37.515559/ -77.244448 Agency: 21VASWCB Date Created: 11/08/80
Location: JAMES RIVER, ABOVE BAILEY BAY FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XOA0947
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 23.30 On/Off RF1:
RF3 Index: 02080207110300.00 RF3 Mile Point: 0.00 Distance from RF3: 0.07 On/Off RF3:
Description:
CHESAPEAKE BAY PROGRAM TISSUE AND SEDIMENT DATA ALL DATA FROM VIRGINIA STATE WATER CONTROL BOARD UNLESS OTHERWISE DESIGNATED
SPECIAL STUDY 70-040 DES LAB SHEETS 3966-3975,3977-3986 APR-AUG 1971/

Parameter Inventory for Station: RICH0098

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71918 ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	04/27/71-04/27/71	20##	0.135	0.13	0.3	0.03	0.007	0.086	0.031	0.051	0.18	0.282
71930 MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/27/71-04/27/71	20	0.055	0.066	0.25	0.01	0.003	0.052	0.02	0.033	0.087	0.109
71936 LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	20	0.75	1.778	7.17	0.125	3.973	1.993	0.145	0.463	2.698	5.861
71937 COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	20	5.815	14.473	92.3	2.93	461.467	21.482	3.353	4.345	10.34	42.97
71938 ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	20	88.8	83.47	147.	1.4	961.278	31.004	41.68	71.25	99.575	124.1
71939 CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	04/27/71-04/27/71	20	1.475	1.937	4.81	0.72	1.023	1.012	0.968	1.398	2.375	3.624
71940 CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	04/27/71-04/27/71	20	0.68	0.777	2.89	0.19	0.468	0.684	0.23	0.25	1.073	1.782
81614 NUMBER OF INDIVIDUALS IN THE SAMPLE	04/27/71-04/27/71	20	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

********** No EPA Water Quality Criteria exist to compare against the data at this station. **********

Station Inventory for Station: RICH0099

NPS Station ID: RICH0099 LAT/LON: 37.516670/ -77.461116 Agency: 112WRD Date Created: 03/31/84
Location: FONTICELLO SPRING AT RICHMOND, VA FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/SPRI STORET Station ID(s): 02037640
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 3.40 On/Off RF1:
RF3 Index: 02080205000107.44 RF3 Mile Point: 7.97 Distance from RF3: 0.04 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0099

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/83-09/27/87	110	16.	15.973	20.5	11.5	5.848	2.418	12.5	13.875	18.	19.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/10/83-09/27/87	110	20.25	19.105	36.	-6.	91.886	9.586	6.5		125	30.
00059	FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/10/83-09/27/87	113	3.38	3.529	5.58	0.82	1.141	1.068	2.234		35	5.14
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/10/83-09/27/87	114	160.	157.14	175.	130.	44.617	6.68	150.			163.
00403	PH, LAB, STANDARD UNITS SU	10/17/83-10/17/83	1	5.7	5.7	5.7	5.7	0.	0.	**		**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	10/17/83-10/17/83	1	5.7	5.7	5.7	5.7	0.	0.	**		**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FR	10/17/83-10/17/83	1	1.995	1.995	1.995	1.995	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	10/17/83-10/17/83	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/17/83-10/17/83	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/17/83-10/17/83	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/17/83-10/17/83	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/17/83-10/17/83	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/17/83-10/17/83	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/17/83-10/17/83	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01130	LITHIUM, DISSOLVED (UG/L AS LI)	10/17/83-10/17/83	1##	2.	2.	2.	2.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0099

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15-3/15 Obs	10/15-3/15 Exceed	10/15-3/15 Prop.	3/16-6/30 Obs	3/16-6/30 Exceed	3/16-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00403 PH, LAB	Fresh Chronic	9.	1	0					1	0	0.00						
	Other-Lo Lim.	6.5	1	1					1	1	1.00						
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0					1	0	0.00						
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1983 - Station RICH0099

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/83-09/27/87	15	18.	17.433	20.5	13.5	5.245	2.29	14.4	15.	19.5	20.2
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/10/83-09/27/87	15	22.	17.6	29.5	-6.	107.329	10.36	6.3	10.	26.5	29.2
00059 FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/10/83-09/27/87	15	2.45	2.945	4.84	1.92	1.103	1.05	1.926	2.	4.15	4.582
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/10/83-09/27/87	16	150.	151.5	165.	135.	59.733	7.729	138.5	148.5	155.	163.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station RICH0099

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/83-09/27/87	31	15.	15.452	19.	12.	5.889	2.427	12.1	13.	18.	18.5
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/10/83-09/27/87	31	18.	18.	33.5	0.	79.033	8.89	3.9	12.5	26.	29.6
00059 FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/10/83-09/27/87	33	4.06	3.963	5.33	2.17	1.293	1.137	2.514	2.88	5.18	5.232
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/10/83-09/27/87	33	160.	155.909	163.	130.	51.585	7.182	145.8	152.5	160.	162.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station RICH0099

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/83-09/27/87	20	16.	15.65	18.5	11.5	5.108	2.26	12.05	14.	17.875	18.
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/10/83-09/27/87	20	23.75	21.35	36.	-2.5	118.397	10.881	4.55	15.5	29.625	32.9
00059 FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/10/83-09/27/87	21	4.05	3.873	5.58	2.58	0.627	0.792	2.626	3.26	4.225	4.986
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/10/83-09/27/87	21	160.	157.524	175.	145.	46.662	6.831	150.	151.5	160.	168.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station RICH0099

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/83-09/27/87	26	16.	16.135	19.5	13.	5.091	2.256	13.	14.	18.5	19.15
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/10/83-09/27/87	26	17.25	18.635	30.	2.	85.211	9.231	5.9	10.625	28.25	30.
00059 FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/10/83-09/27/87	26	3.445	3.49	5.1	2.13	1.008	1.004	2.407	2.568	4.48	5.045
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/10/83-09/27/87	26	160.	159.962	165.	151.	10.678	3.268	156.2	159.75	160.	165.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station RICH0099

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/83-09/27/87	18	15.25	15.778	19.	12.5	7.007	2.647	12.5	13.375	18.625	19.
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/10/83-09/27/87	18	24.	20.444	31.	6.	91.261	9.553	6.45	8.5	28.5	31.
00059 FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/10/83-09/27/87	18	2.97	2.873	4.09	0.82	0.682	0.826	1.306	2.693	3.333	3.919
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/10/83-09/27/87	18	160.	159.889	168.	145.	22.928	4.788	154.	159.5	162.25	165.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: RICH0100

NPS Station ID: RICH0100 LAT/LON: 37.517503/ -77.209448 Agency: 112WRD Date Created: 01/09/8
Location: CHICKAHOMINY RIV AT I64 NR WHITE OAK SWAMP, VA FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02042443
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 0206 RF1 Mile Point: 0.000 Distance from RF1: 0.50 On/Off RF1:
RF3 Index: 02080206161401.13 RF3 Mile Point: 1.12 Distance from RF3: 0.07 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0100

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/85-09/12/89	9	22.	19.589	25.5	11.	32.134	5.669	11.	13.4	24.5	25.5
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	04/08/87-09/12/89	5	21.	20.5	29.5	9.	60.	7.746	**	**	**	**
00025 BAROMETRIC PRESSURE (MM OF HG)	04/08/87-09/12/89	6	752.	755.333	767.	746.	73.867	8.595	**	**	**	**
00061 FLOW, STREAM, INSTANTANEOUS CFS	03/15/85-09/12/89	9	68.	114.111	270.	19.	9098.111	95.384	19.	43.5	2[illegible]	[illegible]0.
00080 COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/12/89	6	60.	75.167	120.	46.	988.167	31.435	**	**		**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/85-09/12/89	9	132.	135.667	190.	109.	850.75	29.168	109.	110.	[illegible]	190.
00300 OXYGEN, DISSOLVED MG/L	04/08/87-04/05/89	5	7.5	7.38	10.	4.3	5.307	2.304	**	**	**	**
00400 PH (STANDARD UNITS)	04/08/87-09/12/89	6	6.3	6.467	7.3	6.	0.259	0.509	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/08/87-09/12/89	6	6.255	6.285	7.3	6.	0.298	0.546	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-09/12/89	6	0.555	0.519	1.	0.05	0.155	0.393	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	04/08/87-09/12/89	6	7.3	7.217	7.7	6.5	0.182	0.426	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	04/08/87-09/12/89	6	7.289	7.022	7.7	6.5	0.227	0.477	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-09/12/89	6	0.051	0.095	0.316	0.02	0.013	0.112	**	**	**	**
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/08/87-09/12/89	6	0.02	0.025	0.04	0.02	0.	0.008	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/08/87-09/12/89	6	0.55	0.55	0.8	0.4	0.023	0.152	**	**	**	**
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/08/87-09/12/89	6	0.04	0.066	0.2	0.005	0.005	0.072	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	04/08/87-09/12/89	6	0.063	0.063	0.069	0.057	0.	0.004	**	**	**	**
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/12/89	6	0.027	0.032	0.062	0.016	0.	0.017	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/08/87-09/12/89	6	0.016	0.021	0.033	0.012	0.	0.01	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/08/87-09/12/89	6	8.45	9.683	14.	7.1	9.83	3.135	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	04/08/87-09/12/89	6	6.85	8.	15.	5.6	12.3	3.507	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/08/87-09/12/89	6	1.95	2.067	3.1	1.6	0.291	0.539	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	04/08/87-09/12/89	6	13.	13.167	16.	10.	6.567	2.563	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/08/87-09/12/89	6	2.	1.85	3.	0.8	0.735	0.857	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	04/08/87-09/12/89	6	14.5	15.833	23.	11.	20.167	4.491	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	04/08/87-09/12/89	6	18.5	22.667	52.	4.	267.067	16.342	**	**	**	**
00950 FLUORIDE, DISSOLVED (MG/L AS F)	04/08/87-09/12/89	6	0.1	0.117	0.2	0.1	0.002	0.041	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	04/08/87-09/12/89	6	7.1	7.067	14.	1.4	24.763	4.976	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/12/89	4##	0.75	0.75	1.	0.5	0.083	0.289	**	**	**	**
01025 CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	2##	1.75	1.75	3.	0.5	3.125	1.768	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	04/12/88-09/12/89	4##	0.5	0.625	1.	0.5	0.063	0.25	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-09/12/89	4##	0.5	0.875	2.	0.5	0.563	0.75	**	**	**	**
01037 COBALT, TOTAL (UG/L AS CO)	04/12/88-09/12/89	4##	0.5	1.375	4.	0.5	3.063	1.75	**	**	**	**
01040 COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	2##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	04/12/88-09/12/89	4	2.	1.625	2.	0.5	0.563	0.75	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	04/08/87-09/12/89	6	1350.	1261.667	1900.	370.	249216.667	499.216	**	**	**	**
01046 IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/12/89	6	715.	683.333	1100.	280.	121386.667	348.406	**	**	**	**
01049 LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	2##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0100

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01051 LEAD, TOTAL (UG/L AS PB)	04/12/88-09/12/89	4##	2.5	2.	2.5	0.5	1.	1.	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/12/89	6	145.	598.333	2900.	70.	1274936.667	1129.131	**	**	**	**
01056 MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-09/12/89	5	120.	718.4	3200.	57.	1925320.3	1387.559	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	04/12/88-09/12/89	4	5.5	4.75	7.	1.	6.917	2.63	**	**	**	**
01090 ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	2	68.	68.	97.	39.	1682.	41.012	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/12/89	4	20.	20.	30.	10.	66.667	8.165	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	04/12/88-09/12/89	4##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70331 SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/12/89	4	80.	76.75	86.	61.	118.917	10.905	**	**	**	**
71890 MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
71900 MERCURY, TOTAL (UG/L AS HG)	04/12/88-09/12/89	4##	0.125	0.125	0.2	0.05	0.008	0.087	**	**	**	**
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-09/12/89	4	6.	5.5	8.	2.	7.	2.646	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0100

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15-3/15 Obs	10/15-3/15 Exceed	10/15-3/15 Prop.	3/16-6/30 Obs	3/16-6/30 Exceed	3/16-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	2	0	0.00				3	0	0.00			
00400 PH	Fresh Chronic	9.	6	0	0.00	3	0	0.00				3	0	0.00			
	Other-Lo Lim.	6.5	6	4	0.67	3	2	0.67				3	2	0.67			
00403 PH, LAB	Fresh Chronic	9.	6	0	0.00	3	0	0.00				3	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	3	1	0.33				3	0	0.00			
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	6	0	0.00	3	0	0.00				3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	6	0	0.00	3	0	0.00				3	0	0.00			
	Drinking Water	250.	6	0	0.00	3	0	0.00				3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	3	0	0.00				3	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	6	0	0.00	3	0	0.00				3	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	50.	4	0	0.00	2	0	0.00				2	0	0.00			
01025 CADMIUM, DISSOLVED	Fresh Acute	3.9	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	5.	2	0	0.00	1	0	0.00				1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	5.	4	0	0.00	2	0	0.00				2	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	4	0	0.00	2	0	0.00				2	0	0.00			
01040 COPPER, DISSOLVED	Fresh Acute	18.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	1300.	2	0	0.00	1	0	0.00				1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	1300.	4	0	0.00	2	0	0.00				2	0	0.00			
01049 LEAD, DISSOLVED	Fresh Acute	82.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	15.	2	0	0.00	1	0	0.00				1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	15.	4	0	0.00	2	0	0.00				2	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	100.	4	0	0.00	2	0	0.00				2	0	0.00			
01090 ZINC, DISSOLVED	Fresh Acute	120.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	5000.	2	0	0.00	1	0	0.00				1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	5000.	4	0	0.00	2	0	0.00				2	0	0.00			
01147 SELENIUM, TOTAL	Fresh Acute	20.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	50.	4	0	0.00	2	0	0.00				2	0	0.00			
71890 MERCURY, DISSOLVED	Fresh Acute	2.4	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	2.	2	0	0.00	1	0	0.00				1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	2.	4	0	0.00	2	0	0.00				2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0101

NPS Station ID: RICH0101 LAT/LON: 37.517503/ -77.472226 Agency: 21VASWCB Date Created: / /
Location: FOREST HILL AVENUE BRIDGE FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-RDD000.76 /VA2-08-X0207/VA2-4X0207
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080205006400.00 RF3 Mile Point: 0.19 Distance from RF3: 0.03 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: REEDY CREEK SECTION: 08 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	184	15.	14.871	29.	0.	47.249	6.874	5.45	9.425	20.5	23.4
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/21/82-04/22/85	18	0.75	2.806	21.	0.1	23.585	4.856	0.1	0.5	3.25	7.5
00070	TURBIDITY, (JACKSON CANDLE UNITS)	02/21/89-06/20/90	15	7.8	16.067	120.	1.8	870.784	29.509	1.92	2.9	13.5	61.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	106	192.	186.585	394.	70.	2192.778	46.827	125.8	159.5	214.5	235.3
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/27/89-06/20/90	7	177.	173.	189.	154.	184.333	13.577	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	184	9.4	9.574	14.8	1.	4.992	2.234	6.95	8.	11.175	12.6
00310	BOD, 5 DAY, 20 DEG C MG/L	04/18/73-06/20/90	113	2.	2.907	25.	0.5	12.36	3.516	1.	1.	3.	5.
00340	COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	113	21.	21.717	63.	4.	121.508	11.023	9.	14.	28.	33.6
00400	PH (STANDARD UNITS)	09/26/72-06/20/90	184	7.3	7.26	9.09	4.	0.463	0.681	6.5	6.855	7.615	8.
00400	CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	184	7.3	5.943	9.09	4.	2.207	1.486	6.5	6.855	7.615	8.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	184	0.05	1.141	100.	0.001	96.783	9.838	0.01	0.024	0.14	0.316
00403	PH, LAB, STANDARD UNITS SU	06/02/74-06/20/90	19	7.	7.074	7.9	6.5	0.159	0.398	6.6	6.8	7.3	7.8
00403	CONVERTED PH, LAB, STANDARD UNITS	06/02/74-06/20/90	19	7.	6.934	7.9	6.5	0.179	0.424	6.6	6.8	7.3	7.8
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/02/74-06/20/90	19	0.1	0.117	0.316	0.013	0.007	0.084	0.016	0.05	0.158	0.251
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/02/74-06/20/90	21	32.	36.857	159.	9.	930.829	30.509	11.8	20.5	43.5	49.8
00500	RESIDUE, TOTAL (MG/L)	09/26/72-06/20/90	78	136.	176.692	1155.	11.	26768.891	163.612	105.9	121.75	162.	272.5
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-06/20/90	79	43.	52.633	155.	4.	860.928	29.342	24.	31.	69.	96.
00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/72-06/20/90	79	89.	125.063	1082.	3.	22411.778	149.706	60.	73.	119.	205.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	175	6.	20.52	560.	0.	2807.722	52.988	0.8	2.5	15.	45.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	174	2.5	5.267	90.	0.	99.701	9.985	0.5	2.	5.	12.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	176	3.	15.92	480.	0.	2044.862	45.22	0.5	2.5	9.	32.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	173##	0.05	0.107	1.4	0.02	0.022	0.148	0.05	0.05	0.1	0.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	172	0.02	0.024	0.32	0.005	0.001	0.034	0.005	0.01	0.03	0.05
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	156	0.68	0.68	1.5	0.01	0.08	0.282	0.307	0.49	0.88	1.029
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	170	0.5	0.561	5.	0.05	0.213	0.461	0.3	0.3	0.625	0.9
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/17/77-06/07/79	16	0.7	0.723	1.1	0.48	0.031	0.176	0.494	0.6	0.875	1.03
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	107	0.1	0.106	0.7	0.05	0.008	0.089	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	110	0.05	0.062	0.47	0.01	0.004	0.062	0.02	0.03	0.07	0.129
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	107	8.7	10.117	31.	1.	36.821	6.068	4.	6.	14.	17.4
00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/29/88-06/20/90	15	48.	46.933	62.	18.	155.924	12.487	25.2	40.	56.	62.
00940	CHLORIDE,TOTAL IN WATER MG/L	10/24/88-06/20/90	15	19.	18.2	30.	2.	48.171	6.941	7.4	16.	20.	30.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/29/88-06/20/90	14	14.5	15.143	25.	8.	17.055	4.13	9.5	13.	17.5	22.
00951	FLUORIDE, TOTAL (MG/L AS F)	11/29/88-06/20/90	14	0.29	0.357	0.9	0.1	0.049	0.222	0.135	0.215	0.4	0.825

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00955 SILICA, DISSOLVED (MG/L AS SIO2)	04/19/89-06/20/90	12	13.3	13.183	15.9	8.6	6.272	2.504	8.75	11.4	15.55	15.87
01002 ARSENIC, TOTAL (UG/L AS AS)	11/18/75-03/28/85	8##	1.25	2.188	7.	1.	4.281	2.069	**	**	**	**
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-05/06/81	3	1.2	1.397	2.5	0.49	1.039	1.019	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	11/18/75-03/28/85	8##	5.	3.875	5.	0.5	4.339	2.083	**	**	**	**
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	3	0.13	0.13	0.2	0.06	0.005	0.07	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	3	2.8	3.037	4.49	1.82	1.824	1.351	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	10/26/72-03/28/85	14##	5.	5.036	10.	0.5	3.479	1.865	2.75	5.	5.	7.5
01042 COPPER, TOTAL (UG/L AS CU)	10/26/72-03/28/85	13##	5.	6.154	10.	5.	4.808	2.193	5.	5.	7.5	10.
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-05/06/81	3	2.6	2.517	3.5	1.45	1.056	1.028	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	11/01/78-11/01/78	1	300.	300.	300.	300.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	10/26/72-03/28/85	14	12.	18.036	53.	0.5	275.402	16.595	2.75	6.5	25.	53.
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-05/06/81	3	3.9	12.767	33.8	0.6	334.523	18.29	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	11/01/78-11/01/78	1	40.	40.	40.	40.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	01/29/73-11/01/78	9##	50.	40.	50.	5.	393.75	19.843	5.	27.5	50.	50.
01067 NICKEL, TOTAL (UG/L AS NI)	05/18/82-03/28/85	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-05/06/81	3	2.	3.913	8.44	1.3	15.491	3.936	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	10/26/72-03/28/85	14	40.	40.357	90.	5.	494.093	22.228	12.5	20.	52.5	75.
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-05/06/81	3	21.6	27.4	40.	20.6	119.32	10.923	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	175	900.	2223.406	16000.	46.	10340920.38	3215.73	88.	300.	2700.	6000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	175	2.954	2.924	4.204	1.663	0.458	0.677	1.938	2.477	3.431	3.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	838.516								
34259 DELTA BENZENE HEXACHLORIDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34351 ENDOSULFAN SULFATE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34356 ENDOSULFAN, BETA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34361 ENDOSULFAN, ALPHA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34366 ENDRIN ALDEHYDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34671 PCB - 1016 TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
38442 DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38451 DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38745 2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39062 CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39065 CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39068 CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39071 CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39300 P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39305 O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39310 P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39315 O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320 P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39327 ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39333 ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/06/81-05/18/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39337 ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39338 BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39340 GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39350 CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39380 DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39390 ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39400 TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39410 HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39488 PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39492 PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39496 PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39500 PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39508 PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39516 PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39631 ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/18/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39730 2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39740 2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39760 SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	08/22/74-08/22/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/07/79	63##	0.05	0.103	0.7	0.05	0.01	0.1	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/07/79	62	0.05	0.063	0.2	0.005	0.002	0.043	0.02	0.04	0.08	0.124
71900 MERCURY, TOTAL (UG/L AS HG)	10/26/72-03/28/85	14##	0.25	0.4	2.5	0.15	0.367	0.606	0.15	0.25	0.25	1.4
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-05/06/81	3##	0.025	0.048	0.1	0.02	0.002	0.045	**	**	**	**
77825 ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0101

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	15	1	0.07	3	0	0.00	5	1	0.20	7	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	184	1	0.01	47	0	0.00	75	1	0.01	62	0	0.00			
00400 PH	Fresh Chronic	9.	184	2	0.01	47	0	0.00	74	0	0.00	63	2	0.03			
	Other-Lo Lim.	6.5	183&	21	0.11	46	2	0.04	74	9	0.12	63	10	0.16			
00403 PH, LAB	Fresh Chronic	9.	19	0	0.00	3	0	0.00	8	0	0.00	8	0	0.00			
	Other-Lo Lim.	6.5	19	1	0.05	3	0	0.00	8	1	0.13	8	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	172	0	0.00	43	0	0.00	71	0	0.00	58	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	156	0	0.00	39	0	0.00	67	0	0.00	50	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	16	0	0.00	4	0	0.00	4	0	0.00	8	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	15	0	0.00	1	0	0.00	7	0	0.00	7	0	0.00			
	Drinking Water	250.	15	0	0.00	1	0	0.00	7	0	0.00	7	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	14	0	0.00	1	0	0.00	6	0	0.00	7	0	0.00			
00951 FLUORIDE, TOTAL AS F	Drinking Water	4.	14	0	0.00	2	0	0.00	5	0	0.00	7	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	8	0	0.00				3	0	0.00	5	0	0.00			
	Drinking Water	50.	8	0	0.00				3	0	0.00	5	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	2&	0	0.00							2	0	0.00			
	Drinking Water	5.	2&	0	0.00							2	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	14	0	0.00				7	0	0.00	7	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	13	0	0.00				6	0	0.00	7	0	0.00			
	Drinking Water	1300.	13	0	0.00				6	0	0.00	7	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	14	0	0.00				7	0	0.00	7	0	0.00			
	Drinking Water	15.	14	6	0.43				7	2	0.29	7	4	0.57			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	9	0	0.00				5	0	0.00	4	0	0.00			
	Drinking Water	100.	9	0	0.00				5	0	0.00	4	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	2	0	0.00							2	0	0.00			
	Drinking Water	100.	2	0	0.00							2	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	14	0	0.00				7	0	0.00	7	0	0.00			
	Drinking Water	5000.	14	0	0.00				7	0	0.00	7	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	174&	143	0.82	44	42	0.95	73	51	0.70	57	50	0.88			
34356 ENDOSULFAN, BETA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
34361 ENDOSULFAN, ALPHA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39300 P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39310 P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39320 P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39340 GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
39350 CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	2.	2	0	0.00	1	0	0.00	1	0	0.00						
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39390 ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	2.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39400 TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0.00							1	0	0.00			
	Drinking Water	3.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: RICH0101

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
39410 HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
	Drinking Water	0.4	1	0	0.00							1	0	0.00			
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	2	0	0.00	1	0	0.00	1	0	0.00						
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	1.	2	0	0.00	1	0	0.00	1	0	0.00						
39730 2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0.00							1	0	0.00			
39760 SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0.00							1	0	0.00			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00	1	0	0.00									
71900 MERCURY, TOTAL	Fresh Acute	2.4	13&	0	0.00				6	0	0.00	7	0	0.00			
	Drinking Water	2.	13&	0	0.00				6	0	0.00	7	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis [illegible] - Station RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	4	10.55	12.225	22.2	5.6	51.482	7.175	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	4	10.2	9.8	11.	7.8	1.947	1.395	**	**	**	**
00400 PH (STANDARD UNITS)	09/26/72-06/20/90	4	7.	7.175	8.	6.7	0.323	0.568	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	4	7.	6.99	8.	6.7	0.368	0.607	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	4	0.1	0.102	0.2	0.01	0.006	0.077	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	4	4.	6.25	16.	1.	44.917	6.702	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	4	1.5	2.	4.	1.	2.	1.414	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	4	1.5	4.25	14.	0.	42.917	6.551	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	2	0.16	0.16	0.22	0.1	0.007	0.085	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	2	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	2	0.68	0.68	0.78	0.58	0.02	0.141	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	2	0.65	0.65	0.7	0.6	0.005	0.071	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	4	500.	900.	2300.	300.	880000.	938.083	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	4	2.699	2.809	3.362	2.477	0.147	0.383	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN = 644.462											

** - Less than 9 observations ## - Computed with 50% or more of the [illegible]ions as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	8	14.45	15.225	25.6	6.7	29.494	5.431	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	8	8.4	8.675	11.6	6.	3.405	1.845	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	04/18/73-06/20/90	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	09/26/72-06/20/90	8	7.	7.013	7.4	6.7	0.05	0.223	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	8	7.	6.965	7.4	6.7	0.052	0.229	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	8	0.1	0.108	0.2	0.04	0.003	0.052	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	8	14.5	17.75	59.	2.	342.786	18.514	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	7	4.	5.714	16.	0.	35.571	5.964	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	8	4.5	12.75	55.	1.	327.357	18.093	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	8##	0.05	0.09	0.3	0.05	0.008	0.087	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	8##	[illegible]	0.009	0.02	0.005	0.	0.005	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	[illegible]	[illegible]	0.521	1.179	0.01	0.117	0.341	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	[illegible]	[illegible]	0.775	1.399	0.1	0.167	0.409	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	8	[illegible]	1362.5	6000.	50.	3836250.	1958.635	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	8	2.929	2.707	3.778	1.699	0.551	0.742	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN = 509.43											

** - Less than 9 observations ## - Computed with 50% or more of the total obse[illegible]ues that [illegible] half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	10	15.25	15.28	22.8	5.6	34.295	[illegible]5	5.93	10.55	21.	22.74
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	10	9.5	9.86	14.	7.8	3.414	1.848	7.82	8.45	11.	13.7
00400 PH (STANDARD UNITS)	09/26/72-06/20/90	10	7.	6.9	7.4	6.5	0.071	0.267	6.5	6.725	7.	7.36
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	10	7.	6.827	7.4	6.5	0.077	0.278	6.5	6.725	7.	7.36
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	10	0.1	0.149	0.316	0.04	0.009	0.094	0.046	0.1	0.198	0.316
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	10	6.	34.	142.	0.	2845.111	53.34	0.	1.5	66.75	139.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	10	1.5	12.1	90.	0.	775.878	27.855	0.	0.	10.75	82.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	10	5.	21.9	126.	0.	1523.656	39.034	0.	0.75	32.5	117.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	10##	0.05	0.08	0.3	0.05	0.006	0.079	0.05	0.05	0.063	0.28
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	10##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.019
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	10	0.54	0.544	1.	0.04	0.093	0.305	0.061	0.258	0.82	0.988
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	10	0.45	0.49	0.8	0.3	0.032	0.179	0.3	0.3	0.625	0.79

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	10	550.	1615.	6000.	50.	5572250.	2360.561	55.	175.	2775.	6000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	10	2.739	2.747	3.778	1.699	0.494	0.703	1.729	2.226	3.367	3.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN = 558.212											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	12	13.3	14.517	24.4	4.4	37.531	6.126	5.24	9.825	19.725	23.74
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	13	8.4	9.269	12.6	6.6	3.736	1.933	7.	8.	10.9	12.6
00400 PH (STANDARD UNITS)	09/26/72-06/20/90	13	7.	6.992	7.5	6.	0.312	0.559	6.	6.55	7.5	7.5
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	13	7.	6.626	7.5	6.	0.458	0.677	6.	6.55	7.5	7.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	13	0.1	0.237	1.	0.032	0.123	0.35	0.032	0.032	0.284	1.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	10	8.	25.6	110.	0.	1350.044	36.743	0.	4.5	36.5	106.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	10	5.	8.2	20.	0.	51.067	7.146	0.	3.	14.5	19.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	10	4.	17.4	96.	0.	1069.378	32.701	0.	1.5	17.5	92.2
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	11	0.1	0.109	0.2	0.05	0.004	0.063	0.05	0.05	0.2	0.2
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	10	0.02	0.022	0.08	0.005	0.001	0.023	0.005	0.005	0.025	0.076
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	10	0.64	0.637	0.92	0.31	0.044	0.209	0.311	0.5	0.81	0.918
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	11	0.4	0.482	1.199	0.1	0.077	0.278	0.14	0.4	0.5	1.099
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	11	100.	1150.	6000.	50.	3431000.	1852.296	50.	50.	2000.	5340.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	11	2.	2.469	3.778	1.699	0.614	0.784	1.699	1.699	3.301	3.709
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN = 294.736											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	12	16.35	15.825	25.6	5.6	51.008	7.142	5.93	8.2	23.025	24.91
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	12	9.15	9.292	13.	5.8	4.695	2.167	6.19	7.65	11.225	12.64
00400 PH (STANDARD UNITS)	09/26/72-06/20/90	12	7.5	7.458	8.	6.7	0.09	0.3	6.88	7.35	7.5	7.91
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	12	7.5	7.338	8.	6.7	0.106	0.325	6.88	7.35	7.5	7.91
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	12	0.032	0.046	0.2	0.01	0.002	0.05	0.013	0.032	0.045	0.155
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	12	9.	41.208	164.	0.5	3837.112	61.944	0.5	1.625	84.5	161.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	12	4.	5.958	22.	0.5	43.884	6.625	0.5	0.875	7.5	20.2
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	12	4.	35.375	148.	0.5	3209.915	56.656	0.5	0.625	82.	143.2
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	12##	0.075	0.192	0.6	0.05	0.041	0.203	0.05	0.05	0.375	0.57
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	12	0.02	0.023	0.05	0.005	0.	0.019	0.005	0.005	0.04	0.05
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	12	0.58	0.579	1.	0.26	0.042	0.206	0.269	0.438	0.688	0.94
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	12	0.65	0.629	1.399	0.05	0.142	0.377	0.125	0.325	0.85	1.309
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	12	700.	1558.333	6000.	100.	4589924.242	2142.411	100.	225.	1800.	6000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	12	2.845	2.838	3.778	2.	0.354	0.595	2.	2.345	3.246	3.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN = 688.926											

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Annual Analysis for 1977 - Station RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	8	8.	10.813	28.	1.2	99.201	9.96	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	8	7.85	7.6	13.	1.	13.111	3.621	**	**	**	**

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Annual Analysis for 1977 - Station RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	09/26/72-06/20/90	8	7.5	7.588	8.5	7.	0.213	0.461	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	8	7.5	7.429	8.5	7.	0.241	0.491	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	8	0.032	0.037	0.1	0.003	0.001	0.03	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	7	10.	21.357	104.	0.5	1352.393	36.775	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	7	2.	3.5	13.	0.	21.417	4.628	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	7	8.	17.929	91.	0.5	1048.536	32.381	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	8	0.1	0.175	0.4	0.05	0.019	0.136	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	8	0.02	0.046	0.15	0.01	0.003	0.054	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	4	0.565	0.523	0.59	0.37	0.011	0.103	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	8	0.6	1.088	5.	0.1	2.567	1.602	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	6	4000.	3358.333	6000.	50.	8868416.667	2977.989	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	6	3.54	3.056	3.778	1.699	0.916	0.957	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		1136.952									

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Annual Analysis for 1978 - Station RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	9	17.	18.278	29.	10.5	36.444	6.037	10.5	14.	23.5	29.
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	9	7.4	7.689	10.5	5.5	2.736	1.654	5.5	6.2	8.9	10.5
00400 PH (STANDARD UNITS)	09/26/72-06/20/90	9	7.5	7.311	8.5	6.5	0.371	0.609	6.5	6.75	7.5	8.5
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	9	7.5	6.994	8.5	6.5	0.484	0.696	6.5	6.75	7.5	8.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	9	0.032	0.101	0.316	0.003	0.016	0.125	0.003	0.032	0.208	0.316
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	7	6.	84.857	560.	0.5	43938.726	209.616	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	8	2.	12.375	80.	0.	757.339	27.52	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	8	2.5	62.625	480.	0.5	28448.482	168.667	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	8##	0.075	0.263	1.4	0.05	0.216	0.464	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	8	0.03	0.04	0.11	0.005	0.002	0.042	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	8	0.5	0.588	1.7	0.1	0.256	0.506	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	8	700.	1800.	8000.	50.	7942142.857	2818.181	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	8	2.845	2.717	3.903	1.699	0.641	0.8	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		521.707									

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Annual Analysis for 1979 - Station RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	9	12.5	14.278	22.	4.	38.257	6.185	4.	9.75	20.	22.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	5	154.	164.8	235.	110.	2185.7	46.751	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	9	10.2	10.033	13.3	8.	2.968	1.723	8.	8.55	11.2	13.3
00310 BOD, 5 DAY, 20 DEG C MG/L	04/18/73-06/20/90	5	2.	2.6	5.	2.	1.8	1.342	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	5	34.	34.2	55.	16.	209.7	14.481	**	**	**	**
00400 PH (STANDARD UNITS)	09/26/72-06/20/90	9	7.5	7.433	8.3	6.9	0.158	0.397	6.9	7.15	7.5	8.3
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	9	7.5	7.304	8.3	6.9	0.176	0.42	6.9	7.15	7.5	8.3
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	9	0.032	0.05	0.126	0.005	0.001	0.038	0.005	0.032	0.075	0.126
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	9	10.	8.889	27.	0.5	67.799	8.234	0.5	1.75	12.	27.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	9	3.	2.889	5.	0.5	3.049	1.746	0.5	1.25	4.5	5.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	9	6.	6.389	22.	0.5	46.674	6.832	0.5	0.75	9.	22.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	9##	0.05	0.056	0.1	0.05	0.	0.017	0.05	0.05	0.05	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	9	0.01	0.011	0.03	0.005	0.	0.009	0.005	0.005	0.015	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	5	0.5	0.488	0.8	0.24	0.052	0.227	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	9	0.3	0.356	0.6	0.3	0.01	0.101	0.3	0.3	0.4	0.6
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	5	0.1	0.14	0.2	0.1	0.003	0.055	**	**	**	**

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Annual Analysis for 1979 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	5	0.1	0.104	0.15	0.06	0.002	0.04	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	5	16.	16.2	27.	10.	45.7	6.76	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	9	1100.	2083.333	7100.	50.	4943750.	2223.455	50.	450.	3250.	7100.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	9	3.041	3.011	3.851	1.699	0.443	0.666	1.699	2.573	3.511	3.851
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		1026.272									

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Annual Analysis for 1980 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	11	16.	14.409	27.5	2.5	63.591	7.974	3.4	8.	19.	27.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	10	181.5	170.6	225.	87.	2254.489	47.481	88.3	138.25	208.	224.5
00300	OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	11	8.8	9.282	12.8	6.6	4.16	2.04	6.68	7.7	11.2	12.62
00310	BOD, 5 DAY, 20 DEG C MG/L	04/18/73-06/20/90	10	3.	4.	13.	2.	11.111	3.333	2.	2.	4.25	12.2
00340	COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	10	25.5	27.1	58.	13.	173.878	13.186	13.2	18.	32.	56.
00400	PH (STANDARD UNITS)	09/26/72-06/20/90	11	7.	7.064	7.6	6.5	0.143	0.378	6.54	6.7	7.5	7.58
00400	CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	11	7.	6.929	7.5	6.5	0.162	0.403	6.54	6.7	7.5	7.58
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	11	0.1	0.118	0.316	0.025	0.008	0.091	0.026	0.032	0.2	0.293
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	10	11.	17.7	59.	2.5	360.122	18.977	2.5	2.5	32.25	56.7
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	10	2.75	5.2	16.	1.	21.178	4.602	1.15	2.5	8.25	15.3
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	10	9.	13.5	51.	2.5	235.278	15.339	2.5	2.5	18.	48.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	10##	0.05	0.075	0.2	0.05	0.002	0.049	0.05	0.05	0.1	0.19
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	10	0.015	0.021	0.05	0.005	0.	0.016	0.005	0.005	0.033	0.049
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	10	0.6	0.633	1.1	0.27	0.066	0.256	0.275	0.41	0.825	1.08
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	10	0.4	0.49	0.9	0.2	0.059	0.242	0.21	0.3	0.675	0.9
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10	0.1	0.15	0.4	0.05	0.015	0.122	0.05	0.05	0.225	0.39
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	10	0.07	0.09	0.19	0.03	0.003	0.058	0.031	0.048	0.13	0.19
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	10	14.5	16.3	28.	8.	53.789	7.334	8.	9.5	23.	27.8
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	10	1450.	3105.	8000.	50.	12194694.444	3492.09	55.	100.	7550.	8000.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	10	3.07	2.961	3.903	1.699	0.767	0.876	1.729	2.	3.878	3.903
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		915.089									

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Annual Analysis for 1981 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	11	14.	14.636	26.	3.	60.905	7.804	3.4	6.	21.5	25.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	11	185.	196.727	268.	162.	859.818	29.323	164.8	177.	206.	259.8
00300	OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	11	8.4	8.773	13.	4.6	6.36	2.522	5.02	6.9	11.	12.86
00310	BOD, 5 DAY, 20 DEG C MG/L	04/18/73-06/20/90	11	3.	4.727	25.	1.	49.018	7.001	1.	1.	3.	21.6
00340	COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	11	22.	26.182	63.	13.	214.364	14.641	13.2	14.	33.	57.4
00400	PH (STANDARD UNITS)	09/26/72-06/20/90	11	7.5	7.527	8.5	7.	0.19	0.436	7.04	7.2	7.8	8.4
00400	CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	11	7.5	7.382	8.5	7.	0.213	0.462	7.04	7.2	7.8	8.4
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	11	0.032	0.042	0.1	0.003	0.001	0.029	0.005	0.016	0.063	0.093
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	11	5.	6.955	17.	2.5	27.123	5.208	2.5	2.5	12.	16.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	11	2.5	3.318	11.	1.	8.014	2.831	1.2	2.	2.5	10.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	11	4.	4.773	11.	2.5	7.468	2.733	2.5	2.5	6.	10.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	11##	0.05	0.1	0.5	0.05	0.018	0.134	0.05	0.05	0.1	0.42
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	11	0.01	0.019	0.06	0.005	0.	0.019	0.005	0.005	0.02	0.058
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	11	0.46	0.494	1.	0.025	0.085	0.291	0.034	0.35	0.7	0.96
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	11	0.4	0.5	1.2	0.2	0.08	0.283	0.2	0.3	0.6	1.1
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	11	0.1	0.105	0.2	0.05	0.003	0.052	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	11	0.06	0.066	0.2	0.02	0.002	0.048	0.022	0.04	0.07	0.176

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std.. Dev.	10th	25th	75th	90th
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	11	14.	13.727	31.	6.	49.418	7.03	6.	8.	17.	28.2
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	11	800.	1663.636	5200.	100.	2608545.455	1615.099	160.	500.	3000.	4860.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	11	2.903	3.007	3.716	2.	0.245	0.495	2.12	2.699	3.477	3.682
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		1015.465									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	11	14.	14.136	26.	0.5	54.905	7.41	1.6	10.	21.	25.2
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	11	207.	200.455	236.	147.	594.273	24.378	151.6	193.	216.	232.8
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	11	9.1	9.164	14.4	5.5	6.451	2.54	5.68	7.2	10.6	13.82
00310 BOD, 5 DAY, 20 DEG C MG/L	04/18/73-06/20/90	11	2.	2.182	4.	1.	1.164	1.079	1.	1.	3.	3.8
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	11	23.	19.455	29.	7.	77.073	8.779	7.2	9.	27.	28.8
00400 PH (STANDARD UNITS)	09/26/72-06/20/90	11	6.9	6.627	7.3	4.	0.848	0.921	4.46	6.5	7.	7.3
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	11	6.9	5.034	7.3	4.	3.64	1.908	4.46	6.5	7.	7.3
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	11	0.126	9.242	100.	0.05	906.092	30.101	0.05	0.1	0.316	80.1
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	11	8.	9.545	28.	2.5	65.973	8.122	2.5	2.5	14.	26.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	11	3.	3.909	9.	2.	4.591	2.143	2.1	2.5	5.	8.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	11	3.	6.545	26.	2.	57.373	7.574	2.1	2.5	9.	23.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	11##	0.05	0.073	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	11	0.02	0.043	0.32	0.005	0.008	0.092	0.005	0.01	0.02	0.26
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	11	0.78	0.782	1.42	0.06	0.154	0.392	0.122	0.6	0.92	1.412
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	11	0.4	0.395	0.7	0.2	0.025	0.159	0.2	0.3	0.5	0.68
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	11	0.1	0.086	0.2	0.05	0.002	0.045	0.05	0.05	0.1	0.18
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	11	0.04	0.043	0.08	0.02	0.	0.016	0.022	0.03	0.05	0.074
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	11	8.	6.909	13.	1.	12.291	3.506	1.4	4.	10.	12.4
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	11	500.	800.	2000.	200.	364000.	603.324	220.	400.	1100.	1960.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	11	2.699	2.799	3.301	2.301	0.099	0.315	2.336	2.602	3.041	3.292
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		628.859									

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Annual Analysis for 1983 - Station RICH0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	10	12.25	13.	27.	0.	69.278	8.323	0.6	6.75	21.125	26.6
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	10	185.5	173.3	208.	88.	1201.567	34.664	94.6	159.25	195.	207.
00300 OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	10	11.4	11.01	14.3	7.8	4.808	2.193	7.81	8.725	12.6	14.19
00310 BOD, 5 DAY, 20 DEG C MG/L	04/18/73-06/20/90	9	2.	2.222	3.	1.	0.444	0.667	1.	2.	3.	3.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	10	23.	21.5	35.	10.	82.944	9.107	10.	11.5	29.	34.7
00400 PH (STANDARD UNITS)	09/26/72-06/20/90	9	6.7	7.011	8.5	6.3	0.479	0.692	6.3	6.5	7.45	8.5
00400 CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	9	6.7	6.722	8.5	6.3	0.573	0.757	6.3	6.5	7.45	8.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	9	0.2	0.19	0.501	0.003	0.027	0.166	0.003	0.036	0.316	0.501
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	10	6.5	10.15	33.	2.5	94.725	9.733	2.5	2.5	14.	31.7
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	10	3.	3.95	7.	2.5	2.747	1.657	2.5	2.5	5.25	6.9
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	10	2.75	6.95	28.	0.	73.747	8.588	0.2	2.375	10.5	26.7
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	10##	0.05	0.075	0.2	0.05	0.002	0.049	0.05	0.05	0.1	0.19
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	10	0.01	0.013	0.02	0.005	0.	0.006	0.005	0.009	0.02	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	10	0.985	0.884	1.5	0.34	0.127	0.357	0.354	0.533	1.1	1.46
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	10	0.55	0.57	0.9	0.2	0.045	0.211	0.22	0.4	0.725	0.89
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	10##	0.075	0.075	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	10	0.025	0.036	0.08	0.02	0.	0.021	0.02	0.02	0.053	0.078
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	10	11.5	10.8	16.	4.	21.511	4.638	4.1	5.75	15.25	16.

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Annual Analysis for 1983 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	10	1850.	2005.	4800.	50.	2575805.556	1604.932	55.	550.	3100.	4750.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	10	3.263	3.033	3.681	1.699	0.45	0.671	1.729	2.634	3.482	3.676
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		1080.188									

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Annual Analysis for 1984 - Station RICH0101

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/26/72-06/20/90	8	20.75	18.	22.	9.5	29.714	5.451	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	8	170.5	161.375	233.	70.	4178.839	64.644	**	**	**	**
00300	OXYGEN, DISSOLVED	MG/L	09/26/72-06/20/90	8	9.55	9.738	13.5	6.7	4.397	2.097	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C	MG/L	04/18/73-06/20/90	8	2.5	4.625	19.	1.	35.696	5.975	**	**	**	**
00340	COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	8	23.5	22.75	32.	8.	82.786	9.099	**	**	**	**
00400	PH (STANDARD UNITS)		09/26/72-06/20/90	8	6.82	6.769	7.7	6.1	0.302	0.549	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)		09/26/72-06/20/90	8	6.82	6.521	7.7	6.1	0.372	0.61	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/26/72-06/20/90	8	0.152	0.301	0.794	0.02	0.088	0.296	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		09/26/72-06/20/90	8	22.5	34.063	146.	2.5	2115.46	45.994	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/26/72-06/20/90	8	7.5	8.563	20.	2.5	29.388	5.421	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		09/26/72-06/20/90	8	15.	25.813	126.	2.	1678.853	40.974	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-06/20/90	8##	0.05	0.069	0.2	0.05	0.003	0.053	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	8	0.015	0.017	0.05	0.005	0.	0.015	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	8	0.59	0.654	1.	0.3	0.069	0.263	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-06/20/90	8	0.45	0.544	0.9	0.4	0.044	0.209	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	8##	0.075	0.188	0.7	0.05	0.051	0.226	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	8	0.065	0.149	0.47	0.02	0.027	0.163	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	8	14.	13.75	28.	4.	57.357	7.573	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/20/90	8	1150.	2237.5	8000.	100.	6865535.714	2620.217	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/20/90	8	3.057	3.062	3.903	2.	0.35	0.591	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		1153.99									

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Annual Analysis for 1985 - Station RICH0101

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/26/72-06/20/90	11	15.	14.591	24.5	1.1	48.333	6.952	2.08	11.4	19.	24.3
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	11	186.	204.455	394.	135.	4852.473	69.66	135.8	168.	218.	360.4
00300	OXYGEN, DISSOLVED	MG/L	09/26/72-06/20/90	11	10.4	10.273	13.6	8.2	3.48	1.866	8.2	8.4	12.	13.34
00310	BOD, 5 DAY, 20 DEG C	MG/L	04/18/73-06/20/90	11	1.	1.318	3.	0.5	0.514	0.717	0.6	1.	2.	2.8
00340	COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	11	14.	16.909	36.	8.	80.091	8.949	8.	8.	24.	34.2
00400	PH (STANDARD UNITS)		09/26/72-06/20/90	11	6.8	6.825	7.8	6.1	0.251	0.501	6.12	6.5	7.2	7.7
00400	CONVERTED PH (STANDARD UNITS)		09/26/72-06/20/90	11	6.8	6.604	7.8	6.1	0.305	0.553	6.12	6.5	7.2	7.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/26/72-06/20/90	11	0.158	0.249	0.794	0.016	0.063	0.25	0.023	0.063	0.316	0.762
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		09/26/72-06/20/90	11##	2.5	3.227	8.	2.5	3.068	1.752	2.5	2.5	2.5	7.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/26/72-06/20/90	11##	2.5	2.682	4.	2.5	0.214	0.462	2.5	2.5	2.5	3.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		09/26/72-06/20/90	11##	2.5	2.591	4.	2.	0.241	0.491	2.1	2.5	2.5	3.7
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-06/20/90	9##	0.05	0.056	0.1	0.05	0.	0.017	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	9	0.01	0.011	0.02	0.005	0.	0.005	0.005	0.008	0.015	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	9	0.79	0.769	1.05	0.44	0.046	0.215	0.44	0.56	0.97	1.05
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-06/20/90	6	0.45	0.4	0.5	0.2	0.016	0.126	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	6##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	9	0.03	0.029	0.05	0.01	0.	0.014	0.01	0.02	0.04	0.05
00680	CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	11	6.	9.	20.	2.	33.8	5.814	2.4	5.	15.	19.4
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/20/90	11	500.	831.818	2200.	50.	626136.364	791.288	60.	200.	1900.	2140.

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Annual Analysis for 1985 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	11	2.699	2.682	3.342	1.699	0.285	0.534	[illegible]	2.301	3.279	3.33
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		481.382									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	12	12.25	14.408	25.	6.	37.123	6.093	6.9	9.25	[illegible]	23.65
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	12	209.5	208.75	287.	115.	2281.841	47.769	125.5	178.	247.	276.2
00300	OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	12	10.6	9.908	12.3	6.	3.775	1.943	6.54	8.2	11.475	12.09
00310	BOD, 5 DAY, 20 DEG C MG/L	04/18/73-06/20/90	12	1.	1.708	7.	0.5	3.203	1.79	0.65	1.	1.75	5.8
00340	COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	12	14.5	17.917	33.	6.	92.447	9.615	6.9	10.	28.75	[illegible]
00400	PH (STANDARD UNITS)	09/26/72-06/20/90	12	7.69	7.36	7.95	6.2	0.385	0.621	6.326	6.7	[illegible]	[illegible]
00400	CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	12	7.687	6.928	7.95	6.2	0.589	0.768	6.326	6.7	[illegible]	[illegible]
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	12	0.021	0.118	0.631	0.011	0.034	0.184	0.011	0.0[illegible]	[illegible]	[illegible]
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	12##	2.5	4.417	18.	2.5	22.947	4.79	2.5	2.5	[illegible]	9
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	12##	2.5	3.25	8.	2.5	3.25	1.803	2.5	2.5	[illegible]	7.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	12##	2.5	3.25	10.	2.5	4.705	2.169	2.5	2.5	[illegible]	8.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	12##	0.05	0.087	0.4	0.05	0.01	0.1	0.05	0.05	0.088	0.31
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	12	0.02	0.027	0.08	0.01	0.	0.021	0.01	0.01	0.038	0.071
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	12	0.8	0.833	1.29	0.49	0.058	0.24	0.505	0.683	0.985	1.263
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	12	0.4	0.467	1.	0.3	0.041	0.202	0.3	0.3	0.575	0.88
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	12##	0.05	0.071	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	12	0.03	0.033	0.06	0.02	0.	0.014	0.02	0.02	0.038	0.06
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	12	6.	6.75	12.	4.	7.114	2.66[illegible]	4.3	5.	9.	11.7
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	10	1200.	1335.	4700.	50.	1750027.778	1322.886	65.	350.	1700.	4400.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	10	3.078	2.894	3.672	1.699	0.315	0.561	1.759	2.527	3.23	3.628
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		783.359									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	11	15.1	15.	25.	5.	50.892	7.134	5.6	8.	22.9	24.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	11	198.	189.636	253.	97.	2018.855	44.932	108.8	157.	217.	251.
00300	OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	10	10.2	10.37	12.5	8.	1.945	1.394	8.14	9.475	11.5	12.49
[illegible]0	BOD, 5 DAY, 20 DEG C MG/L	04/18/73-06/20/90	11	1.	2.136	9.	0.5	6.105	2.471	0.6	1.	2.	8.
[illegible]340	COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	11	21.	17.636	28.	4.	65.255	8.078	4.4	10.	23.	27.8
00400	PH (STANDARD UNITS)	09/26/72-06/20/90	11	7.89	7.982	8.74	7.41	0.142	0.377	7.472	7.77	8.11	8.706
00400	CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	11	7.89	7.862	8.74	7.41	0.158	0.398	7.472	7.77	8.11	8.706
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	11	0.013	0.014	0.039	0.002	0.	0.01	0.002	0.008	0.017	0.035
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	11##	2.5	19.	120.	2.5	1263.85	35.551	2.5	2.5	11.	104.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	11##	2.5	4.318	18.	2.	21.664	4.654	2.1	2.5	5.	15.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	11	4.	16.5	102.	2.5	910.95	30.182	2.5	2.5	9.	89.2
[illegible]	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	11##	0.05	0.077	0.2	0.05	0.002	0.047	0.05	0.05	0.1	0.18
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	11	0.02	0.024	0.05	0.01	0.	0.011	0.01	0.02	0.03	0.046
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	11	0.79	0.746	1.18	0.18	0.085	0.291	[illegible]	0.47	0.98	1.144
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	11	0.5	0.518	1.3	0.2	0.108	0.328	[illegible]	0.3	0.6	1.22
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	11	0.1	0.105	0.4	0.05	0.01	0.101	[illegible]	0.05	0.1	0.34
[illegible]	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	11	0.04	0.053	0.19	0.02	0.002	0.05	0.02	0.02	0.07	0.166
[illegible]	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	7	8.	7.429	10.	5.	4.286	2.07	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	10	1350.	2095.6	8000.	46.	5828580.267	2414.245	48.4	272.5	3500.	7550.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	10	3.13	2.956	3.903	1.663	0.535	0.732	1.681	2.36	3.544	3.867

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		904.164									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/26/72-06/20/90	13	15.	13.938	24.7	4.8	65.391	8.086	4.88	5.15	21.25	24.14
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	9	176.	187.889	257.	129.	1460.611	38.218	129.	166.5	214.5	257.
00300 OXYGEN, DISSOLVED	MG/L	09/26/72-06/20/90	13	9.3	10.708	14.8	6.7	8.659	2.943	7.18	8.3	13.45	14.8
00310 BOD, 5 DAY, 20 DEG C	MG/L	04/18/73-06/20/90	9	2.	2.278	7.	0.5	4.194	2.048	0.5	1.	3.	7.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	9	14.	18.778	36.	7.	107.694	10.378	7.	11.	29.	36.
00400 PH (STANDARD UNITS)		09/26/72-06/20/90	13	7.83	7.774	9.09	4.05	1.509	1.228	5.402	7.675	8.245	9.09
00400 CONVERTED PH (STANDARD UNITS)		09/26/72-06/20/90	13	7.83	5.163	9.09	4.05	8.893	2.982	5.402	7.675	8.245	9.09
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/26/72-06/20/90	13	0.015	6.868	89.125	0.001	610.843	24.715	0.001	0.006	0.021	53.49
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		09/26/72-06/20/90	9	6.	14.944	94.	2.	885.528	29.758	2.	2.75	8.5	94.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/26/72-06/20/90	8	2.25	3.563	14.	1.	18.96	4.354	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		09/26/72-06/20/90	9	3.	12.056	80.	0.	656.778	25.628	0.	1.5	7.5	80.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-06/20/90	10	0.07	0.098	0.3	0.02	0.007	0.084	0.022	0.04	0.143	0.285
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	10	0.035	0.055	0.16	0.01	0.002	0.049	0.011	0.02	0.083	0.156
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	10	0.695	0.747	1.11	0.26	0.062	0.249	0.295	0.633	0.975	1.107
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-06/20/90	10	0.55	0.57	0.9	0.4	0.022	0.149	0.4	0.475	0.625	0.88
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	10	0.1	0.103	0.2	0.05	0.002	0.042	0.05	0.088	0.108	0.193
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	10	0.05	0.062	0.13	0.03	0.001	0.035	0.03	0.038	0.083	0.129
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	7	4.1	5.486	8.8	2.9	5.865	2.422	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/20/90	11	8000.	7944.545	16000.	100.	48925627.273	6994.686	178.	1600.	16000.	16000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/20/90	11	3.903	3.561	4.204	2.	0.54	0.735	2.138	3.204	4.204	4.204
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		3642.48									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/26/72-06/20/90	9	17.4	16.9	27.1	9.4	41.675	6.456	9.4	9.8	21.9	27.1
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	7	167.	171.	220.	123.	1883.667	43.401	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	09/26/72-06/20/90	9	9.9	10.233	12.6	8.5	2.618	1.618	8.5	8.75	12.1	12.6
00310 BOD, 5 DAY, 20 DEG C	MG/L	04/18/73-06/20/90	9	2.	3.167	10.	0.5	8.75	2.958	0.5	1.	4.5	10.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	9	19.	20.111	30.	10.	47.861	6.918	10.	14.5	26.5	30.
00400 PH (STANDARD UNITS)		09/26/72-06/20/90	9	7.5	7.62	8.44	6.77	0.212	0.461	6.77	7.445	7.935	8.44
00400 CONVERTED PH (STANDARD UNITS)		09/26/72-06/20/90	9	7.5	7.402	8.44	6.77	0.266	0.516	6.77	7.445	7.935	8.44
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/26/72-06/20/90	9	0.032	0.04	0.17	0.004	0.003	0.05	0.004	0.012	0.036	0.17
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		09/26/72-06/20/90	9	2.	27.222	212.	0.5	4836.569	69.545	0.5	0.5	12.5	212.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/26/72-06/20/90	9##	0.5	4.889	38.	0.5	154.424	12.427	0.5	0.5	1.5	38.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		09/26/72-06/20/90	9	2.	22.667	174.	0.5	3255.875	57.06	0.5	0.5	12.	174.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-06/20/90	8##	0.03	0.073	0.18	0.02	0.005	0.07	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	8	0.015	0.021	0.05	0.005	0.	0.016	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	8	0.785	0.806	1.07	0.63	0.018	0.133	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-06/20/90	8	0.5	0.538	1.	0.3	0.054	0.233	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	8	0.1	0.106	0.2	0.05	0.002	0.042	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	8	0.035	0.045	0.08	0.02	0.001	0.023	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	9	6.1	6.378	8.7	4.	2.732	1.653	4.	4.9	7.9	8.7
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/20/90	9	600.	2973.333	16000.	50.	25609775.	5060.61	50.	435.	3500.	16000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/20/90	9	2.778	2.998	4.204	1.699	0.526	0.726	1.699	2.625	3.544	4.204
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		995.693									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/26/72-06/20/90	5	18.5	17.68	22.9	11.6	17.667	4.203	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	1	127.	127.	127.	127.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	09/26/72-06/20/90	5	8.7	9.58	12.4	7.8	4.422	2.103	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	04/18/73-06/20/90	6	3.5	5.5	16.	2.	27.5	5.244	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	6	25.	28.	54.	15.	189.6	13.77	**	**	**	**
00400 PH (STANDARD UNITS)		09/26/72-06/20/90	5	7.47	7.336	8.24	6.62	0.409	0.64	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		09/26/72-06/20/90	5	7.47	7.038	8.24	6.62	0.52	0.721	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/26/72-06/20/90	5	0.034	0.092	0.24	0.006	0.01	0.1	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		09/26/72-06/20/90	6	6.	16.75	72.	0.5	754.575	27.47	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/26/72-06/20/90	6	2.	2.75	8.	0.5	7.775	2.788	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		09/26/72-06/20/90	6	4.	14.083	64.	0.5	612.442	24.748	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-06/20/90	5	0.07	0.25	0.86	0.05	0.121	0.347		**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	5	0.03	0.038	0.09	0.02	0.001	0.029		**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	5	0.69	0.746	0.97	0.6	0.022	0.149	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-06/20/90	5	0.7	1.02	2.5	0.4	0.737	0.858	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	5	0.1	0.13	0.2	0.05	0.005	0.067	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	5	0.07	0.08	0.15	0.04	0.002	0.044	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	6	10.1	10.95	19.7	5.9	22.065	4.698	**	**		**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/20/90	6	2600.	3348.333	8000.	690.	7213616.667	2685.618	**	**		**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/20/90	6	3.387	3.397	3.903	2.839	0.145	0.381	**	**		**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		2495.872									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/26/72-06/20/90	46	22.2	21.87	29.	2.1	21.912	4.681	16.28	20.	25.	27.03
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	27	206.	202.222	257.	139.	833.641	28.873	156.6	181.	220.	238.2
00300 OXYGEN, DISSOLVED	MG/L	09/26/72-06/20/90	47	8.3	8.091	10.4	5.	1.251	1.118	6.6	7.6	8.6	9.52
00310 BOD, 5 DAY, 20 DEG C	MG/L	04/18/73-06/20/90	28	1.	1.518	4.	0.5	0.916	0.957	0.5	1.	2.	3.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	28	18.	18.75	38.	4.	90.491	9.513	6.	11.5	25.5	35.1
00400 PH (STANDARD UNITS)		09/26/72-06/20/90	47	7.5	7.391	8.5	4.05	0.472	0.687	6.76	7.2	7.78	8.014
00400 CONVERTED PH (STANDARD UNITS)		09/26/72-06/20/90	47	7.5	5.709	8.5	4.05	3.363	1.834	6.76	7.2	7.78	8.014
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/26/72-06/20/90	47	0.032	1.955	89.125	0.003	168.782	12.992	0.01	0.017	0.063	0.177
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		06/02/74-06/20/90	3	49.	43.667	50.	32.	102.333	10.116	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		09/26/72-06/20/90	18	145.	222.	1010.	105.	44267.176	210.398	115.8	133.5	214.75	452.9
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/26/72-06/20/90	18	64.	61.667	155.	4.	1405.176	37.486	15.7	34.75	79.5	119.
00510 RESIDUE, TOTAL FIXED (MG/L)		09/26/72-06/20/90	18	111.5	160.333	855.	21.	35120.941	187.406	40.8	61.75	178.75	349.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		09/26/72-06/20/90	44	2.75	31.648	560.	0.	7945.867	89.14	0.5	2.5	13.75	104.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/26/72-06/20/90	44	2.5	7.523	90.	0.	311.255	17.642	0.5	2.	4.	14.5
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		09/26/72-06/20/90	44	2.5	25.023	480.	0.	5770.046	75.961	0.5	1.25	9.75	74.5
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-06/20/90	43##	0.05	0.136	1.4	0.02	0.055	0.235	0.05	0.05	0.1	0.4
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	43	0.02	0.032	0.32	0.005	0.003	0.053	0.005	0.005	0.03	0.092
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	39	0.6	0.583	1.2	0.04	0.068	0.261	0.26	0.37	0.77	0.94
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-06/20/90	43	0.4	0.52	1.7	0.1	0.111	0.333	0.24	0.3	0.6	1.019
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	27	0.1	0.096	0.3	0.05	0.003	0.058	0.05	0.05	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	27	0.04	0.061	0.3	0.02	0.003	0.058	0.02	0.03	0.07	0.132
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	27	6.6	9.111	22.	2.9	28.383	5.328	4.	5.	13.	17.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/20/90	44	1400.	2839.091	16000.	50.	10667529.387	3266.118	365.	555.	4275.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/20/90	44	3.146	3.162	4.204	1.699	0.309	0.556	2.56	2.744	3.631	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	1451.026								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		11/27/72-06/07/79	16	0.1	0.159	0.7	0.05	0.027	0.166	0.05	0.05	0.2	0.42
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		11/27/72-06/07/79	16	0.05	0.073	0.2	0.005	0.003	0.058	0.016	0.04	0.095	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/26/72-06/20/90	75	9.4	9.072	22.	0.	18.081	4.252	4.24	6.	11.5	14.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-01/25/90	46	185.	188.543	394.	70.	3230.076	56.834	121.9	155.5	221.75	250.2
00300 OXYGEN, DISSOLVED	MG/L	09/26/72-06/20/90	75	11.	10.705	14.4	1.	5.88	2.425	7.12	10.	12.4	13.12
00310 BOD, 5 DAY, 20 DEG C	MG/L	04/18/73-06/20/90	47	2.	3.255	25.	1.	18.803	4.336	1.	1.	3.	5.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-06/20/90	48	22.	22.896	63.	7.	126.904	11.265	10.	14.25	28.	35.1
00400 PH (STANDARD UNITS)		09/26/72-06/20/90	74	7.	7.179	8.74	6.1	0.312	0.559	6.5	6.753	7.5	7.975
00400 CONVERTED PH (STANDARD UNITS)		09/26/72-06/20/90	74	7.	6.895	8.74	6.1	0.394	0.628	6.5	6.752	7.5	7.975
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/26/72-06/20/90	74	0.1	0.127	0.794	0.002	0.022	0.148	0.011	0.032	0.177	0.316
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		06/02/74-06/20/90	9	24.	27.333	44.	9.	145.25	12.052	9.	17.	39.	44.
00500 RESIDUE, TOTAL (MG/L)		09/26/72-06/20/90	33	128.	169.879	1155.	11.	36551.172	191.184	87.8	117.5	156.	179.4
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/26/72-06/20/90	33	43.	49.061	153.	9.	856.371	29.264	17.	28.5	66.	82.
00510 RESIDUE, TOTAL FIXED (MG/L)		09/26/72-06/20/90	33	83.	123.758	1082.	3.	33130.252	182.017	61.8	73.	98.	137.8
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		09/26/72-06/20/90	74	6.	14.027	212.	0.	959.623	30.978	1.5	2.5	12.25	24.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/26/72-06/20/90	73	2.5	4.295	38.	0.	33.77	5.811	0.5	2.	4.5	11.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		09/26/72-06/20/90	74	3.5	10.432	174.	0.	679.105	26.06	0.75	2.5	7.25	17.5
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-06/20/90	72##	0.05	0.083	0.5	0.02	0.005	0.072	0.05	0.05	0.1	0.194
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	71	0.01	0.016	0.06	0.005	0.	0.013	0.005	0.005	0.02	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-06/20/90	67	0.7	0.721	1.5	0.01	0.103	0.321	0.3	0.54	0.98	1.102
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-06/20/90	72	0.4	0.536	5.	0.05	0.335	0.579	0.2	0.3	0.6	0.805
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-06/20/90	47	0.1	0.106	0.7	0.05	0.011	0.106	0.05	0.05	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-06/20/90	47	0.05	0.07	0.47	0.02	0.006	0.076	0.02	0.03	0.07	0.158
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/15/79-06/20/90	43	9.	10.681	31.	1.	44.266	6.653	4.	6.	14.	18.2
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/20/90	73	500.	1469.534	16000.	46.	8261245.28	2874.238	50.	100.	1550.	3300.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-06/20/90	73	2.699	2.673	4.204	1.663	0.461	0.679	1.699	2.	3.19	3.517

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		471.283								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/07/79	25##	0.05	0.07	0.2	0.05	0.001	0.035	0.05	0.05	0.1	0.1
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/07/79	24	0.04	0.042	0.1	0.005	0.	0.019	0.02	0.03	0.05	0.065

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0101

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/26/72-06/20/90	63	17.5	16.663	23.3	2.2	21.691	4.657	10.14	14.	20.	22.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-01/25/90	33	179.	171.061	226.	87.	1515.059	38.924	100.6	152.	203.	215.2
00300	OXYGEN, DISSOLVED MG/L	09/26/72-06/20/90	62	9.	9.331	14.8	5.8	3.571	1.89	7.33	8.	10.2	12.15
00310	BOD, 5 DAY, 20 DEG C MG/L	04/18/73-06/20/90	38	2.	3.5	16.	1.	11.392	3.375	1.	1.	4.25	8.1
00340	COD, .25N K2CR2O7 MG/L	08/15/79-06/20/90	37	23.	22.432	58.	7.	135.252	11.63	8.8	14.	30.	32.
00400	PH (STANDARD UNITS)	09/26/72-06/20/90	63	7.41	7.256	9.09	4.	0.629	0.793	6.24	6.8	7.69	8.148
00400	CONVERTED PH (STANDARD UNITS)	09/26/72-06/20/90	63	7.41	5.763	9.09	4.	2.894	1.701	6.24	6.8	7.69	8.148
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/72-06/20/90	63	0.039	1.725	100.	0.001	158.339	12.583	0.007	0.02	0.158	0.579
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/02/74-06/20/90	9	32.	44.111	159.	11.	1977.611	44.47	11.	22.	43.5	159.
00500	RESIDUE, TOTAL (MG/L)	09/26/72-06/20/90	27	142.	154.815	342.	90.	3370.003	58.052	109.2	120.	166.	236.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/72-06/20/90	28	41.	51.036	107.	27.	514.776	22.689	29.9	34.	68.5	87.2
00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/72-06/20/90	28	92.5	103.929	260.	40.	2071.847	45.518	59.5	80.5	121.5	158.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/72-06/20/90	57	7.	20.36	164.	0.	1218.739	34.91	1.7	2.5	19.	61.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/72-06/20/90	57	3.	4.772	18.	0.	20.108	4.484	0.5	2.	7.5	12.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/72-06/20/90	58	4.	16.017	148.	0.	952.447	30.862	0.5	2.5	12.	52.3
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/27/72-06/20/90	58##	0.05	0.116	0.86	0.02	0.018	0.133	0.05	0.05	0.1	0.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	58	0.02	0.03	0.16	0.005	0.001	0.032	0.005	0.01	0.04	0.053
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/27/72-06/20/90	50	0.69	0.7	1.179	0.18	0.05	0.223	0.431	0.558	0.88	0.997
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/27/72-06/20/90	55	0.5	0.627	2.5	0.1	0.132	0.364	0.3	0.4	0.8	1.
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-06/20/90	33	0.1	0.115	0.4	0.05	0.007	0.086	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-06/20/90	36	0.04	0.051	0.19	0.01	0.002	0.041	0.02	0.03	0.06	0.096
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/15/79-06/20/90	37	8.5	10.195	28.	3.5	35.131	5.927	4.74	6.	14.	19.76
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	58	1650.	2705.172	16000.	50.	11827692.075	3439.141	100.	475.	3700.	7460.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/26/72-06/20/90	58	3.217	3.058	4.204	1.699	0.441	0.664	2.	2.675	3.568	3.873
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		1142.297								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	11/27/72-06/07/79	22	0.1	0.1	0.3	0.05	0.005	0.067	0.05	0.05	0.1	0.2
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/27/72-06/07/79	22	0.06	0.078	0.18	0.02	0.002	0.041	0.036	0.05	0.1	0.154

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: RICH0102

NPS Station ID: RICH0102 LAT/LON: 37.522253/ -77.411449 Agency: 21VASWCB Date Created: / /
Location: GOVERNMENT RD. BRIDGE FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-GIL000.42 /VA2-07-X0085/VA2-4X0085
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206046 RF1 Mile Point: 6.560 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 02080205075300.00 RF3 Mile Point: 0.04 Distance from RF3: 0.02 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: GILLIE CREEK SECTION: 07 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	144	17.5	17.617	37.	0.	79.127	8.895	5.	10.5	25.575	29.6
00070 TURBIDITY, (JACKSON CANDLE UNITS)		02/21/89-02/21/89	1	270.	270.	270.	270.	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-02/21/89	93	245.	250.14	538.	114.	4553.187	67.477	177.8	206.	277.5	308.2
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	142	10.05	10.102	15.	2.	3.557	1.886	8.	9.	11.	12.54
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	134	2.	3.448	25.	1.	13.467	3.67	1.	2.	4.	6.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-02/21/89	93	15.	18.538	136.	2.	285.686	16.902	8.	10.	20.	31.6
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	143	7.5	7.728	10.	4.5	1.138	1.067	6.5	7.	8.5	9.26
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	143	7.5	6.496	10.	4.5	2.667	1.633	6.5	7.	8.5	9.26
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	143	0.032	0.319	31.623	0.	7.004	2.647	0.001	0.003	0.1	0.316
00403 PH, LAB, STANDARD UNITS	SU	06/02/74-02/21/89	7	6.8	7.186	9.4	6.5	1.005	1.002	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		06/02/74-02/21/89	7	6.8	6.829	9.4	6.5	1.153	1.074	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/02/74-02/21/89	7	0.158	0.148	0.316	0.	0.011	0.104	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		06/02/74-02/21/89	6	22.5	23.833	42.	8.	137.367	11.72	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		05/27/74-02/21/89	52	186.5	215.308	1086.	117.	19120.649	138.277	144.	161.5	219.75	262.5
00505 RESIDUE, TOTAL VOLATILE (MG/L)		05/27/74-02/21/89	52	57.5	64.788	270.	26.	1427.503	37.782	31.	41.	81.5	100.4
00510 RESIDUE, TOTAL FIXED (MG/L)		05/27/74-02/21/89	52	121.	150.519	816.	74.	12298.529	110.899	89.6	106.	161.	196.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	140	10.	37.793	800.	0.5	10972.514	104.75	2.5	5.	21.	77.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	141	4.	8.092	110.	0.	177.799	13.334	1.	2.	8.5	14.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	141	5.	29.805	690.	0.	8579.053	92.623	1.2	2.5	15.	55.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	140	0.2	0.309	3.799	0.04	0.173	0.416	0.05	0.05	0.4	0.6
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	140	0.025	0.039	0.4	0.005	0.002	0.044	0.005	0.013	0.05	0.08
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	124	1.3	1.331	2.9	0.08	0.372	0.61	0.54	0.893	1.8	2.18
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/27/74-11/29/88	138	0.6	0.804	8.099	0.2	0.82	0.906	0.3	0.4	0.8	1.31
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		06/17/77-04/21/82	17	1.7	3.426	35.	0.16	66.632	8.163	0.496	0.9	2.2	8.84
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-11/29/88	88##	0.05	0.099	0.4	0.05	0.007	0.081	0.05	0.05	0.1	0.21
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-11/29/88	91	0.03	0.045	0.29	0.005	0.003	0.056	0.01	0.02	0.05	0.09
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-02/21/89	130	8.	8.814	50.	0.5	48.292	6.949	4.	5.	9.	14.9
00900 HARDNESS, TOTAL (MG/L AS CACO3)		11/29/88-02/21/89	2	28.	28.	30.	26.	8.	2.828	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	08/06/75-02/21/89	4	34.	36.25	54.	23.	220.917	14.863	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)		11/29/88-02/21/89	2	16.5	16.5	19.	14.	12.5	3.536	**	**	**	**
00951 FLUORIDE, TOTAL (MG/L AS F)		11/29/88-02/21/89	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)		11/18/75-03/28/85	8##	1.	1.063	2.	0.5	0.246	0.496	**	**	**	**
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)		10/25/79-10/25/79	1##	0.525	0.525	0.525	0.525	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0102

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01027 CADMIUM, TOTAL (UG/L AS CD)	11/18/75-03/28/85	8##	5.	3.875	5.	0.5	4.339	2.083	**	**	**	**
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-10/25/79	1	0.21	0.21	0.21	0.21	0.	0.	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-10/25/79	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/75-03/28/85	11##	5.	4.591	5.	0.5	1.841	1.357	1.4	5.	5.	5.
01042 COPPER, TOTAL (UG/L AS CU)	03/24/75-03/28/85	10##	5.	6.5	20.	5.	22.5	4.743	5.	5.	5.	18.5
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-10/25/79	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	11/01/78-11/01/78	1	300.	300.	300.	300.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	03/24/75-03/28/85	10	10.	30.4	116.	0.5	1608.1	40.101	0.6	3.375	63.75	112.2
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-10/25/79	1##	1.05	1.05	1.05	1.05	0.	0.	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	11/01/78-11/01/78	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	03/24/75-11/01/78	8##	50.	38.75	50.	5.	433.929	20.831	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	05/18/82-03/28/85	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-10/25/79	1##	1.05	1.05	1.05	1.05	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/75-03/28/85	11	30.	38.636	110.	5.	1235.455	35.149	5.	5.	70.	104.
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-10/25/79	1	33.4	33.4	33.4	33.4	0.	0.	**	**	**	**
02152 INVALID PARAMETER	05/18/82-05/18/82	1	3940.	3940.	3940.	3940.	0.	0.	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	136	650.	2207.721	8000.	50.	8314514.025	2883.49	50.	100.	3650.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	[illegible]	2.812	2.772	3.903	1.699	0.669	0.818	1.699	2.	3.562	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			[illegible] MEAN =	591.767								
34259 DELTA BENZENE HEXACHLORIDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05		0.05	0.	0	**	**	**	**
34351 ENDOSULFAN SULFATE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05		0.05	0.	0.	**	**	**	**
34356 ENDOSULFAN, BETA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34361 ENDOSULFAN, ALPHA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34366 ENDRIN ALDEHYDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34671 PCB - 1016 TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
38442 DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38451 DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38745 2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39300 P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39310 P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39320 P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/18/82-03/28/85	2##	0.025	0.025	0.05	0.	0.001	0.035	**	**	**	**
39337 ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39338 BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39340 GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39380 DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39390 ENDRIN IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39400 TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39410 HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39488 PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39492 PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39496 PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39500 PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39508 PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	05/18/82-05/18/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39730 2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39740 2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39760 SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	08/22/74-08/22/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	05/27/74-06/07/79	50	0.1	0.205	2.	0.05	0.144	0.38	0.05	0.05	0.2	0.29
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/27/74-06/07/79	49	0.08	0.138	1.699	0.005	0.061	0.246	0.03	0.05	0.13	0.23
71900 MERCURY TOTAL (UG/L AS HG)	03/24/75-03/28/85	11##	0.25	0.223	0.25	0.15	0.002	0.047	0.15	0.15	0.25	0.25
71921 MERCURY, TOT IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-10/25/79	1##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
77825 ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0102

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	1	1	1.00				1	1	1.00						
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	142	1	0.01	37	0	0.00	58	0	0.00	47	1	0.02			
00400 PH	Fresh Chronic	9.	143	30	0.21	39	15	0.38	58	4	0.07	46	11	0.24			
	Other-Lo Lim.	6.5	143	15	0.10	39	1	0.03	58	7	0.12	46	7	0.15			
00403 PH, LAB	Fresh Chronic	9.	7	1	0.14	1	1	1.00	3	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	7	1	0.14	1	0	0.00	3	1	0.33	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	140	0	0.00	37	0	0.00	58	0	0.00	45	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	124	0	0.00	33	0	0.00	54	0	0.00	37	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	17	1	0.06	4	0	0.00	4	0	0.00	9	1	0.11			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	1	0	0.00	3	0	0.00						
	Drinking Water	250.	4	0	0.00	1	0	0.00	3	0	0.00						
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00				2	0	0.00						
00951 FLUORIDE, TOTAL AS F	Drinking Water	4.	2	0	0.00				2	0	0.00						
01002 ARSENIC, TOTAL	Fresh Acute	360.	8	0	0.00				3	0	0.00	5	0	0.00			
	Drinking Water	50.	8	0	0.00				3	0	0.00	5	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	2&	0	0.00							2	0	0.00			
	Drinking Water	5.	2&	0	0.00							2	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	11	0	0.00				4	0	0.00	7	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	10	1	0.10				4	1	0.25	6	0	0.00			
	Drinking Water	1300.	10	0	0.00				4	0	0.00	6	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	10	1	0.10				3	0	0.00	7	1	0.14			
	Drinking Water	15.	10	5	0.50				3	2	0.67	7	3	0.43			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	8	0	0.00				4	0	0.00	4	0	0.00			
	Drinking Water	100.	8	0	0.00				4	0	0.00	4	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	2	0	0.00							2	0	0.00			
	Drinking Water	100.	2	0	0.00							2	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	11	0	0.00				4	0	0.00	7	0	0.00			
	Drinking Water	5000.	11	0	0.00				4	0	0.00	7	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	136	92	0.68	37	23	0.62	55	39	0.71	44	30	0.68			
34356 ENDOSULFAN, BETA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
34361 ENDOSULFAN, ALPHA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	1	0	0.00							1	0	0.00			
	Drinking Water	1.	1	0	0.00							1	0	0.00			
39300 P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	1	0	0.00							1	0	0.00			
39310 P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	1	0	0.00							1	0	0.00			
39320 P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	1	0	0.00							1	0	0.00			
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	2	0	0.00							2	0	0.00			
39340 GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	1	0	0.00							1	0	0.00			
39390 ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			
39400 TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0.00							1	0	0.00			
	Drinking Water	3.	1	0	0.00							1	0	0.00			
39410 HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
	Drinking Water	0.4	1	0	0.00							1	0	0.00			
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	1	0	0.00							1	0	0.00			
39730 2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0.00							1	0	0.00			
39760 SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0.00							1	0	0.00			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00	1	0	0.00									
71900 MERCURY, TOTAL	Fresh Acute	2.4	11	0	0.00				4	0	0.00	7	0	0.00			
	Drinking Water	2.	11	0	0.00				4	0	0.00	7	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1974 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	5	17.8	17.68	29.4	5.6	70.832	[illegible]	[illegible]	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	6	9.9	9.3	15.	2.	18.412	[illegible]	**	**	**	**
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	6	8.	8.25	10.	7.	1.675	1.294	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	6	7.76	7.407	10.	7.	2.528	1.59	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	6	0.017	0.039	0.1	0.	0.002	0.049	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	5	6.	119.2	366.	4.	27303.7	165.238	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	5	5.	17.2	55.	2.	515.7	22.709	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	5	3.	102.	311.	1.	20491.	143.147	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	6	0.3	0.6	1.5	0.1	0.356	0.596	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	6##	0.013	0.023	0.07	0.005	0.001	0.025	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	6	1.06	1.006	2.199	0.08	0.643	0.802	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/27/74-11/29/88	6	0.7	1.133	3.199	0.3	1.166	1.08	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	6	1650.	2591.667	6000.	50.	7462416.667	2731.742	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	6	3.212	2.997	3.778	1.699	0.698	0.836	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		992.805									

** - Less than 9 observations ## - Computed with 50% or more of the total ob[illegible]as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	11	16.1	17.109	[illegible]	4.4	52.707	7.26	5.4	12.2	25.6	26.
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	11	10.2	10.227	[illegible]	8.	3.888	1.972	8.	8.4	11.4	13.8
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	10	4.5	4.3	7.	2.	[illegible]	1.567	2.1	3.	5.25	6.9
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	11	7.5	7.545	9.3	5.6	1.323	1.15	5.78	6.7	9.	9.24
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	11	7.5	6.528	9.3	5.6	2.463	1.569	5.78	6.7	9.	9.24
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	11	0.032	0.297	2.512	0.001	0.549	0.741	0.001	0.[illegible]	0.2	2.073
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	10	14.	31.2	170.	2.	[illegible]	50.771	2.2	4.75	33.	157.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	10	8.	10.5	42.	0.	[illegible]	12.304	0.2	2.	13.5	39.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	10	4.5	20.8	152.	2.	[illegible]	46.384	2.	2.	13.75	138.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	11	0.3	0.35	0.8	0.05	0.044	0.209	0.06	0.3	0.4	0.76
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	10	0.02	0.027	0.07	0.005	0.	0.02	0.005	0.016	0.035	0.068
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	10	1.274	1.204	1.969	0.21	[illegible]	0.661	0.237	0.555	1.934	1.967
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/27/74-11/29/88	11	0.8	0.745	1.099	0.4	[illegible]	0.238	0.42	0.5	0.9	1.079
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-02/21/89	10	9.	10.3	18.	8.	[illegible]	3.057	8.	8.75	10.75	17.5
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	11	3300.	3040.909	6000.	50.	5658409.091	2378.741	60.	500.	6000.	6000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	11	3.519	3.167	3.778	1.699	0.546	0.739	1.759	2.699	3.778	3.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		1467.787									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	11	19.4	18.727	32.2	7.8	88.43	9.404	7.8	8.3	28.3	31.76
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	11	11.	11.	14.	9.2	2.378	1.542	9.2	9.6	11.3	13.88
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	12	3.	3.833	11.	1.	6.697	2.588	1.3	3.	4.5	9.5
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	11	7.9	8.055	9.5	6.7	0.867	0.931	6.76	7.5	9.	9.4
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	11	7.9	7.418	9.5	6.7	1.313	1.146	6.76	7.5	9.	9.4
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	11	0.013	0.038	0.2	0.	0.004	0.061	0.	0.001	0.032	0.18
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	12	8.	15.292	48.	0.5	292.248	17.095	0.5	1.375	23.	48.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	12	2.	4.292	12.	0.	19.612	4.429	0.15	0.5	9.5	11.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	12	6.	11.125	38.	0.5	178.506	13.361	0.5	[illegible]	17.5	37.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	12	0.2	0.267	0.6	0.05	0.044	0.209	0.05	[illegible]	0.475	0.6
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	12	0.02	0.028	0.07	0.005	0.	0.02	0.007	[illegible]	0.038	0.067

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Annual Analysis for 1976 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/27/74-11/29/88	12	1.6	1.35	2.099	0.22	0.437	0.661	0.28	0.805	1.942	2.066
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/27/74-11/29/88	12	0.55	0.608	1.099	0.3	0.053	0.231	0.33	0.425	0.775	1.039
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-02/21/89	12	7.5	8.167	15.	5.	7.424	2.725	5.	7.	9.	13.8
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	12	750.	1729.167	6000.	50.	4450208.333	2109.552	65.	100.	3475.	5670.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	12	2.778	2.763	3.778	1.699	0.582	0.763	1.789	2.	3.538	3.752
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		579.201									

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Annual Analysis for 1977 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/27/74-11/29/88	9	7.	12.822	37.	1.4	147.472	12.144	1.4	2.75	21.5	37.
00300	OXYGEN, DISSOLVED MG/L	05/27/74-11/29/88	9	9.8	10.422	14.	8.	3.364	1.834	8.	9.	11.6	14.
00310	BOD, 5 DAY, 20 DEG C MG/L	03/24/75-02/21/89	9	3.	5.556	23.	2.	44.278	6.654	2.	2.5	5.	23.
00400	PH (STANDARD UNITS)	05/27/74-11/29/88	9	8.5	8.633	10.	7.5	0.83	0.911	7.5	7.65	9.45	10.
00400	CONVERTED PH (STANDARD UNITS)	05/27/74-11/29/88	9	8.5	8.014	10.	7.5	1.262	1.123	7.5	7.65	9.45	10.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/74-11/29/88	9	0.003	0.01	0.032	0.	0.	0.013	0.	0.	0.024	0.032
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/27/74-02/21/89	9	19.	18.556	41.	3.	165.278	12.856	3.	7.5	29.	41.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/27/74-02/21/89	9	4.	5.111	14.	0.	20.111	4.485	0.	2.5	8.	14.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/27/74-02/21/89	9	7.	13.444	30.	0.	132.528	11.512	0.	4.5	25.	30.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/27/74-11/29/88	9	0.5	0.878	3.799	0.1	1.554	1.246	0.1	0.1	1.3	3.799
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/27/74-11/29/88	9	0.03	0.098	0.4	0.02	0.016	0.128	0.02	0.02	0.16	0.4
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/27/74-11/29/88	5	1.299	1.575	2.299	1.099	0.255	0.505	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/27/74-11/29/88	9	0.7	1.7	8.099	0.2	6.323	2.515	0.2	0.5	1.9	8.099
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-02/21/89	9	8.	8.889	21.	2.	30.611	5.533	2.	5.	11.	21.
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	8	800.	1906.25	6000.	50.	5630312.5	2372.828	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	8	2.9	2.892	3.778	1.699	0.494	0.703	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		779.443									

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Annual Analysis for 1978 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/27/74-11/29/88	8	19.5	21.438	31.	15.	26.888	5.185	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/27/74-11/29/88	9	9.7	9.333	12.	5.8	3.778	1.944	5.8	8.1	10.6	12.
00310	BOD, 5 DAY, 20 DEG C MG/L	03/24/75-02/21/89	8	2.5	4.875	16.	2.	25.839	5.083	**	**	**	**
00400	PH (STANDARD UNITS)	05/27/74-11/29/88	9	8.	8.556	10.	6.4	1.685	1.298	6.4	7.7	10.	10.
00400	CONVERTED PH (STANDARD UNITS)	05/27/74-11/29/88	9	8.	7.288	10.	6.4	3.492	1.869	6.4	7.7	10.	10.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/74-11/29/88	9	0.01	0.051	0.398	0.	0.017	0.13	0.	0.	0.022	0.398
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/27/74-02/21/89	8	4.5	17.938	100.	0.5	1146.388	33.858	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/27/74-02/21/89	8	0.75	5.063	20.	0.	53.817	7.336	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/27/74-02/21/89	8	4.	13.063	80.	0.5	740.388	27.21	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/27/74-11/29/88	8##	0.225	0.263	0.7	0.05	0.061	0.247	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/27/74-11/29/88	8	0.03	0.043	0.1	0.005	0.001	0.033	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/27/74-11/29/88	8	0.65	0.65	1.2	0.2	0.143	0.378	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-02/21/89	8	7.5	10.25	26.	3.	65.071	8.067	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	8##	75.	3037.5	8000.	50.	16886964.286	4109.375	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	8##	1.849	2.563	3.903	1.699	1.242	1.114	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		365.716									

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Annual Analysis for 1979 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	9	15.5	17.556	27.	5.	63.903	7.994	5.	11.75	26.75	27.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-02/21/89	5	240.	237.	293.	161.	3007.5	54.841	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	9	10.3	9.933	12.4	8.5	1.59	1.261	8.5	8.75	10.55	12.4
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	9	2.	4.556	15.	1.	26.028	5.102	1.	1.	8.	15.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-02/21/89	5	22.	35.4	95.	14.	1164.8	34.129	**	**	**	**
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	9	7.	7.4	9.	6.5	0.545	0.738	6.5	7.	7.8	9.
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	9	7.	7.061	9.	6.5	0.674	0.821	6.5	7.	7.8	9.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	9	0.1	0.087	0.316	0.001	0.009	0.096	0.001	0.016	0.1	0.316
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	9	12.	99.833	800.	2.5	68978.5	262.638	2.5	7.	20.5	800.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	9	4.	15.944	110.	2.	1249.403	35.347	2.	2.25	8.	110.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	9	9.	84.167	690.	2.5	51645.625	227.257	2.5	4.	17.	690.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	8	0.2	0.306	0.9	0.05	0.087	0.296	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	9	0.02	0.022	0.03	0.01	0.	0.007	0.01	0.02	0.03	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	5	1.2	1.1	1.4	0.6	0.12	0.346	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/27/74-11/29/88	9	0.5	0.722	1.6	0.4	0.192	0.438	0.4	0.4	1.1	1.6
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-11/29/88	5##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-11/29/88	5	0.04	0.048	0.07	0.04	0.	0.013	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-02/21/89	9	9.	12.667	36.	8.	81.75	9.042	8.	8.	13.5	36.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	9	900.	3805.556	8000.	50.	15885277.778	3985.634	50.	350.	8000.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	9	2.954	3.125	3.903	1.699	0.662	0.814	1.699	2.54	3.903	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		1332.807									

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Annual Analysis for 1980 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	11	15.	16.227	29.	3.	74.168	8.612	3.8	8.5	22.	28.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-02/21/89	11	265.	242.818	300.	158.	2171.564	46.6	164.	190.	278.	295.8
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	11	10.4	9.982	12.6	7.4	2.364	1.537	7.52	8.6	10.8	12.36
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	11	2.	2.636	8.	1.	3.655	1.912	1.	2.	3.	7.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-02/21/89	11	12.	16.909	45.	7.	128.691	11.344	7.2	9.	20.	41.6
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	11	7.3	7.736	9.	6.3	1.095	1.046	6.4	7.	9.	9.
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	11	7.3	7.038	9.	6.3	1.631	1.277	6.4	7.	9.	9.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	11	0.05	0.092	0.501	0.001	0.021	0.145	0.001	0.001	0.1	0.433
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	11	9.	30.864	221.	2.5	4034.705	63.519	3.	7.	23.	182.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	11	4.	7.773	45.	1.	159.268	12.62	1.	2.5	7.	38.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	11	6.	23.318	176.	2.	2610.714	51.095	2.	2.5	15.	145.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	11	0.2	0.218	0.7	0.05	0.041	0.202	0.05	0.05	0.3	0.64
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	11	0.02	0.027	0.06	0.005	0.	0.018	0.006	0.01	0.03	0.06
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	11	1.8	1.705	2.9	0.5	0.484	0.695	0.56	1.2	2.3	2.792
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/27/74-11/29/88	11	0.5	0.473	0.6	0.2	0.018	0.135	0.22	0.4	0.6	0.6
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-11/29/88	11##	0.05	0.095	0.4	0.05	0.011	0.104	0.05	0.05	0.1	0.34
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-11/29/88	11	0.02	0.028	0.06	0.005	0.	0.021	0.006	0.01	0.05	0.06
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-02/21/89	11	9.	13.545	50.	7.	154.473	12.429	7.2	8.	13.	43.4
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	11	100.	1909.091	8000.	50.	9779909.091	3127.285	50.	50.	2900.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	11	2.	2.538	3.903	1.699	0.828	0.91	1.699	1.699	3.462	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		345.418									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	11	14.5	15.273	31.	0.	119.018	10.91	0.4	4.5	25.	30.4
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-02/21/89	11	252.	279.273	390.	212.	3037.818	55.116	217.8	242.	314.	384.4
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	10	9.45	9.72	13.	7.1	3.651	1.911	7.15	8.125	11.325	12.93
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	11	2.	4.455	25.	1.	47.873	6.919	1.	2.	4.	21.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-02/21/89	11	15.	25.364	136.	8.	1364.655	36.941	8.2	10.	18.	113.2
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	10	7.15	7.72	10.	6.8	1.54	1.241	6.81	6.9	8.35	10.
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	10	7.125	7.15	10.	6.8	1.901	1.379	6.81	6.9	8.35	10.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	10	0.075	0.071	0.158	0.	0.003	0.058	0.	0.012	0.126	0.155
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	11	7.	17.864	113.	2.5	1017.205	31.894	3.	5.	13.	94.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	11	4.	7.773	53.	1.	227.868	15.095	1.	2.	5.	43.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	11	5.	10.318	60.	0.	282.414	16.805	0.5	3.	9.	50.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	11	0.4	0.305	0.9	0.05	0.078	0.28	0.05	0.05	0.5	0.82
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	11	0.05	0.058	0.11	0.005	0.001	0.037	0.008	0.03	0.11	0.11
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	11	1.2	1.313	2.5	0.7	0.282	0.531	0.74	0.9	1.7	2.38
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/27/74-11/29/88	11	0.5	0.8	2.2	0.3	0.392	0.626	0.3	0.4	1.4	2.06
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-11/29/88	11##	0.05	0.127	0.4	0.05	0.015	0.121	0.05	0.05	0.2	0.38
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-11/29/88	11	0.04	0.083	0.29	0.01	0.008	0.089	0.012	0.02	0.14	0.27
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-02/21/89	11	8.	12.	50.	4.	172.4	13.13	4.	5.	13.	43.2
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	9	1700.	2522.222	8000.	50.	10438819.444	3230.916	50.	75.	5150.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	9	3.23	2.858	3.903	1.699	0.785	0.886	1.699	1.849	3.632	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		720.845									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	10	17.25	18.	31.5	5.	54.389	7.375	5.65	13.375	23.75	30.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-02/21/89	10	288.	306.1	538.	160.	10020.1	100.1	169.6	256.75	333.	523.2
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	10	8.6	8.74	12.	6.1	3.743	1.935	6.16	6.85	10.375	11.89
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	10	2.	2.1	3.	1.	0.767	0.876	1.	1.	3.	3.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-02/21/89	10	15.5	15.5	25.	2.	48.944	6.996	2.8	10.	21.	24.9
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	10	6.8	6.86	7.5	6.5	0.14	0.375	6.5	6.5	7.125	7.5
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	10	6.8	6.748	7.5	6.5	0.154	0.393	6.5	6.5	7.125	7.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	10	0.158	0.179	0.316	0.032	0.012	0.109	0.032	0.083	0.316	0.316
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	9	12.	15.	43.	5.	146.	12.083	5.	6.5	19.5	43.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	10	5.	5.6	12.	2.	12.711	3.565	2.	2.	8.5	11.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	10	6.	11.4	31.	2.	110.933	10.532	2.1	3.75	19.	30.7
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	10	0.2	0.17	0.3	0.05	0.012	0.111	0.05	0.05	0.3	0.3
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	10	0.03	0.048	0.13	0.01	0.001	0.038	0.011	0.02	0.073	0.125
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	10	1.135	1.108	2.2	0.09	0.344	0.587	0.139	0.678	1.5	2.13
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/27/74-11/29/88	10	0.5	0.475	0.6	0.3	0.013	0.114	0.3	0.375	0.6	0.6
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-11/29/88	10##	0.05	0.085	0.3	0.05	0.006	0.078	0.05	0.05	0.1	0.28
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-11/29/88	10	0.025	0.029	0.06	0.01	0.	0.017	0.01	0.018	0.043	0.059
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-02/21/89	10	5.5	5.4	9.	2.	6.044	2.459	2.	2.75	7.25	8.9
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	9	700.	1055.556	3700.	100.	1215277.778	1102.396	100.	350.	1450.	3700.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	9	2.845	2.829	3.568	2.	0.208	0.456	2.	2.54	3.159	3.568
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		675.004									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/27/74-11/29/88	9	11.5	16.222	33.	0.5	130.819	11.438	0.5	7.5	27.	33.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-02/21/89	9	240.	227.778	304.	169.	2323.194	48.2	169.	180.5	267.	304.
00300	OXYGEN, DISSOLVED MG/L	05/27/74-11/29/88	9	11.	11.022	14.	8.5	3.442	1.855	8.5	9.1	12.5	14.
00310	BOD, 5 DAY, 20 DEG C MG/L	03/24/75-02/21/89	8	3.	3.125	6.	1.	2.696	1.642	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	08/15/79-02/21/89	9	20.	20.556	37.	8.	92.028	9.593	8.	13.5	28.5	37.
00400	PH (STANDARD UNITS)	05/27/74-11/29/88	8	6.75	6.8	7.2	6.5	0.063	0.251	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/27/74-11/29/88	8	6.747	6.741	7.2	6.5	0.067	0.259	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/74-11/29/88	8	0.179	0.182	0.316	0.063	0.009	0.096	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/27/74-02/21/89	9	18.	29.444	109.	5.	1053.278	32.454	5.	9.5	40.	109.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/27/74-02/21/89	9	5.	8.	23.	2.	44.75	6.69	2.	3.5	11.5	23.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/27/74-02/21/89	9	13.	21.444	86.	0.	690.528	26.278	0.	5.	28.5	86.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/27/74-11/29/88	9	0.2	0.206	0.5	0.05	0.022	0.149	0.05	0.05	0.3	0.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/27/74-11/29/88	9	0.01	0.022	0.07	0.005	0.	0.022	0.005	0.008	0.035	0.07
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/27/74-11/29/88	9	1.3	1.369	2.2	0.51	0.414	0.644	0.51	0.735	1.975	2.2
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/27/74-11/29/88	9	0.5	0.689	1.3	0.3	0.124	0.352	0.3	0.45	1.	1.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-11/29/88	9##	0.05	0.061	0.1	0.05	0.	0.022	0.05	0.05	0.075	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-11/29/88	9	0.02	0.021	0.04	0.01	0.	0.011	0.01	0.01	0.03	0.04
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-02/21/89	9	8.	7.667	12.	3.	8.5	2.915	3.	5.5	10.	12.
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	7	800.	2121.429	8000.	50.	8146547.619	2854.216	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	7	2.903	2.912	3.903	1.699	0.543	0.737	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		816.494									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/27/74-11/29/88	7	22.	21.643	31.5	12.	49.893	7.063	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-02/21/89	7	202.	190.857	219.	145.	653.81	25.57	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/27/74-11/29/88	6	9.4	9.433	10.6	8.4	0.731	0.855	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/24/75-02/21/89	6	2.	2.333	4.	1.	1.867	1.366	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	08/15/79-02/21/89	7	13.	16.143	31.	5.	103.476	10.172	**	**	**	**
00400	PH (STANDARD UNITS)	05/27/74-11/29/88	7	6.85	6.893	9.1	4.5	2.137	1.462	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/27/74-11/29/88	7	6.85	5.327	9.1	4.5	4.997	2.235	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/74-11/29/88	7	0.141	4.708	31.623	0.001	140.917	11.871	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/27/74-11/29/88	7	14.	145.143	740.	2.5	75191.393	274.21	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/27/74-11/29/88	7	5.	15.	58.	2.5	407.917	20.197	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/27/74-02/21/89	7	5.	130.857	682.	2.5	64411.726	253.795	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/27/74-11/29/88	7##	0.05	0.157	0.4	0.05	0.021	0.146	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/27/74-11/29/88	7	0.04	0.039	0.08	0.005	0.001	0.03	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/27/74-11/29/88	7	1.5	1.459	2.5	0.42	0.651	0.807	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/27/74-11/29/88	7	0.4	0.443	0.9	0.3	0.043	0.207	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-11/29/88	7	0.2	0.171	0.3	0.05	0.012	0.107	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-11/29/88	7	0.14	0.126	0.26	0.01	0.013	0.112	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-02/21/89	7	7.	9.429	17.	5.	24.286	4.928	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	6	1350.	3208.333	8000.	50.	13740416.667	3706.807	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	6	3.128	3.089	3.903	1.699	0.671	0.819	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		1227.02									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	10	18.75	19.55	29.	4.7	51.678	7.189	5.71	14.95	25.75	28.75
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-02/21/89	10	252.5	236.7	293.	114.	2753.344	52.472	122.2	210.25	270.75	291.9
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	10	10.25	10.11	14.1	8.	2.817	1.678	8.04	8.85	10.475	13.76
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	10	1.	1.5	3.	1.	0.722	0.85	1.	1.	2.25	3.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-02/21/89	10	13.5	14.7	33.	6.	69.567	8.341	6.	7.5	20.25	31.8
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	10	7.2	7.49	8.9	6.6	0.617	0.785	6.62	6.875	8.1	8.85
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	10	7.155	7.083	8.9	6.6	0.801	0.895	6.62	6.875	8.1	8.85
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	10	0.07	0.083	0.251	0.001	0.007	0.084	0.002	0.008	0.134	0.242
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	10	11.	17.7	82.	2.5	547.733	23.404	2.5	4.375	19.	75.7
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	10	4.5	6.1	14.	2.	19.156	4.377	2.05	2.5	9.25	13.9
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	10	5.5	12.1	68.	2.5	398.267	19.957	2.5	2.875	11.25	62.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	8	0.2	0.206	0.5	0.05	0.025	0.159	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	8	0.035	0.038	0.11	0.005	0.001	0.035	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	8	1.45	1.558	2.36	1.09	0.185	0.43	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/27/74-11/29/88	5	0.8	1.76	6.	0.2	5.783	2.405	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-11/29/88	5##	0.05	0.06	0.1	0.05	0.001	0.022	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-11/29/88	8	0.025	0.022	0.04	0.005	0.	0.013	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-02/21/89	10	4.5	5.85	16.	0.5	18.892	4.346	0.65	3.5	7.5	15.3
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	9	1700.	2550.	8000.	50.	10553125.	3248.557	50.	50.	5250.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	9	3.23	2.801	3.903	1.699	0.9	0.949	1.699	1.699	3.651	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		633.014									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	12	15.	18.808	31.5	6.	87.823	9.371	7.05	10.625	28.175	31.35
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-02/21/89	12	240.	264.167	478.	219.	5114.152	71.513	220.2	226.75	264.75	426.7
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	12	10.6	10.108	12.	8.1	1.957	1.399	8.13	8.775	11.3	11.88
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	12	2.	2.5	9.	1.	5.182	2.276	1.	1.	3.	7.5
00340 COD, .25N K2CR2O7	MG/L	08/15/79-02/21/89	12	13.	15.25	45.	7.	102.205	10.11	7.	10.25	16.5	37.5
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	12	7.645	7.836	9.8	6.5	1.212	1.101	6.53	6.9	8.695	9.74
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	12	7.645	7.121	9.8	6.5	1.769	1.33	6.53	6.9	8.695	9.74
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	12	0.023	0.076	0.316	0.	0.012	0.108	0.	0.002	0.135	0.297
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	12	5.5	15.417	50.	2.5	280.356	16.744	2.5	2.5	26.25	47.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	12	5.	6.167	13.	2.	16.97	4.119	2.15	2.5	10.5	12.7
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	12	3.5	7.917	37.	1.	107.811	10.383	1.45	2.5	10.25	31.3
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	12	0.25	0.308	0.7	0.05	0.06	0.245	0.05	0.05	0.575	0.67
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	12	0.05	0.053	0.12	0.005	0.001	0.036	0.007	0.015	0.085	0.111
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	12	1.55	1.504	2.25	0.09	0.375	0.613	0.357	1.18	2.075	2.223
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/27/74-11/29/88	12	0.7	0.808	1.6	0.3	0.144	0.38	0.36	0.6	0.875	1.57
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-11/29/88	12	0.1	0.087	0.1	0.05	0.001	0.023	0.05	0.063	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-11/29/88	12	0.02	0.03	0.07	0.01	0.	0.019	0.01	0.02	0.04	0.067
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-02/21/89	12	6.	5.833	8.	4.	1.424	1.193	4.3	5.	6.	8.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	11	200.	1045.455	8000.	50.	5529727.273	2351.537	50.	50.	900.	6700.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	11	2.301	2.367	3.903	1.699	0.534	0.731	1.699	1.699	2.954	3.758
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		232.635									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	11	15.	17.9	35.	4.5	102.772	10.138	5.2	9.	27.2	34.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-02/21/89	11	240.	257.091	480.	188.	6674.291	81.696	189.	201.	279.	440.6
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	9	10.9	10.756	13.4	8.8	1.673	1.293	8.8	10.	11.35	13.4
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	11	3.	3.909	14.	1.	14.091	3.754	1.	2.	4.	12.6
00340 COD, .25N K2CR2O7	MG/L	08/15/79-02/21/89	11	16.	17.273	33.	9.	46.818	6.842	9.4	12.	21.	31.
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	10	7.925	8.04	9.13	7.19	0.37	0.608	7.208	7.685	8.428	9.11
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	10	7.922	7.749	9.13	7.19	464	0.681	7.208	7.685	8.427	9.11
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	10	0.012	0.018	0.065	0.001	0.	0.02	0.001	0.004	0.023	0.062
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	11	7.	19.727	152.	2.5	1941.518	44.063	2.5	2.5	12.	124.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	11	2.5	5.409	28.	0.	60.641	7.787	0.4	2.5	6.	24.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	11	2.5	15.045	124.	1.	1315.823	36.274	1.3	2.5	8.	101.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	11	0.3	0.309	1.2	0.05	0.11	0.332	0.05	0.05	0.4	1.04
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	11	0.01	0.025	0.09	0.005	0.001	0.027	0.006	0.01	0.03	0.084
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	11	1.2	1.284	1.9	0.54	0.213	0.462	0.57	0.99	1.68	1.896
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/27/74-11/29/88	11	0.6	0.918	2.8	0.3	0.512	0.715	0.34	0.5	1.2	2.54
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-11/29/88	11	0.1	0.118	0.3	0.05	0.009	0.093	0.05	0.05	0.1	0.3
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-11/29/88	11	0.02	0.038	0.18	0.01	0.002	0.049	0.01	0.01	0.03	0.156
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-02/21/89	7	6.	6.429	9.	5.	1.952	1.397	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	10	300.	2310.	8000.	50.	11462111.111	3385.574	50.	50.	5900.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	10	2.349	2.606	3.903	1.699	0.939	0.969	1.699	1.699	3.763	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		403.499									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	10	14.6	16.72	29.8	4.4	99.717	9.986	4.46	8.	26.675	29.54
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-02/21/89	6	198.5	215.5	291.	165.	2158.3	46.458	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	10	10.7	10.86	14.4	8.5	3.985	1.996	8.55	9.	12.475	14.23
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	6	2.	1.833	3.	1.	0.567	0.753	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/15/79-02/21/89	6	16.5	15.	22.	8.	34.4	5.865	**	**	**	**
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	10	7.955	7.989	9.	6.39	0.663	0.814	6.487	7.405	8.76	9.
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	10	7.954	7.271	9.	6.39	1.236	1.112	6.487	7.405	8.76	9.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	10	0.011	0.054	0.407	0.001	0.016	0.125	0.001	0.002	0.039	0.371
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	6	8.	18.25	80.	1.	928.975	30.479	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	6	3.5	5.333	12.	0.5	20.967	4.579	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	6	2.25	13.583	68.	1.	715.642	26.751	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	7	0.1	0.137	0.3	0.04	0.011	0.105	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	7	0.02	0.026	0.05	0.01	0.	0.013	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	7	0.67	0.85	1.4	0.54	0.13	0.361	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/27/74-11/29/88	7	0.7	0.714	1.1	0.5	0.038	0.195	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-11/29/88	7	0.1	0.114	0.2	0.1	0.001	0.038	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-11/29/88	7	0.04	0.05	0.09	0.02	0.001	0.027	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-02/21/89	4	5.6	5.225	6.1	3.6	1.256	1.121	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	9	300.	1311.111	8000.	50.	6892986.111	2625.45	50.	75.	1450.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	9	2.477	2.473	3.903	1.699	0.57	0.755	1.699	1.849	3.	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		297.035									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-02/21/89	1	230.	230.	230.	230.	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/24/75-02/21/89	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	08/15/79-02/21/89	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/27/74-02/21/89	1	350.	350.	350.	350.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/27/74-02/21/89	1	38.	38.	38.	38.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/27/74-02/21/89	1	312.	312.	312.	312.	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-02/21/89	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	1##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		50.									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	37	26.5	25.327	37.	0.	54.007	7.349	17.96	23.1	29.6	32.36
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-02/21/89	25	232.	229.88	362.	114.	2807.443	52.985	165.4	194.5	271.	288.2
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	37	8.8	8.881	11.	5.8	1.556	1.247	7.28	8.05	9.6	10.76
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	36	2.	2.833	11.	1.	4.486	2.118	1.	1.25	3.75	5.3
00340 COD, .25N K2CR2O7	MG/L	08/15/79-02/21/89	25	18.	18.04	45.	2.	79.707	8.928	10.	11.5	21.5	32.4
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	39	8.5	8.319	10.	6.5	1.203	1.097	6.85	7.4	9.1	10.
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	39	8.5	7.401	10.	6.5	2.069	1.438	6.85	7.4	9.1	10.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	39	0.003	0.04	0.316	0.	0.005	0.069	0.	0.001	0.04	0.141
00500 RESIDUE, TOTAL (MG/L)		05/27/74-02/21/89	14	173.	185.714	264.	136.	1527.143	39.079	139.	156.5	218.75	251.5
00505 RESIDUE, TOTAL VOLATILE (MG/L)		05/27/74-02/21/89	14	65.5	65.	124.	27.	995.846	31.557	28.5	34.	89.25	115.5
00510 RESIDUE, TOTAL FIXED (MG/L)		05/27/74-02/21/89	14	106.	120.714	199.	74.	1508.989	38.846	81.5	92.5	144.5	195.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	37	8.	18.676	221.	0.5	1419.503	37.676	2.5	3.5	17.5	43.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	37	4.	5.635	45.	0.	58.592	7.655	0.4	2.25	6.5	12.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	37	4.	13.419	176.	0.	919.882	30.33	0.9	2.5	10.	30.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	36##	0.05	0.14	0.9	0.04	0.029	0.171	0.05	0.05	0.2	0.33
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	37	0.03	0.044	0.17	0.005	0.001	0.038	0.01	0.02	0.06	0.11
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	33	0.97	1.195	2.9	0.21	0.472	0.687	0.504	0.635	1.655	2.34
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/27/74-11/29/88	37	0.5	0.566	1.5	0.2	0.104	0.323	0.28	0.4	0.65	1.14
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-11/29/88	24	0.1	0.125	0.3	0.05	0.007	0.086	0.05	0.063	0.1	0.3
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-11/29/88	24	0.04	0.066	0.29	0.005	0.007	0.083	0.01	0.02	0.068	0.255
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-02/21/89	35	8.	10.183	50.	4.	59.029	7.683	5.24	7.	11.	15.4
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	37	500.	2320.27	8000.	50.	8964647.147	2994.102	50.	75.	3700.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	37	2.699	2.75	3.903	1.699	0.752	0.867	1.699	1.849	3.568	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	562.25								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/27/74-11/29/88	60	9.5	10.293	22.	0.5	25.05	5.005	4.41	7.	14.375	17.77
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-02/21/89	42	266.	271.452	538.	145.	7000.4	83.668	176.1	224.25	294.75	390.
00300 OXYGEN, DISSOLVED	MG/L	05/27/74-11/29/88	58	11.2	11.412	15.	7.1	2.606	1.614	9.7	10.275	12.45	14.
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/24/75-02/21/89	56	2.	3.036	15.	1.	7.053	2.656	1.	1.25	3.75	5.3
00340 COD, .25N K2CR2O7	MG/L	08/15/79-02/21/89	42	15.	17.643	95.	7.	199.016	14.107	8.	10.	20.	29.2
00400 PH (STANDARD UNITS)		05/27/74-11/29/88	58	7.2	7.369	10.	6.2	0.656	0.81	6.5	6.8	7.793	8.077
00400 CONVERTED PH (STANDARD UNITS)		05/27/74-11/29/88	58	7.2	6.961	10.	6.2	0.826	0.909	6.5	6.8	7.792	8.077
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/27/74-11/29/88	58	0.063	0.109	0.631	0.	0.017	0.131	0.009	0.016	0.158	0.316
00500 RESIDUE, TOTAL (MG/L)		05/27/74-02/21/89	19	200.	205.842	471.	117.	5788.585	76.083	118.	163.	237.	259.
00505 RESIDUE, TOTAL VOLATILE (MG/L)		05/27/74-02/21/89	19	63.	63.368	102.	26.	650.468	25.504	31.	34.	85.	101.
00510 RESIDUE, TOTAL FIXED (MG/L)		05/27/74-02/21/89	19	120.	142.474	391.	86.	4333.263	65.828	92.	110.	158.	175.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		05/27/74-02/21/89	59	10.	37.644	800.	0.5	13025.087	114.128	2.5	5.	21.	48.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		05/27/74-02/21/89	59	4.	8.008	110.	0.5	240.065	15.494	1.	2.	8.	13.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		05/27/74-02/21/89	59	5.	29.475	690.	0.	9934.624	99.673	1.	2.5	15.	36.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		05/27/74-11/29/88	59	0.3	0.347	1.2	0.05	0.064	0.253	0.05	0.2	0.5	0.6
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	58	0.02	0.022	0.13	0.005	0.	0.021	0.005	0.01	0.03	0.05
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		05/27/74-11/29/88	54	1.385	1.413	2.5	0.09	0.31	0.557	0.605	1.065	1.882	2.15
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		05/27/74-11/29/88	59	0.6	0.798	6.	0.2	0.619	0.787	0.3	0.5	0.8	1.1
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-11/29/88	41##	0.05	0.077	0.3	0.05	0.003	0.055	0.05	0.05	0.1	0.18
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-11/29/88	41	0.03	0.041	0.19	0.005	0.002	0.041	0.01	0.02	0.04	0.086
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-02/21/89	52	6.5	7.467	36.	0.5	26.758	5.173	3.72	5.	9.	12.4
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	55	700.	2083.636	8000.	50.	7412968.013	2722.677	50.	50.	3700.	7940.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		05/27/74-02/21/89	55	2.845	2.769	3.903	1.699	0.653	0.808	1.699	1.699	3.568	3.9
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	586.937								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0102

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/27/74-11/29/88	47	21.1	20.896	32.	3.	42.827	6.544	13.04	15.	26.1	30.2
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-02/21/89	26	235.	235.192	309.	158.	1174.002	34.264	193.5	213.75	257.75	283.5
00300	OXYGEN, DISSOLVED MG/L	05/27/74-11/29/88	47	9.4	9.447	12.	2.	2.654	1.629	7.96	8.9	10.5	11.04
00310	BOD, 5 DAY, 20 DEG C MG/L	03/24/75-02/21/89	42	3.	4.524	25.	1.	28.646	5.352	1.	2.	4.25	10.4
00340	COD, .25N K2CR2O7 MG/L	08/15/79-02/21/89	26	14.	20.462	136.	5.	642.978	25.357	6.	9.75	20.	37.3
00400	PH (STANDARD UNITS)	05/27/74-11/29/88	46	7.6	7.681	10.	4.5	1.273	1.128	6.47	6.8	8.88	9.
00400	CONVERTED PH (STANDARD UNITS)	05/27/74-11/29/88	46	7.589	6.086	10.	4.5	3.873	1.968	6.47	6.8	8.88	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/27/74-11/29/88	46	0.026	0.82	31.623	0.	21.696	4.658	0.001	0.001	0.158	0.341
00500	RESIDUE, TOTAL (MG/L)	05/27/74-02/21/89	19	188.	246.579	1086.	144.	45475.702	213.25	147.	161.	208.	426.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/27/74-02/21/89	19	55.	66.053	270.	34.	2671.053	51.682	36.	44.	66.	96.
00510	RESIDUE, TOTAL FIXED (MG/L)	05/27/74-02/21/89	19	129.	180.526	816.	76.	27713.041	166.472	86.	111.	163.	359.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/27/74-02/21/89	44	11.5	54.068	740.	0.5	16126.6	126.991	2.5	5.	25.5	161.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/27/74-02/21/89	45	5.	10.222	58.	0.	191.609	13.842	1.	2.25	12.	25.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/27/74-02/21/89	45	6.	43.711	682.	0.	13025.006	114.127	2.	3.	21.	135.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/27/74-11/29/88	45	0.2	0.393	3.799	0.05	0.407	0.638	0.05	0.05	0.4	0.78
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/27/74-11/29/88	45	0.05	0.057	0.4	0.005	0.004	0.062	0.01	0.02	0.07	0.104
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/27/74-11/29/88	37	1.39	1.332	2.5	0.08	0.366	0.605	0.442	0.95	1.8	2.119
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/27/74-11/29/88	42	0.6	1.021	8.099	0.2	1.673	1.294	0.4	0.4	1.2	2.02
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-11/29/88	23	0.1	0.113	0.4	0.05	0.011	0.105	0.05	0.05	0.1	0.36
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-11/29/88	26	0.02	0.032	0.19	0.01	0.001	0.037	0.01	0.01	0.04	0.063
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-02/21/89	43	8.	9.328	50.	2.	63.971	7.998	3.4	5.	9.	17.6
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	44	750.	2268.182	8000.	50.	9254778.013	3042.167	50.	100.	3200.	8000.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/27/74-02/21/89	44	2.874	2.795	3.903	1.699	0.65	0.806	1.699	2.	3.504	3.903
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	624.144								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: RICH0103

NPS Station ID: RICH0103 LAT/LON: 37.523059/ -77.417226 Agency: 21VASWCB Date Created: / /
Location: RT. 5 BRIDGE WILLIAMSBURG RD.
FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 2-GIL000.03 /VA2-02-X0084/VA2-4X0084
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206046 RF1 Mile Point: 6.560 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 02080206142000.00 RF3 Mile Point: 0.35 Distance from RF3: 0.01 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: GILLIE CREEK SECTION: 02 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0103

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/26/72-07/21/74	16	12.75	14.675	27.2	5.	44.923	6.702	6.19	10.275	18.75	27.2
00300 OXYGEN, DISSOLVED	MG/L	09/26/72-07/21/74	16	9.2	8.694	12.6	5.	4.405	2.099	5.7	6.85	10.225	11.48
00310 BOD, 5 DAY, 20 DEG C	MG/L	04/18/73-10/19/73	2	10.6	10.6	15.2	6.	42.32	6.505	**	**	**	**
00400 PH (STANDARD UNITS)		09/26/72-07/21/74	16	7.	7.256	10.	6.7	0.976	0.988	6.7	6.8	7.	9.65
00400 CONVERTED PH (STANDARD UNITS)		09/26/72-07/21/74	16	7.	6.934	10.	6.7	1.087	1.043	6.7	6.8	7.	9.65
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/26/72-07/21/74	16	0.1	0.116	0.2	0.	0.004	0.062	0.	0.1	0.158	0.2
00500 RESIDUE, TOTAL (MG/L)		09/26/72-07/21/74	15	200.	216.733	393.	155.	3236.495	56.89	161.6	189.	231.	318.
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/26/72-07/21/74	15	48.	58.8	201.	7.	2069.457	45.491	21.4	33.	57.	142.8
00510 RESIDUE, TOTAL FIXED (MG/L)		09/26/72-07/21/74	15	141.	134.267	362.	16.	6624.638	81.392	20.8	97.	158.	261.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		09/26/72-07/21/74	15	24.	50.2	194.	10.	2570.314	50.698	14.8	20.	82.	141.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/26/72-07/21/74	15	7.	12.933	60.	2.	217.495	14.748	2.	4.	19.	37.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		09/26/72-07/21/74	15	20.	37.267	174.	1.	2052.924	45.309	7.6	12.	41.	121.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		11/27/72-07/21/74	14	0.94	1.646	4.899	0.36	2.089	1.445	0.43	0.5	2.625	4.399
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		11/27/72-07/21/74	14	0.03	0.069	0.2	0.005	0.007	0.083	0.005	0.01	0.19	0.2
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		11/27/72-07/21/74	14	1.249	1.381	2.509	0.9	0.219	0.468	0.935	0.99	1.712	2.194
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		11/27/72-07/21/74	14	2.2	2.714		1.	2.899	1.703	1.1	1.399	3.575	5.95
01034 CHROMIUM, TOTAL (UG/L AS CR)		10/26/72-01/29/73	2##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)		10/26/72-01/29/73	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)		10/26/72-01/29/73	2	10.	10.	10.	10.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)		01/29/73-01/29/73	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)		10/26/72-01/29/73	2##	27.5	27.5	50.	5.	1012.5	31.82	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-07/21/74	16	6000.	8521.875	60000.	50.	200370322.917	14155.222	365.	2875.	6000.	28500.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		09/26/72-07/21/74	16	3.778	3.578	4.778	1.699	0.458	0.677	2.399	3.458	3.778	4.357
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	3784.593								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		11/27/72-07/21/74	14	0.55	0.868	3.	0.05	0.705	0.84	0.075	0.3	1.15	2.6
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		11/27/72-07/21/74	14	0.325	0.534	1.799	0.05	0.3	0.548	0.05	0.175	0.725	1.65
71900 MERCURY, TOTAL (UG/L AS HG)		10/26/72-01/29/73	2##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0103

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	16	0	0.00	4	0	0.00	8	0	0.00	4	0	0.00			
00400 PH	Fresh Chronic	9.	16	2	0.13	4	1	0.25	8	1	0.13	4	0	0.00			
	Other-Lo Lim.	6.5	16	0	0.00	4	0	0.00	8	0	0.00	4	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	14	0	0.00	3	0	0.00	7	0	0.00	4	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	14	0	0.00	3	0	0.00	7	0	0.00	4	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	2	0	0.00				2	0	0.00						
01042 COPPER, TOTAL	Fresh Acute	18.	2	0	0.00				2	0	0.00						
	Drinking Water	1300.	2	0	0.00				2	0	0.00						
01051 LEAD, TOTAL	Fresh Acute	82.	2	0	0.00				2	0	0.00						
	Drinking Water	15.	2	0	0.00				2	0	0.00						
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	1	0	0.00				1	0	0.00						
	Drinking Water	100.	1	0	0.00				1	0	0.00						
01092 ZINC, TOTAL	Fresh Acute	120.	2	0	0.00				2	0	0.00						
	Drinking Water	5000.	2	0	0.00				2	0	0.00						
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	16	15	0.94	4	4	1.00	8	7	0.88	4	4	1.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	2	0	0.00				2	0	0.00						
	Drinking Water	2.	2	0	0.00				2	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0104

NPS Station ID: RICH0104 LAT/LON: 37.523059/ -77.471115 Agency: 21VASWCB Date Created: 06/04/94
Location: REEDY CREEK, RIVERSIDE DRIVE, RIC
Station Type: /TYPA/AMBNT/STREAM
FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
STORET Station ID(s): 2-RDD000.19
Within Park Boundary: No
RMI-Indexes:
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: REEDY CREEK SECTION: 08 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0104

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/20/94-11/23/98	20	15.15	15.335	[illegible]	3.8	57.621	7.591	5.06	8.325	21.9	26.87
00076	TURBIDITY, LAB (FORMAZIN TURB UNIT)		07/20/94-11/23/98	20	5.	6.265	19.	1.9	20.632	4.542	2.01	2.8	8.4	13.76
00094	SPECIFIC CONDUCTANCE, FIELD (MICROMHOS/CM @ 25C)		04/19/95-11/23/98	18	157.5	173.778	531.	84.	8925.948	94.477	105.6	139.5	174.75	246.6
00095	SPECIFIC CONDUCTANCE, (MICROMHOS/CM @ 25C)		07/20/94-11/23/98	20	155.5	166.	468.	115.	5577.053	74.68	117.5	132.	173.5	197.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	MG/L	07/20/94-11/23/98	20	9.1	9.275	16.2	5.1	7.789	2.791	5.68	7.325	11.35	13.13
00310	BOD, 5 DAY, 20 DEG C	MG/L	07/20/94-11/23/98	20	1.3	1.71	4.	0.5	1.088	1.043	0.5	1.	2.75	3.18
00340	COD, .25N K2CR2O7	MG/L	07/20/94-11/23/98	20	20.	19.65	33.	5.	43.187	6.572	10.3	[illegible]	21.	31.6
00400	PH (STANDARD UNITS)		07/20/94-11/23/98	20	6.89	6.901	7.11	6.44	0.027	0.165	6.685	[illegible]	7.065	7.099
00400	CONVERTED PH (STANDARD UNITS)		07/20/94-11/23/98	20	6.89	6.867	7.11	6.44	0.028	0.168	6.685	6.85	7.065	7.099
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/20/94-11/23/98	20	0.129	0.136	0.363	0.078	0.004	0.064	0.08	0.086	0.141	0.207
00403	PH, LAB, STANDARD UNITS	SU	07/20/94-11/23/98	20	6.8	6.87	7.7	6.4	0.101	0.318	6.5	6.7	6.975	7.3
00403	CONVERTED PH, LAB, STANDARD UNITS		07/20/94-11/23/98	20	6.8	6.781	7.7	6.4	0.11	0.331	6.5	6.7	6.975	7.3
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/20/94-11/23/98	20	0.158	0.166	0.398	0.02	0.009	0.097	0.05	0.106	0.2	0.316
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		07/20/94-11/23/98	20	31.5	29.95	41.	19.	44.892	6.7	21.	22.5	34.75	38.
00500	RESIDUE, TOTAL (MG/L)		07/20/94-11/23/98	20	113.5	114.	276.	78.	1653.579	40.664	81.5	91.5	116.75	124.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)		07/20/94-11/23/98	20	33.	33.3	48.	13.	62.326	7.895	22.6	29.	38.5	43.
00510	RESIDUE, TOTAL FIXED (MG/L)		07/20/94-11/23/98	20	76.5	80.7	228.	52.	1357.8	36.848	52.4	58.75	83.75	88.9
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/20/94-11/23/98	20	4.5	4.325	13.	1.5	8.507	2.917	1.5	1.5	6.	7.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/20/94-11/23/98	20##	1.5	1.5	1.5	1.5	0.	0.	1.5	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		07/20/94-11/23/98	20##	2.25	3.1	11.	1.5	5.226	2.286	1.5	1.5	4.	5.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		07/20/94-11/23/98	20##	0.02	0.052	0.33	0.02	0.005	0.071	0.02	0.02	0.058	0.116
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		07/20/94-11/23/98	20	0.01	0.02	0.05	0.005	0.	0.016	0.005	0.01	0.035	0.049
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		07/20/94-11/23/98	20	0.645	0.627	1.06	0.14	0.057	0.238	0.332	0.428	0.833	0.919
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		07/20/94-11/23/98	20	0.5	0.605	1.8	0.3	0.131	0.362	0.3	0.425	0.6	1.18
00665	PHOSPHORUS, TOTAL (MG/L AS P)		07/20/94-11/23/98	20	0.075	0.074	0.13	0.03	0.001	0.025	0.04	0.053	0.09	0.1
00680	CARBON, TOTAL ORGANIC (MG/L AS C)		07/20/94-07/10/96	8	7.4	8.713	13.1	5.6	7.238	2.69	**	**	**	**
00687	CARBON, ORGANIC, IN BED MATERIAL (GM/KG AS C)		04/19/95-04/19/95	1	1.14	1.14	1.14	1.14	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)		07/20/94-11/23/98	20	40.5	41.1	56.	30.	58.305	7.636	30.2	36.	47.5	53.6
00940	CHLORIDE,TOTAL IN WATER	MG/L	07/20/94-11/23/98	20	14.5	19.2	107.	8.	444.905	21.093	9.2	11.	15.	26.1
00945	SULFATE, TOTAL (MG/L AS SO4)		07/20/94-11/23/98	20	12.	12.125	19.	2.5	15.26	3.906	7.1	10.	14.75	17.8
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)		04/19/95-04/19/95	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)		04/19/95-04/19/95	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)		04/19/95-04/19/95	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0104

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	04/19/95-04/19/95	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	04/19/95-04/19/95	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	04/19/95-04/19/95	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01053 MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	04/19/95-04/19/95	1	80.	80.	80.	80.	0.	0.	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	04/19/95-04/19/95	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01078 SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	04/19/95-04/19/95	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	04/19/95-04/19/95	1	36.	36.	36.	36.	0.	0.	**	**	**	**
01098 ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	04/19/95-04/19/95	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01108 ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	04/19/95-04/19/95	1	3370.	3370.	3370.	3370.	0.	0.	**	**	**	**
01148 SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	04/19/95-04/19/95	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170 IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	04/19/95-04/19/95	1	5220.	5220.	5220.	5220.	0.	0.	**	**	**	**
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/20/94-11/23/98	18	640.	2101.833	16000.	45.	16637749.912	4078.94	74.7	197.5	1400.	9880.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/20/94-11/23/98	18	2.794	2.798	4.204	1.653	0.47	0.685	1.868	2.285	3.143	3.988
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		628.051								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/24/94-04/19/95	2	550.	550.	900.	200.	245000.	494.975	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/24/94-04/19/95	2	2.628	2.628	2.954	2.301	0.213	0.462	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		424.264								
34480 THALLIUM DRY WGTBOTMG/KG	04/19/95-04/19/95	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
39061 PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	04/19/95-04/19/95	1##	33.	33.	33.	33.	0.	0.	**	**	**	**
39333 ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	04/19/95-04/19/95	1##	22.5	22.5	22.5	22.5	0.	0.	**	**	**	**
39351 CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	04/19/95-04/19/95	1##	35.	35.	35.	35.	0.	0.	**	**	**	**
39363 DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	04/19/95-04/19/95	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
39368 DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	04/19/95-04/19/95	1##	20.5	20.5	20.5	20.5	0.	0.	**	**	**	**
39373 DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	04/19/95-04/19/95	1##	18.	18.	18.	18.	0.	0.	**	**	**	**
39383 DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	04/19/95-04/19/95	1##	22.	22.	22.	22.	0.	0.	**	**	**	**
39393 ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	04/19/95-04/19/95	1##	35.	35.	35.	35.	0.	0.	**	**	**	**
39403 TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	04/19/95-04/19/95	1##	105.	105.	105.	105.	0.	0.	**	**	**	**
39413 HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	04/19/95-04/19/95	1##	18.5	18.5	18.5	18.5	0.	0.	**	**	**	**
39526 PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	04/19/95-04/19/95	1##	53.	53.	53.	53.	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/94-11/23/98	20	0.05	0.048	0.08	0.005	0.	0.022	0.012	0.03	0.07	0.07
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	04/19/95-04/19/95	1##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
75045 HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	04/19/95-04/19/95	1##	22.	22.	22.	22.	0.	0.	**	**	**	**
79799 DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	04/19/95-04/19/95	1##	33.	33.	33.	33.	0.	0.	**	**	**	**
82007 PERCENT SAND IN SEDIMENT ON A DRY WEIGHT BASIS	04/19/95-04/19/95	1	99.	99.	99.	99.	0.	0.	**	**	**	**
82008 SEDIMENT PRCTL.SIZE CLASS .0039-.0625 SILT %DRY WT	04/19/95-04/19/95	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
82009 SEDIMENT PRCTL.SIZE CLASS <.0039 CLAY %DRY WT	04/19/95-04/19/95	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0104

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	20	0	0.00	8	0	0.00	7	0	0.00	5	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	20	0	0.00	8	0	0.00	7	0	0.00	5	0	0.00			
00400 PH	Fresh Chronic	9.	20	0	0.00	8	0	0.00	7	0	0.00	5	0	0.00			
	Other-Lo Lim.	6.5	20	1	0.05	8	0	0.00	7	1	0.14	5	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	20	0	0.00	8	0	0.00	7	0	0.00	5	0	0.00			
	Other-Lo Lim.	6.5	20	3	0.15	8	2	0.25	7	0	0.00	5	1	0.20			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	20	0	0.00	8	0	0.00	7	0	0.00	5	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	20	0	0.00	8	0	0.00	7	0	0.00	5	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	20	0	0.00	8	0	0.00	7	0	0.00	5	0	0.00			
	Drinking Water	250.	20	0	0.00	8	0	0.00	7	0	0.00	5	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	20	0	0.00	8	0	0.00	7	0	0.00	5	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	18	14	0.78	8	7	0.88	6	4	0.67	4	3	0.75			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	2	2	1.00				1	1	1.00	1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0105

NPS Station ID: RICH0105 LAT/LON: 37.523337/ -77 421116 Agency: 21VASWCB Date Created: 06/11/83
Location: ROCK OFF LONE STAR CEMENT CO., DOCK ST.RICHMOND FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBN AM STORET Station ID(s): 2-JMS109.39
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.60 On/Off RF1:
RF3 Index: 02080205000100.61 RF3 Mile Point: 1.21 Distance from RF3: 0.03 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD INTENSIVE SURVEY NO. 815102 BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0105

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-10/26/98	121	24.8	23.136	31.7	5.	33.927	5.825	15.5	19.55	27.75	29.4
00070 TURBIDITY, (JACKSON CANDLE UNITS)		05/06/71-07/16/80	4	8.5	12.5	30.5	2.5	153.5	12.39	**	**	**	**
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		07/14/94-06/01/95	11	3.4	6.455	16.	1.5	23.993	4.898	1.6	2.4	10.7	15.2
00078 TRANSPARENCY, SECCHI DISC (METERS)		11/18/82-11/18/82	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		05/19/80-10/26/98	58	196.	209.121	392.	105.	3888.389	62.357	136.9	161.5	251.75	295.2
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/14/94-06/01/95	11	190.	193.273	276.	122.	3008.218	54.847	123.8	136.	251.	273.6
00096 SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.		**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	50	8.45	8.728	10.7	7.5	0.751	0.867	.71	8.075	9.425	10.09
00300 OXYGEN, DISSOLVED	MG/L	07/22/68-06/28/83	72	8.15	8.501	14.6	4.1	2.983	1.727	6.8	7.425	8.975	11.34
00310 BOD, 5 DAY, 20 DEG C	MG/L	03/20/69-06/01/95	49	1.	1.467	8.	0.5	1.511	1.229	0.5	1.	2.	2.1
00340 COD, .25N K2CR2O7	MG/L	07/22/74-06/28/83	13	11.	12.769	31.	4.	65.526	8.095	4.4	7.	15.5	29.4
00400 PH (STANDARD UNITS)		07/22/68-10/26/98	123	7.86	7.897	9.5	6.8	0.304	0.552	7.3	7.5	8.18	8.8
00400 CONVERTED PH (STANDARD UNITS)		07/22/68-10/26/98	123	7.86	7.623	9.5	6.8	0.38	0.616	7.3	7.5	8.18	8.8
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-10/26/98	123	0.014	0.024	0.158	0.	0.001	0.028	0.002	0.007	0.032	0.05
00403 PH, LAB, STANDARD UNITS	SU	03/20/69-06/01/95	17	7.4	7.335	7.9	6.5	0.209	0.457	6.5	7.	7.7	7.82
00403 CONVERTED PH, LAB, STANDARD UNITS		03/20/69-06/01/95	17	7.4	7.093	7.9	6.5	0.271	0.521	6.5	7.	7.7	7.82
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		03/20/69-06/01/95	17	0.04	0.081	0.316	0.013	0.009	0.097	0.015	0.02	0.1	0.316
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		03/20/69-06/01/95	17	44.	44.294	73.	22.	240.346	15.503	22.	31.	57.	67.4
00480 SALINITY - PARTS PER THOUSAND		11/18/82-11/18/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		03/20/69-06/01/95	44	123.	155.023	1134.	82.	24786.999	157.439	98.	106.5	142.75	180.
00505 RESIDUE, TOTAL VOLATILE (MG/L)		03/20/69-06/01/95	44	36.5	53.159	613.	15.	7863.997	88.679	18.	26.25	47.	78.
00510 RESIDUE, TOTAL FIXED (MG/L)		03/20/69-06/01/95	44	85.5	102.	521.	12.	5967.07	77.247	43.5	74.5	109.	154.
00515 RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L		07/27/81-07/27/81	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/69-06/01/95	62	10.	19.661	233.	0.	1236.572	35.165	1.5	4.	18.	36.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/69-06/01/95	61	3.	6.303	80.	0.	126.669	11.255	1.	1.5	8.	13.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/69-06/01/95	62	6.5	15.194	195.	0.	913.552	30.225	1.15	2.5	14.	29.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/01/95	76##	0.05	0.064	0.5	0.01	0.006	0.076	0.02	0.04	0.05	0.123
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	77##	0.005	0.011	0.13	0.005	0.	0.017	0.005	0.005	0.01	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	77	0.26	0.316	1.739	0.005	0.115	0.339	0.02	0.055	0.4	0.708
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/01/95	77	0.3	0.34	1.599	0.05	0.075	0.274	0.1	0.2	0.4	0.8
00665 PHOSPHORUS, TOTAL (MG/L AS P)		05/19/80-06/01/95	23	0.07	0.075	0.15	0.04	0.001	0.028	0.05	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		05/19/80-06/28/83	12	0.05	0.052	0.1	0.01	0.001	0.031	0.01	0.025	0.082	0.1
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		07/22/74-07/14/94	34	6.	7.335	51.	3.	63.519	7.97	3.7	4.75	7.	9.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0105

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00940	CHLORIDE,TOTAL IN WATER MG/L	07/08/72-06/01/95	46	9.	9.543	22.	2.	25.231	5.023	4.7	6.	11.25	18.6
00945	SULFATE, TOTAL (MG/L AS SO4)	07/28/94-06/01/95	10	19.	21.	35.	11.	89.111	9.44	11.	11.75	31.75	34.9
01002	ARSENIC, TOTAL (UG/L AS AS)	06/13/71-10/28/82	5##	1.	1.5	2.5	0.5	0.875	0.935	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/02/72-10/28/82	6##	5.	5.083	10.	0.5	9.042	3.007	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/21/70-10/28/82	14##	5.	5.464	10.	0.5	12.133	3.483	0.5	3.875	10.	10.
01042	COPPER, TOTAL (UG/L AS CU)	04/21/70-10/28/82	14##	5.	16.429	100.	5.	640.11	25.3	5.	5.	20.	65.
01051	LEAD, TOTAL (UG/L AS PB)	06/13/71-10/28/82	12	6.	11.333	55.	1.	217.152	14.736	1.3	4.25	13.	44.5
01055	MANGANESE, TOTAL (UG/L AS MN)	04/21/70-04/21/70	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	05/03/73-05/22/78	4##	50.	50.	50.	50.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	11/16/81-10/28/82	4##	30.	33.75	70.	5.	989.583	31.458	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/21/70-10/28/82	14##	7.5	16.071	80.	5.	481.456	21.942	5.	5.	12.5	65.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/22/68-05/04/76	15	11000.	195710.667	1100000.	430.	146696820292.381	383010.209	730.	4300.	110000.	1100000.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	07/22/68-05/04/76	15	4.041	4.322	6.041	2.633	1.106	1.051	2.834	3.633	5.041	6.041
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	20998.574								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	53	400.	2751.019	16000.	9.	23981327.865	4897.073	72.	110.	1950.	13280.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	53	2.602	2.748	4.204	0.954	0.677	0.823	1.856	2.041	3.286	4.108
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	559.369								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-06/28/83	56	100.	722.857	8000.	50.	2207657.143	1485.819	50.	50.	557.5	2360.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-06/28/83	56	2.	2.299	3.903	1.699	0.422	0.649	1.699	1.699	2.742	3.362
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	199.198								
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/82-10/28/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	05/06/71-06/13/71	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	06/13/71-10/28/82	3	0.	0.033	0.1	0.	0.003	0.058	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	05/01/75-05/01/75	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-04/24/79	54##	0.05	0.077	0.7	0.025	0.01	0.1	0.05	0.05	0.05	0.1
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	65	0.04	0.042	0.1	0.01	0.001	0.023	0.01	0.03	0.05	0.084
71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-10/28/82	14##	0.25	0.246	0.6	0.15	0.012	0.112	0.15	0.15	0.25	0.425

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0105

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	2	0	0.00				2	0	0.00			
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	50	0	0.00	30	0	0.00	5	0	0.00	15	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	72	0	0.00	38	0	0.00	10	0	0.00	24	0	0.00			
00400 PH	Fresh Chronic	9.	123	10	0.08	69	4	0.06	15	1	0.07	39	5	0.13			
	Other-Lo Lim.	6.5	123	0	0.00	69	0	0.00	15	0	0.00	39	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	17	0	0.00	8	0	0.00	2	0	0.00	7	0	0.00			
	Other-Lo Lim.	6.5	17	2	0.12	8	2	0.25	2	0	0.00	7	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	77	0	0.00	40	0	0.00	11	0	0.00	26	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	77	0	0.00	40	0	0.00	11	0	0.00	26	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	46	0	0.00	26	0	0.00	5	0	0.00	15	0	0.00			
	Drinking Water	250.	46	0	0.00	26	0	0.00	5	0	0.00	15	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	10	0	0.00	6	0	0.00	1	0	0.00	3	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	5	0	0.00				1	0	0.00	4	0	0.00			
	Drinking Water	50.	5	0	0.00				1	0	0.00	4	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	2&	1	0.50				1	0	0.00	1	1	1.00			
	Drinking Water	5.	2&	1	0.50				1	0	0.00	1	1	1.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	14	0	0.00	3	0	0.00	2	0	0.00	9	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	14	4	0.29	3	0	0.00	2	1	0.50	9	3	0.33			
	Drinking Water	1300.	14	0	0.00	3	0	0.00	2	0	0.00	9	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	12	0	0.00	3	0	0.00	2	0	0.00	7	0	0.00			
	Drinking Water	15.	12	2	0.17	3	0	0.00	2	0	0.00	7	2	0.29			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	4	0	0.00							4	0	0.00			
	Drinking Water	100.	4	0	0.00							4	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	4	0	0.00				2	0	0.00	2	0	0.00			
	Drinking Water	100.	4	0	0.00				2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: RICH0105

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01092 ZINC, TOTAL	Fresh Acute	120.	14	0	0.00	3	0	0.00	2	0	0.00	9	0	0.00			
	Drinking Water	5000.	14	0	0.00	3	0	0.00	2	0	0.00	9	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	15	13	0.87	8	8	1.00	1	1	1.00	6	4	0.67			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	53	36	0.68	32	21	0.66	5	2	0.40	16	13	0.81			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	56	24	0.43	29	14	0.48	8	5	0.63	19	5	0.26			
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	2	0	0.00				1	0	0.00	1	0	0.00			
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	2	0	0.00							2	0	0.00			
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	3	0	0.00				1	0	0.00	2	0	0.00			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00							1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	14	0	0.00	4	0	0.00	2	0	0.00	8	0	0.00			
	Drinking Water	2.	14	0	0.00	4	0	0.00	2	0	0.00	8	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1968 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	2	28.65	28.65	31.7	25.6	18.605	4.313	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	2	8.	8.	8.	8.	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	2	8.	8.	8.	8.	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	3	22.2	19.833	25.6	11.7	52.503	7.246	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	3	7.2	7.067	7.2	6.8	0.053	0.231	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	3	7.2	7.023	7.2	6.8	0.056	0.237	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	3	0.063	0.095	0.158	0.063	0.003	0.055	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	9	26.7	22.9	31.1	5.	67.503	8.216	5.	17.5	28.05	31.1
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	9	7.3	7.411	8.2	6.8	0.171	0.414	6.8	7.2	7.7	8.2
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	9	7.3	7.268	8.2	6.8	0.194	0.441	6.8	7.2	7.7	8.2
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	9	0.05	0.054	0.158	0.006	0.002	0.044	0.006	0.022	0.063	0.158

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	7	22.8	23.329	30.	17.2	24.239	4.923	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	7	7.5	7.6	8.3	7.	0.207	0.455	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	7	7.5	7.426	8.3	7.	0.242	0.492	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	7	0.032	0.038	0.1	0.005	0.001	0.033	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	7	23.9	22.943	26.7	17.2	14.19	3.767	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	8	7.95	7.813	8.3	7.3	0.133	0.364	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	8	7.825	7.687	8.3	7.3	0.151	0.388	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	8	0.015	0.021	0.05	0.005	0.	0.016	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	5	27.2	25.98	29.4	17.8	22.952	4.791	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	5	8.	8.06	9.	7.3	0.368	0.607	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	5	8.	7.79	9.	7.3	0.459	0.678	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	5	0.01	0.016	0.05	0.001	0.	0.019	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	7	27.8	25.171	29.	16.1	23.709	4.869	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	7	8.	7.986	8.5	7.6	0.075	0.273	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	7	8.	7.92	8.5	7.6	0.08	0.282	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	7	0.01	0.012	0.025	0.003	0.	0.007	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	8	27.2	25.538	30.	17.2	21.877	4.677	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	9	8.	8.211	9.	7.5	0.366	0.605	7.5	7.6	8.85	9.
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	9	8.	7.911	9.	7.5	0.467	0.683	7.5	7.6	8.85	9.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	9	0.01	0.012	0.032	0.001	0.	0.013	0.001	0.001	0.026	0.032

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	4	14.8	14.5	22.8	5.6	61.187	7.822	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	4	7.6	7.925	9.	7.5	0.523	0.723	**	**	**	**
00400 CONVERTED PH (STANDARD [illegible]	07/22/68-10/26/98	4	7.589	7.677	9.	7.5	0.605	0.778	**	**	**	**
00400 MICRO EQUIVALENTS/LITER [illegible] FROM PH	07/22/68-10/26/98	4	0.026	0.021	0.032	0.001	0.	0.014	**	**	**	**

** - Less than 9 observations ## - Computed with [illegible]% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	6	26.	22.917	30.	7.	69.442	8.333	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	6	8.85	8.567	9.5	7.5	0.631	0.794	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	6	8.825	8.031	9.5	7.5	0.975	0.988	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	6	0.001	0.009	0.032	0.	0.	0.013	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	1	0.002	0.002	0.002	0.002	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	3	23.	23.833	31.5	17.	53.083	7.286	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	3	9.	8.833	9.	8.5	0.083	0.289	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	3	9.	8.764	9.	8.5	0.09	0.301	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	3	0.001	0.002	0.003	0.001	0.	0.001	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	3	25.	21.333	29.	10.	100.333	10.017	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	3	8.1	8.267	8.8	7.9	0.223	0.473	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	3	8.1	8.132	8.8	7.9	0.25	0.5	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	3	0.008	0.007	0.013	0.002	0.	0.006	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	4	17.5	17.875	28.	8.5	77.063	8.779	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	4	8.35	8.375	9.3	7.5	0.676	0.822	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	4	8.15	7.936	9.3	7.5	0.932	0.966	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	4	0.007	0.012	0.032	0.001	0.	0.014	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	1	29.5	29.5	29.5	29.5	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	9	25.4	24.167	29.6	16.3	24.52	4.952	16.3	19.35	28.5	29.6
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	9	8.3	8.767	10.7	7.9	0.915	0.957	7.9	8.	9.5	10.7
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	9	8.04	8.011	8.39	7.55	0.083	0.289	7.55	7.785	8.28	8.39
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	9	8.04	7.927	8.39	7.55	0.091	0.302	7.55	7.785	8.28	8.39
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	9	0.009	0.012	0.028	0.004	0.	0.008	0.004	0.005	0.016	0.028
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	9	110.	1217.	9200.	45.	9017012.	3002.834	45.	73.	565.	9200.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	9	2.041	2.349	3.964	1.653	0.518	0.72	1.653	1.862	2.715	3.964
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		223.164									

** - Less than [illegible]ations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	8	23.3	22.513	29.5	15.1	26.178	5.116	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	8	8.65	8.887	10.3	7.7	0.827	0.909	**	**	**	**
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	8	7.565	7.674	8.29	7.33	0.116	0.341	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	8	7.565	7.578	8.29	7.33	0.127	0.356	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	8	0.027	0.026	0.047	0.005	0.	0.016	**	**	**	**
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	9	640.	2921.111	16000.	220.	26881336.111	5184.721	220.	230.	3800.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	9	2.806	2.958	4.204	2.342	0.462	0.68	2.342	2.362	3.537	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		908.227									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	12	21.45	22.008	27.9	15.1	18.683	4.322	15.34	18.875	26.375	27.75
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	12	8.8	8.975	10.2	8.	0.6	0.775	8.03	8.4	9.825	10.11
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	12	7.555	7.661	8.55	6.87	0.199	0.446	6.999	7.368	7.93	8.439
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	12	7.554	7.472	8.55	6.87	0.237	0.487	6.999	7.368	7.93	8.439
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	12	0.028	0.034	0.135	0.003	0.001	0.035	0.004	0.012	0.043	0.109
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	12	365.	3174.667	16000.	40.	36390659.697	6032.467	41.5	81.75	2075.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	12	2.56	2.692	4.204	1.602	0.845	0.919	1.617	1.911	3.314	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		491.692									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	10	22.45	22.85	28.2	14.	20.752	4.555	14.46	20.4	26.95	28.15
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/28/94-10/26/98	9	8.4	8.511	10.4	7.5	1.031	1.015	7.5	7.65	9.3	10.4
00400 PH (STANDARD UNITS)	07/22/68-10/26/98	10	7.64	7.64	8.03	7.38	0.054	0.233	7.381	7.405	7.868	8.016
00400 CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	10	7.64	7.588	8.03	7.38	0.057	0.239	7.381	7.405	7.868	8.016
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	10	0.023	0.026	0.042	0.009	0.	0.012	0.01	0.014	0.039	0.042
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	11	330.	1651.545	9200.	9.	8696893.873	2949.05	22.8	110.	1500.	8440.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/28/94-10/26/98	11	2.519	2.57	3.964	0.954	0.736	0.858	1.142	2.041	3.176	3.918
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		371.549									

** - Less than 9 obse[illegible] ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station RICH0105

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/22/68-10/26/98	12	26.3	25.092	29.1	15.5	16.95	4.117	16.76	22.925	28.4	29.01
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/28/94-10/26/98	12	8.4	8.508	10.	7.6	0.626	0.791	7.6	7.8	9.175	9.85
00400	PH (STANDARD UNITS)		07/22/68-10/26/98	12	7.915	7.88	8.45	7.02	0.135	0.368	7.179	7.69	8.157	8.372
00400	CONVERTED PH (STANDARD UNITS)		07/22/68-10/26/98	12	7.914	7.705	8.45	7.02	0.169	0.411	7.179	7.69	8.157	8.372
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/22/68-10/26/98	12	0.012	0.02	0.095	0.004	0.001	0.025	0.004	0.007	0.02	0.075
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	12	1300.	4358.167	16000.	78.	36790062.152	6065.481	105.6	250.	8250.	16000.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/28/94-10/26/98	12	3.114	3.108	4.204	1.892	0.628	0.792	1.994	2.345	3.906	4.204
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		1282.365									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	68	26.8	25.846	31.7	15.1	13.053	3.613	20.	24.025	28.275	29.51
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-10/26/98	32	222.5	223.938	341.	141.	3350.19	57.881	150.	177.5	275.75	300.5
00300 OXYGEN, DISSOLVED MG/L	07/22/68-06/28/83	38	7.85	7.821	11.2	4.1	1.485	1.219	6.36	7.275	8.3	9.08
00310p BOD, 5 DAY, 20 DEG C MG/L	03/20/69-06/01/95	20	1.	1.325	8.	0.5	2.718	1.649	0.5	0.5	1.	2.
00400p PH (STANDARD UNITS)	07/22/68-10/26/98	69	7.87	7.911	9.	6.8	0.227	0.477	7.35	7.565	8.11	8.7
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	69	7.87	7.691	9.	6.8	0.276	0.526	7.35	7.565	8.11	8.7
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	69	0.013	0.02	0.158	0.001	0.001	0.024	0.002	0.008	0.027	0.045
00500p RESIDUE, TOTAL (MG/L)	03/20/69-06/01/95	17	137.	147.647	360.	98.	3776.118	61.45	100.4	120.	142.5	247.2
00505p RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/01/95	17	37.	40.118	105.	15.	504.985	22.472	15.	25.	46.	83.4
00510p RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/01/95	17	92.	113.412	255.	42.	2737.257	52.319	65.2	83.	128.5	210.2
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-06/01/95	30	8.5	23.933	233.	0.5	2034.823	45.109	1.5	4.75	20.5	64.5
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-06/01/95	30	2.	4.917	38.	0.	56.312	7.504	0.55	1.	6.	14.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-06/01/95	30	6.5	19.2	195.	0.5	1445.959	38.026	1.5	3.	14.5	55.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	38##	0.05	0.068	0.5	0.01	0.007	0.084	0.02	0.02	0.05	0.152
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	40##	0.008	0.014	0.13	0.005	0.001	0.023	0.005	0.005	0.01	0.029
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	40	0.255	0.325	1.329	0.005	0.118	0.343	0.011	0.045	0.42	0.879
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	40	0.3	0.337	1.099	0.05	0.065	0.254	0.055	0.2	0.4	0.78
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/22/74-07/14/94	14	6.	6.529	12.	3.	7.142	2.672	3.2	4.	9.	11.
00940 CHLORIDE,TOTAL IN WATER MG/L	07/08/72-06/01/95	26	9.	10.462	22.	2.	29.538	5.435	4.7	6.75	12.25	21.3
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-06/28/83	29	100.	558.621	3600.	50.	844476.601	918.954	50.	50.	700.	1900.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-06/28/83	29	2.	2.303	3.556	1.699	0.375	0.613	1.699	1.699	2.841	3.279
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	200.807								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-04/24/79	29##	0.05	0.09	0.7	0.05	0.018	0.135	0.05	0.05	0.05	0.1
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	36	0.04	0.043	0.1	0.01	0.	0.021	0.017	0.03	0.05	0.069

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	15	14.	12.647	18.9	5.	20.503	4.528	5.36	8.5	16.1	17.82
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-10/26/98	9	200.	233.556	392.	105.	6979.278	83.542	105.	183.5	284.5	392.
00300 OXYGEN, DISSOLVED MG/L	07/22/68-06/28/83	10	11.6	11.	12.2	8.8	1.68	1.296	8.82	9.75	12.	12.18
00310p BOD, 5 DAY, 20 DEG C MG/L	03/20/69-06/01/95	8	2.	1.725	3.3	0.5	0.762	0.873	**	**	**	**
00400p PH (STANDARD UNITS)	07/22/68-10/26/98	15	7.7	7.741	9.	7.	0.224	0.474	7.18	7.5	8.	8.496
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	15	7.7	7.561	9.	7.	0.259	0.509	7.18	7.5	8.	8.496
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	15	0.02	0.027	0.1	0.001	0.001	0.025	0.005	0.01	0.032	0.07
00500p RESIDUE, TOTAL (MG/L)	03/20/69-06/01/95	9	113.	126.889	164.	101.	566.611	23.804	101.	109.	152.5	164.
00505p RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/01/95	9	32.	33.333	47.	18.	111.25	10.548	18.	25.	45.5	47.
00510p RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/01/95	9	85.	93.556	129.	66.	474.278	21.778	66.	77.	115.	129.
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-06/01/95	10##	5.25	8.45	32.	0.5	91.136	9.547	0.6	2.25	11.25	30.3
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-06/01/95	10##	4.25	12.15	80.	0.5	579.669	24.076	0.6	2.25	10.	73.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-06/01/95	10##	2.25	4.45	24.	0.	53.803	7.335	0.	0.375	4.125	22.5
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	11##	0.05	0.082	0.44	0.02	0.014	0.119	0.024	0.05	0.05	0.362
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	11##	0.005	0.01	0.03	0.005	0.	0.008	0.005	0.005	0.01	0.028
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	11	0.16	0.205	0.43	0.01	0.029	0.17	0.012	0.025	0.38	0.43
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	11	0.3	0.3	0.8	0.1	0.034	0.184	0.12	0.2	0.3	0.72
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/22/74-07/14/94	7	7.	6.143	8.	4.	2.143	1.464	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	07/08/72-06/01/95	5	9.	11.2	18.	5.	35.2	5.933	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-06/28/83	8	650.	2181.25	8000.	50.	9599241.071	3098.264	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-06/28/83	8	2.671	2.678	3.903	1.699	0.893	0.945	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	476.103								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-04/24/79	6##	0.05	0.067	0.1	0.05	0.001	0.026	**	**	**	**
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	7	0.04	0.046	0.09	0.02	0.001	0.024	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

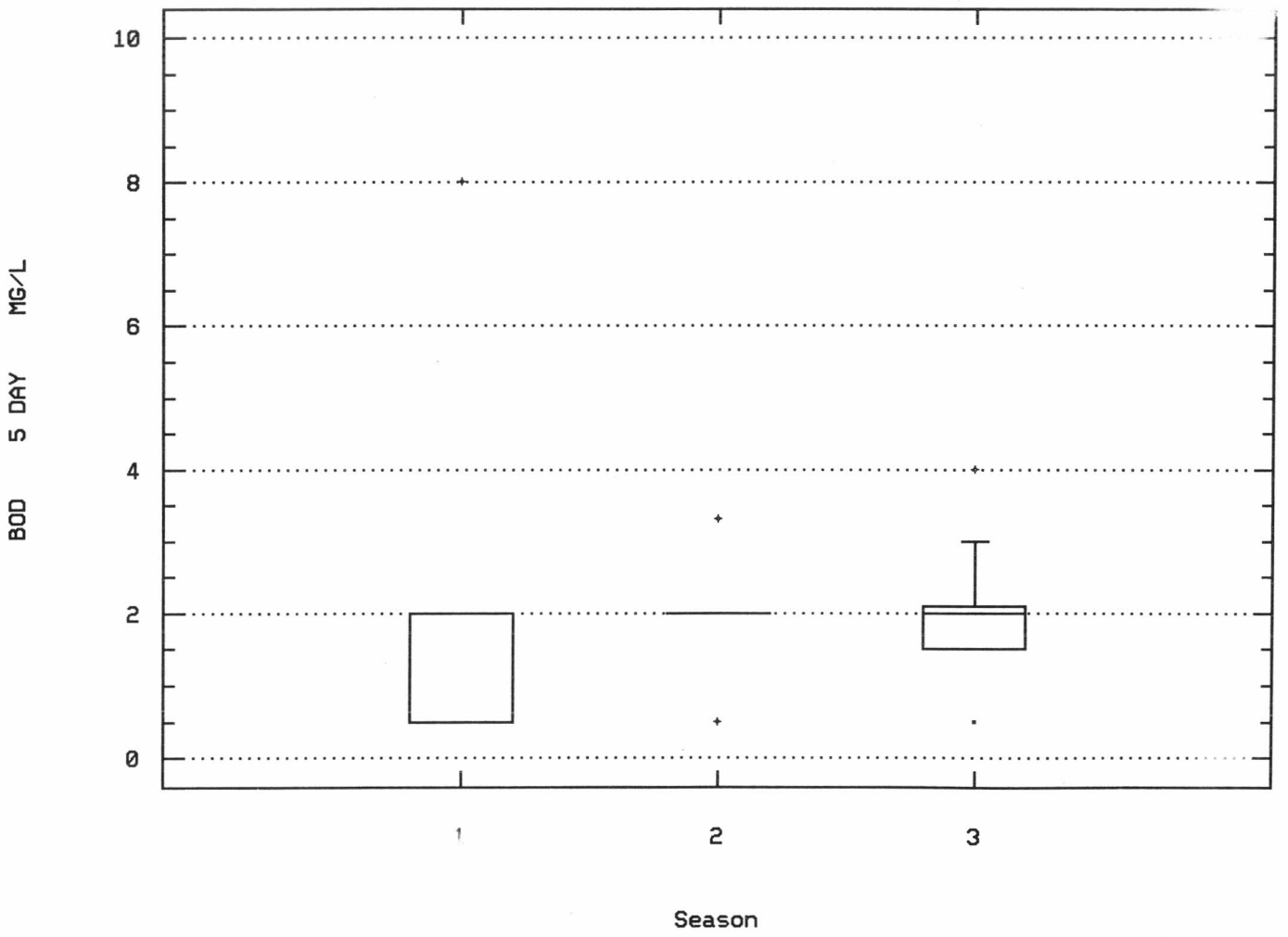
Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/68-10/26/98	38	22.4	22.429	30.	11.7	20.027	4.475	17.2	18.875	26.025	29.41
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/19/80-10/26/98	17	167.	168.294	249.	109.	1325.846	36.412	125.8	136.5	198.5	219.4
00300 OXYGEN, DISSOLVED MG/L	07/22/68-06/28/83	24	8.3	8.538	14.6	6.1	2.682	1.638	7.1	7.725	8.875	10.45
00310p BOD, 5 DAY, 20 DEG C MG/L	03/20/69-06/01/95	21	1.	1.505	4.	0.5	0.73	0.855	0.6	1.	2.	2.82
00400p PH (STANDARD UNITS)	07/22/68-10/26/98	39	7.88	7.93	9.5	6.8	0.477	0.691	7.2	7.36	8.34	9.
00400p CONVERTED PH (STANDARD UNITS)	07/22/68-10/26/98	39	7.88	7.545	9.5	6.8	0.629	0.793	7.2	7.36	8.34	9.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/68-10/26/98	39	0.013	0.029	0.158	0.	0.001	0.035	0.001	0.005	0.044	0.063
00500p RESIDUE, TOTAL (MG/L)	03/20/69-06/01/95	18	116.5	176.056	1134.	82.	57934.056	240.695	83.8	99.5	141.5	279.9
00505p RESIDUE, TOTAL VOLATILE (MG/L)	03/20/69-06/01/95	18	39.	75.389	613.	16.	18462.252	135.876	20.5	26.	69.	140.5
00510p RESIDUE, TOTAL FIXED (MG/L)	03/20/69-06/01/95	18	77.	95.444	521.	12.	12080.261	109.91	14.7	53.25	97.75	152.9
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/69-06/01/95	22	15.5	18.932	126.	0.	656.412	25.621	1.1	7.	20.5	33.6
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/69-06/01/95	21	4.	5.5	15.	0.5	16.85	4.105	1.5	2.5	8.5	12.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/69-06/01/95	22	10.	14.614	116.	0.5	555.546	23.57	1.3	3.625	16.25	22.5
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	27##	0.05	0.05	0.13	0.01	0.001	0.026	0.02	0.04	0.05	0.088
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	26##	0.005	0.008	0.03	0.005	0.	0.006	0.005	0.005	0.01	0.013
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	26	0.31	0.351	1.739	0.01	0.147	0.383	0.025	0.065	0.42	0.808
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	26	0.3	0.36	1.599	0.1	0.113	0.336	0.1	0.175	0.4	0.902
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/22/74-07/14/94	13	6.	8.846	51.	3.	161.808	12.72	3.4	4.5	6.5	33.4
00940 CHLORIDE,TOTAL IN WATER MG/L	07/08/72-06/01/95	15	6.	7.4	15.	3.	10.829	3.291	3.6	5.	9.	13.8
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-06/28/83	19	100.	359.474	3200.	50.	570816.374	755.524	50.	50.	300.	1400.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/06/71-06/28/83	19	2.	2.135	3.505	1.699	0.265	0.515	1.699	1.699	2.477	3.146
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	136.338								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-04/24/79	19##	0.05	0.061	0.1	0.025	0.001	0.025	0.025	0.05	0.1	0.1
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	22	0.045	0.04	0.1	0.01	0.001	0.027	0.01	0.01	0.05	0.087

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: RICH0105 Parameter Code: 00310

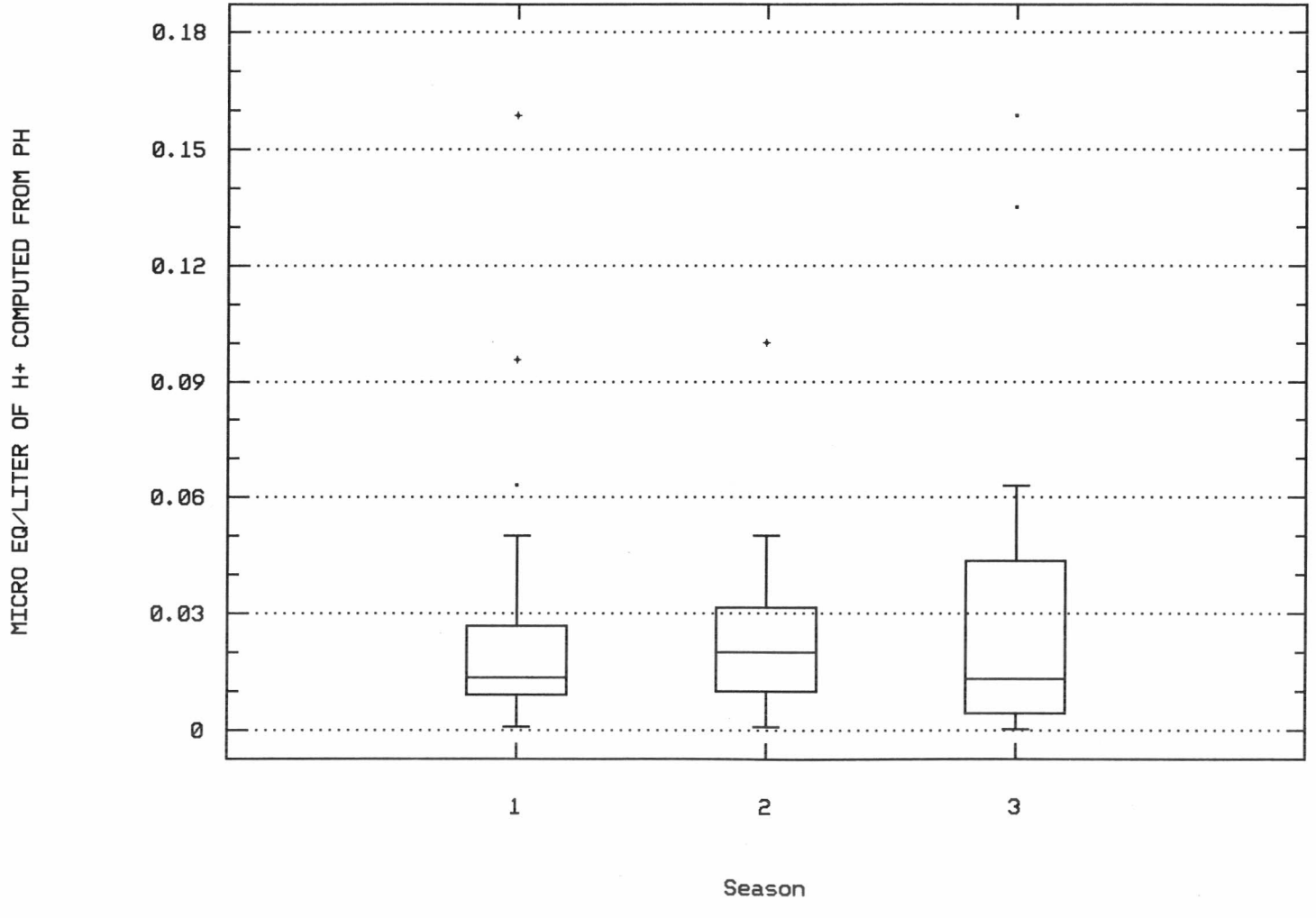
BOD, 5 DAY, 20 DEG C



ROCK OFF LONE STAR CEMENT CO., DOCK ST.

Station: RICH0105 Parameter Code: 00400

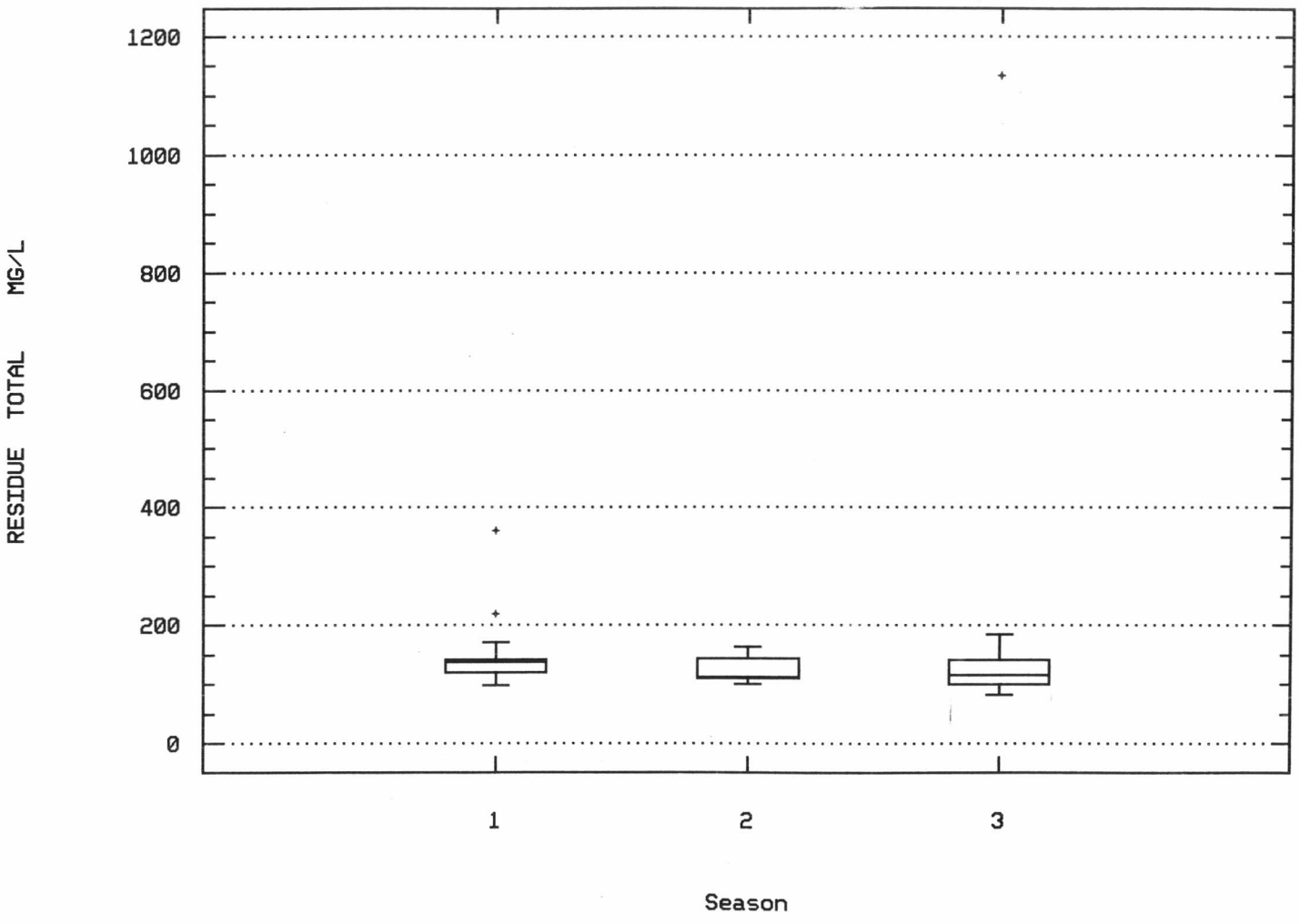
MICRO EQ/LITER OF H+ COMPUTED FROM PH



ROCK OFF LONE STAR CEMENT CO., DOCK ST.

Station: RICH0105 Parameter Code: 00500

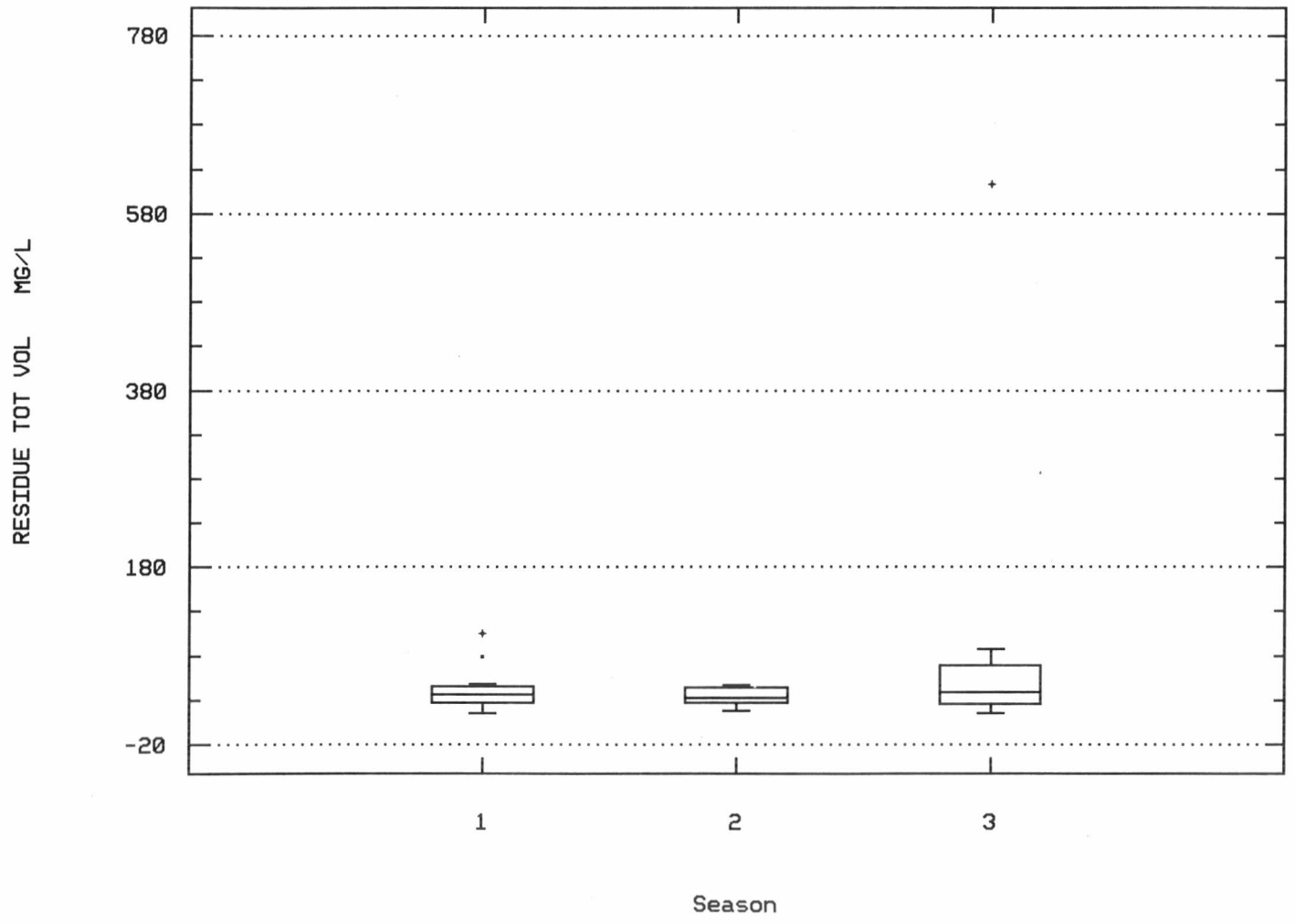
RESIDUE, TOTAL (MG/L)



K OFF LONE STAR CEMENT CO., DOCK ST.

Station: RICH0105 Parameter Code: 00505

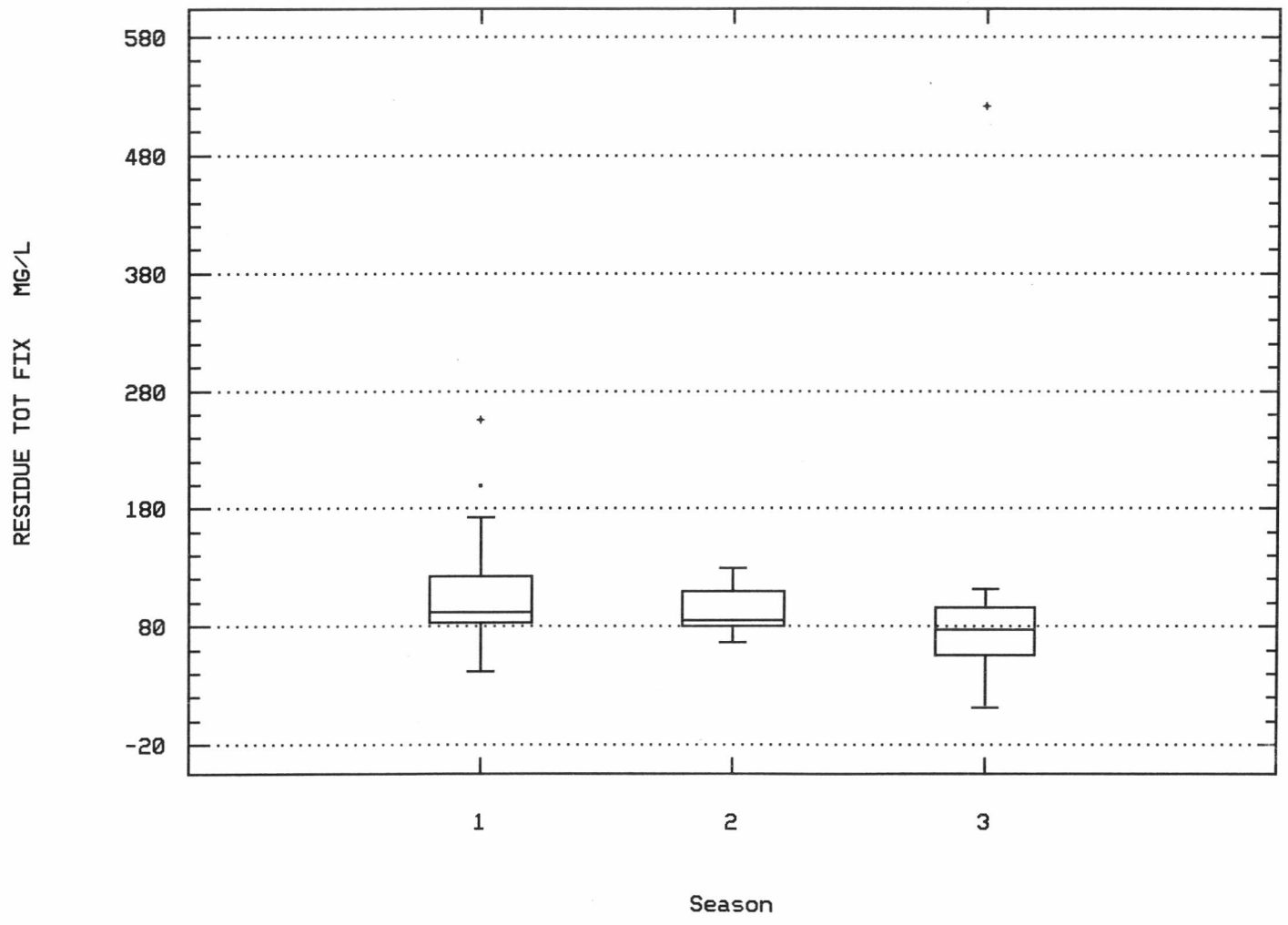
RESIDUE, TOTAL VOLATILE (MG/L)



ROCK OFF LONE STAR CEMENT CO., DOCK ST.

Station: RICH0105 Parameter Code: 00510

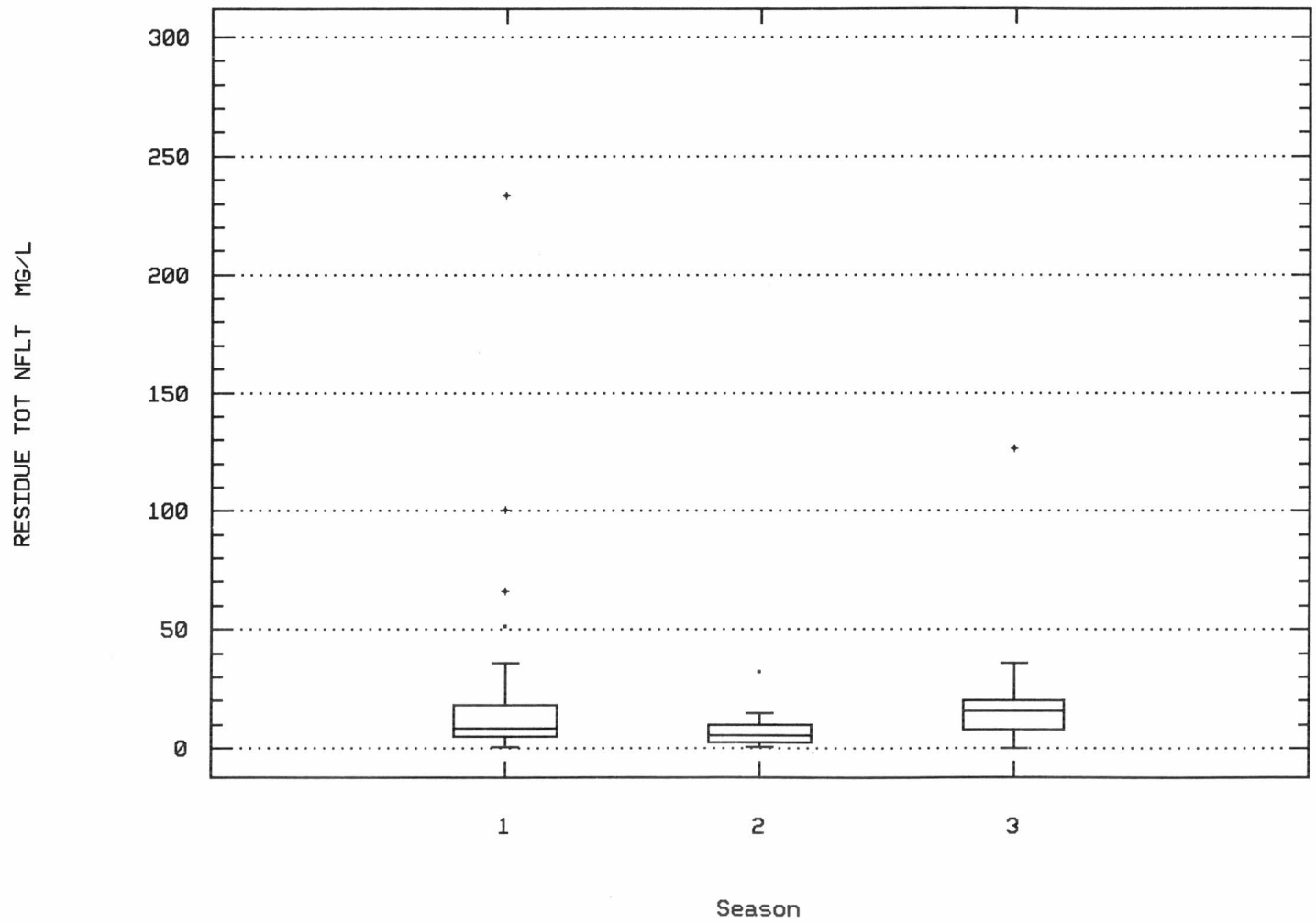
RESIDUE, TOTAL FIXED (MG/L)



ROCK OFF LONE STAR CEMENT CO., DOCK ST.

Station: RICH0105 Parameter Code: 00530

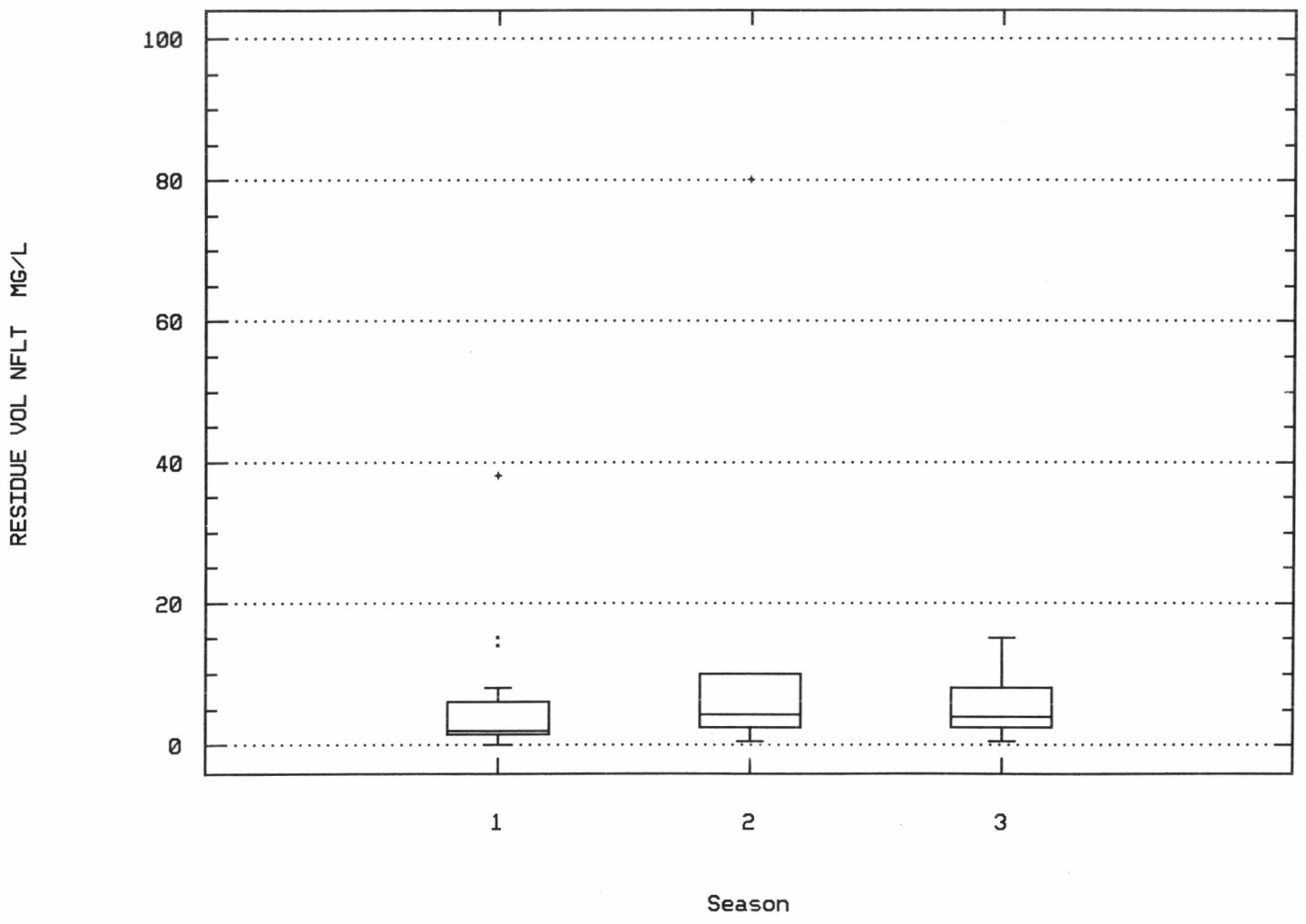
RESIDUE, TOTAL NONFILTRABLE (MG/L)



ROCK OFF LONE STAR CEMENT CO., DOCK ST.

Station: RICH0105 Parameter Code: 00535

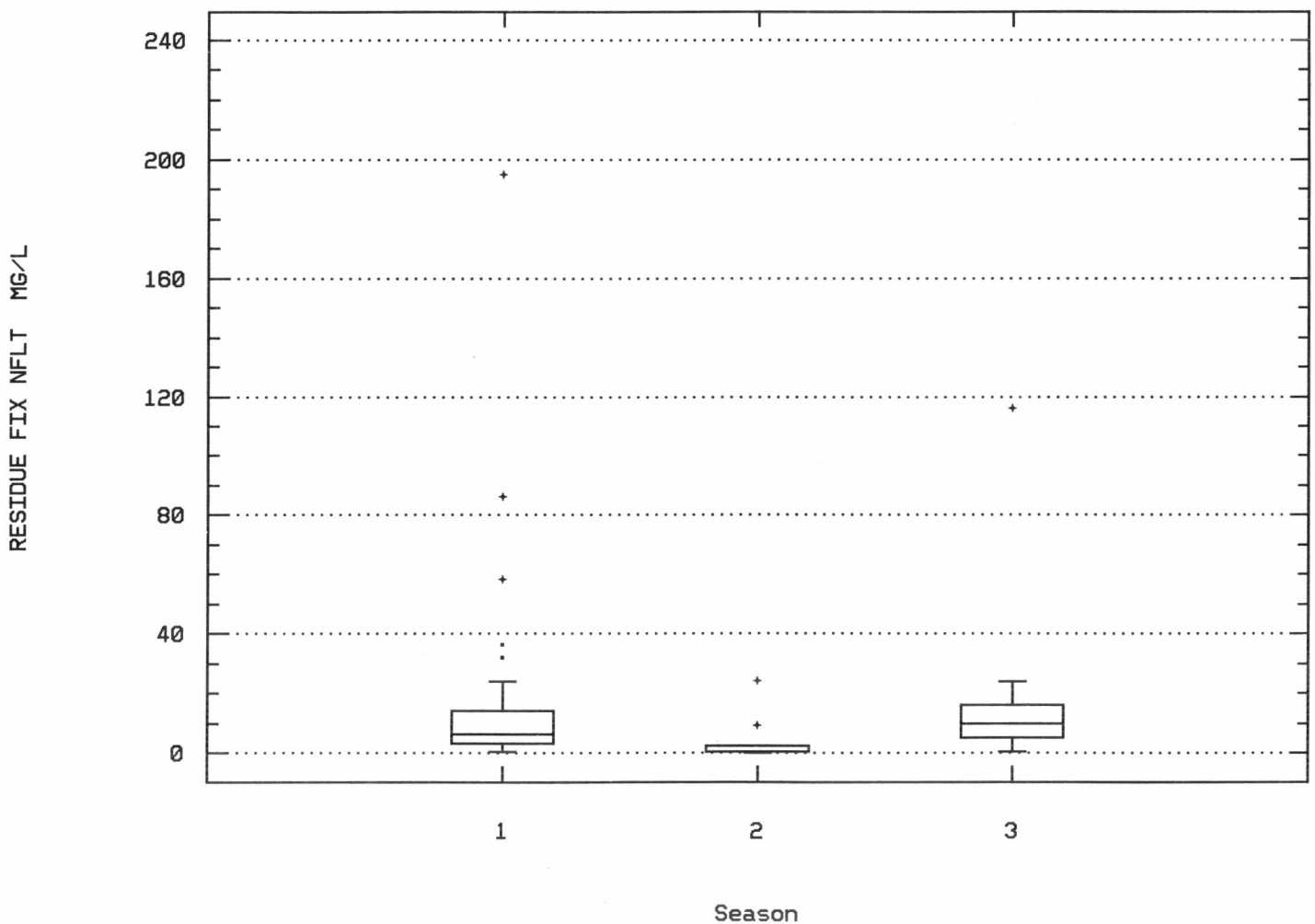
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



ROCK OFF LONE STAR CEMENT CO., DOCK ST.

Station: RICH0105 Parameter Code: 00540

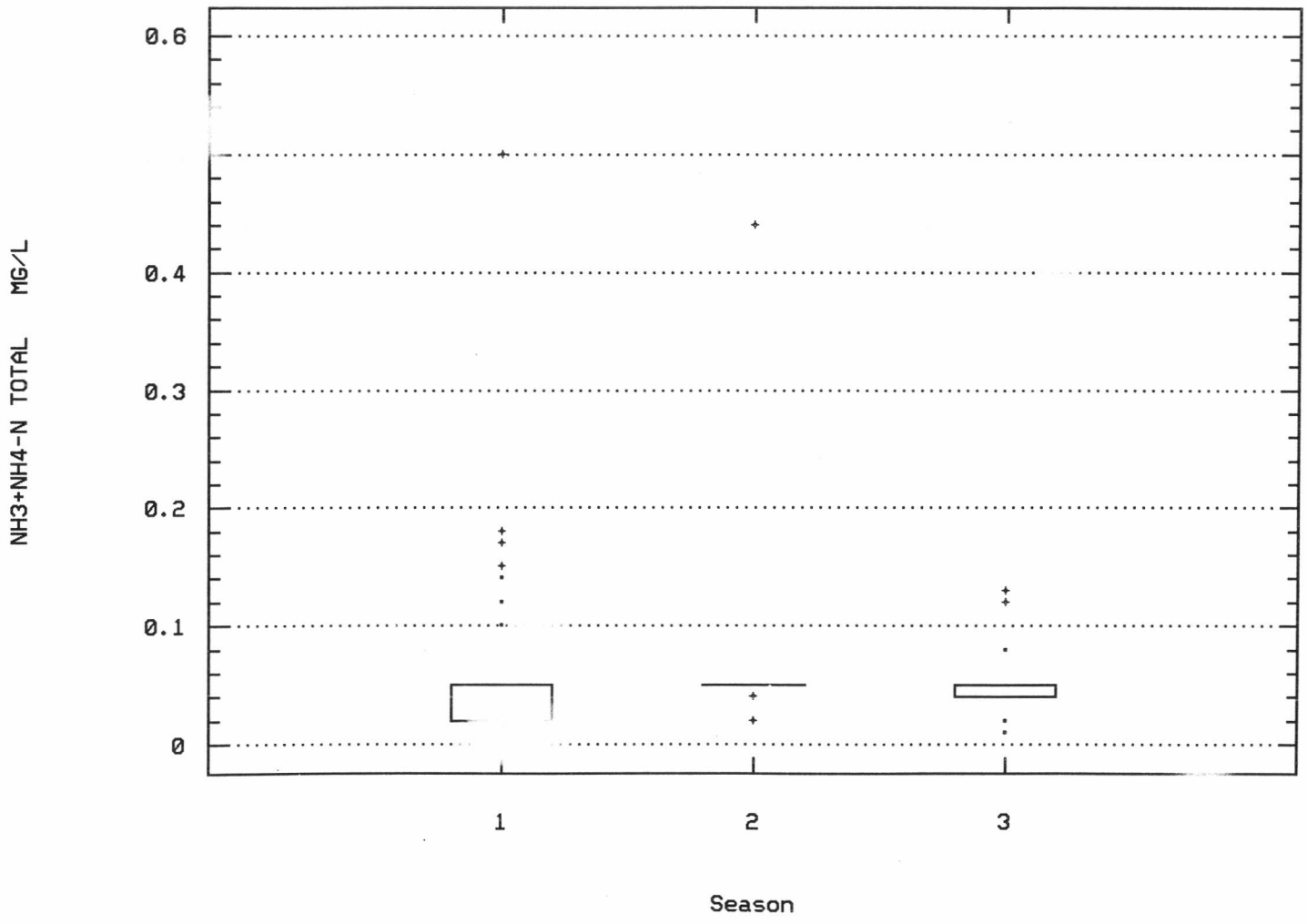
RESIDUE, FIXED NONFILTRABLE (MG/L)



ROCK OFF LONE STAR CEMENT CO., DOCK ST.

Station: RICH0105 Parameter Code: 00610

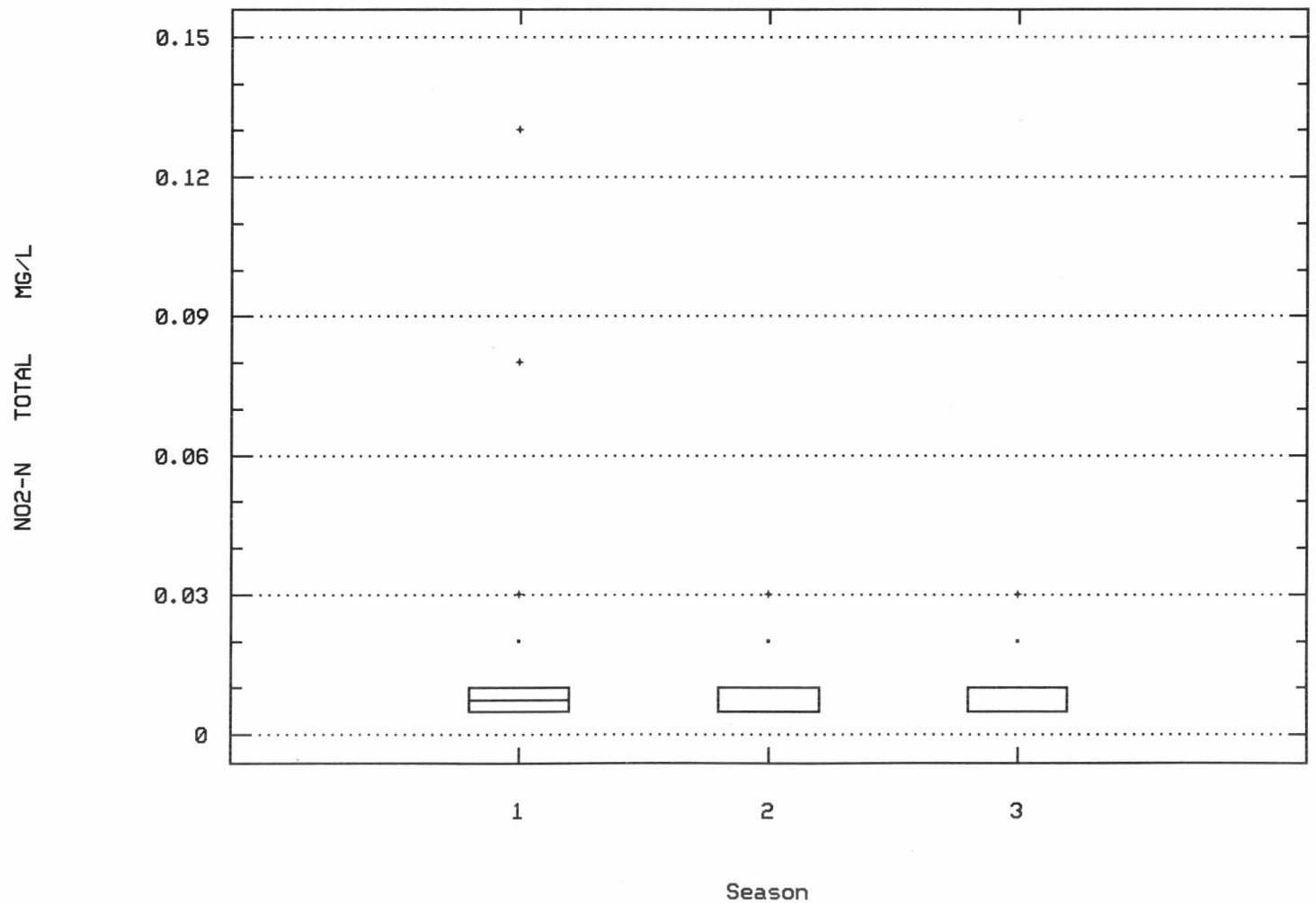
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



ROCK OFF LONE STAR CEMENT CO., DOCK ST.

Station: RICH0105 Parameter Code: 00615

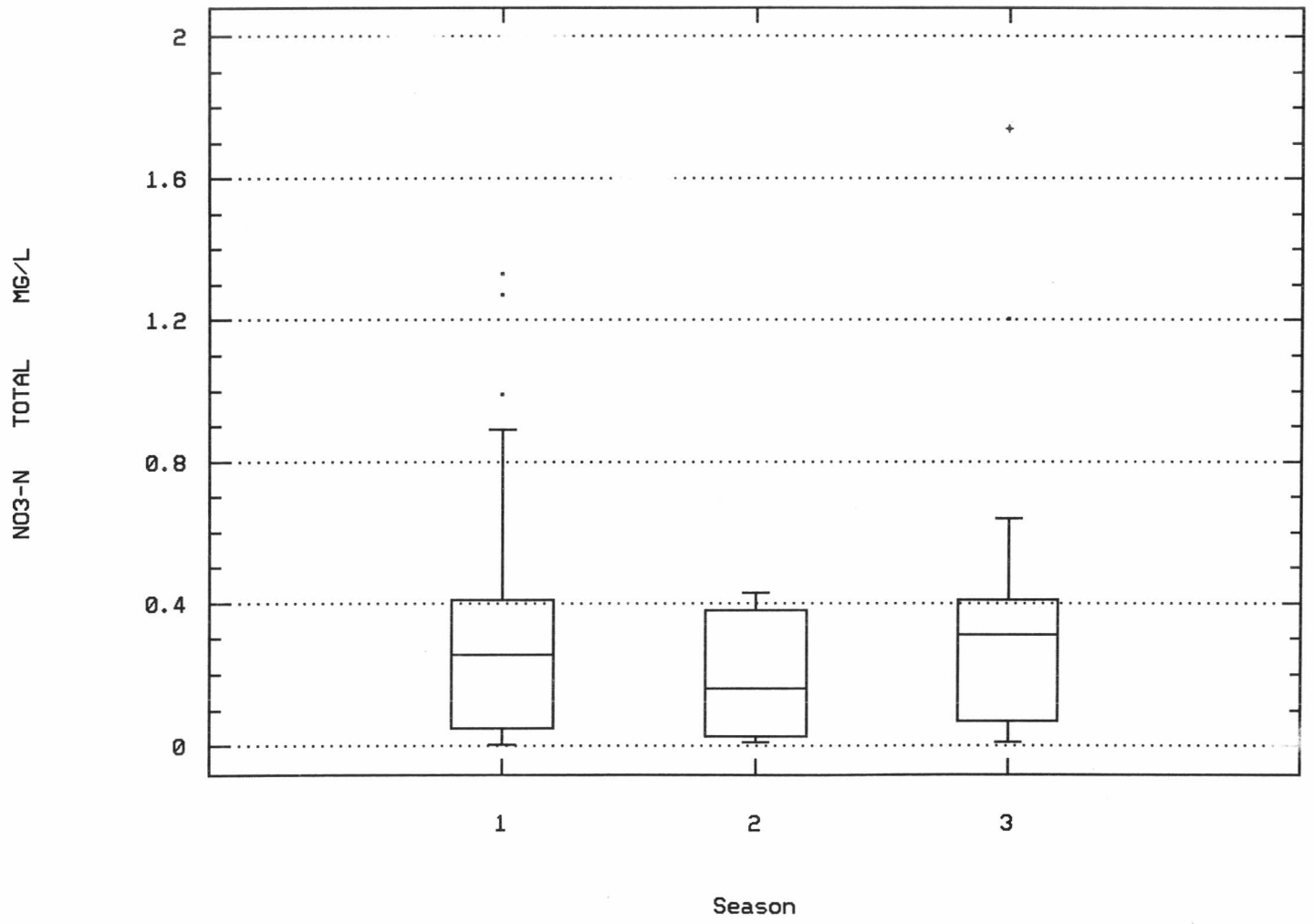
NITRITE NITROGEN, TOTAL (MG/L AS N)



ROCK OFF LONE STAR CEMENT CO., DOCK ST.

Station: RICH0105 Parameter Code: 00620

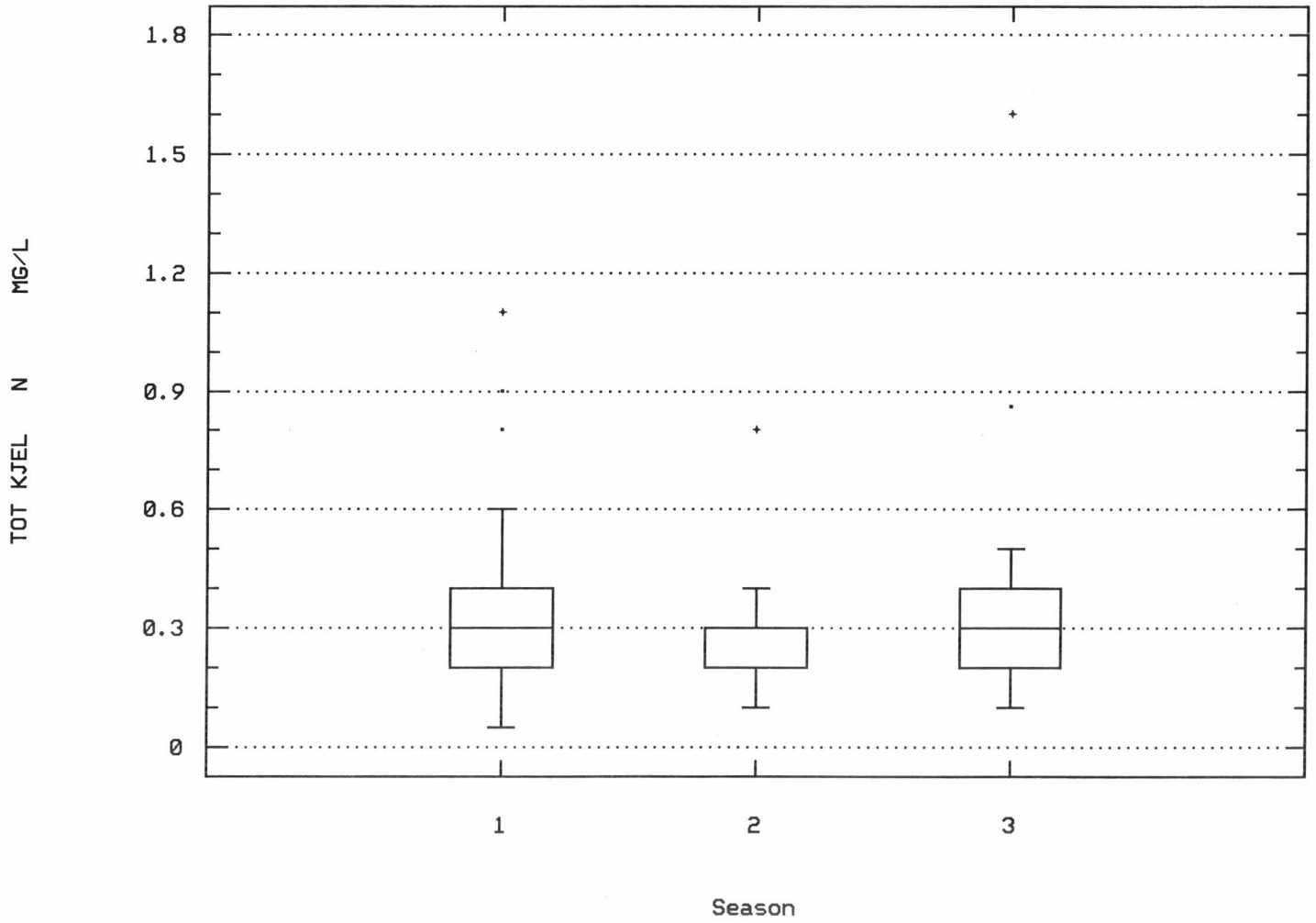
NITRATE NITROGEN, TOTAL (MG/L AS N)



ROCK OFF LONE STAR CEMENT CO., DOCK ST.

Station: RICH0105 Parameter Code: 00625

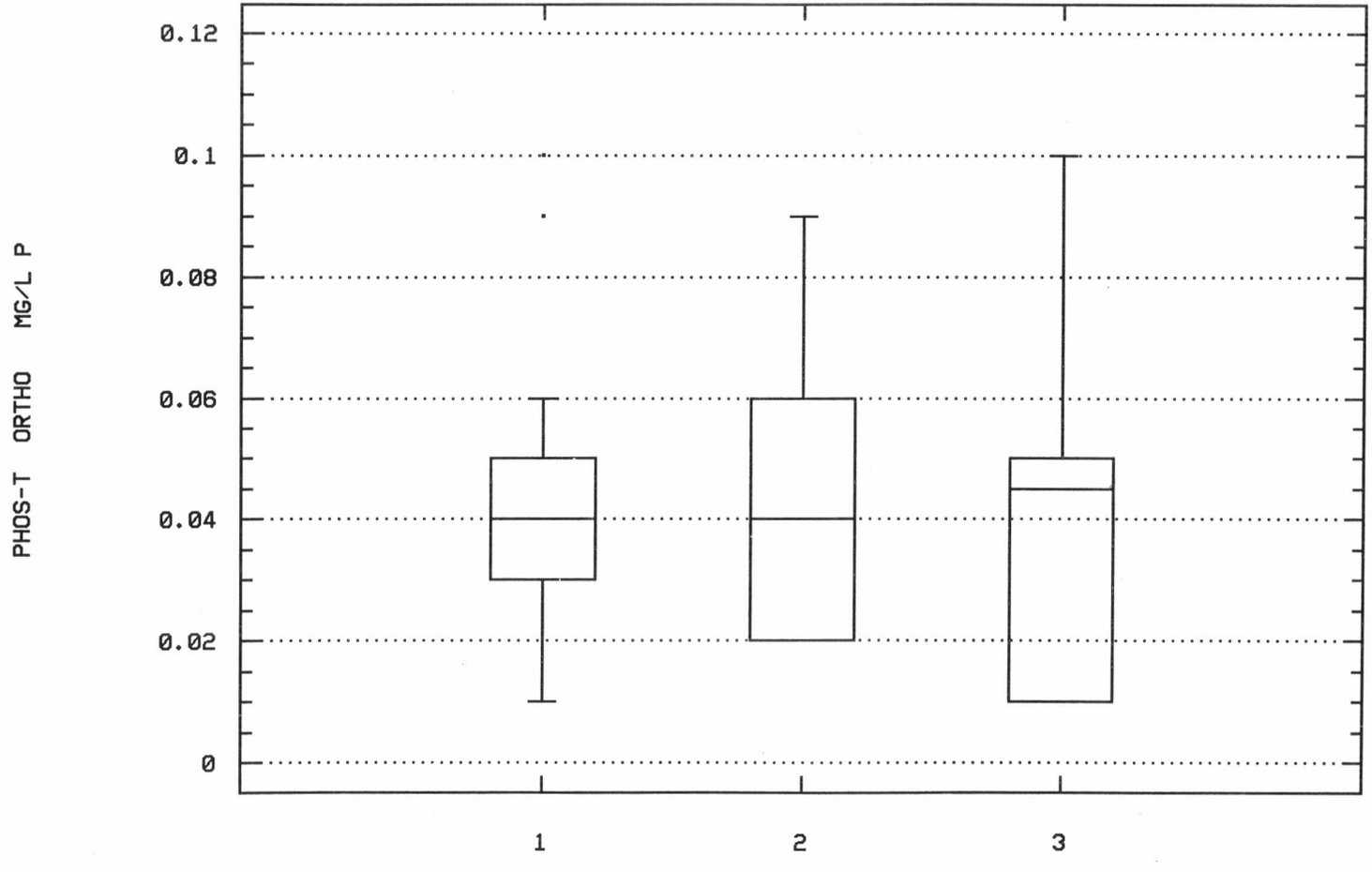
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



ROCK OFF LONE STAR CEMENT CO., DOCK ST.

Station: RICH0105 Parameter Code: 70507

PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/



ROCK OFF LONE STAR CEMENT CO., DOCK ST.

Station Inventory for Station: RICH0106

NPS Station ID: RICH0106 LAT/LON: 37.523893/ -77.484170 Agency: 112WRD Date Created: 08/27/83
Location: WAYSIDE SPRING AT RICHMOND, VA FIPS State/County: 51159 VIRGINIA/RICHMOND
Station Type: /TYPA/AMBNT/SPRING STORET Station ID(s): 02037620
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 8.90 On/Off RF1:
RF3 Index: 02080206008500.00 RF3 Mile Point: 2.88 Distance from RF3: 0.03 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0106

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/21/82-09/27/87	135	16.	15.826	17.5	14.	0.438	0.662	15.	15.5	16.	16.5
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	11/21/82-09/27/87	137	19.	17.624	32.5	-4.	66.712	8.168	6.	12.25	25.	26.6
00059 FLOW, RATE, INSTANTANEOUS GALLONS/MIN	10/30/82-09/27/87	140	2.645	2.665	3.18	2.18	0.063	0.251	2.361	2.453	2.818	3.089
00061 FLOW, STREAM, INSTANTANEOUS CFS	03/24/83-03/24/83	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/30/82-09/27/87	141	73.	87.574	1140.	58.	8371.046	91.493	63.	68.	84.	114.
00403 PH, LAB, STANDARD UNITS SU	03/24/83-10/17/83	2	5.2	5.2	5.3	5.1	0.02	0.141	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	03/24/83-10/17/83	2	5.189	5.189	5.3	5.1	0.02	0.142	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/24/83-10/17/83	2	6.478	6.478	7.943	5.012	4.297	2.073	**	**	**	**
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	03/24/83-10/17/83	2	3.2	3.2	3.7	2.7	0.5	0.707	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	03/24/83-10/17/83	2	2.	2.	2.3	1.7	0.18	0.424	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	03/24/83-10/17/83	2	1.65	1.65	2.	1.3	0.245	0.495	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	03/24/83-10/17/83	2	9.45	9.45	13.	5.9	25.205	5.02	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	03/24/83-10/17/83	2	1.25	1.25	1.4	1.1	0.045	0.212	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	03/24/83-10/17/83	2	14.	14.	19.	9.	50.	7.071	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	03/24/83-10/17/83	2##	1.55	1.55	2.5	0.6	1.805	1.344	**	**	**	**
01130 LITHIUM, DISSOLVED (UG/L AS LI)	10/17/83-10/17/83	1##	2.	2.	2.	2.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0106

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop
00403 PH, LAB	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	2	1.00				1	1	1.00	1	1	1.00			
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	2	0	0.00				1	0	0.00	1	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	250.	2	0	0.00				1	0	0.00	1	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00				1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1982 - Station RICH0106

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/21/82-09/27/87	5	15.5	15.8	16.5	15.5	0.2	0.447	**	**	**	**
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	11/21/82-09/27/87	5	15.5	12.8	18.5	0.	57.825	7.604	**	**	**	**
00059 FLOW, RATE, INSTANTANEOUS GALLONS/MIN	10/30/82-09/27/87	6	2.75	2.778	3.07	2.59	0.025	0.159	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/30/82-09/27/87	6	69.	70.167	78.	65.	22.167	4.708	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station RICH0106

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/21/82-09/27/87	35	16.	15.729	16.5	15.	0.343	0.586	15.	15.	16.	16.5
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	11/21/82-09/27/87	35	18.	17.229	32.5	-4.	87.005	9.328	6.2	-4.	25.	30.5
00059 FLOW, RATE, INSTANTANEOUS GALLONS/MIN	10/30/82-09/27/87	35	2.75	2.749	2.98	2.29	0.02	0.142	2.6	2.67	2.85	2.95
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/30/82-09/27/87	36	75.	81.	138.	58.	467.902	21.631	61.4	63.	85.	121.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station RICH0106

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/21/82-09/27/87	33	16.	15.682	17.	15.	0.263	0.513	[illegible]	15.	16.	16.
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	11/21/82-09/27/87	33	16.5	17.258	30.	0.	64.768	8.048	4.1	12.75	23.75	27.2
00059 FLOW, RATE, INSTANTANEOUS GALLONS/MIN	10/30/82-09/27/87	33	3.02	2.967	3.18	2.58	0.031	0.177	2.724	2.8	3.115	3.166
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/30/82-09/27/87	33	73.	83.97	160.	62	540.78	23.255	66.2	70.	92.5	123.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station RICH0106

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/21/82-09/27/87	20	16.	15.45	17.	14.	0.708	0.841	14.	15.	16.	16.
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	11/21/82-09/27/87	20	20.5	19.125	28.	3.	60.628	7.786	3.85	14.75	25.	28.
00059 FLOW, RATE, INSTANTANEOUS GALLONS/MIN	10/30/82-09/27/87	22	2.495	2.46	2.7	2.18	0.028	0.169	2.212	2.31	2.643	2.687
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/30/82-09/27/87	22	65.	68.227	95.	58.	93.803	9.685	59.3	62.75	70.5	88.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station RICH0106

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/21/82-09/27/87	25	16.	16.36	17.5	15.5	0.24	0.49	16.	16.	16.75	17.
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	11/21/82-09/27/87	26	18.	17.404	27.	2.	55.78	7.469	6.	11.875	24.25	26.15
00059 FLOW, RATE, INSTANTANEOUS GALLONS/MIN	10/30/82-09/27/87	26	2.51	2.49	2.58	2.34	0.006	0.077	2.35	2.438	2.553	2.57
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/30/82-09/27/87	26	72.5	119.885	1140.	64.	43607.546	208.824	65.7	69.	81.5	131.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station RICH0106

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/21/82-09/27/87	17	16.	15.971	17.	15.	0.452	0.672	15.	15.5	16.5	17.
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	11/21/82-09/27/87	18	23.	19.056	26.	6.	62.056	7.878	6.9	8.5	25.5	26.
00059 FLOW, RATE, INSTANTANEOUS GALLONS/MIN	10/30/82-09/27/87	18	2.42	2.414	2.47	2.36	0.001	0.031	2.369	2.388	2.44	2.452
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/30/82-09/27/87	18	83.	90.889	142.	70.	378.105	19.445	70.	75.	103.5	122.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: RICH0107

NPS Station ID: RICH0107 LAT/LON: 37.524448/ -77.469449 Agency: 21VASWCB Date Created: 04/13/96
Location: JAMES RIVER AT MOUTH OF REEDY CREEK FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS112.37
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 08 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0107

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/95-10/26/98	37	21.5	21.076	28.7	12.3	17.697	4.207	14.56	18.1	24.55	26.3
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/95-10/26/98	36	170.	176.389	319.	43.	3263.616	57.128	108.4	139.	219.	241.9
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	09/20/95-10/26/98	37	7.6	6.681	11.	0.9	7.472	2.734	2.46	3.75	8.6	9.92
00400 PH (STANDARD UNITS)	09/20/95-10/26/98	37	6.97	7.082	8.39	6.41	0.222	0.471	6.468	6.805	7.225	7.828
00400 CONVERTED PH (STANDARD UNITS)	09/20/95-10/26/98	37	6.97	6.902	8.39	6.41	0.255	0.505	6.468	6.805	7.225	7.828
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/95-10/26/98	37	0.107	0.125	0.389	0.004	0.01	0.101	0.015	0.06	0.157	0.34
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	39	790.	4353.846	16000.	9.	37571077.291	6129.525	68.	220.	9200.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	39	2.898	3.001	4.204	0.954	0.77	0.878	1.833	2.342	3.964	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	1002.426								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0107

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	37	10	0.27	21	8	0.38	4	0	0.00	12	2	0.17			
00400 PH	Fresh Chronic	9.	37	0	0.00	21	0	0.00	4	0	0.00	12	0	0.00			
	Other-Lo Lim.	6.5	37	4	0.11	21	2	0.10	4	0	0.00	12	2	0.17			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	39	30	0.77	23	17	0.74	4	3	0.75	12	10	0.83			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0108

NPS Station ID: RICH0108 LAT/LON: 37.524726/ -77.456948 Agency: 21VASWCB Date Created: 07/16/94
Location: JAMES RIVER,DOWNSTREAM CANOE RUN CSO,SOUTH BANK FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS111.48
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 08 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0108

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	56	22.	21.15	27.5	10.7	20.801	4.561	13.84	17.975	25.325	26.66
00061 FLOW, STREAM, INSTANTANEOUS CFS	09/11/95-09/11/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/13/94-06/01/95	14	12.	13.436	40.	2.	119.629	10.937	2.	4.025	19.25	34.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/30/94-10/26/98	48	203.5	205.271	337.	96.	2919.989	54.037	141.5	171.25	236.25	282.5
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/13/94-06/01/95	14	133.	140.857	232.	62.	3545.363	59.543	64.5	76.	196.5	227.
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	56	4.35	4.217	9.2	0.08	10.073	3.174	0.2	0.9	7.175	8.5
00310 BOD, 5 DAY, 20 DEG C MG/L	06/27/94-06/01/95	15	5.7	7.053	17.	1.1	28.443	5.333	1.46	2.6	12.	15.8
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	56	6.83	6.859	7.8	6.29	0.133	0.364	6.384	6.573	7.14	7.313
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	56	6.83	6.729	7.8	6.29	0.15	0.387	6.384	6.573	7.14	7.313
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	56	0.148	0.186	0.513	0.016	0.018	0.134	0.049	0.072	0.268	0.413
00403 PH, LAB, STANDARD UNITS SU	07/28/94-06/01/95	12	6.8	6.783	7.4	6.3	0.111	0.333	6.33	6.5	7.05	7.34
00403 CONVERTED PH, LAB, STANDARD UNITS	07/28/94-06/01/95	12	6.8	6.679	7.4	6.3	0.123	0.35	6.33	6.5	7.05	7.34
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/28/94-06/01/95	12	0.158	0.21	0.501	0.04	0.02	0.143	0.047	0.091	0.316	0.47
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	12	41.5	42.167	74.	9.	477.424	21.85	10.8	19.5	62.	71.
00500 RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	12	95.5	108.167	166.	60.	1337.242	36.568	63.6	77.5	148.5	163.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	11	24.	27.273	54.	12.	162.018	12.729	12.4	16.	39.	51.2
00510 RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	12	75.	81.583	138.	44.	864.811	29.408	45.8	56.	105.	131.4
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/13/94-06/01/95	14	15.5	19.893	58.	1.5	264.238	16.255	2.25	5.75	33.	48.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/13/94-06/01/95	14	7.	6.679	13.	1.	21.946	4.685	1.25	1.5	11.25	12.5
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/13/94-06/01/95	14	9.	13.393	46.	1.5	151.007	12.288	1.75	4.75	23.25	35.5
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/27/94-06/01/95	13	0.06	0.28	1.15	0.02	0.156	0.395	0.02	0.02	0.525	1.086
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	12##	0.008	0.019	0.05	0.005	0.	0.017	0.005	0.005	0.038	0.047
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	12	0.14	0.158	0.36	0.02	0.018	0.133	0.02	0.02	0.28	0.342
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/94-06/01/95	12	0.6	0.95	2.5	0.3	0.552	0.743	0.3	0.4	1.475	2.38
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/28/94-06/01/95	12	0.155	0.222	0.6	0.04	0.031	0.176	0.049	0.093	0.313	0.567
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/13/94-07/14/94	2	14.15	14.15	18.2	10.1	32.805	5.728	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	07/28/94-06/01/95	12	7.5	9.417	19.	4.	23.356	4.833	4.3	5.25	13.5	17.8
00945 SULFATE, TOTAL (MG/L AS SO4)	07/28/94-06/01/95	12	12.	13.667	28.	8.	33.515	5.789	8.	9.25	16.	25.6
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	56	16000.	9671.679	16000.	9.	50166367.058	7082.822	300.	1475.	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	56	4.204	3.626	4.204	0.954	0.665	0.816	2.471	3.167	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	4228.24								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/28/94-06/01/95	12	0.1	0.141	0.35	0.03	0.011	0.103	0.036	0.063	0.23	0.329

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0108

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	14	0	0.00	10	0	0.00	1	0	0.00	3	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	56	27	0.48	35	23	0.66	5	1	0.20	16	3	0.19			
00400 PH	Fresh Chronic	9.	56	0	0.00	35	0	0.00	5	0	0.00	16	0	0.00			
	Other-Lo Lim.	6.5	56	13	0.23	35	9	0.26	5	1	0.20	16	3	0.19			
00403 PH, LAB	Fresh Chronic	9.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	12	4	0.33	8	4	0.50	1	0	0.00	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	250.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	56	52	0.93	35	32	0.91	5	4	0.80	16	16	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1994 - Station RICH0108

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	12	22.3	21.3	26.8	10.7	27.52	5.246	11.27	19.45	25.95	26.62
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/30/94-10/26/98	5	220.	218.4	245.	172.	893.3	29.888	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	12	3.95	3.657	8.5	0.08	8.272	2.876	0.116	0.25	5.575	8.11
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	12	6.625	6.653	7.14	6.34	0.075	0.274	6.346	6.385	6.843	7.119
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	12	6.623	6.583	7.14	6.34	0.08	0.284	6.346	6.385	6.842	7.119
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	12	0.238	0.261	0.457	0.072	0.019	0.139	0.076	0.144	0.414	0.451
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	16000.	11000.	16000.	700.	41060000.	6407.808	1210.	3975.	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	4.204	3.903	4.204	2.845	0.199	0.446	3.006	3.591	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		7994.815									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station RICH0108

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	10	21.55	20.82	27.5	13.7	23.024	4.798	13.72	17.125	24.65	27.44
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/30/94-10/26/98	9	182.	175.556	237.	112.	2164.778	46.527	112.	136.	225.5	237.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	10	2.1	3.89	9.2	0.1	14.088	3.753	0.11	0.725	7.925	9.08
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	10	6.815	6.812	7.22	6.42	0.073	0.27	6.421	6.58	7.038	7.204
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	10	6.815	6.737	7.22	6.42	0.079	0.281	6.421	6.58	7.038	7.204
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	10	0.153	0.183	0.38	0.06	0.013	0.115	0.063	0.092	0.269	0.379
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	9	5400.	8694.444	16000.	490.	51036677.778	7143.996	490.	1480.	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	9	3.732	3.678	4.204	2.69	0.38	0.617	2.69	3.064	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		4761.706									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station RICH0108

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	12	20.7	20.883	25.9	14.7	16.351	4.044	14.79	17.675	25.	25.87
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/30/94-10/26/98	12	182.	182.25	221.	153.	588.023	24.249	153.3	157.75	202.75	219.8
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	12	7.15	5.975	9.	0.2	9.562	3.092	0.38	3.275	8.4	8.91
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.035	6.938	7.53	6.29	0.162	0.403	6.32	6.533	7.262	7.455
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.022	6.767	7.53	6.29	0.195	0.441	6.32	6.532	7.262	7.455
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	12	0.095	0.171	0.513	0.03	0.026	0.161	0.036	0.055	0.297	0.481
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	9750.	8648.333	16000.	230.	59643687.879	7722.933	299.	717.5	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	3.874	3.572	4.204	2.362	0.524	0.724	2.452	2.804	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		3729.671									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0108

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	10	18.65	19.94	26.6	12.8	20.	4.472	13.04	17.15	23.825	26.45
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/30/94-10/26/98	10	215.5	229.1	324.	180.	1948.1	44.137	180.5	201.5	255.75	319.5
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	10	2.55	2.959	6.9	0.09	7.558	2.749	0.101	0.275	5.5	6.76
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	10	6.78	6.823	7.39	6.44	0.1	0.317	6.445	6.55	7.07	7.37
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	10	6.766	6.732	7.39	6.44	0.109	0.331	6.445	6.55	7.07	7.37
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	10	0.171	0.185	0.363	0.041	0.013	0.112	0.043	0.086	0.283	0.359
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	16000.	12506.364	16000.	40.	41225005.455	6420.67	98.	9200.	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	4.204	3.792	4.204	1.602	0.781	0.884	1.785	3.964	4.204	4.204

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0108

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN = 6201.315											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station RICH0108

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	12	23.6	22.55	27.	11.4	21.261	4.611	12.99	20.85	26.3	26.94
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/30/94-10/26/98	12	223.5	225.25	337.	96.	6064.568	77.875	109.8	163.75	300.	336.4
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	12	3.9	4.342	8.8	0.5	9.552	3.091	0.68	1.525	6.975	8.71
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	12	6.93	7.053	7.8	6.37	0.187	0.433	6.454	6.725	7.363	7.764
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	12	6.927	6.882	7.8	6.37	0.219	0.468	6.454	6.725	7.363	7.764
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	12	0.118	0.131	0.427	0.016	0.013	0.116	0.017	0.044	0.189	0.366
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	4100.	7501.167	16000.	9.	58509808.152	7649.17	19.8	180.	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	3.59	3.213	4.204	0.954	1.316	1.147	1.164	2.215	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN = 1632.428											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: RICH0109

NPS Station ID: RICH0109 LAT/LON: 37.525004/ -77.423615 Agency: 21VASWCB Date Created: 11/08/80
Location: JAMES RIVER, BELOW I95 FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): XOL1554 /Y4155000
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.70 On/Off RF1:
RF3 Index: 02080205000100.08 RF3 Mile Point: 0.07 Distance from RF3: 0.09 On/Off RF3:
Description:
CHESAPEAKE BAY PROGRAM TISSUE AND SEDIMENT DATA ALL DATA FROM VIRGINIA SWCB DES KEPONE FISH MONITORING PROGRAM, ANALYZED BY DCLS / BIOLOGICAL STUDY 75-010 DES LAB SHEET 33831 APR-AUG 1975/

Parameter Inventory for Station: RICH0109

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00023 SAMPLE WEIGHT IN POUNDS	05/08/75-05/08/75	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00024 SAMPLE LENGTH IN INCHES	05/08/75-05/08/75	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
39369 DDE IN SHELLFISH OR ANIMAL (UG/KG WET WEIGHT)	03/19/76-04/12/79	63	70.	142.222	1000.	10.	37949.821	194.807	30.	40.	150.	360.
39374 DDT IN SHELLFISH OR ANIMAL (UG/KG WET WEIGHT)	08/08/78-04/12/79	22	40.	66.591	400.	10.	7550.92	86.896	11.5	20.	67.5	179.
39520 PCBS IN SHELLFISH OR ANIMAL (UG/KG WET WEIGHT)	02/24/76-04/12/79	84	500.	1066.786	6000.	50.	1497679.905	1223.797	100.	200.	1650.	2750.
71936 LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	05/08/75-05/08/75	1##	0.22	0.22	0.22	0.22	0.	0.	**	**	**	**
71937 COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	05/08/75-05/08/75	1	636.	636.	636.	636.	0.	0.	**	**	**	**
71938 ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	05/08/75-05/08/75	1	107.	107.	107.	107.	0.	0.	**	**	**	**
71939 CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	05/08/75-05/08/75	1	1.48	1.48	1.48	1.48	0.	0.	**	**	**	**
71940 CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	05/08/75-05/08/75	1##	0.74	0.74	0.74	0.74	0.	0.	**	**	**	**
81614 NUMBER OF INDIVIDUALS IN THE SAMPLE	05/08/75-04/12/79	120	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
81665 VANADIUM IN FISH TISSUE WET WEIGHT MG/KG	05/08/75-05/08/75	1##	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

********** No EPA Water Quality Criteria exist to compare against the data at this station. **********

Annual Analysis for 1975 - Station RICH0109

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
81614 NUMBER OF INDIVIDUALS IN THE SAMPLE	05/08/75-04/12/79	1	1.	1.	1.	1.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station RICH0109

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
81614 NUMBER OF INDIVIDUALS IN THE SAMPLE	05/08/75-04/12/79	37	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station RICH0109

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
81614 NUMBER OF INDIVIDUALS IN THE SAMPLE	05/08/75-04/12/79	26	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station RICH0109

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
81614 NUMBER OF INDIVIDUALS IN THE SAMPLE	05/08/75-04/12/79	15	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station RICH0109

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
81614 NUMBER OF INDIVIDUALS IN THE SAMPLE	05/08/75-04/12/79	41	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: RICH0110

NPS Station ID: RICH0110 LAT/LON: 37.525004/ -77.458059 Agency: 21VASWCB Date Created: 07/16/94
Location: JAMES RIVER,UPSTREAM OCANOE RIN CSO, SOUTH BANK FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS111.55
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 08 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0110

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	55	22.3	21.76	28.9	10.8	23.361	4.833	13.94	18.8	26.	27.64
00061 FLOW, STREAM, INSTANTANEOUS CFS	09/11/95-09/11/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/13/94-06/01/95	13	3.	4.915	22.	1.4	28.986	5.384	1.64	2.25	5.25	15.96
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	51	189.	197.902	330.	107.	2403.41	49.025	139.	165.	220.	270.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/13/94-06/01/95	13	163.	167.769	242.	87.	1979.192	44.488	101.	133.	206.	234.4
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	55	7.	7.12	12.6	2.7	4.859	2.204	3.98	5.6	8.7	9.82
00310 BOD, 5 DAY, 20 DEG C MG/L	06/27/94-06/01/95	14	1.45	1.643	3.5	0.5	0.816	0.904	0.5	1.	2.025	3.4
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	55	7.17	7.295	8.83	6.4	0.275	0.524	6.676	6.95	7.48	8.318
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	55	7.17	7.075	8.83	6.4	0.324	0.569	6.676	6.95	7.48	8.318
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	55	0.068	0.084	0.398	0.001	0.006	0.079	0.005	0.033	0.112	0.211
00403 PH, LAB, STANDARD UNITS SU	07/28/94-06/01/95	11	7.	7.109	7.9	6.6	0.187	0.432	6.6	6.8	7.3	7.88
00403 CONVERTED PH, LAB, STANDARD UNITS	07/28/94-06/01/95	11	7.	6.957	7.9	6.6	0.212	0.461	6.6	6.8	7.3	7.88
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/28/94-06/01/95	11	0.1	0.11	0.251	0.013	0.007	0.083	0.013	0.05	0.158	0.251
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	11	49.	58.636	171.	20.	1560.455	39.503	22.8	36.	62.	149.2
00500 RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	11	108.	114.	188.	71.	1113.6	33.371	72.	93.	136.	179.2
00505 RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	11	23.	25.818	46.	12.	99.364	9.968	12.2	18.	33.	43.4
00510 RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	10	89.	90.5	155.	58.	1074.056	32.773	58.	59.5	111.25	151.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/13/94-06/01/95	13	4.	5.808	22.	1.5	34.606	5.883	1.5	2.25	6.	18.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/13/94-06/01/95	13##	1.5	1.692	4.	1.	0.731	0.855	1.	1.25	1.5	3.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/13/94-06/01/95	12	2.5	4.625	18.	1.5	25.324	5.032	1.5	1.5	5.	15.9
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/27/94-06/01/95	12##	0.02	0.026	0.06	0.02	0.	0.014	0.02	0.02	0.02	0.057
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	11##	0.005	0.013	0.03	0.005	0.	0.011	0.005	0.005	0.03	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	11##	0.02	0.105	0.27	0.02	0.011	0.106	0.02	0.02	0.24	0.266
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/94-06/01/95	11	0.3	0.327	0.5	0.2	0.006	0.079	0.22	0.3	0.4	0.48
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/28/94-06/01/95	11	0.07	0.068	0.11	0.04	0.	0.021	0.04	0.05	0.08	0.106
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/13/94-07/14/94	2	5.35	5.35	5.8	4.9	0.405	0.636	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	07/28/94-06/01/95	11	12.	11.364	20.	6.	22.855	4.781	6.	6.	15.	19.4
00945 SULFATE, TOTAL (MG/L AS SO4)	07/28/94-06/01/95	11	16.	17.273	32.	8.	55.218	7.431	8.6	11.	25.	30.6
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	56	1300.	4595.554	16000.	9.	35374917.524	5947.682	37.5	230.	8750.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	56	3.114	3.035	4.204	0.954	0.889	0.943	1.548	2.362	3.94	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	1083.346								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/28/94-06/01/95	11	0.04	0.047	0.08	0.02	0.	0.017	0.022	0.04	0.06	0.078

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0110

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	13	0	0.00	9	0	0.00	1	0	0.00	3	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	55	5	0.09	34	4	0.12	5	1	0.20	16	0	0.00			
00400 PH	Fresh Chronic	9.	55	0	0.00	34	0	0.00	5	0	0.00	16	0	0.00			
	Other-Lo Lim.	6.5	55	1	0.02	34	1	0.03	5	0	0.00	16	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	250.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	56	45	0.80	35	25	0.71	5	4	0.80	16	16	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1994 - Station RICH0110

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	11	23.4	22.718	28.5	12.4	31.856	5.644	12.66	19.	27.1	28.5
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	8	204.	216.125	288.	172.	1592.411	39.905	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	11	7.2	7.091	10.	2.9	4.621	2.15	3.16	6.3	8.4	10.
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	11	7.17	7.361	8.47	6.64	0.322	0.567	6.7	7.03	7.61	8.438
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	11	7.17	7.137	8.47	6.64	0.377	0.614	6.7	7.03	7.61	8.438
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	11	0.068	0.073	0.229	0.003	0.004	0.063	0.004	0.025	0.093	0.206
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	1100.	4513.636	16000.	130.	38106045.455	6173.009	130.	230.	7400.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	3.041	3.074	4.204	2.114	0.713	0.844	2.114	2.362	3.869	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		1185.145									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station RICH0110

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	10	21.95	21.59	28.9	13.3	26.81	5.178	13.38	18.075	26.175	28.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	9	187.	170.222	230.	107.	2410.444	49.096	107.	120.5	219.	230.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	10	6.5	7.02	10.8	3.8	5.766	2.401	3.88	4.75	9.175	10.69
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	10	7.12	7.181	8.18	6.61	0.177	0.42	6.633	6.915	7.363	8.099
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	10	7.12	7.047	8.18	6.61	0.197	0.443	6.633	6.915	7.362	8.099
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	10	0.076	0.09	0.245	0.007	0.004	0.067	0.01	0.043	0.122	0.235
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	2400.	5174.5	16000.	45.	39711524.722	6301.708	51.5	620.	10900.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	3.329	3.228	4.204	1.653	0.741	0.861	1.692	2.684	4.024	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		1690.551									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station RICH0110

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	12	20.8	21.042	26.	14.7	16.181	4.023	14.82	18.	25.25	25.85
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	12	184.5	184.083	220.	139.	765.902	27.675	142.6	160.5	213.75	219.1
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	12	7.65	7.175	9.2	2.7	4.113	2.028	3.12	6.45	8.825	9.14
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.12	7.02	7.63	6.4	0.147	0.383	6.448	6.62	7.26	7.585
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.12	6.869	7.63	6.4	0.171	0.414	6.448	6.62	7.26	7.585
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	12	0.076	0.135	0.398	0.023	0.014	0.119	0.026	0.055	0.243	0.361
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	3550.	6336.667	16000.	230.	44455078.788	6667.464	260.	542.5	14300.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	3.481	3.401	4.204	2.362	0.512	0.716	2.409	2.729	4.144	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		2519.582									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0110

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	10	19.55	20.44	26.9	12.4	21.767	4.666	12.67	17.725	24.775	26.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	10	204.5	220.1	307.	164.	2014.322	44.881	166.	187.75	261.75	303.6
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	10	6.85	6.73	12.6	3.8	6.822	2.612	3.83	4.475	7.95	12.15
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	10	7.105	7.224	8.83	6.7	0.36	0.6	6.716	6.913	7.24	8.692
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	10	7.105	7.045	8.83	6.7	0.395	0.629	6.716	6.912	7.24	8.692
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	10	0.079	0.09	0.2	0.001	0.003	0.055	0.005	0.06	0.123	0.193
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	2200.	4477.273	16000.	20.	35269981.818	5938.854	38.	330.	5400.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	3.342	3.134	4.204	1.301	0.802	0.895	1.449	2.519	3.732	4.204

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0110

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN = 1361.982											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station RICH0110

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	12	23.6	22.842	27.7	10.8	25.426	5.042	12.57	20.725	27.025	27.67
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	12	187.5	201.833	330.	114.	4202.697	64.828	122.7	159.25	247.75	321.9
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	12	7.15	7.5	11.7	3.6	4.933	2.221	4.17	5.8	9.325	11.07
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.59	7.665	8.36	6.95	0.218	0.467	7.016	7.368	8.198	8.354
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.588	7.473	8.36	6.95	0.258	0.508	7.016	7.368	8.197	8.354
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	12	0.026	0.034	0.112	0.004	0.001	0.031	0.004	0.007	0.043	0.099
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	275.	2555.5	16000.	9.	25050143.909	5005.012	9.	20.	2822.5	13960.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	2.43	2.38	4.204	0.954	1.292	1.136	0.954	1.301	3.382	4.132
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN = 240.039											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: RICH0111

NPS Station ID: RICH0111 LAT/LON: 37.527226/ -77.438615 Agency: 21VASWCB Date Created: 04/08/89
Location: SOUTH BANK OF THE JAMES RIVER BELOW FALL ZONE FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS110.34
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH-ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080205025100.00 RF3 Mile Point: 0.11 Distance from RF3: 0.16 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0111

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

******** No Parameter Data Available for this Station ********

Station Inventory for Station: RICH0112

NPS Station ID: RICH0112 LAT/LON: 37.527226/ -77.476949 Agency: 21VASWCB Date Created: 04/13/96
Location: JAMES RI, 676M ABOVE MOUTH OF REEDY CREEK FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS112.79
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 08 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0112

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/95-10/26/98	37	22.3	22.286	29.	10.4	23.495	4.847	14.38	20.3	26.55	28.1
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/95-10/26/98	36	197.	209.694	359.	106.	3504.39	59.198	146.5	162.25	251.5	297.9
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	09/20/95-10/26/98	37	8.3	8.341	10.8	5.8	1.492	1.222	6.7	7.35	9.3	10.02
00400 PH (STANDARD UNITS)	09/20/95-10/26/98	37	7.6	7.576	8.67	6.79	0.141	0.376	7.048	7.33	7.825	8.016
00400 CONVERTED PH (STANDARD UNITS)	09/20/95-10/26/98	37	7.6	7.426	8.67	6.79	0.165	0.406	7.048	7.33	7.825	8.016
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/95-10/26/98	37	0.025	0.038	0.162	0.002	0.001	0.035	0.01	0.015	0.047	0.09
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	38	365.	2306.263	16000.	9.	20093081.388	4482.531	45.	105.75	1900.	9880.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	38	2.56	2.644	4.204	0.954	0.719	0.848	1.653	2.023	3.277	3.988
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	440.664								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0112

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	37	0	0.00	21	0	0.00	4	0	0.00	12	0	0.00			
00400 PH	Fresh Chronic	9.	37	0	0.00	21	0	0.00	4	0	0.00	12	0	0.00			
	Other-Lo Lim.	6.5	37	0	0.00	21	0	0.00	4	0	0.00	12	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	38	24	0.63	23	17	0.74	4	1	0.25	11	6	0.55			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0113

NPS Station ID: RICH0113 LAT/LON: 37.528615/ -77.429726 Agency: 21VASWCB Date Created: 12/07/84
Location: I 95 BRIDGE (CITY OF RICHMOND) FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS109.98
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH-ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 9.80 On/Off RF1:
RF3 Index: 02080205020900.00 RF3 Mile Point: 0.00 Distance from RF3: 0.53 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD INTENSIVE SURVEY NO. 835108 BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0113

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/83-09/27/83	3	27.	25.5	29.5	20.	24.25	4.924	**	**	**	**
00078 TRANSPARENCY, SECCHI DISC (METERS)	07/28/83-10/12/83	7##	0.335	142.989	999.	0.26	142480.25	377.466	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/83-09/27/83	3	245.	241.667	260.	220.	408.333	20.207	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/28/83-09/27/83	3	8.7	8.9	9.5	8.5	0.28	0.529	**	**	**	**
00400 PH (STANDARD UNITS)	07/28/83-09/27/83	3	8.7	8.6	8.8	8.3	0.07	0.265	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/28/83-09/27/83	3	8.7	8.543	8.8	8.3	0.075	0.274	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/28/83-09/27/83	3	0.002	0.003	0.005	0.002	0.	0.002	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/83-09/27/83	3	68.	66.333	70.	61.	22.333	4.726	**	**	**	**
00415 ALKALINITY, PHENOLPHTHALEIN (MG/L)	07/28/83-09/27/83	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00515 RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/28/83-09/27/83	3	159.	156.333	181.	129.	681.333	26.102	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/28/83-10/03/83	5	5.	5.8	12.	2.5	15.575	3.947	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/28/83-10/03/83	5	5.	4.4	7.	2.5	3.675	1.917	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/83-10/12/83	7##	0.05	0.044	0.05	0.005	0.	0.017	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/83-10/12/83	6##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/83-10/12/83	6##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00623 NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	07/28/83-09/27/83	3	0.3	0.267	0.3	0.2	0.003	0.058	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/83-09/27/83	3	0.2	0.233	0.3	0.2	0.003	0.058	**	**	**	**
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	07/28/83-09/27/83	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/28/83-09/27/83	4##	0.125	0.15	0.3	0.05	0.015	0.122	**	**	**	**
00667 PHOSPHORUS, SUSPENDED (MG/L AS P)	07/28/83-10/03/83	4##	0.075	0.125	0.3	0.05	0.014	0.119	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	07/28/83-09/27/83	3	0.1	0.067	0.1	0.	0.003	0.058	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/28/83-09/27/83	3	4.	4.667	6.	4.	1.333	1.155	**	**	**	**
31506 COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/83-09/27/83	3	930.	763.333	930.	430.	83333.333	288.675	**	**	**	**
31506 LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/83-09/27/83	3	2.968	2.857	2.968	2.633	0.037	0.193	**	**	**	**
31506 GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.		GEOMETRIC MEAN =		719.137								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/28/83-09/27/83	3	93.	95.333	150.	43.	2866.333	53.538	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/28/83-09/27/83	3	1.968	1.926	2.176	1.633	0.075	0.274	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		84.336								
32209 CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	07/28/83-10/12/83	4	1.35	1.225	2.1	0.1	0.823	0.907	**	**	**	**
32218 PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	07/28/83-10/12/83	4	1.15	1.15	1.7	0.6	0.217	0.465	**	**	**	**
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	07/28/83-09/27/83	3	0.	0.067	0.2	0.	0.013	0.115	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0113

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00									
00400	PH	Fresh Chronic	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	6	0	0.00	6	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	6	0	0.00	6	0	0.00									
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	3	0	0.00	3	0	0.00									
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	3	0	0.00	3	0	0.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	3	0	0.00	3	0	0.00									
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	3	1	0.33	3	1	0.33									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0114

NPS Station ID: RICH0114 LAT/LON: 37.528615/ -77.468616 Agency: 21VASWCB Date Created: 04/13/96
Location: JAMES RIVER AT TEXAS AVENUE BEACH FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS112.33
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 08 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0114

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/95-10/26/98	36	22.3	22.381	28.4	13.8	17.665	4.203	14.77	20.175	26.45	27.43
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/95-10/26/98	35	197.	211.743	362.	111.	3493.314	59.104	143.8	170.	250.	301.2
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	09/20/95-10/26/98	36	8.45	8.333	11.	2.3	2.353	1.534	6.85	7.525	9.375	10.13
00400 PH (STANDARD UNITS)	09/20/95-10/26/98	36	7.59	7.588	8.27	6.5	0.121	0.348	7.252	7.403	7.81	8.019
00400 CONVERTED PH (STANDARD UNITS)	09/20/95-10/26/98	36	7.59	7.421	8.27	6.5	0.15	0.387	7.252	7.403	7.81	8.019
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/95-10/26/98	36	0.026	0.038	0.316	0.005	0.003	0.053	0.01	0.016	0.04	0.056
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	38	490.	2599.868	16000.	9.	20746386.442	4554.82	74.7	137.5	2975.	9880.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	38	2.69	2.795	4.204	0.954	0.641	0.801	1.868	2.138	3.471	3.988
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	623.239								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0114

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	36	1	0.03	20	0	0.00	4	0	0.00	12	1	0.08			
00400 PH	Fresh Chronic	9.	36	0	0.00	20	0	0.00	4	0	0.00	12	0	0.00			
	Other-Lo Lim.	6.5	36	1	0.03	20	0	0.00	4	0	0.00	12	1	0.08			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	38	26	0.68	22	16	0.73	4	2	0.50	12	8	0.67			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0115

NPS Station ID: RICH0115 LAT/LON: 37.529727/ -77.429726 Agency: 21VASWCB Date Created: 07/16/94
Location: JAMES RIVER,I-95 BR.AT NORTH BANK, DS SHOCKOE FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS110.07
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0115

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	56	24.7	23.755	31.2	14.9	20.405	4.517	16.	21.325	27.475	29.19
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/13/94-06/01/95	14	7.7	8.607	20.	1.5	38.311	6.19	1.5	2.75	13.65	17.65
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	47	200.	213.702	361.	111.	3486.822	59.049	143.8	177.	260.	301.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/13/94-06/01/95	14	184.	183.357	277.	84.	3312.247	57.552	103.	134.	231.25	266.5
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	55	8.4	8.504	10.9	6.	1.267	1.125	7.06	7.8	9.3	10.
00310 BOD, 5 DAY, 20 DEG C MG/L	06/27/94-06/01/95	15	2.4	3.84	17.	0.5	18.28	4.275	0.5	1.	6.	11.42
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	56	7.9	7.843	8.64	6.92	0.136	0.369	7.397	7.553	8.092	8.306
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	56	7.9	7.69	8.64	6.92	0.16	0.4	7.397	7.552	8.092	8.306
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	56	0.013	0.02	0.12	0.002	0.	0.02	0.005	0.008	0.028	0.04
00403 PH, LAB, STANDARD UNITS SU	07/28/94-06/01/95	12	7.3	7.233	8.2	6.4	0.255	0.505	6.43	6.85	7.55	8.05
00403 CONVERTED PH, LAB, STANDARD UNITS	07/28/94-06/01/95	12	7.3	6.977	8.2	6.4	0.327	0.572	6.43	6.85	7.55	8.05
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/28/94-06/01/95	12	0.05	0.105	0.398	0.006	0.016	0.125	0.01	0.029	0.144	0.374
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	12	49.5	48.75	71.	16.	252.75	15.898	21.4	36.75	62.5	69.8
00500 RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	12	126.5	129.417	178.	87.	1135.538	33.698	87.	97.25	162.5	177.4
00505 RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	12	23.5	27.667	51.	15.	115.879	10.765	15.9	18.5	36.25	47.1
00510 RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	12	105.	101.75	160.	63.	1145.114	33.84	63.6	69.	129.25	154.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/13/94-06/01/95	14	12.5	17.143	46.	1.5	214.247	14.637	1.5	4.	28.25	43.5
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/13/94-06/01/95	14	3.	4.357	15.	1.	15.593	3.949	1.25	1.875	5.	12.5
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/13/94-06/01/95	14	9.5	13.143	38.	1.5	132.709	11.52	1.5	3.	20.	34.5
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/27/94-06/01/95	13	0.05	0.157	0.84	0.02	0.054	0.233	0.02	0.02	0.21	0.656
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	12	0.01	0.015	0.03	0.005	0.	0.012	0.005	0.005	0.03	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	12	0.16	0.176	0.33	0.02	0.016	0.128	0.02	0.038	0.315	0.33
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/94-06/01/95	12	0.35	0.542	1.4	0.2	0.161	0.401	0.23	0.3	0.65	1.37
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/28/94-06/01/95	12	0.105	0.122	0.29	0.05	0.007	0.081	0.05	0.06	0.148	0.284
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/13/94-07/14/94	2	4.35	4.35	5.7	3.	3.645	1.909	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	07/28/94-06/01/95	12	12.	12.667	22.	6.	34.242	5.852	6.	7.	18.5	21.7
00945 SULFATE, TOTAL (MG/L AS SO4)	07/28/94-06/01/95	12	18.5	19.667	34.	10.	82.061	9.059	10.3	11.	29.25	33.7
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	56	3150.	7222.857	16000.	20.	50451966.234	7102.955	196.	700.	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	56	3.496	3.422	4.204	1.301	0.609	0.78	2.284	2.845	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	2645.448								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/28/94-06/01/95	12	0.065	0.083	0.23	0.04	0.003	0.055	0.04	0.05	0.098	0.203

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Station Inventory for Station: RICH0122

NPS Station ID: RICH0122 LAT/LON: 37.532226/ -77.451392 Agency: 1113JAWQ Date Created: / /
Location: JEFFERSON DAVIS HIGHWAY BR J02
FIPS State/County: 51000 VIRGINIA/
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): JAMES J02 /J02 /J2
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 1 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080205001 RF1 Mile Point: 0.240 Distance from RF1: 0.00 On/Off RF1: ON
RF3 Index: 02080205000107.44 RF3 Mile Point: 8.67 Distance from RF3: 0.06 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0122

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		05/05/69-11/04/71	5	20.	19.22	21.1	17.	2.792	1.671	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	05/05/69-11/04/71	5	8.8	8.64	9.2	7.4	0.523	0.723	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	05/05/69-11/04/71	5	1.5	1.66	2.1	1.4	0.083	0.288	**	**	**	**
00400 PH (STANDARD UNITS)		05/05/69-11/02/71	3	6.2	6.433	6.9	6.2	0.163	0.404	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		05/05/69-11/02/71	3	6.2	6.335	6.9	6.2	0.178	0.422	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		05/05/69-11/02/71	3	0.631	0.463	0.631	0.126	0.085	0.292	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/19/71-11/04/71	4	0.01	0.012	0.026	0.001	0.	0.013	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/19/71-11/04/71	4	0.34	0.334	0.39	0.265	0.004	0.066	**	**	**	**
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		10/19/71-11/04/71	4	0.435	0.465	0.7	0.29	0.031	0.177	**	**	**	**
00650 PHOSPHATE, TOTAL (MG/L AS PO4)		10/19/71-11/04/71	4	0.14	0.18	0.33	0.11	0.01	0.101	**	**	**	**
00660 PHOSPHATE, ORTHO (MG/L AS PO4)		10/19/71-11/04/71	4	0.115	0.118	0.16	0.08	0.001	0.035	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		11/02/71-11/04/71	3	5.1	5.067	6.4	3.7	1.823	1.35	**	**	**	**
00690 CARBON, TOTAL (MG/L AS C)		11/02/71-11/04/71	3	12.3	12.	12.5	11.2	0.49	0.7	**	**	**	**
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)		05/05/69-11/04/71	5	490.	5208.	24000.	330.	110385420.	10506.447	**	**	**	**
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150		05/05/69-11/04/71	5	2.69	3.024	4.38	2.519	0.594	0.771	**	**	**	**
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506				GEOMETRIC MEAN =	1056.826								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		10/19/71-11/04/71	4	200.	2412.5	9180.	70.	20359491.667	4512.149	**	**	**	**
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		10/19/71-11/04/71	4	2.296	2.6	3.963	1.845	0.874	0.935	**	**	**	**
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)				GEOMETRIC MEAN =	398.134								
32210 CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED		10/19/71-11/02/71	3	3.8	4.3	5.3	3.8	0.75	0.866	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0122

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00				4	0	0.00	1	0	0.00			
00400 PH	Fresh Chronic	9.	3	0	0.00				2	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	3	2	0.67				2	1	0.50	1	1	1.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00				4	0	0.00						
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	1	0.20				4	1	0.25	1	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	4	2	0.50				4	2	0.50						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: RICH0121

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
00400 PH	Fresh Chronic	9.	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
	Other-Lo Lim.	6.5	24	1	0.04	7	0	0.00	10	0	0.00	7	1	0.14			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
00720 CYANIDE, TOTAL	Fresh Acute	0.022	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
	Drinking Water	0.2	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
	Drinking Water	50.	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
	Drinking Water	5.	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	23	0	0.00	7	0	0.00	9	0	0.00	7	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	24	1	0.04	7	0	0.00	10	1	0.10	7	0	0.00			
	Drinking Water	1300.	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
	Drinking Water	15.	24	3	0.13	7	1	0.14	10	2	0.20	7	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
	Drinking Water	100.	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
01077 SILVER, TOTAL	Fresh Acute	4.1	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
	Drinking Water	100.	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	24	1	0.04	7	0	0.00	10	1	0.10	7	0	0.00			
	Drinking Water	5000.	24	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
31625 FECAL COLIFORM, MF	Other-Hi Lim.	200.	20	6	0.30	6	0	0.00	7	2	0.29	7	4	0.57			
71900 MERCURY, TOTAL	Fresh Acute	2.4	11	0	0.00	3	0	0.00	5	0	0.00	3	0	0.00			
	Drinking Water	2.	11	0	0.00	3	0	0.00	5	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0121

NPS Station ID: RICH0121 LAT/LON: 37.531948/ -77.434726 Agency: 112WRD Date Created: 11/07/81
Location: JAMES RIVER AT RICHMOND, VA FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02037700
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206004603.50 RF3 Mile Point: 3.96 Distance from RF3: 0.04 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0121

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		10/24/79-09/03/81	24	16.25	15.167	27.	0.	75.058	8.664	3.75	6.5	24.75	26.5
00061 FLOW, STREAM, INSTANTANEOUS	CFS	10/24/79-09/03/81	24	3645.	5806.042	23100.	865.	34546406.476	5877.619	1215.	1597.5	8292.5	15750.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		10/24/79-09/03/81	24	145.	170.542	323.	95.	4089.911	63.952	105.	124.	238.75	261.
00300 OXYGEN, DISSOLVED	MG/L	10/24/79-09/03/81	24	9.9	10.258	15.	6.5	5.192	2.279	7.55	8.35	12.35	13.5
00340 COD, .25N K2CR2O7	MG/L	10/24/79-09/03/81	22	13.	15.045	44.	3.	120.141	10.961	5.	7.	17.25	37.2
00400 PH (STANDARD UNITS)		10/24/79-09/03/81	24	7.45	7.421	8.	6.5	0.186	0.431	6.8	7.1	7.8	7.95
00400 CONVERTED PH (STANDARD UNITS)		10/24/79-09/03/81	24	7.447	7.207	8.	6.5	0.234	0.483	6.8	7.1	7.8	7.95
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/24/79-09/03/81	24	0.036	0.062	0.316	0.01	0.005	0.071	0.011	0.016	0.079	0.158
00500 RESIDUE, TOTAL (MG/L)		10/24/79-12/18/79	2	83.5	83.5	84.	83.	0.5	0.707	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		11/19/79-09/03/81	22	10.	19.5	81.	0.	482.071	21.956	1.2	4.75	32.25	61.8
00600 NITROGEN, TOTAL (MG/L AS N)		10/24/79-09/03/81	23	0.57	0.621	2.	0.13	0.141	0.375	0.208	0.42	0.72	0.962
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/24/79-09/03/81	24	0.275	0.298	0.63	0.05	0.024	0.154	0.08	0.213	0.388	0.585
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		10/24/79-09/03/81	24	0.305	0.311	1.7	0.04	0.103	0.322	0.055	0.123	0.358	0.45
00665 PHOSPHORUS, TOTAL (MG/L AS P)		10/24/79-09/03/81	24	0.085	0.095	0.27	0.03	0.003	0.052	0.05	0.06	0.12	0.16
00720 CYANIDE, TOTAL (MG/L AS CN)	MG/L	10/24/79-09/03/81	24##	0.003	0.003	0.005	0.	0.	0.003	0.	0.	0.005	0.005
01002 ARSENIC, TOTAL (UG/L AS AS)		10/24/79-09/03/81	24	1.	0.875	2.	0.	0.266	0.516	0.	0.625	1.	1.5
01027 CADMIUM, TOTAL (UG/L AS CD)		10/24/79-09/03/81	24	0.25	0.563	3.	0.	0.702	0.838	0.	0.	0.5	2.
01034 CHROMIUM, TOTAL (UG/L AS CR)		10/24/79-09/03/81	23	8.	9.391	27.	0.	52.863	7.271	0.5	3.	14.	21.2
01042 COPPER, TOTAL (UG/L AS CU)		10/24/79-09/03/81	24	1.25	4.042	20.	0.	30.346	5.509	0.	0.	5.75	13.
01051 LEAD, TOTAL (UG/L AS PB)		10/24/79-09/03/81	24	4.5	6.792	31.	1.	49.389	7.028	1.5	3.	7.5	18.5
01067 NICKEL, TOTAL (UG/L AS NI)		10/24/79-09/03/81	24	2.5	3.667	13.	1.	10.058	3.171	1.	2.	4.75	9.5
01077 SILVER, TOTAL (UG/L AS AG)		10/24/79-09/03/81	24	0.5	0.438	3.	0.	0.42	0.648	0.	0.	0.5	1.
01092 ZINC, TOTAL (UG/L AS ZN)		10/24/79-09/03/81	24	20.	29.167	160.	10.	912.319	30.205	10.	12.5	30.	50.
31625 FECAL COLIFORM, MF,M-FC, 0.7 UM		10/24/79-09/03/81	20	84.	346.35	2400.	7.	510885.082	714.762	13.4	20.25	242.5	2211.
31625 LOG FECAL COLIFORM, MF,M-FC, 0.7 UM		10/24/79-09/03/81	20	1.923	1.941	3.38	0.845	0.505	0.711	1.126	1.306	2.384	3.313
31625 GM FECAL COLIFORM, MF,M-FC, 0.7 UM				GEOMETRIC MEAN =	87.238								
31673 FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR		10/24/79-09/03/81	22	93.5	210.136	1400.	9.	104132.79	322.696	13.9	49.5	220.	689.
31673 LOG FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR		10/24/79-09/03/81	22	1.97	1.986	3.146	0.954	0.308	0.555	1.141	1.695	2.341	2.822
31673 GM FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR				GEOMETRIC MEAN =	96.754								
70331 SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM		08/12/80-08/12/80	1	72.	72.	72.	72.	0.	0.	**	**	**	**
71886 PHOSPHORUS, TOTAL, AS PO4 - MG/L		10/24/79-09/03/81	24	0.265	0.29	0.83	0.09	0.026	0.161	0.15	0.18	0.37	0.49
71887 NITROGEN, TOTAL, AS NO3 - MG/L		10/24/79-09/03/81	23	2.5	2.748	8.7	0.6	2.681	1.637	0.92	1.9	3.2	4.28
71900 MERCURY, TOTAL (UG/L AS HG)		10/24/79-09/03/81	11##	0.05	0.082	0.3	0.05	0.006	0.075	0.05	0.05	0.1	0.26
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)		03/25/80-09/03/81	17	16.	27.176	96.	4.	762.279	27.609	4.	10.5	37.5	92.
80155 SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)		03/25/80-09/03/81	17	125.	680.353	5990.	13.	2164351.493	1471.174	14.6	51.5	549.	2862.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0120

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/70-06/07/79	27##	0.05	0.072	0.3	0.01	0.003	0.058	0.048	0.05	0.08	0.136
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/70-06/07/79	29##	0.005	0.008	0.03	0.005	0.	0.006	0.005	0.005	0.008	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/24/70-05/27/77	21	0.25	0.327	1.	0.01	0.067	0.258	0.021	0.195	0.445	0.852
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/70-06/07/79	29	0.2	0.293	1.	0.05	0.043	0.206	0.1	0.1	0.4	0.5
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-11/01/78	8##	7.5	10.	20.	5.	42.857	6.547	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	03/24/70-11/01/78	8	10.	14.375	40.	5.	174.554	13.212	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	03/15/71-11/01/78	7	9.	7.571	10.	3.	8.286	2.878	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-11/01/78	8	15.	23.125	60.	5.	363.839	19.075	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	28##	50.	732.143	8000.	50.	4290224.868	2071.286	50.	50.	175.	1700.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	28##	1.699	2.074	3.903	1.699	0.439	0.663	1.699	1.699	2.226	3.09
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	118.546								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/24/70-06/07/79	28##	0.05	0.09	1.1	0.025	0.039	0.198	0.05	0.05	0.05	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/24/70-06/07/79	28	0.02	0.049	0.58	0.005	0.011	0.107	0.005	0.01	0.05	0.055
71900 MERCURY, TOTAL (UG/L AS HG)	03/15/71-11/01/78	7##	0.25	0.3	0.6	0.25	0.018	0.132	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0120

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/68-06/07/79	28	26.1	23.164	30.6	2.3	64.364	8.023	3.18	21.975	28.625	29.55
00300 OXYGEN, DISSOLVED MG/L	06/18/68-06/07/79	29	8.	8.3	13.	7.	1.208	1.099	7.2	7.85	8.7	9.
00400 PH (STANDARD UNITS)	06/18/68-06/07/79	29	8.	8.128	9.5	7.	0.356	0.597	7.3	7.85	8.5	8.9
00400 CONVERTED PH (STANDARD UNITS)	06/18/68-06/07/79	29	8.	7.773	9.5	7.	0.486	0.697	7.3	7.85	8.5	8.9
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/68-06/07/79	29	0.01	0.017	0.1	0.	0.001	0.026	0.001	0.003	0.014	0.05
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/70-06/07/79	23	0.05	0.07	0.3	0.01	0.003	0.056	0.024	0.05	0.09	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/70-06/07/79	23##	0.005	0.009	0.03	0.005	0.	0.007	0.005	0.005	0.01	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/24/70-05/27/77	19	0.33	0.424	1.089	0.025	0.125	0.354	0.025	0.12	0.78	1.
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/70-06/07/79	23	0.4	0.439	1.299	0.1	0.104	0.323	0.1	0.2	0.6	0.999
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-11/01/78	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	03/24/70-11/01/78	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	03/15/71-11/01/78	2##	5.	5.	5.	5.	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-11/01/78	2	10.	10.	10.	10.	0.	0.	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	19	100.	381.579	3200.	50.	628669.591	792.887	50.	50.	200.	1500.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	19	2.	2.087	3.505	1.699	0.315	0.561	1.699	1.699	2.301	3.176
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	122.183								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/24/70-06/07/79	23##	0.05	0.077	0.5	0.025	0.01	0.098	0.05	0.05	0.05	0.16
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/24/70-06/07/79	23	0.03	0.027	0.07	0.005	0.	0.019	0.005	0.01	0.05	0.05
71900 MERCURY, TOTAL (UG/L AS HG)	03/15/71-11/01/78	2##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0120

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/68-06/07/79	36	9.15	9.156	18.9	1.2	24.675	4.967	3.72	4.55	12.2	17.44
00300 OXYGEN, DISSOLVED MG/L	06/18/68-06/07/79	36	11.6	11.847	15.	9.4	2.087	1.445	9.77	10.8	13.	13.86
00400 PH (STANDARD UNITS)	06/18/68-06/07/79	36	7.45	7.511	8.8	6.5	0.324	0.569	6.97	7.	8.	8.5
00400 CONVERTED PH (STANDARD UNITS)	06/18/68-06/07/79	36	7.447	7.229	8.8	6.5	0.406	0.637	6.97	7.	8.	8.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/68-06/07/79	36	0.036	0.059	0.316	0.002	0.004	0.064	0.003	0.01	0.1	0.108
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/70-06/07/79	33##	0.05	0.179	3.05	0.005	0.276	0.525	0.05	0.05	0.09	0.338
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/70-06/07/79	32	0.01	0.01	0.04	0.005	0.	0.007	0.005	0.005	0.01	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/24/70-05/27/77	28	0.37	0.383	0.8	0.08	0.027	0.164	0.149	0.278	0.478	0.617
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/70-06/07/79	32	0.2	0.27	0.8	0.05	0.034	0.183	0.065	0.1	0.375	0.5
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-11/01/78	9##	5.	6.667	10.	5.	6.25	2.5	5.	5.	10.	10.
01042 COPPER, TOTAL (UG/L AS CU)	03/24/70-11/01/78	9##	5.	6.667	20.	5.	25.	5.	5.	5.	5.	20.
01051 LEAD, TOTAL (UG/L AS PB)	03/15/71-11/01/78	10##	5.	7.6	20.	1.	28.489	5.337	1.4	5.	10.5	19.2
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-11/01/78	9	10.	11.111	20.	5.	29.861	5.465	5.	7.5	15.	20.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	34##	50.	252.941	4000.	50.	503324.421	709.454	50.	50.	100.	600.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	34##	1.699	1.945	3.602	1.699	0.213	0.461	1.699	1.699	2.	2.716
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	88.086								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/24/70-06/07/79	33##	0.05	0.058	0.2	0.05	0.001	0.028	0.05	0.05	0.05	0.08
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/24/70-06/07/79	32	0.035	0.037	0.09	0.01	0.	0.022	0.01	0.02	0.05	0.067
71900 MERCURY, TOTAL (UG/L AS HG)	03/15/71-11/01/78	10##	0.25	0.24	0.25	0.15	0.001	0.032	0.16	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0120

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/68-06/07/79	33	18.3	17.736	28.9	2.5	39.065	6.25	9.16	13.05	21.55	26.
00300 OXYGEN, DISSOLVED MG/L	06/18/68-06/07/79	33	9.4	9.688	19.9	7.4	4.699	2.168	8.	8.3	10.2	11.36
00400 PH (STANDARD UNITS)	06/18/68-06/07/79	32	7.7	7.844	9.	6.7	0.521	0.722	7.	7.325	8.5	9.
00400 CONVERTED PH (STANDARD UNITS)	06/18/68-06/07/79	32	7.7	7.437	9.	6.7	0.691	0.832	7.	7.325	8.5	9.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/68-06/07/79	32	0.02	0.037	0.2	0.001	0.002	0.046	0.001	0.003	0.048	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station RICH0120

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/68-06/07/79	9	18.	17.778	29.5	3.	58.007	7.616	3.	14.	23.5	29.5
00300 OXYGEN, DISSOLVED MG/L	06/18/68-06/07/79	9	9.7	9.189	11.2	7.	2.014	1.419	7.	7.65	10.	11.2
00400 PH (STANDARD UNITS)	06/18/68-06/07/79	9	8.5	8.478	9.5	7.8	0.342	0.585	7.8	8.	9.	9.5
00400 CONVERTED PH (STANDARD UNITS)	06/18/68-06/07/79	9	8.5	8.218	9.5	7.8	0.418	0.646	7.8	8.	9.	9.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/68-06/07/79	9	0.003	0.006	0.016	0.	0.	0.006	0.	0.001	0.01	0.016
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/70-06/07/79	8##	0.05	0.075	0.2	0.05	0.003	0.053	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/70-06/07/79	8##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/70-06/07/79	8	0.35	0.35	0.6	0.2	0.017	0.131	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	8##	50.	243.75	1500.	50.	258169.643	508.104	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	8##	1.699	1.959	3.176	1.699	0.26	0.51	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		90.964									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/24/70-06/07/79	8##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/24/70-06/07/79	8	0.01	0.022	0.09	0.005	0.001	0.03	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station RICH0120

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/68-06/07/79	4	14.	13.25	21.	4.	65.583	8.098	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/18/68-06/07/79	4	10.8	10.375	11.3	8.6	1.563	1.25	**	**	**	**
00400 PH (STANDARD UNITS)	06/18/68-06/07/79	4	7.55	7.725	8.8	7.	0.596	0.772	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	06/18/68-06/07/79	4	7.525	7.394	8.8	7.	0.742	0.861	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/68-06/07/79	4	0.03	0.04	0.1	0.002	0.002	0.043	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/70-06/07/79	4##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/70-06/07/79	4##	0.008	0.008	0.01	0.005	0.	0.003	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/70-06/07/79	4	0.15	0.138	0.2	0.05	0.006	0.075	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	4##	75.	300.	1000.	50.	218333.333	467.262	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	4##	1.849	2.099	3.	1.699	0.381	0.617	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		125.743									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/24/70-06/07/79	4##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/24/70-06/07/79	4	0.015	0.021	0.05	0.005	0.	0.02	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station RICH0120

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/68-06/07/79	10	15.25	16.76	24.4	8.9	39.383	6.276	8.95	11.5	24.4	24.4
00300 OXYGEN, DISSOLVED MG/L	06/18/68-06/07/79	11	9.4	9.664	13.3	7.	4.305	2.075	7.16	8.	11.6	13.16
00400 PH (STANDARD UNITS)	06/18/68-06/07/79	10	7.5	7.61	8.8	7.	0.263	0.513	7.	7.375	7.775	8.72
00400 CONVERTED PH (STANDARD UNITS)	06/18/68-06/07/79	10	7.5	7.417	8.8	7.	0.305	0.552	7.	7.375	7.775	8.72
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/68-06/07/79	10	0.032	0.038	0.1	0.002	0.001	0.034	0.002	0.017	0.049	0.1
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/70-06/07/79	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/70-06/07/79	9##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/24/70-05/27/77	9	0.24	0.314	1.	0.08	0.076	0.275	0.08	0.155	0.365	1.
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/70-06/07/79	10	0.2	0.21	0.4	0.1	0.012	0.11	0.1	0.1	0.3	0.39
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	10##	50.	60.	100.	50.	444.444	21.082	50.	50.	62.5	100.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	10##	1.699	1.759	2.	1.699	0.016	0.127	1.699	1.699	1.774	2.
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		57.435									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/24/70-06/07/79	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/24/70-06/07/79	9##	0.05	0.041	0.07	0.005	0.	0.021	0.005	0.02	0.05	0.07

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station RICH0120

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/68-06/07/79	11	18.3	17.273	28.9	4.4	86.16	9.282	4.64	5.6	26.7	28.46
00300 OXYGEN, DISSOLVED MG/L	06/18/68-06/07/79	11	10.2	11.064	19.9	7.8	12.345	3.513	7.92	8.6	13.	18.68
00400 PH (STANDARD UNITS)	06/18/68-06/07/79	11	8.	8.145	9.	7.	0.377	0.614	7.1	7.8	8.6	8.98
00400 CONVERTED PH (STANDARD UNITS)	06/18/68-06/07/79	11	8.	7.753	9.	7.	0.546	0.739	7.1	7.8	8.6	8.98
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/68-06/07/79	11	0.01	0.018	0.1	0.001	0.001	0.029	0.001	0.003	0.016	0.086
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/70-06/07/79	11##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.09
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/70-06/07/79	12##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/24/70-05/27/77	12	0.28	0.261	0.47	0.025	0.025	0.157	0.025	0.133	0.41	0.455
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/70-06/07/79	12	0.15	0.292	0.7	0.05	0.068	0.26	0.05	0.1	0.575	0.7
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	11##	50.	54.545	100.	50.	227.273	15.076	50.	50.	50.	90.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	11##	1.699	1.726	2.	1.699	0.008	0.091	1.699	1.699	1.699	1.94
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		53.252									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/24/70-06/07/79	11##	0.05	0.068	0.2	0.05	0.002	0.046	0.05	0.05	0.05	0.18
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/24/70-06/07/79	11	0.02	0.022	0.04	0.005	0.	0.014	0.006	0.01	0.04	0.04

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station RICH0120

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/68-06/07/79	9	4.	9.911	26.	1.2	99.394	9.97	1.2	2.4	19.	26.
00300 OXYGEN, DISSOLVED MG/L	06/18/68-06/07/79	9	8.1	9.289	13.5	7.4	3.944	1.986	7.4	7.95	10.55	13.5
00400 PH (STANDARD UNITS)	06/18/68-06/07/79	9	8.5	8.533	9.5	7.8	0.31	0.557	7.8	8.	9.	9.5
00400 CONVERTED PH (STANDARD UNITS)	06/18/68-06/07/79	9	8.5	8.276	9.5	7.8	0.384	0.62	7.8	8.	9.	9.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/68-06/07/79	9	0.003	0.005	0.016	0.	0.	0.005	0.	0.001	0.01	0.016
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/70-06/07/79	8##	0.075	0.494	3.05	0.05	1.079	1.039	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/70-06/07/79	8##	0.005	0.008	0.02	0.005	0.	0.005	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/24/70-05/27/77	4	0.28	0.249	0.41	0.025	0.028	0.166	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/70-06/07/79	8	0.35	0.425	1.	0.1	0.108	0.328	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	7##	50.	92.857	200.	50.	5357.143	73.193	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	7##	1.699	1.871	2.301	1.699	0.086	0.294	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		74.3									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/24/70-06/07/79	8##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/24/70-06/07/79	8	0.02	0.019	0.04	0.005	0.	0.013	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station RICH0120

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/68-06/07/79	12	12.2	13.642	27.8	4.4	62.214	7.888	4.58	6.1	21.675	26.45
00300	OXYGEN, DISSOLVED MG/L	06/18/68-06/07/79	12	11.	10.817	14.6	8.	4.251	2.062	8.06	8.7	12.05	14.24
00400	PH (STANDARD UNITS)	06/18/68-06/07/79	12	7.2	7.3	8.	6.5	0.233	0.482	6.59	6.925	7.775	8.
00400	CONVERTED PH (STANDARD UNITS)	06/18/68-06/07/79	12	7.2	7.081	8.	6.5	0.285	0.534	6.59	6.925	7.775	8.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/68-06/07/79	12	0.063	0.083	0.316	0.01	0.008	0.087	0.01	0.017	0.119	0.269
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/70-06/07/79	9	0.08	0.125	0.48	0.005	0.02	0.142	0.005	0.04	0.15	0.48
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/70-06/07/79	10	0.01	0.016	0.04	0.005	0.	0.01	0.006	0.01	0.02	0.038
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/24/70-05/27/77	10	0.4	0.455	1.089	0.24	0.063	0.252	0.241	0.28	0.513	1.041
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/70-06/07/79	10	0.4	0.405	0.8	0.05	0.042	0.206	0.065	0.275	0.525	0.78
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	11	100.	459.091	3200.	50.	889409.091	943.085	50.	50.	300.	2740.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	11	2.	2.157	3.505	1.699	0.367	0.606	1.699	1.699	2.477	3.395
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		143.711									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/24/70-06/07/79	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/24/70-06/07/79	10	0.02	0.022	0.04	0.01	0.	0.01	0.01	0.01	0.03	0.039

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station RICH0120

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/68-06/07/79	8	11.4	12.775	28.9	3.3	67.422	8.211	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/18/68-06/07/79	8	11.1	10.95	13.2	8.2	3.014	1.736	**	**	**	**
00400	PH (STANDARD UNITS)	06/18/68-06/07/79	8	7.25	7.35	8.2	6.7	0.249	0.499	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/18/68-06/07/79	8	7.247	7.152	8.2	6.7	0.293	0.541	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/68-06/07/79	8	0.057	0.07	0.2	0.006	0.004	0.063	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/70-06/07/79	8##	0.05	0.081	0.29	0.01	0.008	0.088	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/70-06/07/79	8##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/24/70-05/27/77	8	0.345	0.298	0.4	0.15	0.009	0.093	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/70-06/07/79	8	0.3	0.412	1.299	0.1	0.144	0.379	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	8##	50.	350.	1300.	50.	309285.714	556.135	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	8##	1.699	2.048	3.114	1.699	0.419	0.647	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		111.781									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/24/70-06/07/79	8##	0.05	0.106	0.5	0.05	0.025	0.159	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/24/70-06/07/79	8##	0.05	0.06	0.1	0.04	0.	0.022	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station RICH0120

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/68-06/07/79	11	17.8	16.618	27.8	6.7	52.17	7.223	6.8	10.	21.1	27.46
00300	OXYGEN, DISSOLVED MG/L	06/18/68-06/07/79	11	10.	10.2	15.	8.	4.088	2.022	8.04	8.8	11.	14.32
00400	PH (STANDARD UNITS)	06/18/68-06/07/79	11	7.5	7.582	8.2	7.	0.152	0.389	7.	7.4	8.	8.16
00400	CONVERTED PH (STANDARD UNITS)	06/18/68-06/07/79	11	7.5	7.43	8.2	7.	0.177	0.421	7.	7.4	8.	8.16
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/68-06/07/79	11	0.032	0.037	0.1	0.006	0.001	0.033	0.007	0.01	0.04	0.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/70-06/07/79	11##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.09
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/70-06/07/79	11##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/24/70-05/27/77	11	0.27	0.323	1.	0.01	0.107	0.326	0.012	0.04	0.48	0.96
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/70-06/07/79	11	0.2	0.168	0.3	0.05	0.007	0.084	0.06	0.1	0.2	0.3
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	11	100.	181.818	1000.	50.	78636.364	280.422	50.	50.	100.	860.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	11	2.	2.025	3.	1.699	0.158	0.398	1.699	1.699	2.	2.895
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		105.881									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/24/70-06/07/79	11##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/24/70-06/07/79	11##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1968 - Station RICH0120

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/18/68-06/07/79	5	26.1	25.68	30.6	16.7	31.037	5.571	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	06/18/68-06/07/79	5	8.	8.74	13.	7.2	5.788	2.406	**	**	**	**
00400 PH (STANDARD UNITS)		06/18/68-06/07/79	5	8.	8.02	8.4	7.5	0.112	0.335	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		06/18/68-06/07/79	5	8.	7.907	8.4	7.5	0.128	0.358	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/18/68-06/07/79	5	0.01	0.012	0.032	0.004	0.	0.011	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station RICH0120

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/18/68-06/07/79	3	21.1	16.833	27.2	2.2	169.903	13.035	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	06/18/68-06/07/79	3	9.4	10.267	14.	7.4	11.453	3.384	**	**	**	**
00400 PH (STANDARD UNITS)		06/18/68-06/07/79	3	7.4	7.467	7.7	7.3	0.043	0.208	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		06/18/68-06/07/79	3	7.4	7.436	7.7	7.3	0.045	0.211	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/18/68-06/07/79	3	0.04	0.037	0.05	0.02	0.	0.015	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station RICH0120

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/18/68-06/07/79	3	16.1	16.833	25.	9.4	61.243	7.826	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	06/18/68-06/07/79	3	9.	9.733	11.4	8.8	2.093	1.447	**	**	**	**
00400 PH (STANDARD UNITS)		06/18/68-06/07/79	3	7.2	7.267	7.9	6.7	0.363	0.603	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		06/18/68-06/07/79	3	7.2	7.037	7.9	6.7	0.442	0.665	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/18/68-06/07/79	3	0.063	0.092	0.2	0.013	0.009	0.097	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/24/70-06/07/79	3	0.07	0.063	0.08	0.04	0.	0.021	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		03/24/70-06/07/79	3	0.02	0.015	0.02	0.005	0.	0.009	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		03/24/70-05/27/77	3	0.5	0.493	0.78	0.2	0.084	0.29	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/24/70-06/07/79	3	0.3	0.566	1.199	0.2	0.303	0.55	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		03/24/70-06/07/79	3##	0.025	0.05	0.1	0.025	0.002	0.043	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		03/24/70-06/07/79	3	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station RICH0120

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/18/68-06/07/79	12	20.85	18.8	28.9	3.9	91.029	9.541	4.41	9.	28.625	28.9
00300 OXYGEN, DISSOLVED	MG/L	06/18/68-06/07/79	12	9.1	9.817	13.	8.	3.647	1.91	8.	8.1	11.7	12.94
00400 PH (STANDARD UNITS)		06/18/68-06/07/79	12	7.65	7.775	9.	7.	0.56	0.748	7.	7.	8.5	8.85
00400 CONVERTED PH (STANDARD UNITS)		06/18/68-06/07/79	12	7.625	7.358	9.	7.	0.75	0.866	7.	7.	8.5	8.85
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/18/68-06/07/79	12	0.024	0.044	0.1	0.001	0.002	0.045	0.002	0.003	0.1	0.1
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/24/70-06/07/79	11	0.09	0.092	0.37	0.01	0.01	0.1	0.01	0.02	0.1	0.32
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		03/24/70-06/07/79	11	0.01	0.016	0.03	0.01	0.	0.008	0.01	0.01	0.02	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		03/24/70-05/27/77	11	0.54	0.611	0.98	0.27	0.053	0.23	0.294	0.49	0.87	0.972
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/24/70-06/07/79	10	0.45	0.4	0.5	0.2	0.016	0.125	0.2	0.275	0.5	0.5
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		02/14/71-06/07/79	11	200.	1954.545	8000.	50.	10271727.273	3204.954	50.	50.	4000.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		02/14/71-06/07/79	11	2.301	2.519	3.903	1.699	0.821	0.906	1.699	1.699	3.602	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		330.388									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		03/24/70-06/07/79	11##	0.05	0.164	1.1	0.05	0.099	0.314	0.05	0.05	0.1	0.92
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		03/24/70-06/07/79	11	0.02	0.078	0.58	0.01	0.028	0.168	0.01	0.01	0.06	0.478

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Parameter Inventory for Station: RICH0120

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506		GEOMETRIC MEAN =		2028.788								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	81##	50.	448.765	8000.	50.	1842498.457	1357.387	50.	50.	100.	1000.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/14/71-06/07/79	81##	1.699	2.023	3.903	1.699	0.311	0.558	1.699	1.699	2.	3.
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		105.396								
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	05/13/71-06/27/71	2	0.009	0.009	0.01	0.008	0.	0.001	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	12/05/73-08/22/74	2	0.	0.	0.	0.	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/24/70-06/07/79	84##	0.05	0.074	1.1	0.025	0.016	0.126	0.05	0.05	0.05	0.1
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/24/70-06/07/79	83	0.03	0.038	0.58	0.005	0.004	0.064	0.005	0.01	0.05	0.05
71900	MERCURY, TOTAL (UG/L AS HG)	03/15/71-11/01/78	19##	0.25	0.263	0.6	0.15	0.007	0.085	0.25	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0120

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	1	0	0.00				3	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	98	0	0.00	29	0	0.00	36	0	0.00	33	0	0.00			
00400	PH	Fresh Chronic	9.	97	8	0.08	29	2	0.07	36	0	0.00	32	6	0.19			
		Other-Lo Lim.	6.5	97	1	0.01	29	0	0.00	36	1	0.03	32	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	8	0	0.00	2	0	0.00	1	0	0.00	5	0	0.00			
		Other-Lo Lim.	6.5	8	0	0.00	2	0	0.00	1	0	0.00	5	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	84	0	0.00	23	0	0.00	32	0	0.00	29	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	68	0	0.00	19	0	0.00	28	0	0.00	21	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	16	0	0.00	4	0	0.00	4	0	0.00	8	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	11	0	0.00	1	0	0.00	5	0	0.00	5	0	0.00			
		Drinking Water	50.	11	0	0.00	1	0	0.00	5	0	0.00	5	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	0&	0	0.00												
		Drinking Water	5.	0&	0	0.00												
01034	CHROMIUM, TOTAL	Drinking Water	100.	19	0	0.00	2	0	0.00	9	0	0.00	8	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	19	3	0.16	2	0	0.00	9	1	0.11	8	2	0.25			
		Drinking Water	1300.	19	0	0.00	2	0	0.00	9	0	0.00	8	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	19	0	0.00	2	0	0.00	10	0	0.00	7	0	0.00			
		Drinking Water	15.	19	1	0.05	2	0	0.00	10	1	0.10	7	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	9	0	0.00				5	0	0.00	4	0	0.00			
		Drinking Water	100.	9	0	0.00				5	0	0.00	4	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	19	0	0.00	2	0	0.00	9	0	0.00	8	0	0.00			
		Drinking Water	5000.	19	0	0.00	2	0	0.00	9	0	0.00	8	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	10	6	0.60	6	5	0.83	1	0	0.00	3	1	0.33			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	81	18	0.22	19	5	0.26	34	6	0.18	28	7	0.25			
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	2	0	0.00							2	0	0.00			
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	2	0	0.00	1	0	0.00	1	0	0.00						
71900	MERCURY, TOTAL	Fresh Acute	2.4	19	0	0.00	2	0	0.00	10	0	0.00	7	0	0.00			
		Drinking Water	2.	19	0	0.00	2	0	0.00	10	0	0.00	7	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0120

NPS Station ID: RICH0120 LAT/LON: 37.531420/ -77.483699 Agency: 21VASWCB Date Created: / /
Location: BOULEVARD BRIDGE FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS113.20 /VA2-08-X0143/VA2-4X0143
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205001 RF1 Mile Point: 2.230 Distance from RF1: 0.40 On/Off RF1: ON
RF3 Index: 02080205009600.00 RF3 Mile Point: 0.00 Distance from RF3: 0.01 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 08 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0120

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/18/68-06/07/79	97	16.1	16.119	30.6	1.2	73.68	8.584	3.98	9.2	24.4	27.8
00070 TURBIDITY, (JACKSON CANDLE UNITS)		04/28/71-07/08/71	4	6.	6.5	11.	3.	13.667	3.697	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	06/18/68-06/07/79	98	9.7	10.07	19.9	7.	4.81	2.193	7.89	8.2	11.4	13.02
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/07/68-04/18/73	8	1.85	2.088	3.3	1.	0.684	0.827	**	**	**	**
00400 PH (STANDARD UNITS)		06/18/68-06/07/79	97	7.8	7.805	9.5	6.5	0.454	0.674	7.	7.25	8.25	8.82
00400 CONVERTED PH (STANDARD UNITS)		06/18/68-06/07/79	97	7.8	7.409	9.5	6.5	0.613	0.783	7.	7.25	8.25	8.82
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/18/68-06/07/79	97	0.016	0.039	0.316	0.	0.003	0.052	0.002	0.006	0.057	0.1
00403 PH, LAB, STANDARD UNITS	SU	10/07/68-04/25/78	8	7.3	7.288	7.7	6.7	0.124	0.352	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		10/07/68-04/25/78	8	7.3	7.156	7.7	6.7	0.144	0.379	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		10/07/68-04/25/78	8	0.05	0.07	0.2	0.02	0.004	0.062	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		10/07/68-04/25/78	8	33.5	36.25	51.	21.	103.071	10.152	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-06/02/74	8	160.5	155.5	211.	104.	1124.857	33.539	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		10/07/68-06/02/74	8	49.	57.25	101.	17.	928.214	30.467	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-06/02/74	6	77.5	81.167	105.	66.	196.567	14.02	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-06/02/74	6	26.	25.167	44.	9.	165.767	12.875	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		10/07/68-06/02/74	8	6.5	6.5	12.	1.	11.714	3.423	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-06/02/74	6	20.5	17.667	32.	2.	117.867	10.857	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/24/70-06/07/79	83##	0.05	0.114	3.05	0.005	0.112	0.335	0.05	0.05	0.09	0.154
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		03/24/70-06/07/79	84##	0.005	0.009	0.04	0.005	0.	0.007	0.005	0.005	0.01	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		03/24/70-05/27/77	68	0.34	0.377	1.089	0.01	0.066	0.256	0.058	0.213	0.48	0.807
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/24/70-06/07/79	84	0.3	0.324	1.299	0.05	0.06	0.244	0.1	0.125	0.4	0.6
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		06/15/77-06/07/79	16	0.235	0.229	0.6	0.025	0.034	0.185	0.025	0.025	0.38	0.46
01002 ARSENIC, TOTAL (UG/L AS AS)		03/15/71-11/01/78	11##	1.5	1.727	2.5	1.	0.568	0.754	1.	1.	2.5	2.5
01027 CADMIUM, TOTAL (UG/L AS CD)		04/28/71-11/01/78	11##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01034 CHROMIUM, TOTAL (UG/L AS CR)		03/24/70-11/01/78	19##	5.	7.895	20.	5.	23.099	4.806	5.	5.	10.	20.
01042 COPPER, TOTAL (UG/L AS CU)		03/24/70-11/01/78	19##	5.	9.737	40.	5.	95.76	9.786	5.	5.	10.	30.
01045 IRON, TOTAL (UG/L AS FE)		04/28/71-11/01/78	2	450.	450.	700.	200.	125000.	353.553	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)		03/15/71-11/01/78	19	5.	7.316	20.	1.	17.673	4.204	3.	5.	10.	12.
01055 MANGANESE, TOTAL (UG/L AS MN)		03/24/70-11/01/78	3	30.	36.667	60.	20.	433.333	20.817	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)		01/24/73-11/01/78	9##	50.	35.	50.	5.	506.25	22.5	5.	5.	50.	50.
01092 ZINC, TOTAL (UG/L AS ZN)		03/24/70-11/01/78	19	10.	16.053	60.	5.	193.275	13.902	5.	10.	20.	40.
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)		06/18/68-07/09/70	10	2900.	12938.1	93000.	91.	810008296.1	28460.645	104.9	230.	9725.	84800.
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150		06/18/68-07/09/70	10	3.405	3.307	4.968	1.959	0.928	0.964	1.999	2.362	3.987	4.876

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Annual Analysis for 1997 - Station RICH0119

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN = 779.242											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station RICH0119

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	12	25.7	25.292	29.4	16.2	16.724	4.09	17.19	23.525	28.775	29.37
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	12	224.	221.833	339.	109.	5864.879	76.582	118.	154.	285.75	332.4
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	12	8.75	8.817	10.9	7.7	0.789	0.888	7.76	8.1	9.15	10.57
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	12	8.365	8.357	8.62	8.13	0.028	0.168	8.133	8.192	8.49	8.605
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	12	8.363	8.328	8.62	8.13	0.029	0.17	8.133	8.192	8.49	8.605
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	12	0.004	0.005	0.007	0.002	0.	0.002	0.002	0.003	0.006	0.007
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	410.	3212.417	16000.	45.	36355942.447	6029.589	51.9	78.	2525.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	2.604	2.724	4.204	1.653	0.8	0.895	1.707	1.892	3.393	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN = 530.125											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station RICH0119

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	11	25.6	24.682	30.7	16.9	21.376	4.623	16.94	21.6	27.8	30.38
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	7	232.	235.143	318.	171.	3808.81	61.716	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	11	8.1	8.545	10.9	6.7	1.749	1.322	6.86	7.8	9.2	10.9
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	11	7.85	7.962	8.54	7.44	0.145	0.381	7.456	7.66	8.31	8.496
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	11	7.85	7.824	8.54	7.44	0.166	0.407	7.456	7.66	8.31	8.496
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	11	0.014	0.015	0.036	0.003	0.	0.011	0.003	0.005	0.022	0.035
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	4395.	6698.8	16000.	9.	52111694.178	7218.843	9.	369.75	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	3.4	3.067	4.204	0.954	1.625	1.275	0.954	2.256	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		1165.666									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station RICH0119

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	10	23.65	23.73	30.7	15.	27.553	5.249	15.13	20.8	28.275	30.69
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	9	221.	207.778	302.	107.	5351.944	73.157	107.	133.5	277.5	302.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	10	8.8	8.78	10.1	7.7	0.668	0.818	7.71	7.875	9.35	10.07
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	10	8.03	7.947	8.34	7.48	0.108	0.328	7.491	7.628	8.282	8.338
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	10	8.024	7.839	8.34	7.48	0.121	0.348	7.491	7.627	8.282	8.338
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	10	0.009	0.015	0.033	0.005	0.	0.01	0.005	0.005	0.024	0.032
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	900.	4776.	16000.	110.	42556604.444	6523.542	116.	410.	10900.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	2.943	3.145	4.204	2.041	0.627	0.792	2.06	2.575	4.024	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		1397.919									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station RICH0119

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	12	21.85	22.492	27.5	15.5	17.057	4.13	15.8	19.275	26.425	27.44
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	12	186.	184.5	233.	142.	771.182	27.77	145.6	156.	205.75	227.6
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	12	9.1	8.983	10.8	6.6	1.258	1.122	7.02	8.225	9.7	10.62
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.67	7.801	8.55	7.34	0.13	0.36	7.385	7.528	8.108	8.463
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.67	7.692	8.55	7.34	0.142	0.377	7.385	7.528	8.108	8.463
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	12	0.021	0.02	0.046	0.003	0.	0.013	0.004	0.008	0.03	0.042
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	1200.	5507.25	16000.	9.	47373557.659	6882.845	29.7	250.	14300.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	3.078	3.069	4.204	0.954	1.088	1.043	1.236	2.394	4.144	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		1171.76									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0119

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	10	22.4	23.69	30.	15.3	21.354	4.621	15.75	21.	28.225	29.83
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	10	200.	234.2	363.	183.	3643.289	60.36	183.2	189.5	276.	355.5
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	10	8.95	9.06	10.6	8.	0.847	0.92	8.02	8.275	9.95	10.58
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	10	8.2	8.2	8.7	7.57	0.141	0.375	7.593	7.898	8.577	8.699
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	10	8.2	8.057	8.7	7.57	0.163	0.404	7.593	7.897	8.577	8.699
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	10	0.006	0.009	0.027	0.002	0.	0.008	0.002	0.003	0.013	0.026
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	460.	4658.182	16000.	20.	39973456.364	6322.457	20.	140.	9200.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	2.663	2.892	4.204	1.301	1.197	1.094	1.301	2.146	3.964	4.204

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

EPA Water Quality Criteria Analysis for Station: RICH0119

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	13	0	0.00	9	0	0.00	1	0	0.00	3	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	55	0	0.00	34	0	0.00	5	0	0.00	16	0	0.00			
00400 PH	Fresh Chronic	9.	55	0	0.00	34	0	0.00	5	0	0.00	16	0	0.00			
	Other-Lo Lim.	6.5	55	0	0.00	34	0	0.00	5	0	0.00	16	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	11	1	0.09	7	1	0.14	1	0	0.00	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	250.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	55	40	0.73	35	28	0.80	4	1	0.25	16	11	0.69			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0119

NPS Station ID: RICH0119 LAT/LON: 37.531393/ -77.433337 Agency: 21VASWCB Date Created: 07/16/94
Location: JAMES RIVER,MAYOS BR., NORTH CHANNEL US SHOCKOE FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS110.31
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0119

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	55	24.9	23.984	30.7	15.	19.993	4.471	16.42	21.6	27.6	29.34
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/13/94-06/01/95	13	6.	8.1	30.	1.6	59.213	7.695	1.76	2.65	11.8	23.2
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/13/94-10/26/98	50	198.	214.68	363.	107.	3880.998	62.298	139.3	170.	267.5	301.7
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/13/94-06/01/95	13	193.	190.769	277.	130.	2563.359	50.63	130.	144.5	233.5	268.6
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	55	8.7	8.836	10.9	6.6	1.025	1.013	7.76	8.1	9.4	10.48
00310 BOD, 5 DAY, 20 DEG C MG/L	06/27/94-06/01/95	14	2.2	2.671	6.2	0.5	3.647	1.91	0.5	1.1	3.775	6.1
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	55	8.14	8.053	8.7	7.34	0.143	0.378	7.512	7.66	8.32	8.544
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	55	8.14	7.897	8.7	7.34	0.168	0.41	7.512	7.66	8.32	8.544
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	55	0.007	0.013	0.046	0.002	0.	0.011	0.003	0.005	0.022	0.031
00403 PH, LAB, STANDARD UNITS SU	07/28/94-06/01/95	11	7.3	7.291	8.1	6.5	0.219	0.468	6.56	6.9	7.5	8.06
00403 CONVERTED PH, LAB, STANDARD UNITS	07/28/94-06/01/95	11	7.3	7.079	8.1	6.5	0.268	0.518	6.56	6.9	7.5	8.06
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/28/94-06/01/95	11	0.05	0.083	0.316	0.008	0.008	0.09	0.009	0.032	0.126	0.285
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	11	52.	51.727	71.	32.	167.218	12.931	32.8	39.	64.	70.2
00500 RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	11	131.	128.727	174.	67.	1294.018	35.972	70.6	101.	166.	173.2
00505 RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	11	26.	30.318	62.	2.5	381.414	19.53	3.6	16.	51.	60.8
00510 RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	11	108.	98.636	142.	42.	917.855	30.296	46.4	69.	115.	140.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/13/94-06/01/95	13	8.	11.615	45.	3.	121.59	11.027	3.8	5.	13.	35.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/13/94-06/01/95	13	2.	2.5	7.	1.	2.583	1.607	1.2	1.5	3.	5.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/13/94-06/01/95	13	5.	8.923	38.	1.5	95.035	9.749	1.5	3.5	10.5	29.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/27/94-06/01/95	12	0.045	0.079	0.27	0.02	0.008	0.091	0.02	0.02	0.098	0.267
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	11##	0.005	0.012	0.03	0.005	0.	0.011	0.005	0.005	0.03	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	11	0.11	0.162	0.34	0.02	0.013	0.113	0.02	0.09	0.27	0.336
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/94-06/01/95	11	0.3	0.464	1.1	0.2	0.081	0.284	0.22	0.3	0.5	1.06
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/28/94-06/01/95	11	0.11	0.141	0.6	0.06	0.024	0.154	0.06	0.07	0.12	0.504
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/13/94-07/14/94	2	5.35	5.35	6.6	4.1	3.125	1.768	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	07/28/94-06/01/95	11	14.	13.545	22.	6.	29.673	5.447	6.2	8.	18.	21.8
00945 SULFATE, TOTAL (MG/L AS SO4)	07/28/94-06/01/95	11	20.	21.	34.	11.	76.6	8.752	11.	12.	30.	33.8
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	55	790.	4920.436	16000.	9.	41564905.065	6447.085	35.	170.	9200.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	55	2.898	2.972	4.204	0.954	1.006	1.003	1.512	2.23	3.964	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	937.074								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/28/94-06/01/95	11	0.06	0.108	0.57	0.04	0.024	0.154	0.04	0.05	0.09	0.474

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Annual Analysis for 1994 - Station RICH0118

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	395.	3363.7	16000.	9.	30632947.567	5534.704	10.1	56.	7475.	15320.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	2.591	2.617	4.204	0.954	1.236	1.112	0.989	1.7	3.87	4.18
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		414.012									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station RICH0118

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	1500.	2136.5	5400.	45.	4209278.056	2051.653	64.5	427.5	3975.	5400.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	3.172	3.021	3.732	1.653	0.447	0.668	1.726	2.613	3.591	3.732
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		1050.563									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station RICH0118

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	560.	3388.75	16000.	45.	35661664.205	5971.739	64.5	180.	3050.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	2.708	2.883	4.204	1.653	0.666	0.816	1.77	2.215	3.466	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		763.045									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0118

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	220.	1408.545	9200.	9.	7469435.073	2733.027	11.2	45.	1400.	7920.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	2.342	2.379	3.964	0.954	0.896	0.947	1.024	1.653	3.146	3.86
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		239.468									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station RICH0118

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	270.	1582.167	16000.	20.	20672636.515	4546.717	27.5	53.25	490.	11437.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	2.427	2.362	4.204	1.301	0.595	0.772	1.407	1.713	2.69	3.812
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		229.952									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

EPA Water Quality Criteria Analysis for Station: RICH0118

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	23	0	0.00	15	0	0.00	2	0	0.00	6	0	0.00			
00400 PH	Fresh Chronic	9.	21	0	0.00	14	0	0.00	2	0	0.00	5	0	0.00			
	Other-Lo Lim.	6.5	21	0	0.00	14	0	0.00	2	0	0.00	5	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	11	1	0.09	7	1	0.14	1	0	0.00	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	250.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	55	37	0.67	34	24	0.71	5	4	0.80	16	9	0.56			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0118

NPS Station ID: RICH0118 LAT/LON: 37.530560/ -77.444171 Agency: 21VASWCB Date Created: 07/16/94
Location: JAMES RIVER, MANCHERSTER BR. NEAR SOUTH BANK FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS110.90
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 08 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0118

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-09/16/96	23	25.	23.643	31.1	14.8	23.173	4.814	15.88	21.5	27.5	30.2
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/14/94-06/01/95	12	3.55	5.125	11.5	1.2	11.697	3.42	1.44	2.4	8.05	10.78
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	07/28/94-09/16/96	18	200.5	213.167	332.	106.	4576.265	67.648	138.4	155.75	279.5	305.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/14/94-06/01/95	12	202.5	199.083	277.	134.	2604.629	51.036	135.2	144.5	240.25	274.
00096	SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-09/16/96	23	8.6	8.761	10.2	7.7	0.541	0.735	7.94	8.2	9.4	9.98
00310	BOD, 5 DAY, 20 DEG C MG/L	06/27/94-06/01/95	13	1.2	1.462	3.3	0.5	0.834	0.913	0.5	0.5	2.1	3.06
00400	PH (STANDARD UNITS)	06/27/94-06/11/96	21	7.84	7.93	8.75	7.31	0.173	0.416	7.38	7.615	8.345	8.522
00400	CONVERTED PH (STANDARD UNITS)	06/27/94-06/11/96	21	7.84	7.767	8.75	7.31	0.201	0.449	7.38	7.615	8.345	8.522
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-06/11/96	21	0.014	0.017	0.049	0.002	0.	0.014	0.003	0.005	0.024	0.042
00403	PH, LAB, STANDARD UNITS SU	07/28/94-06/01/95	11	7.5	7.391	8.1	6.5	0.191	0.437	6.6	7.1	7.6	8.06
00403	CONVERTED PH, LAB, STANDARD UNITS	07/28/94-06/01/95	11	7.5	7.173	8.1	6.5	0.243	0.493	6.6	7.1	7.6	8.06
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/28/94-06/01/95	11	0.032	0.067	0.316	0.008	0.008	0.087	0.009	0.025	0.079	0.273
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	11	54.	53.727	71.	34.	153.818	12.402	34.8	41.	65.	69.8
00500	RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	11	130.	138.909	186.	106.	688.491	26.239	108.	116.	160.	185.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	11	34.	34.364	58.	13.	245.055	15.654	13.4	17.	48.	56.4
00510	RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	11	93.	104.545	164.	66.	1064.273	32.623	66.8	72.	128.	158.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/14/94-06/01/95	12	5.5	6.25	16.	1.5	18.159	4.261	1.5	3.25	9.25	14.5
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/14/94-06/01/95	12##	1.5	1.708	3.	1.	0.248	0.498	1.15	1.5	2.	2.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/14/94-06/01/95	12	4.	4.875	13.	1.5	12.506	3.536	1.5	1.875	7.5	11.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/27/94-06/01/95	12##	0.02	0.028	0.06	0.02	0.	0.015	0.02	0.02	0.043	0.057
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	11##	0.005	0.014	0.03	0.005	0.	0.011	0.005	0.005	0.03	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	11	0.06	0.129	0.33	0.02	0.015	0.122	0.02	0.02	0.22	0.328
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/94-06/01/95	11	0.3	0.309	0.5	0.2	0.009	0.094	0.2	0.2	0.4	0.48
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/28/94-06/01/95	11	0.07	0.08	0.14	0.04	0.001	0.03	0.042	0.06	0.1	0.134
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/14/94-07/14/94	1	4.3	4.3	4.3	4.3	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/28/94-06/01/95	11	14.	14.182	22.	6.	28.964	5.382	6.2	10.	18.	22.
00945	SULFATE, TOTAL (MG/L AS SO4)	07/28/94-06/01/95	11	22.	21.727	35.	12.	76.218	8.73	12.	12.	28.	34.8
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	55	410.	2366.309	16000.	9.	19415579.588	4406.311	35.	78.	1700.	9200.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	55	2.613	2.645	4.204	0.954	0.775	0.88	1.512	1.892	3.23	3.964
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	441.78								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/28/94-06/01/95	11	0.05	0.062	0.11	0.04	0.001	0.023	0.04	0.04	0.08	0.106

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Station Inventory for Station: RICH0117

NPS Station ID: RICH0117 LAT/LON: 37.530560/ -77.433893 Agency: CHESBAY Date Created: 08/24/84
Location: MAYO'S BRIDGE JRWQMP STA.2 VIMS SLACK WATER STA. FIPS State/County: 51159 VIRGINIA/RICHMOND
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): TF5.2
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080206046 RF1 Mile Point: 7.650 Distance from RF1: 6.30 On/Off RF1: ON
RF3 Index: 02080205000102.60 RF3 Mile Point: 2.59 Distance from RF3: 0.30 On/Off RF3:
Description:

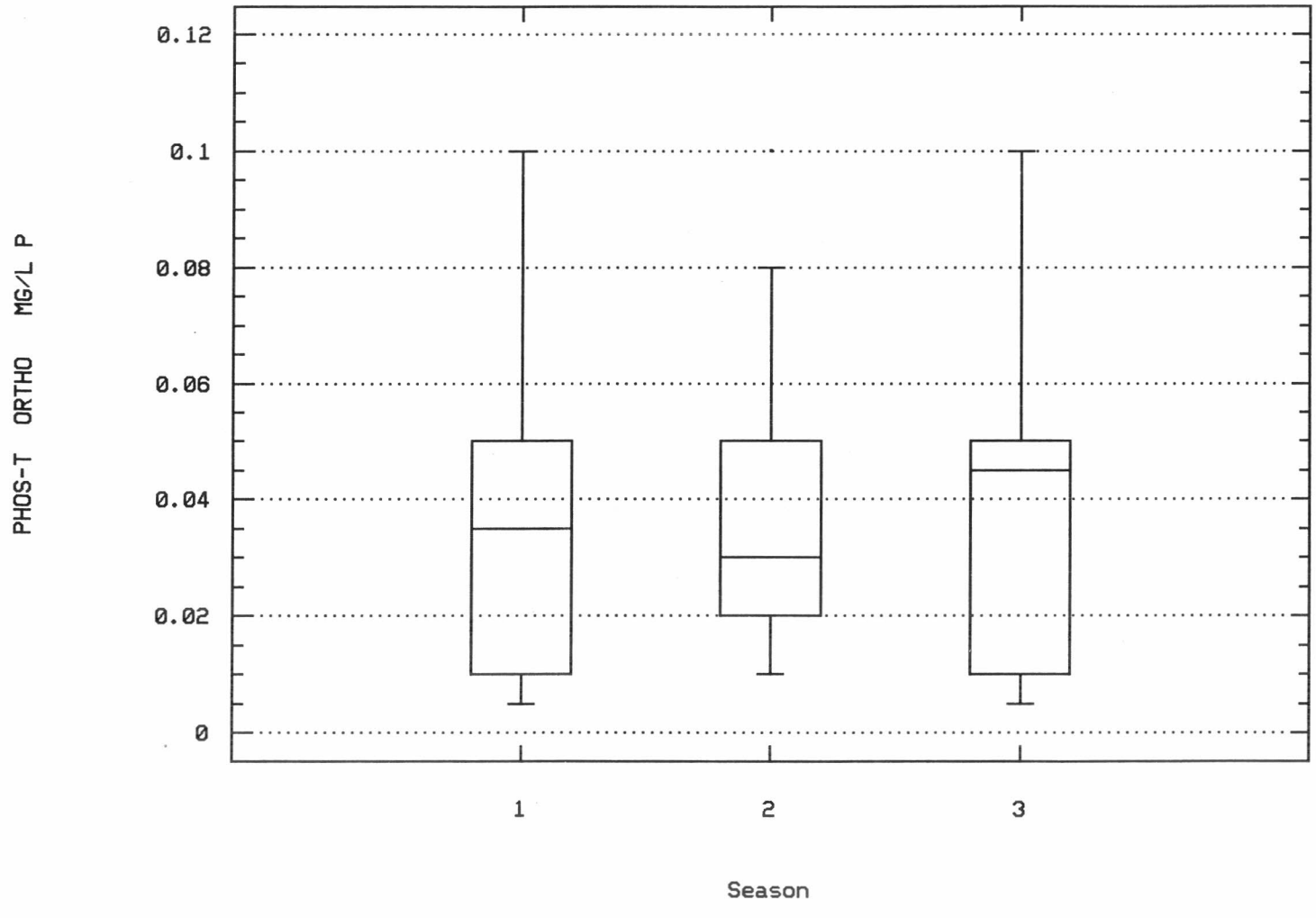
Parameter Inventory for Station: RICH0117

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

******** No Parameter Data Available for this Station ********

Station: RICH0116 Parameter Code: 70507

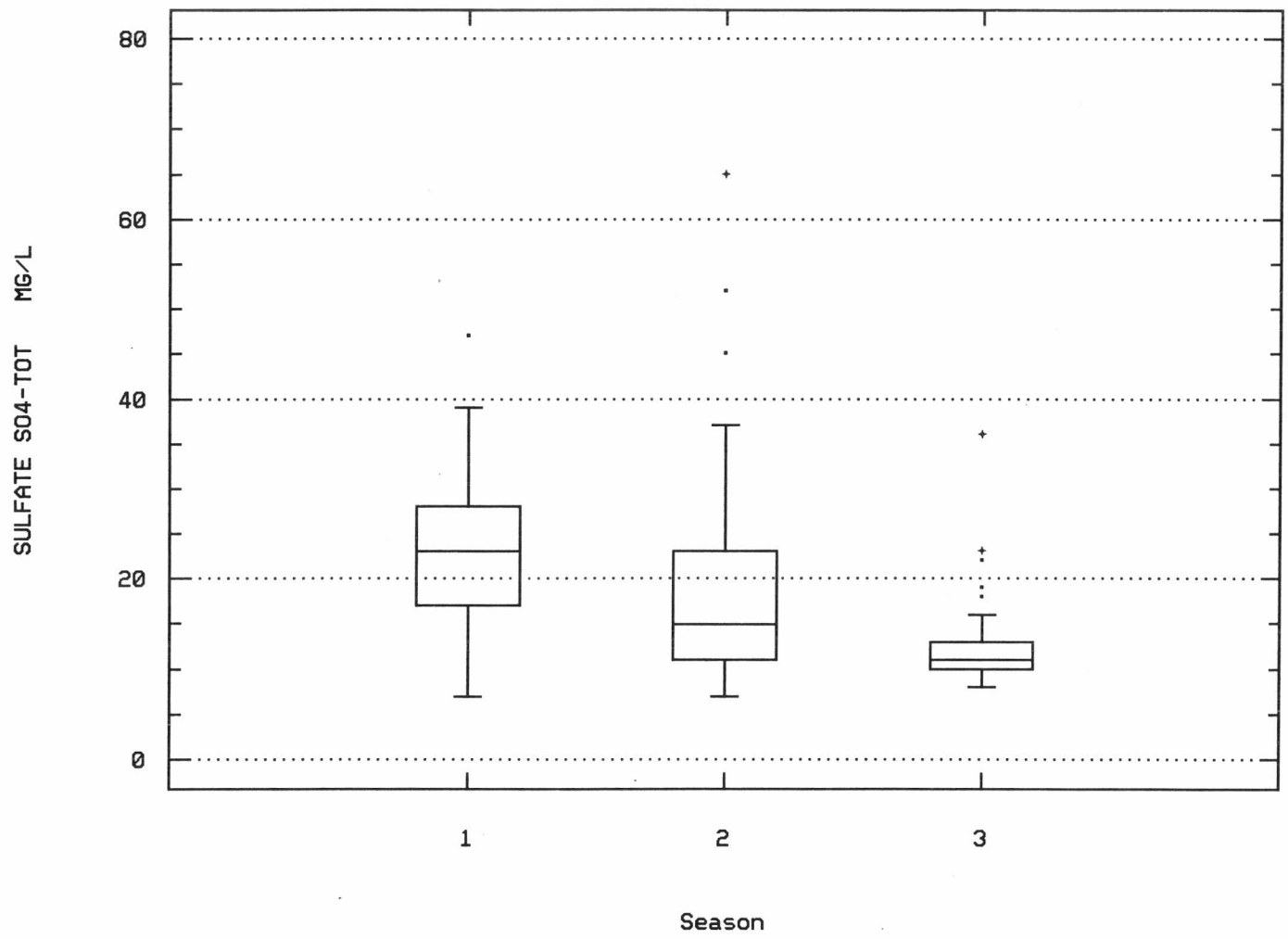
PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00945

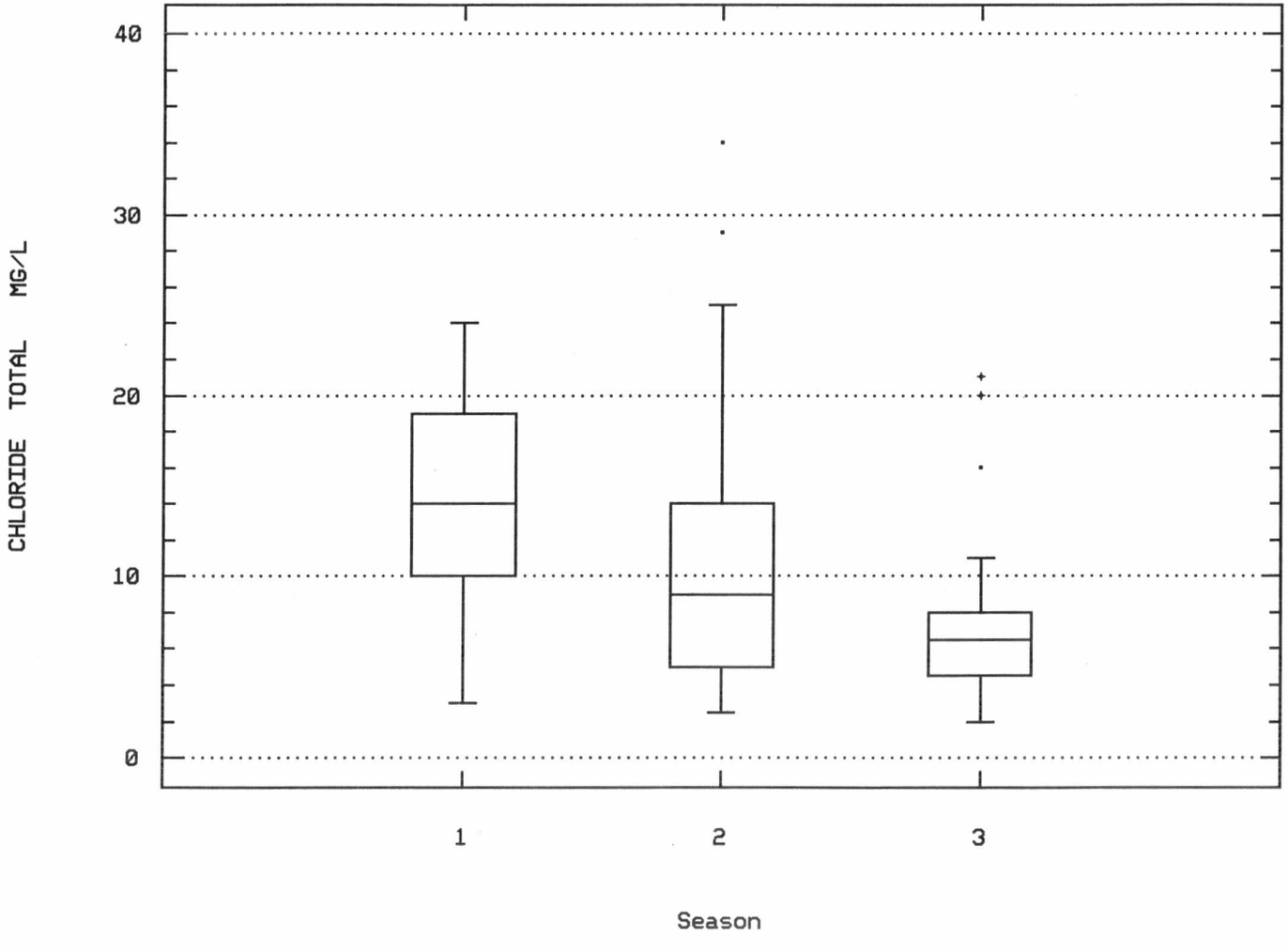
SULFATE, TOTAL (MG/L AS SO4)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00940

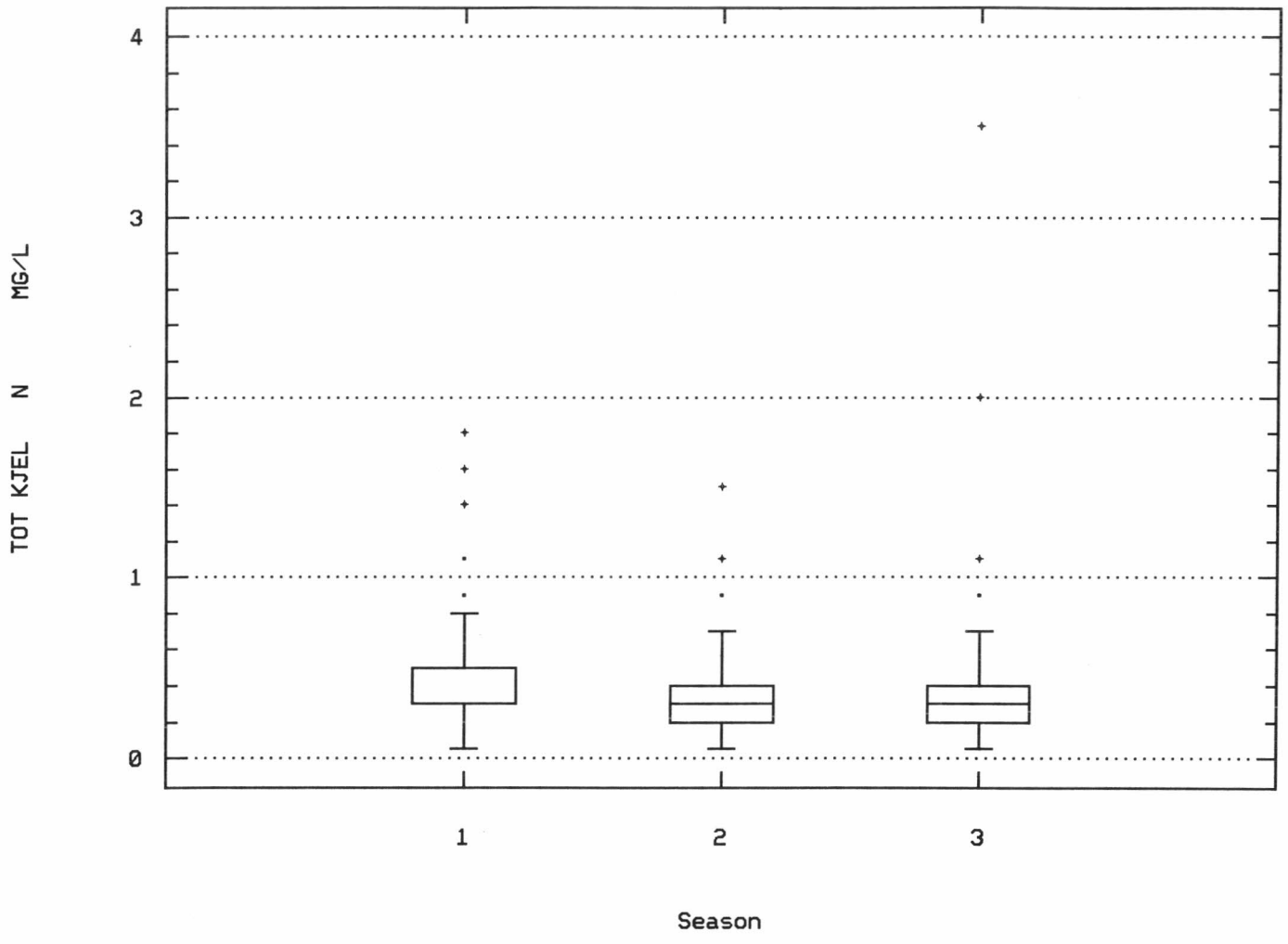
CHLORIDE,TOTAL IN WATER



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00625

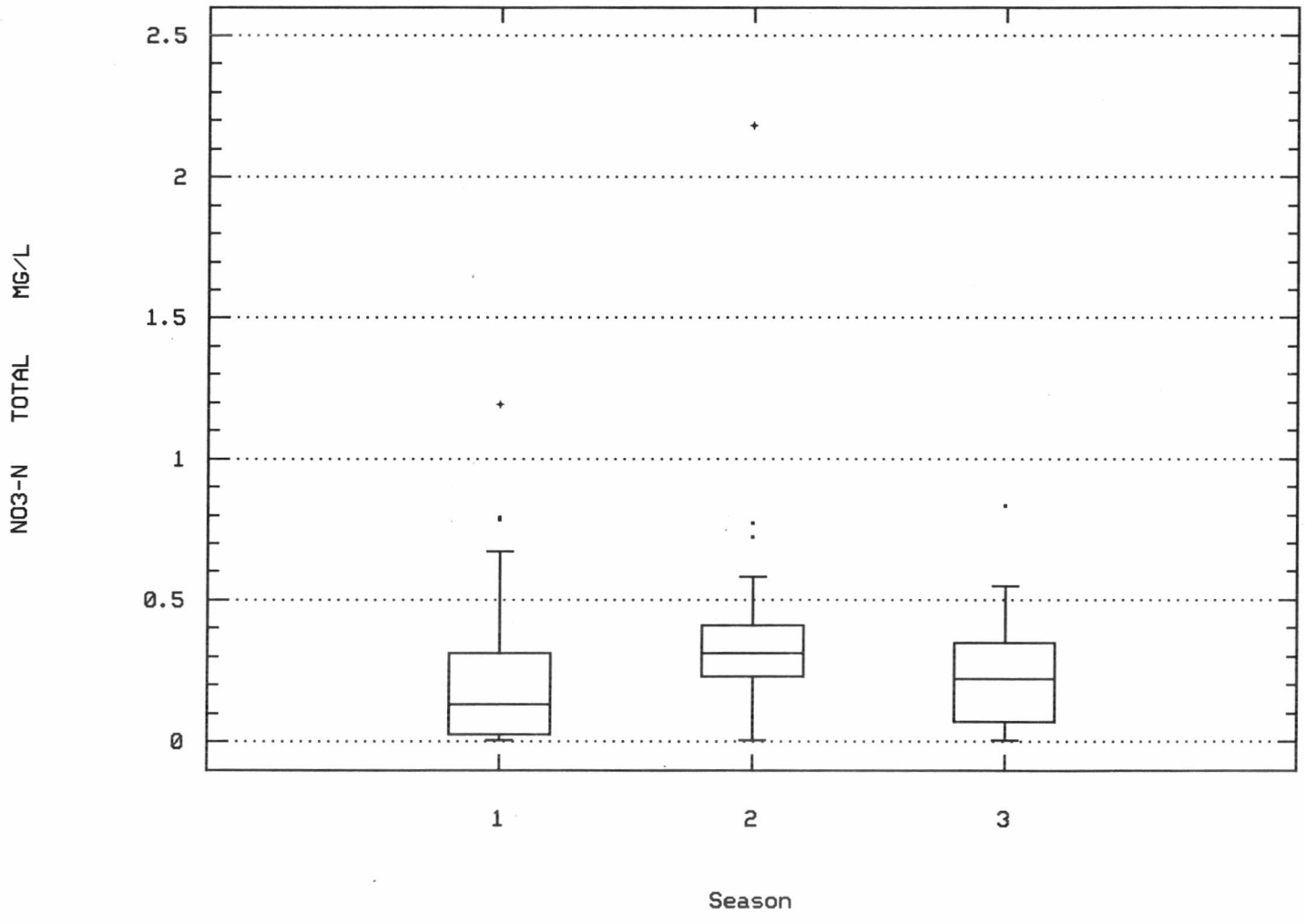
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00620

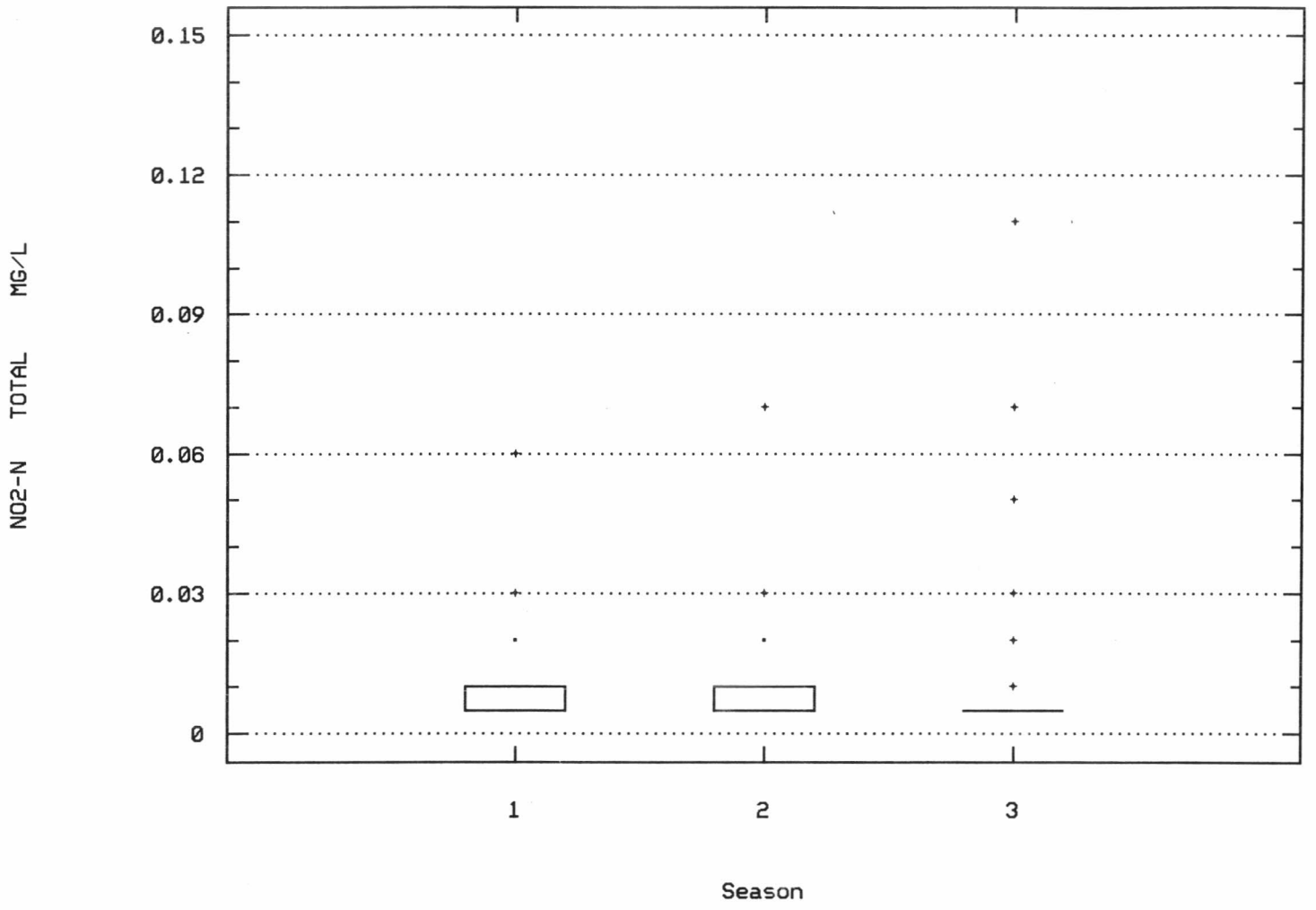
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00615

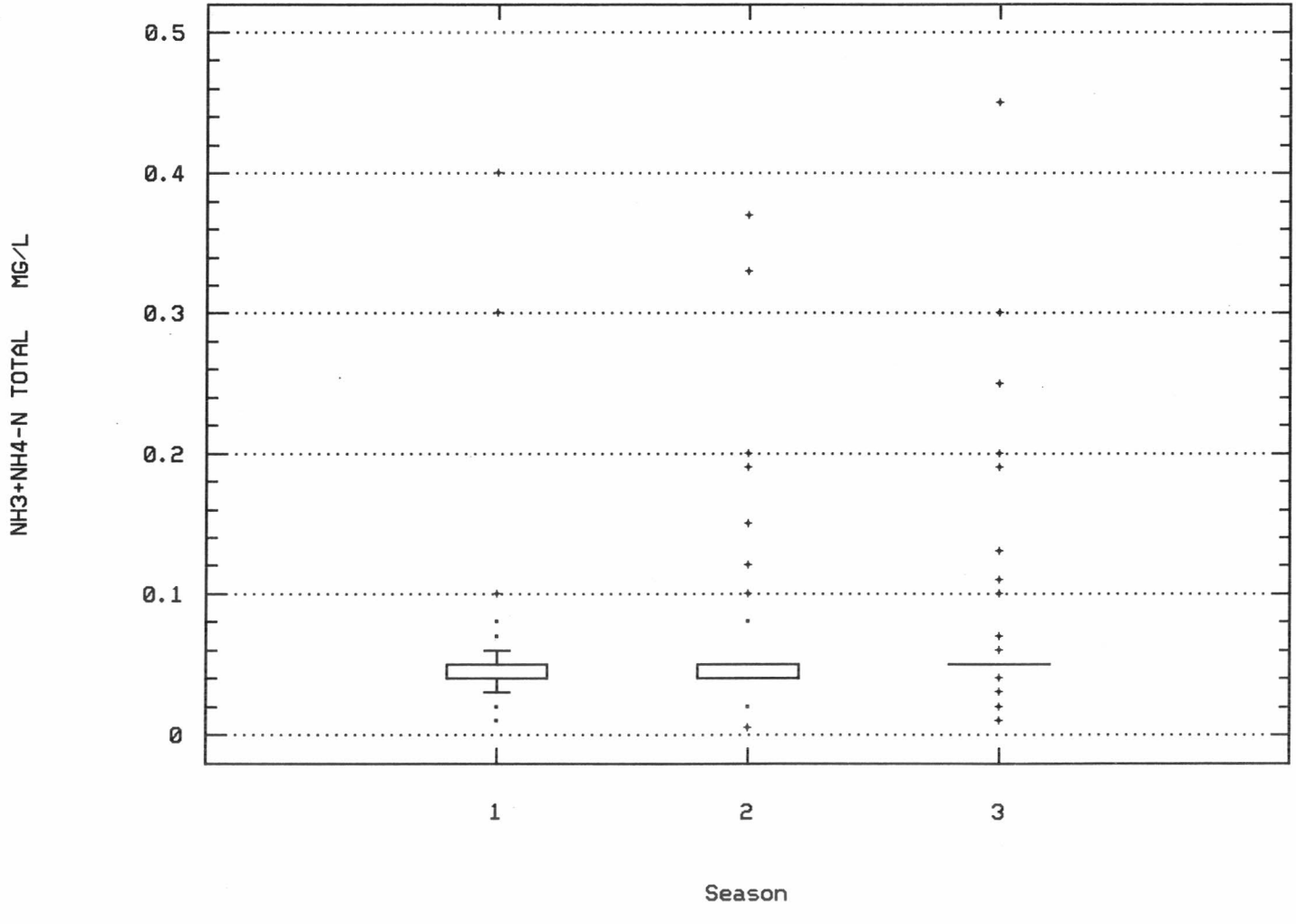
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00610

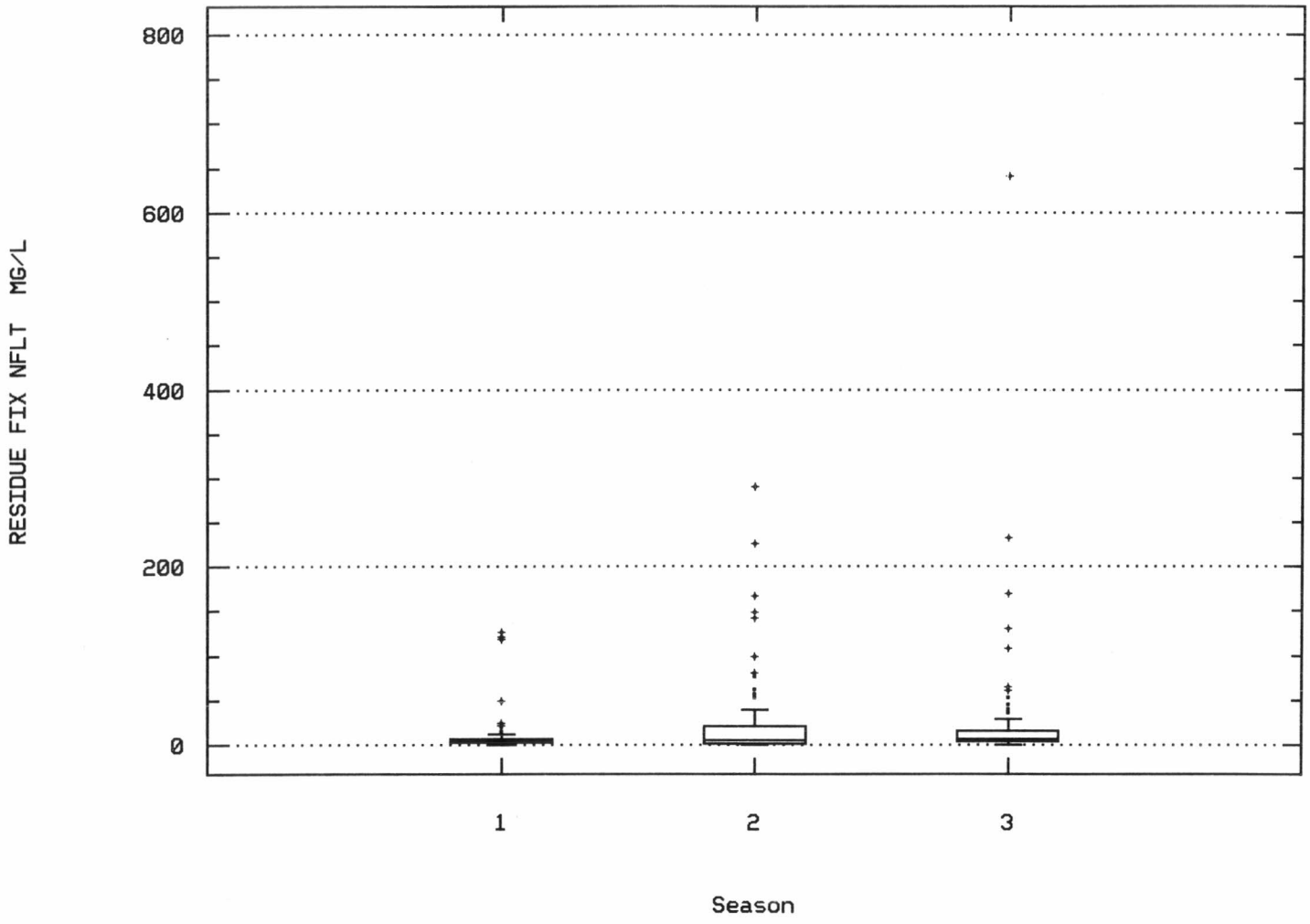
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00540

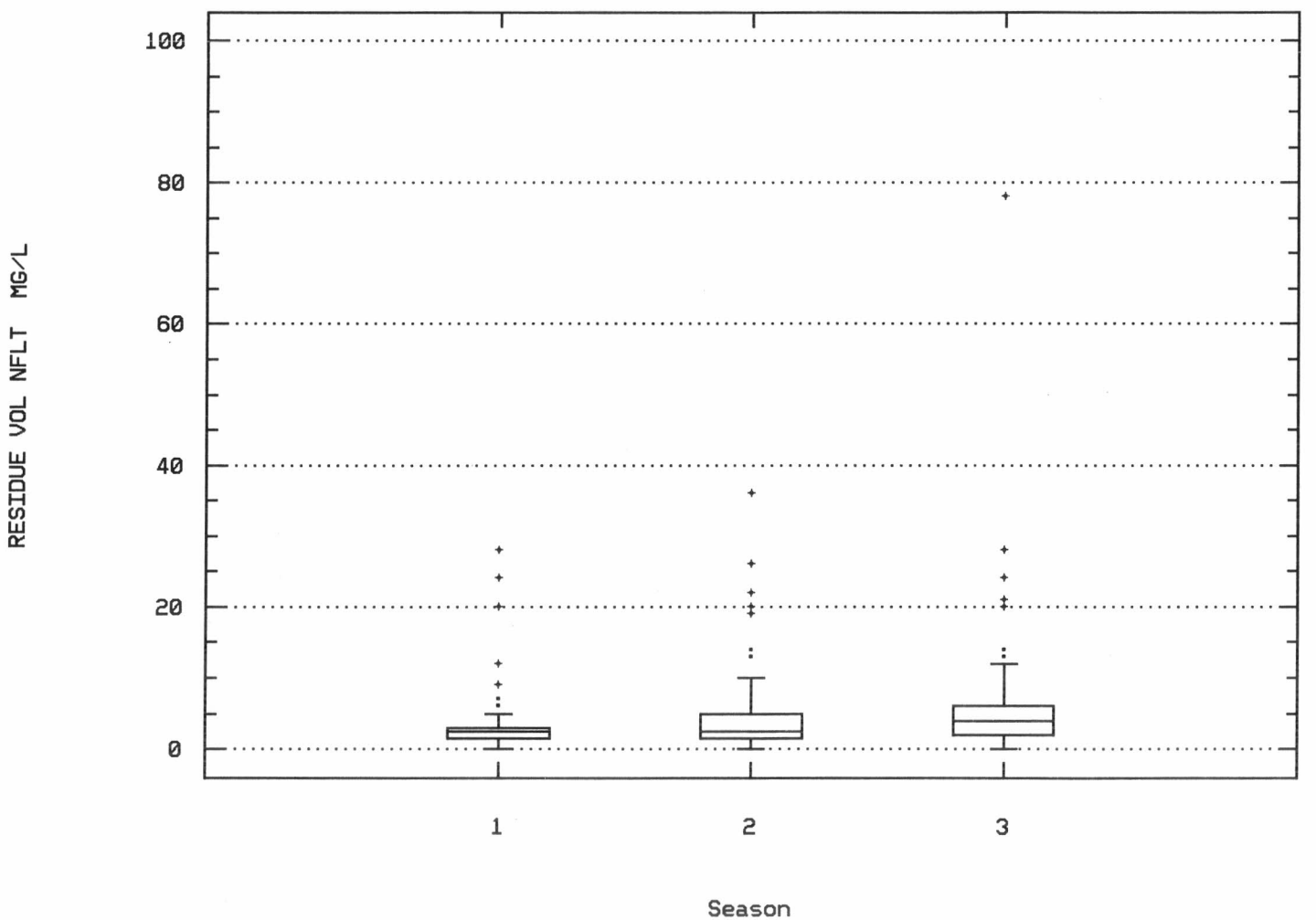
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00535

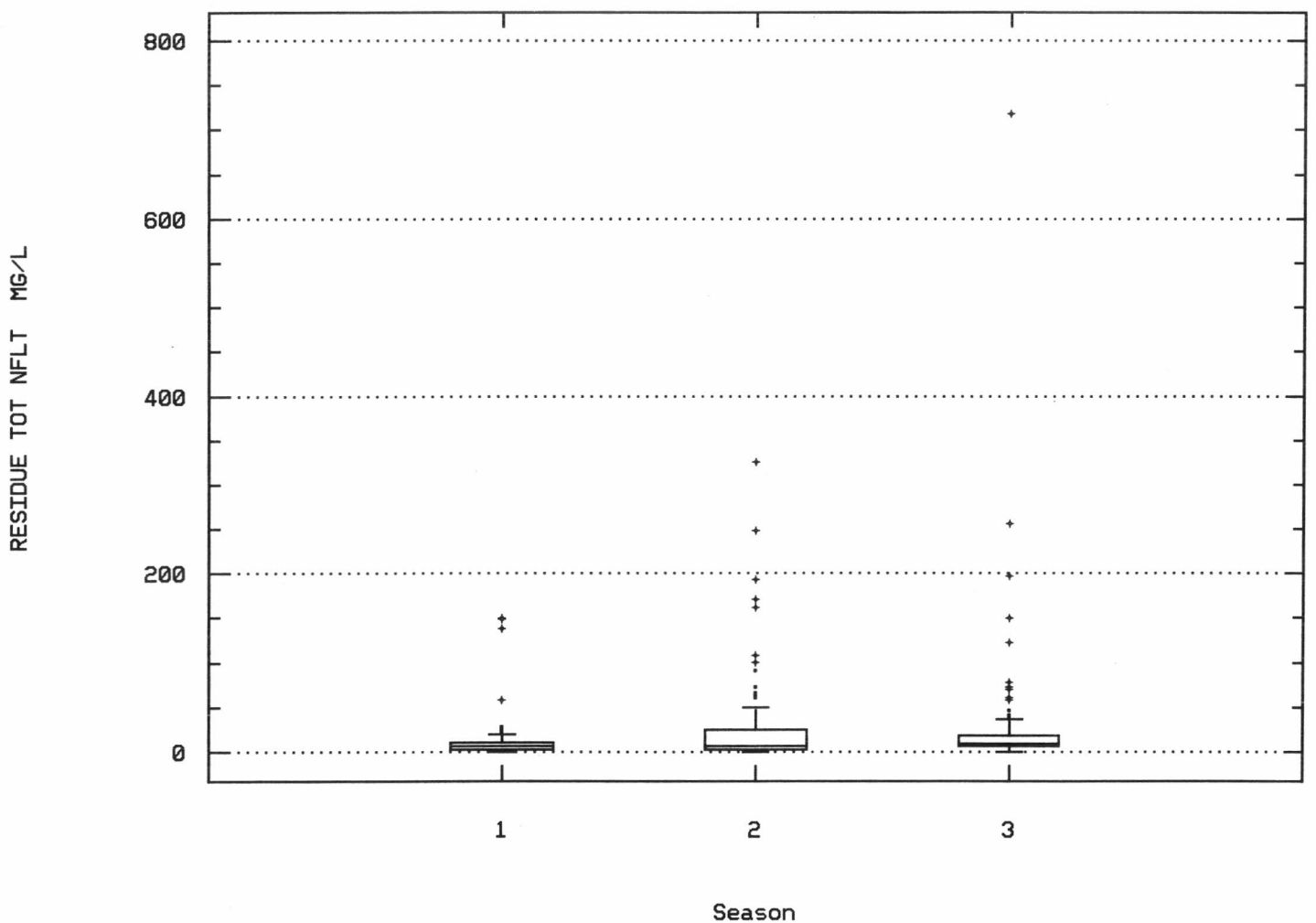
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00530

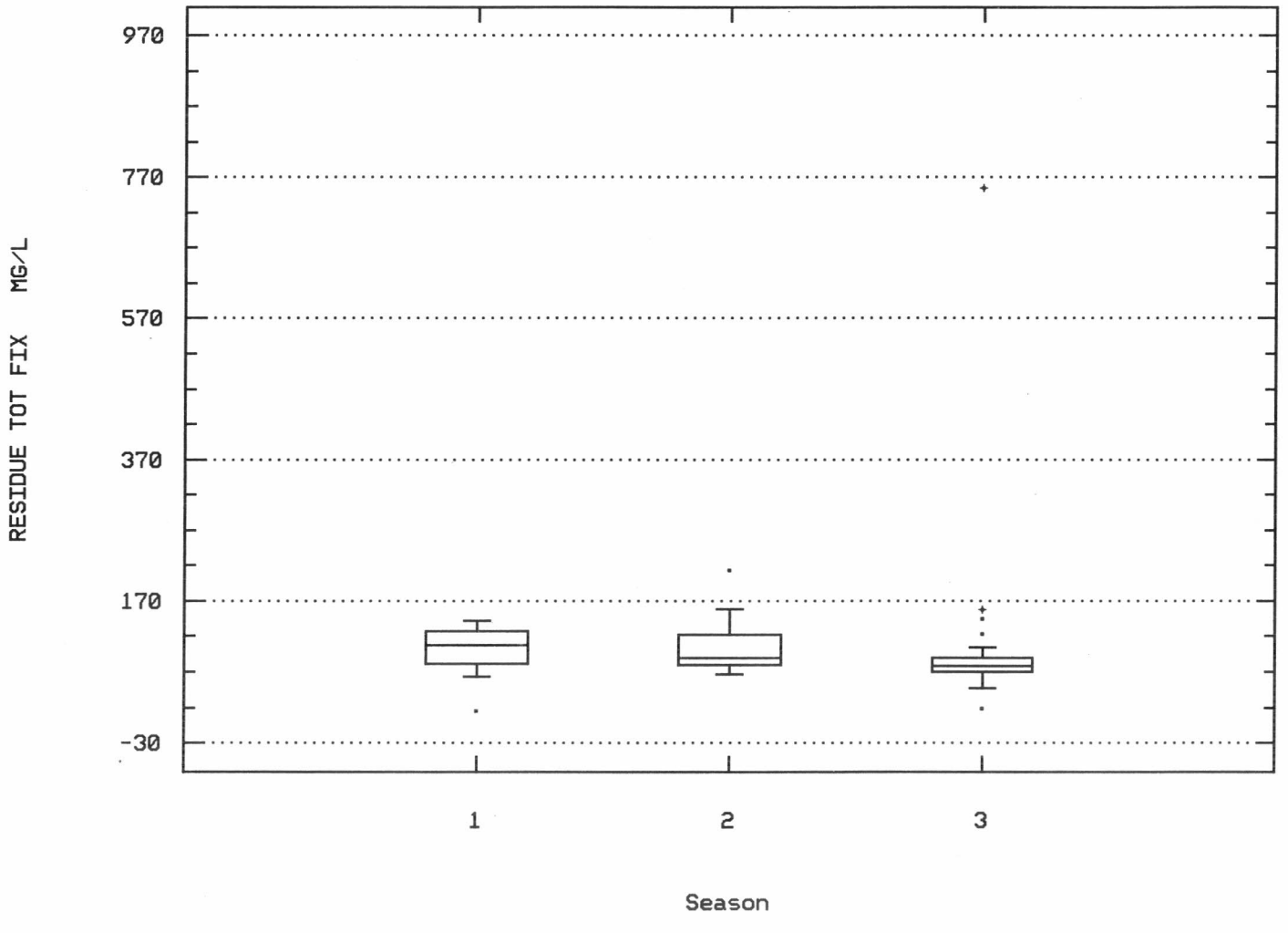
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00510

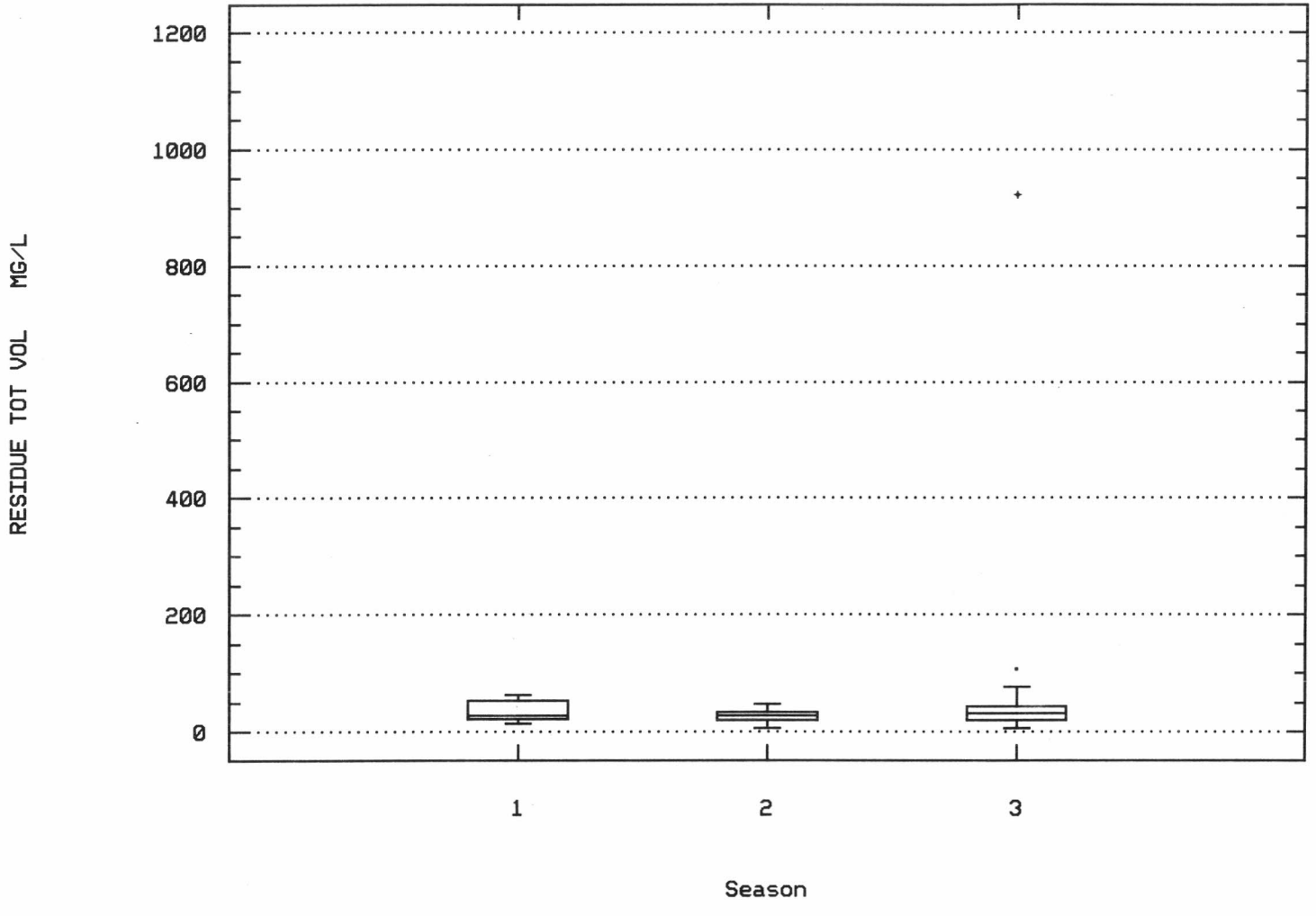
RESIDUE, TOTAL FIXED (MG/L)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00505

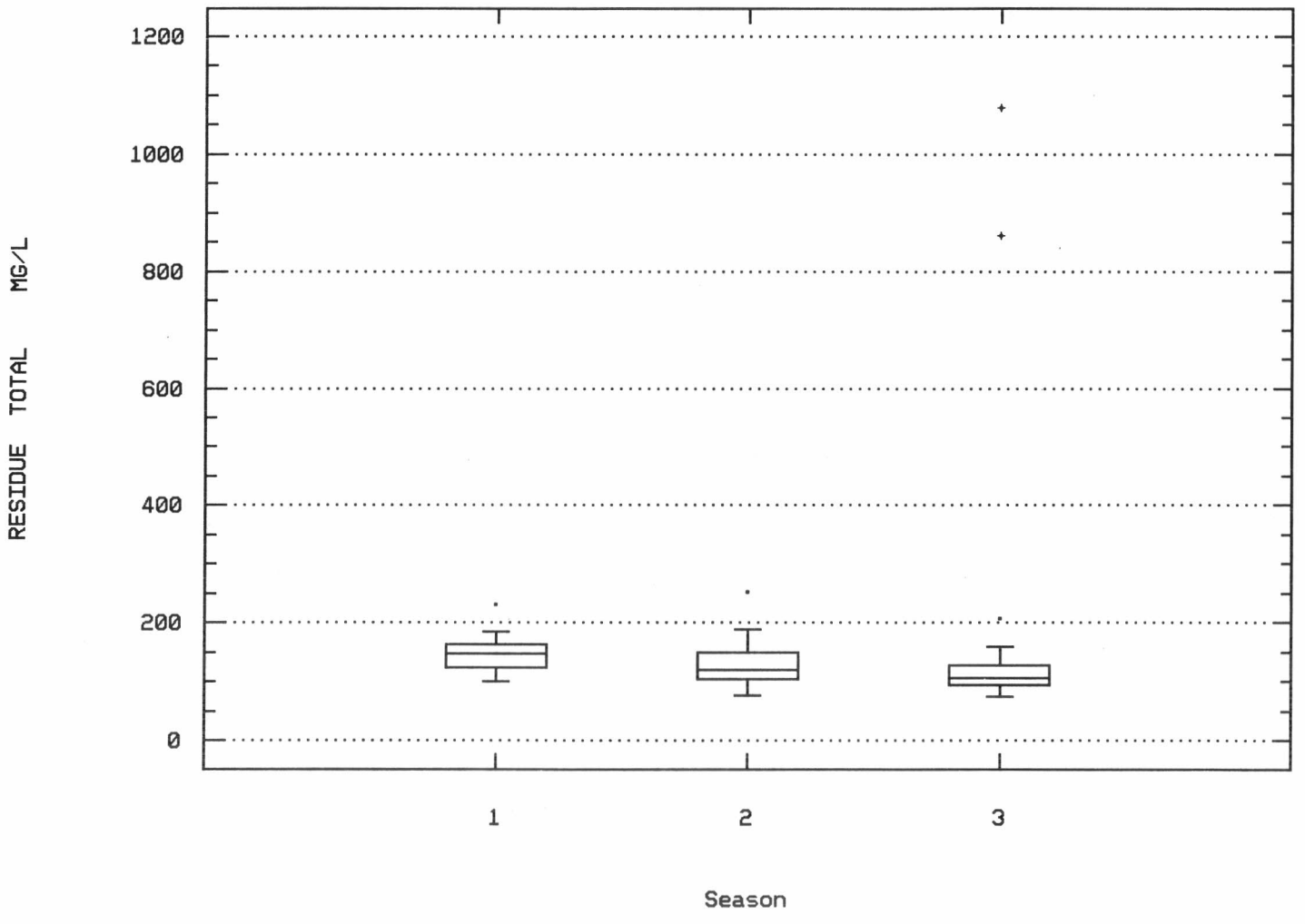
RESIDUE, TOTAL VOLATILE (MG/L)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00500

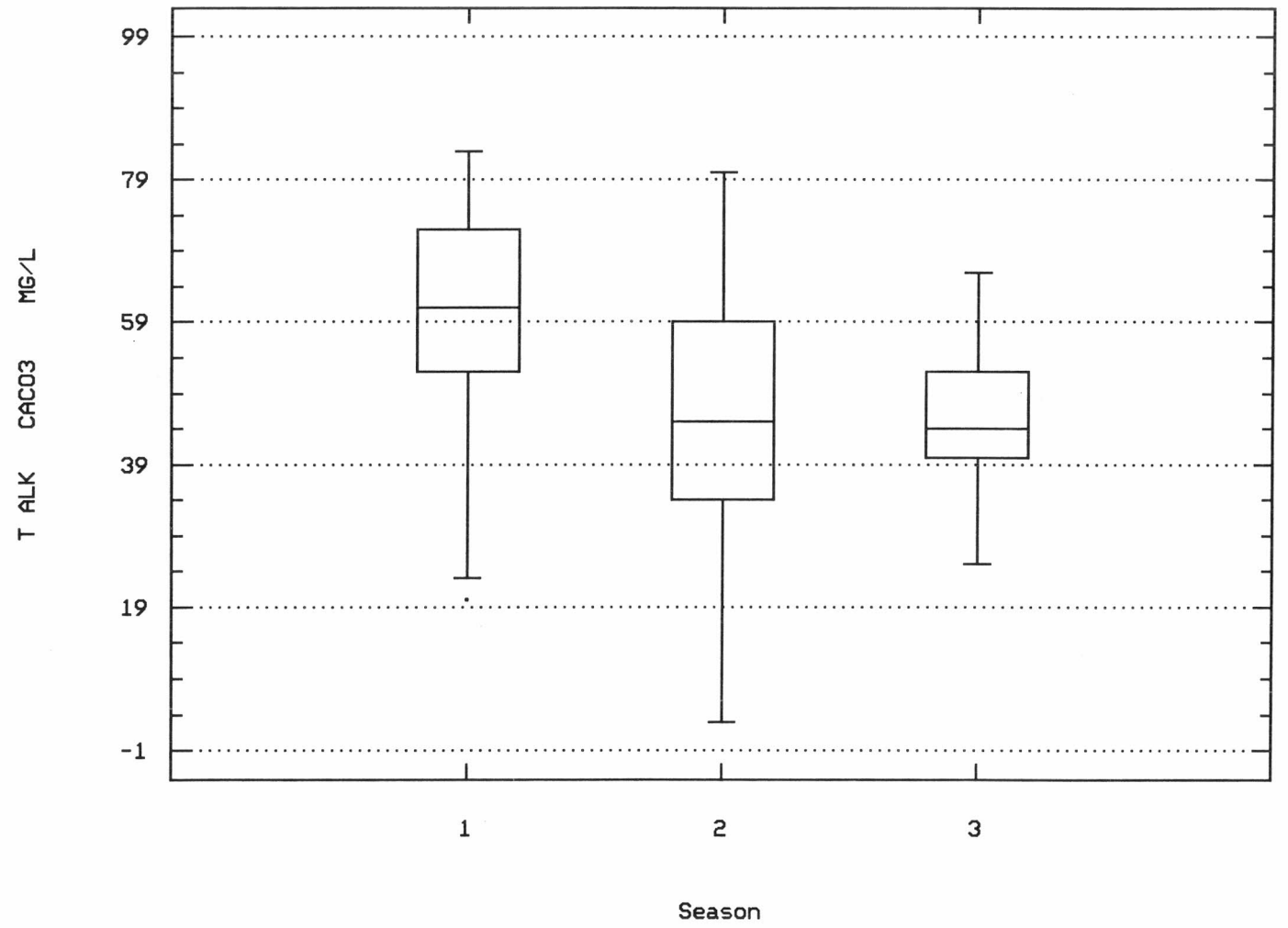
RESIDUE, TOTAL (MG/L)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00410

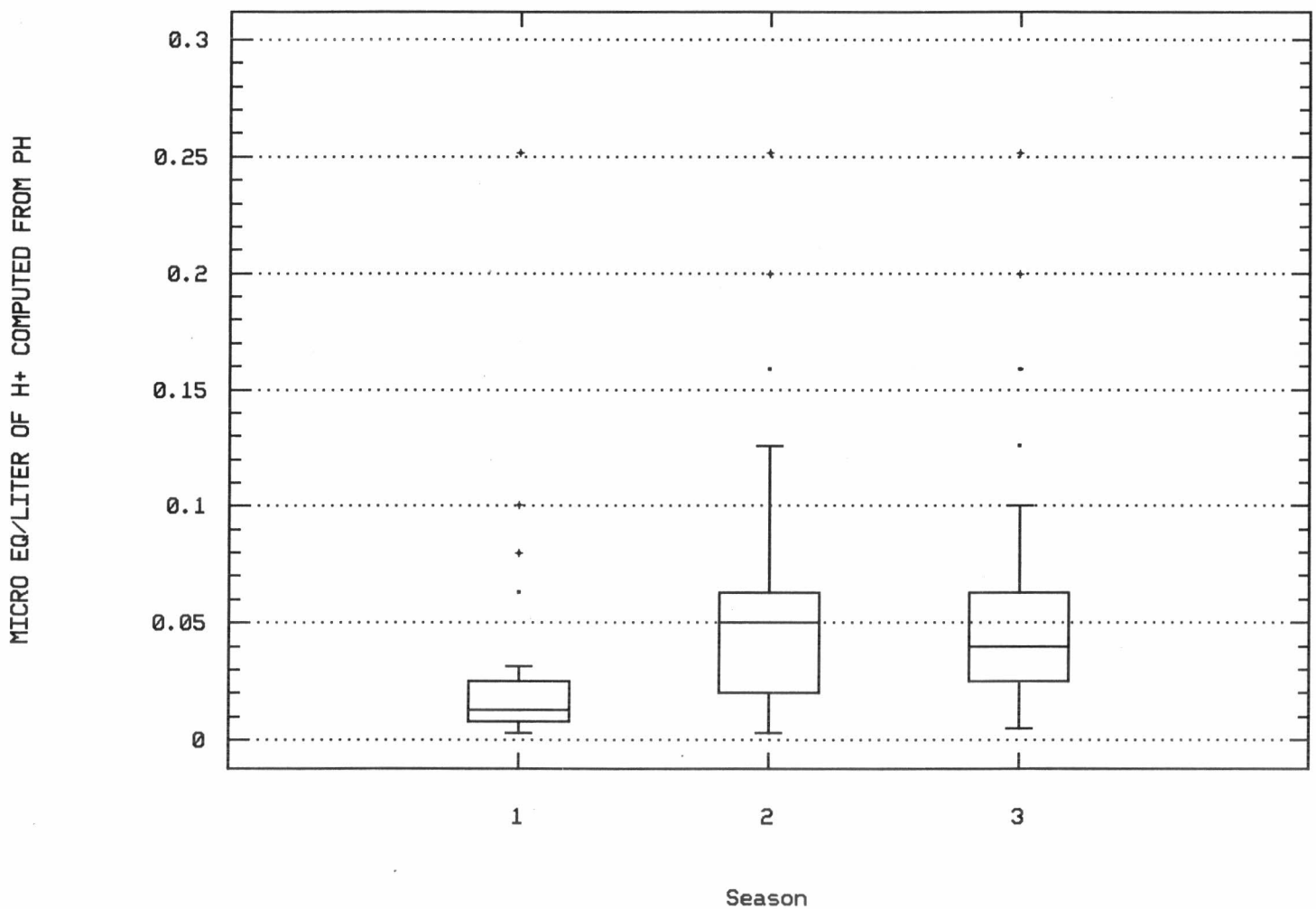
ALKALINITY, TOTAL (MG/L AS CACO3)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00403

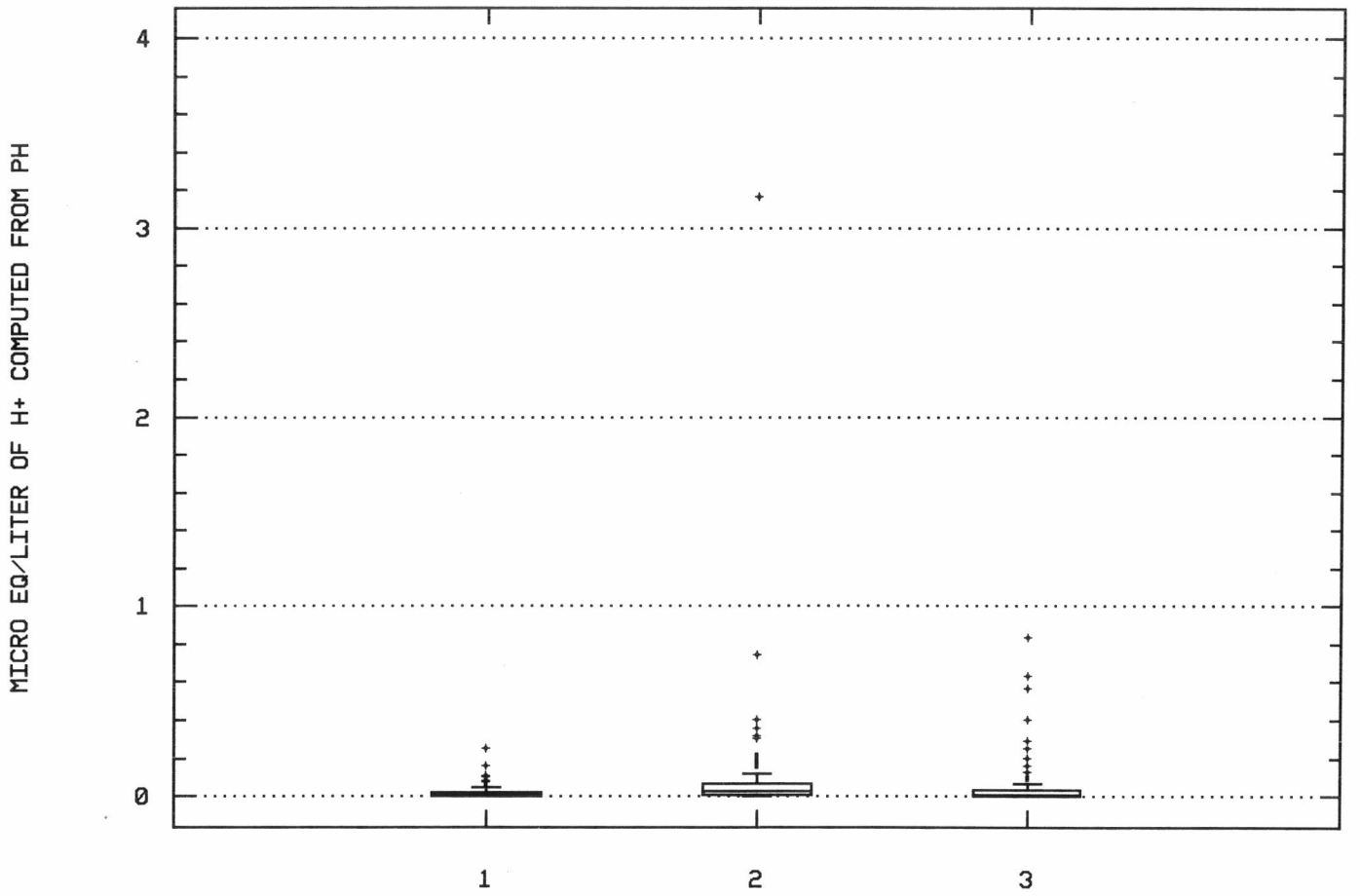
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00400

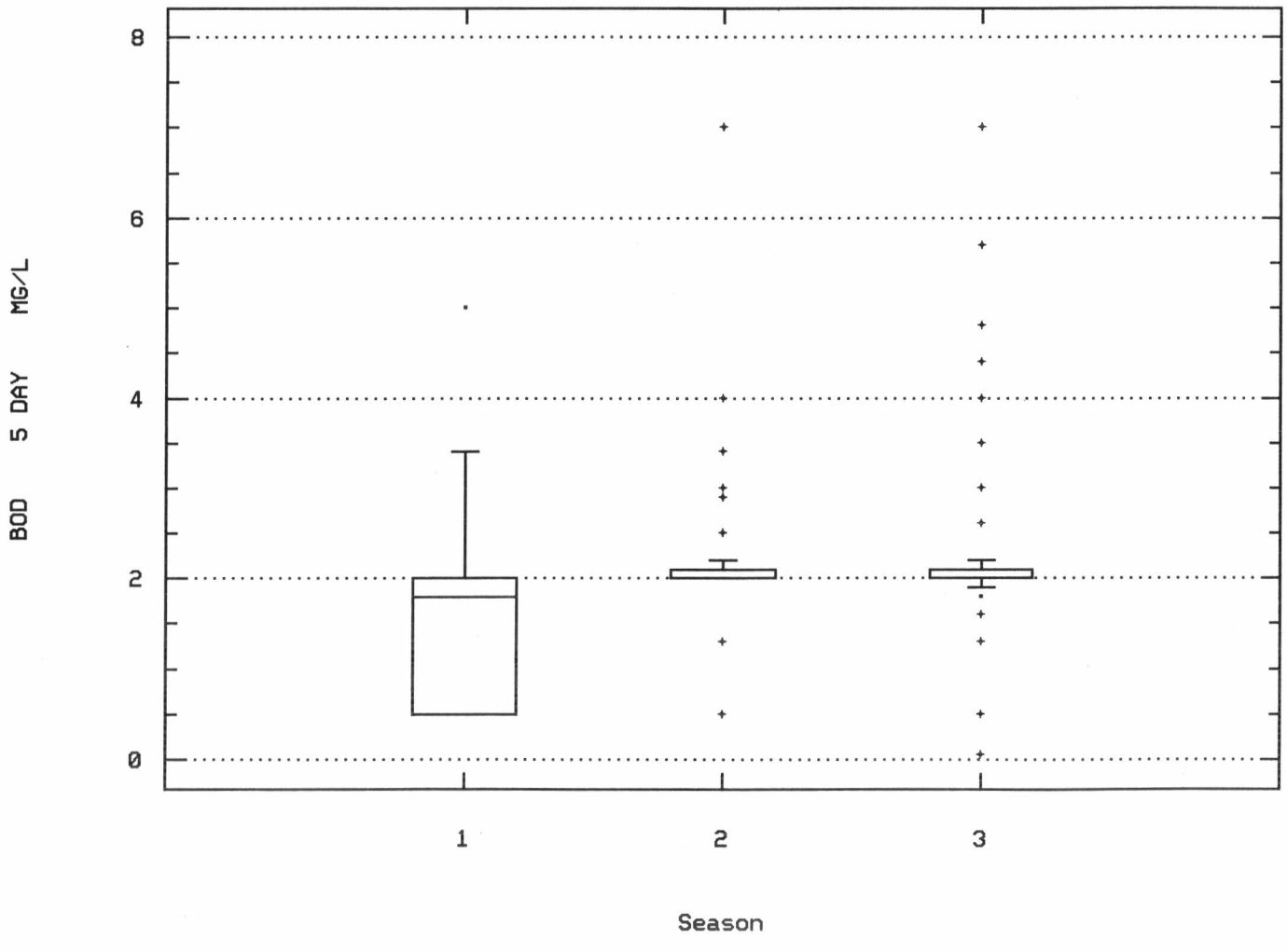
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00310

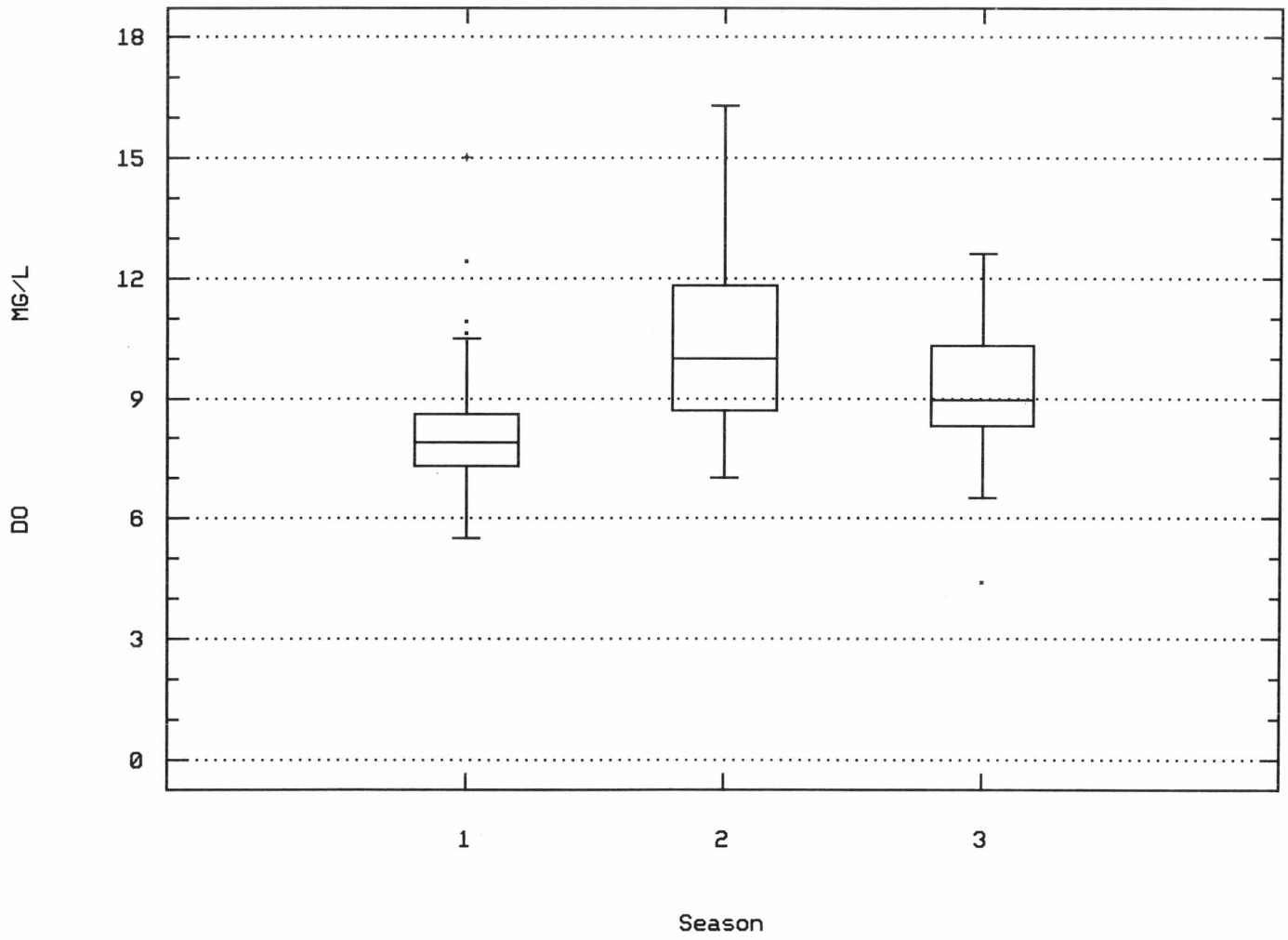
BOD, 5 DAY, 20 DEG C



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00300

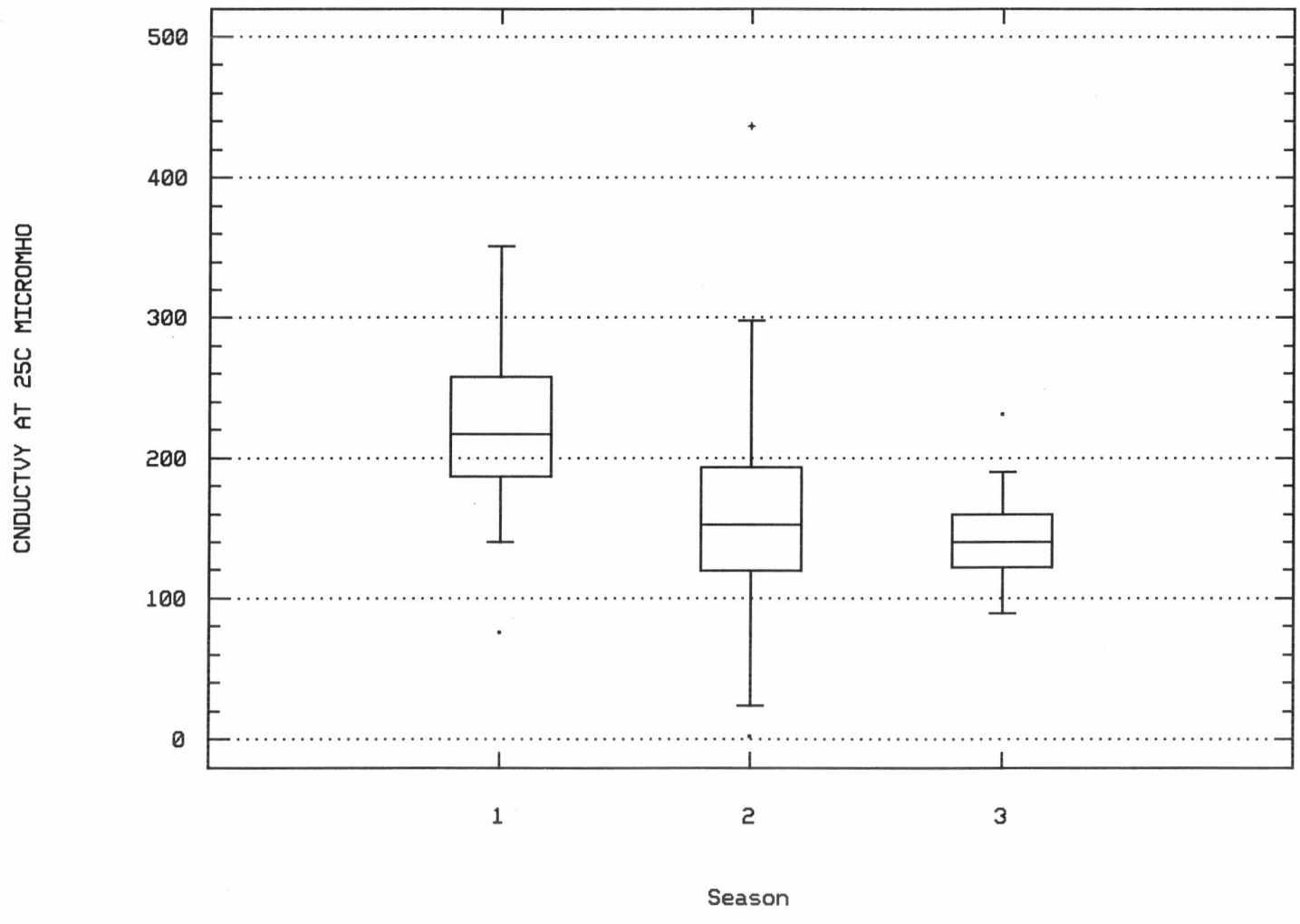
OXYGEN, DISSOLVED



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00095

SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



RT. 360 BRIDGE

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	165	20.	19.232	30.8	1.	42.717	6.536	10.64	14.	24.45	27.94
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	27	6.3	11.067	118.8	0.6	481.672	21.947	1.88	4.6	8.7	15.88
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	113	143.	143.08	271.	40.	1422.645	37.718	102.	120.	161.	185.6
00095p SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/68-12/15/98	51	140.	143.392	231.	89.	883.283	29.72	111.2	122.	160.	179.
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	62	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	85	9.2	9.533	12.6	7.8	1.427	1.195	8.16	8.6	10.55	11.34
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	100	8.95	9.208	12.6	4.4	1.913	1.383	7.8	8.3	10.35	11.
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	87	2.	1.836	7.	0.05	1.274	1.129	1.	1.	2.	3.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	68	9.	11.647	75.	0.5	95.	9.747	4.9	7.	15.	19.4
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	166	8.065	7.957	9.18	6.08	0.5	0.707	7.	7.5	8.51	8.841
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	166	8.065	7.355	9.18	6.08	0.866	0.93	7.	7.5	8.51	8.841
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	166	0.009	0.044	0.832	0.001	0.011	0.105	0.001	0.003	0.032	0.1
00403p PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	51	7.4	7.396	8.3	6.6	0.138	0.371	6.9	7.2	7.6	7.88
00403p CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	51	7.4	7.245	8.3	6.6	0.161	0.402	6.9	7.2	7.6	7.88
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	51	0.04	0.057	0.251	0.005	0.003	0.053	0.013	0.025	0.063	0.126
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	51	44.	44.627	66.	25.	72.438	8.511	33.	40.	52.	56.8
00500p RESIDUE, TOTAL (MG/L)	02/18/68-06/01/95	31	107.	166.226	1078.	74.	47456.714	217.846	82.	94.	128.	196.6
00505p RESIDUE, TOTAL VOLATILE (MG/L)	02/18/68-06/01/95	31	31.	63.194	921.	6.	25840.895	160.751	9.2	20.	44.	74.6
00510p RESIDUE, TOTAL FIXED (MG/L)	02/18/68-06/01/95	31	78.	103.032	754.	18.	15272.366	123.581	56.2	70.	90.	139.8
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	125	9.	25.584	718.	0.5	5053.438	71.088	4.	6.	18.5	39.8
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	125	3.	5.048	78.	0.	63.909	7.994	1.	1.5	6.	9.4
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	125	7.	20.58	640.	0.	4034.598	63.518	2.	4.	15.	31.4
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	68##	0.02	0.027	0.1	0.002	0.	0.02	0.005	0.02	0.025	0.05
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	85##	0.05	0.065	0.45	0.01	0.004	0.066	0.02	0.045	0.05	0.118
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	69##	0.005	0.005	0.02	0.001	0.	0.003	0.001	0.004	0.005	0.005
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	84##	0.005	0.01	0.11	0.005	0.	0.015	0.005	0.005	0.005	0.02
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	69	0.2	0.19	0.6	0.002	0.02	0.14	0.02	0.038	0.31	0.36
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	74	0.22	0.237	0.83	0.005	0.028	0.166	0.025	0.07	0.353	0.45
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	130	0.3	0.396	3.5	0.05	0.145	0.38	0.2	0.2	0.4	0.6
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/16/83-12/15/98	12	0.2	0.162	0.3	0.002	0.016	0.126	0.003	0.014	0.3	0.3
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	93	0.08	0.099	1.2	0.03	0.016	0.126	0.05	0.05	0.1	0.148
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	53	0.04	0.051	0.11	0.01	0.001	0.026	0.024	0.03	0.07	0.086
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	113	0.03	0.042	0.19	0.004	0.001	0.033	0.01	0.02	0.06	0.09
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	124	4.	4.817	25.5	1.	9.089	3.015	2.35	3.	5.975	9.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	38	57.5	59.	186.	30.	539.027	23.217	43.8	50.	63.25	68.2
00940p CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	40	6.5	7.013	21.	2.	17.083	4.133	2.5	4.25	8.	11.
00945p SULFATE, TOTAL (MG/L AS SO4)	02/18/68-12/15/98	38	11.	12.921	36.	8.	26.777	5.175	9.	10.	13.25	19.3
00955 SILICA, DISSOLVED (MG/L AS SI02)	08/29/84-12/15/98	60	7.55	6.887	15.4	0.5	6.29	2.508	3.41	5.4	8.275	9.49
01002 ARSENIC, TOTAL (UG/L AS AS)	04/28/71-04/08/93	10##	1.75	2.45	5.	0.5	3.525	1.877	0.55	1.	5.	5.
01027 CADMIUM, TOTAL (UG/L AS CD)	11/23/70-04/08/93	10##	5.	4.1	5.	0.5	3.6	1.897	0.5	3.875	5.	5.
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-04/08/93	16##	5.	6.594	20.	0.5	28.641	5.352	3.65	5.	5.	20.
01042 COPPER, TOTAL (UG/L AS CU)	03/24/70-04/08/93	15##	5.	7.667	20.	5.	20.952	4.577	5.	5.	10.	17.
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-04/08/93	13##	5.	11.5	60.	1.	233.667	15.286	1.6	5.	14.5	42.
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-04/08/93	16	10.	16.563	80.	5.	352.396	18.772	5.	5.	20.	45.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	89##	50.	1748.051	80000.	1.5	92812294.807	9633.914	50.	50.	100.	800.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	89##	1.699	2.002	4.903	0.176	0.497	0.705	1.699	1.699	2.	2.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	100.427								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-09/11/80	37##	0.05	0.065	0.3	0.025	0.002	0.049	0.05	0.05	0.05	0.1
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	40	0.045	0.037	0.1	0.005	0.001	0.023	0.005	0.01	0.05	0.068
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-04/08/93	11##	0.25	0.214	0.25	0.15	0.003	0.05	0.15	0.15	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	264	12.55	12.064	23.	0.	37.035	6.086	4.	6.55	18.	19.
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	30	7.5	23.15	237.	1.6	2333.343	48.305	2.12	3.375	14.825	100.4
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	117	152.	167.393	339.	60.	4454.758	66.744	90.	114.	210.	271.
00095p SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/68-12/15/98	56	152.	164.839	436.	2.	4972.974	70.519	102.	118.25	194.75	255.
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	54	0.	0.002	0.1	0.	0.	0.014	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	80	11.95	11.979	16.5	9.1	2.311	1.52	10.1	10.625	12.875	13.8
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	195	10.	10.412	16.3	7.	3.577	1.891	8.6	8.7	11.8	13.08
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	104	1.	1.548	7.	0.5	0.897	0.947	1.	1.	2.	2.9
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	91	11.	11.429	24.	1.	24.581	4.958	6.	8.	15.	19.
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	178	7.59	7.653	9.3	5.5	0.438	0.662	6.91	7.188	8.128	8.6
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	178	7.59	7.142	9.3	5.5	0.701	0.837	6.91	7.187	8.127	8.6
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	178	0.026	0.072	3.162	0.001	0.062	0.249	0.003	0.007	0.065	0.123
00403p PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	54	7.3	7.344	8.5	6.	0.164	0.405	6.85	7.175	7.7	7.8
00403p CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	54	7.3	7.118	8.5	6.	0.216	0.465	6.85	7.175	7.7	7.8
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	54	0.05	0.076	1.	0.003	0.019	0.138	0.016	0.02	0.067	0.142
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	55	45.	45.636	80.	3.	277.013	16.644	26.4	34.	59.	69.
00500p RESIDUE, TOTAL (MG/L)	02/18/68-06/01/95	29	120.	130.	252.	76.	1452.571	38.113	90.	102.5	156.5	182.
00505p RESIDUE, TOTAL VOLATILE (MG/L)	02/18/68-06/01/95	29	27.	26.552	47.	6.	101.256	10.063	11.	19.	33.5	40.
00510p RESIDUE, TOTAL FIXED (MG/L)	02/18/68-06/01/95	28	89.5	103.393	212.	66.	1189.877	34.495	69.8	79.5	123.75	153.5
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	133	6.	22.801	325.	0.	2049.174	45.268	1.5	2.5	25.	48.8
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	133	2.5	4.316	36.	0.	28.263	5.316	0.5	1.5	5.	9.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	132	4.	19.004	289.	0.	1626.185	40.326	0.5	2.	20.	38.7
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	70	0.02	0.027	0.1	0.002	0.	0.019	0.011	0.02	0.029	0.05
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	101##	0.05	0.058	0.37	0.005	0.004	0.06	0.02	0.04	0.05	0.074
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	68##	0.005	0.005	0.02	0.001	0.	0.003	0.001	0.003	0.005	0.006
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	101##	0.005	0.01	0.07	0.005	0.	0.009	0.005	0.005	0.01	0.02
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	68	0.25	0.237	0.47	0.008	0.024	0.156	0.02	0.06	0.36	0.441
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	97	0.31	0.324	2.179	0.005	0.059	0.242	0.056	0.225	0.41	0.472
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	146	0.3	0.326	1.5	0.05	0.043	0.208	0.1	0.2	0.4	0.5
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/16/83-12/15/98	14	0.25	0.215	0.5	0.008	0.031	0.176	0.009	0.04	0.4	0.45
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	112	0.1	0.14	0.5	0.04	0.01	0.102	0.05	0.05	0.2	0.3
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	52	0.055	0.095	0.48	0.01	0.009	0.094	0.02	0.033	0.118	0.237
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	135	0.05	0.079	0.46	0.005	0.006	0.079	0.02	0.03	0.09	0.204
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	130	4.25	5.293	29.	1.	14.562	3.816	2.41	3.275	6.	8.27
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	52	58.	60.538	102.	28.	321.155	17.921	40.3	46.	74.	88.7
00940p CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	52	9.	10.981	34.	2.5	52.872	7.271	4.	5.	14.	22.7
00945p SULFATE, TOTAL (MG/L AS SO4)	02/18/68-12/15/98	51	15.	19.431	65.	7.	149.29	12.218	9.2	11.	23.	36.6
00955 SILICA, DISSOLVED (MG/L AS SI02)	08/29/84-12/15/98	61	7.6	7.433	12.	2.9	4.071	2.018	4.5	6.1	8.8	10.
01002 ARSENIC, TOTAL (UG/L AS AS)	04/28/71-04/08/93	6##	3.25	3.083	5.	1.	4.442	2.108	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	11/23/70-04/08/93	8##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-04/08/93	12##	5.	6.667	20.	5.	19.697	4.438	5.	5.	5.	17.
01042 COPPER, TOTAL (UG/L AS CU)	03/24/70-04/08/93	12##	5.	7.417	20.	5.	20.083	4.481	5.	5.	9.75	17.
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-04/08/93	13##	5.	7.615	30.	3.	49.756	7.054	3.8	5.	7.	22.8
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-04/08/93	12##	7.5	20.	97.	5.	689.818	26.264	5.	5.	28.25	76.9
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	110	75.	369.636	8000.	15.	959239.775	979.408	50.	50.	200.	927.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	110	1.849	2.07	3.903	1.176	0.292	0.54	1.699	1.699	2.301	2.967
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	117.413								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-09/11/80	35##	0.05	0.054	0.1	0.05	0.	0.014	0.05	0.05	0.05	0.07
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	35	0.03	0.037	0.1	0.01	0.	0.021	0.01	0.02	0.05	0.06
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-04/08/93	12##	0.25	0.471	2.5	0.15	0.434	0.659	0.15	0.175	0.438	1.96

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

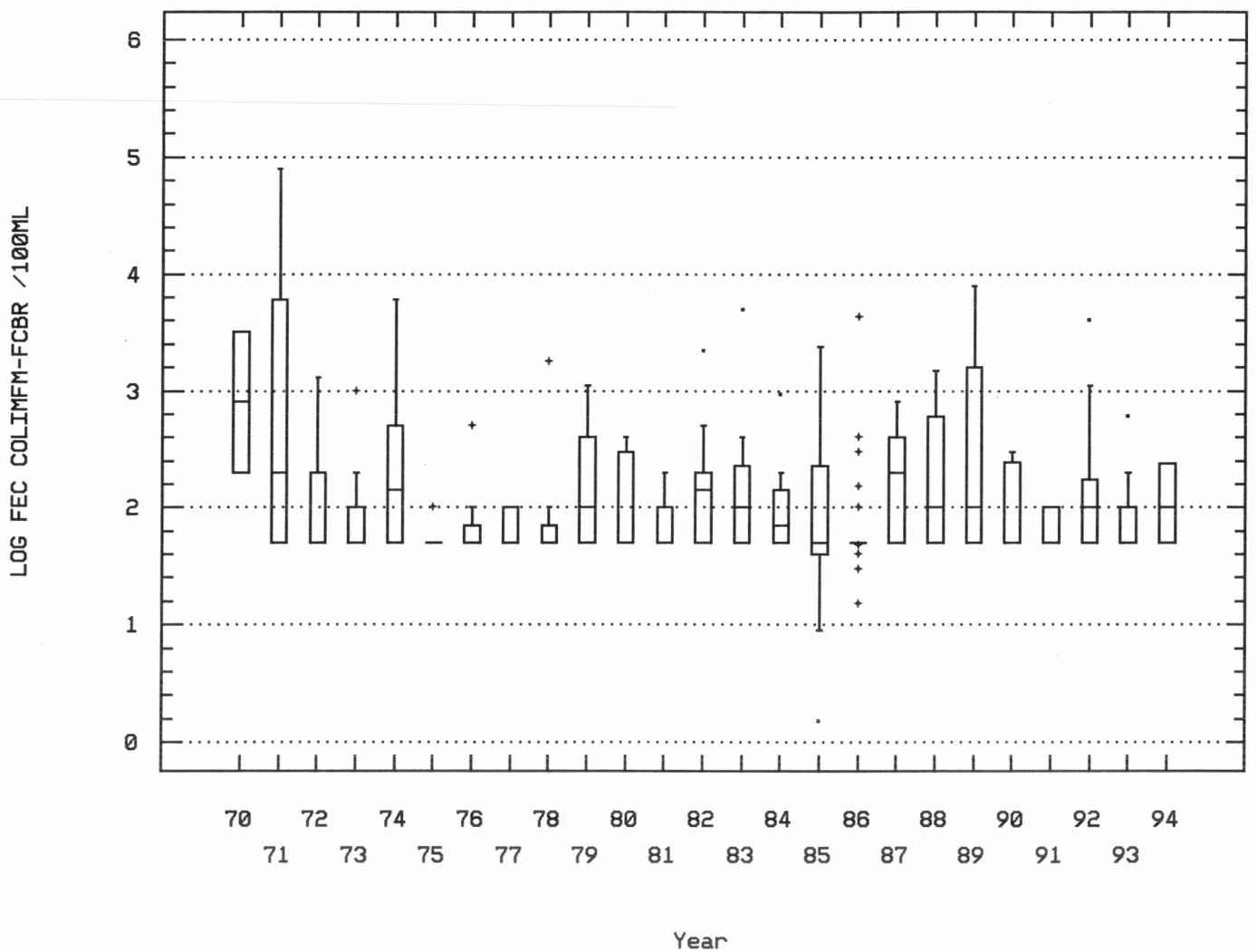
Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	2092	28.	27.276	34.	2.5	13.015	3.608	22.	26.	29.5	31.
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	27	3.1	3.781	11.1	1.6	5.704	2.388	1.78	2.	4.5	7.84
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	128	199.	205.664	522.	30.	5454.571	73.855	119.3	161.	256.75	297.1
00095p SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/68-12/15/98	44	216.5	222.386	351.	75.	3330.801	57.713	157.5	186.	257.75	321.
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	62	0.	0.003	0.1	0.	0.	0.018	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	109	8.4	8.662	12.	6.7	0.911	0.954	7.6	8.	9.2	9.8
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	1998	7.9	7.953	15.	5.5	0.773	0.879	6.9	7.3	8.6	9.1
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	71	1.	1.352	5.	0.5	0.643	0.802	0.5	1.	2.	2.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	58	12.	12.552	31.	2.5	31.331	5.597	6.9	8.75	15.	20.
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	182	8.22	8.171	9.3	6.6	0.304	0.552	7.4	7.717	8.602	8.807
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	182	8.22	7.8	9.3	6.6	0.443	0.665	7.4	7.717	8.602	8.807
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	182	0.006	0.016	0.251	0.001	0.001	0.028	0.002	0.002	0.019	0.04
00403p PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	39	7.9	7.785	8.5	6.6	0.224	0.474	7.1	7.6	8.1	8.3
00403p CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	39	7.9	7.473	8.5	6.6	0.324	0.569	7.1	7.6	8.1	8.3
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	39	0.013	0.034	0.251	0.003	0.003	0.056	0.005	0.008	0.025	0.079
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	40	61.	59.55	83.	20.	213.844	14.623	41.1	51.5	72.	78.8
00500p RESIDUE, TOTAL (MG/L)	02/18/68-06/01/95	24	148.	146.083	229.	100.	880.514	29.673	106.5	123.5	165.	181.5
00505p RESIDUE, TOTAL VOLATILE (MG/L)	02/18/68-06/01/95	23	28.	34.739	63.	14.	253.565	15.924	17.2	22.	54.	57.2
00510p RESIDUE, TOTAL FIXED (MG/L)	02/18/68-06/01/95	23	108.	103.391	142.	14.	891.613	29.86	69.6	82.	127.	136.8
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	110	6.	10.918	150.	0.5	564.571	23.761	1.5	2.5	9.25	16.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	110	2.	3.027	28.	0.	16.077	4.01	1.	1.5	3.	5.9
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	106	4.	8.613	126.	0.5	411.735	20.291	1.	2.	7.	14.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	69##	0.025	0.034	0.19	0.002	0.001	0.026	0.016	0.02	0.04	0.06
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	81##	0.05	0.054	0.4	0.01	0.003	0.052	0.02	0.035	0.05	0.08
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	72##	0.005	0.006	0.04	0.001	0.	0.008	0.001	0.005	0.005	0.01
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	81##	0.005	0.009	0.06	0.005	0.	0.009	0.005	0.005	0.01	0.02
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	69	0.04	0.109	0.47	0.005	0.015	0.124	0.02	0.02	0.185	0.31
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	77	0.13	0.202	1.189	0.003	0.049	0.221	0.02	0.025	0.335	0.464
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	134	0.3	0.395	1.8	0.05	0.065	0.254	0.2	0.3	0.5	0.6
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/16/83-12/15/98	11	0.02	0.08	0.3	0.	0.013	0.115	0.001	0.005	0.1	0.3
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	107	0.1	0.132	0.47	0.02	0.008	0.088	0.05	0.07	0.2	0.262
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	63	0.08	0.098	0.31	0.01	0.005	0.069	0.03	0.05	0.12	0.21
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	116	0.06	0.085	0.33	0.005	0.005	0.071	0.02	0.04	0.108	0.21
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	119	5.	5.971	24.7	2.	6.625	2.574	3.4	4.	6.	8.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	27	70.	203.333	3600.	30.	461177.538	679.101	53.8	60.	89.	105.6
00940p CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	34	14.	14.265	24.	3.	32.14	5.669	7.	10.	19.25	22.
00945p SULFATE, TOTAL (MG/L AS SO4)	02/18/68-12/15/98	33	23.	23.424	47.	7.	75.127	8.668	12.4	17.	28.5	35.
00955 SILICA, DISSOLVED (MG/L AS SI02)	08/29/84-12/15/98	53	6.7	6.821	14.8	2.2	5.017	2.24	4.3	5.15	8.2	9.48
01002 ARSENIC, TOTAL (UG/L AS AS)	04/28/71-04/08/93	3##	5.	4.167	5.	2.5	2.083	1.443	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	11/23/70-04/08/93	4##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-04/08/93	4##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	03/24/70-04/08/93	4##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-04/08/93	4##	5.	6.	9.	5.	4.	2.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-04/08/93	4##	5.	5.	5.	5.	0.	0.	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	79	50.	395.025	8000.	40.	1378607.563	1174.141	50.	50.	200.	600.
31616 LOG FECAL COLIFORM MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	79	1.699	2.065	3.903	1.602	0.275	0.525	1.699	1.699	2.301	2.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	116.146								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-09/11/80	27##	0.05	0.054	0.1	0.05	0.	0.013	0.05	0.05	0.05	0.06
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	34	0.035	0.034	0.1	0.005	0.001	0.023	0.005	0.01	0.05	0.05
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-04/08/93	5##	0.25	0.66	2.5	0.15	1.061	1.03	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: RICH0116 Parameter Code: 31616

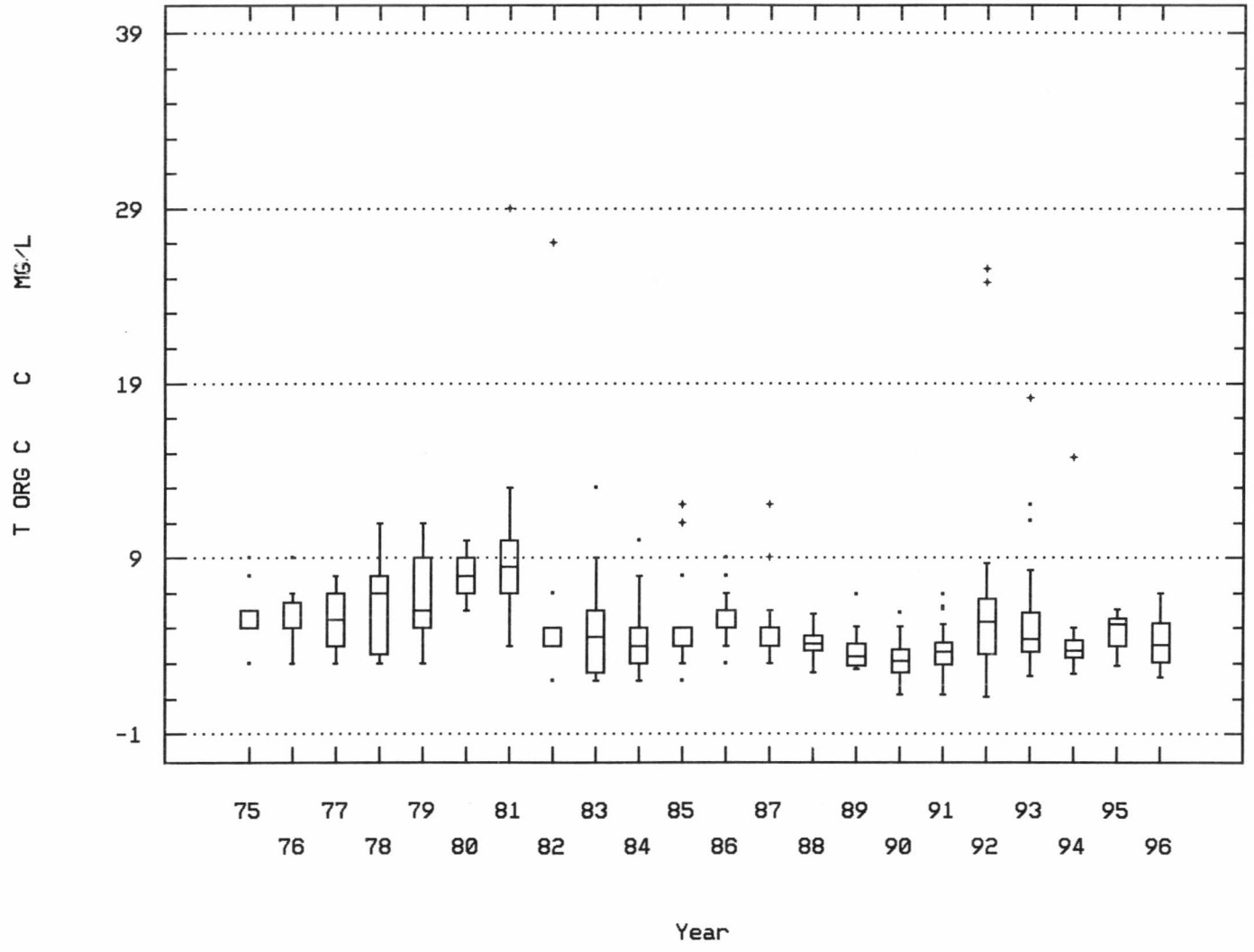
LOG FECAL COLIFORM,MEMBR FILTER,M-FC BR



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00680

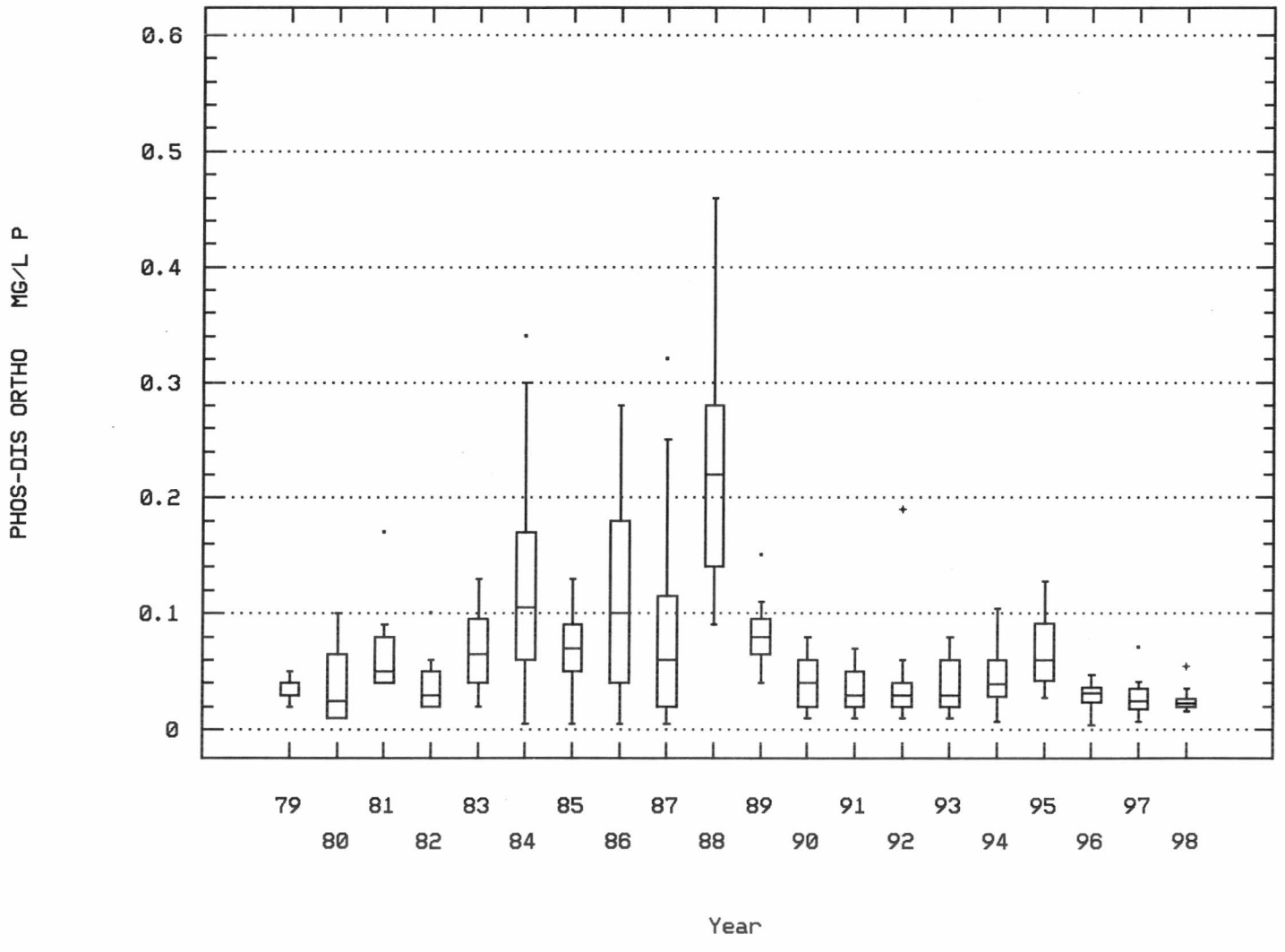
CARBON, TOTAL ORGANIC (MG/L AS C)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00671

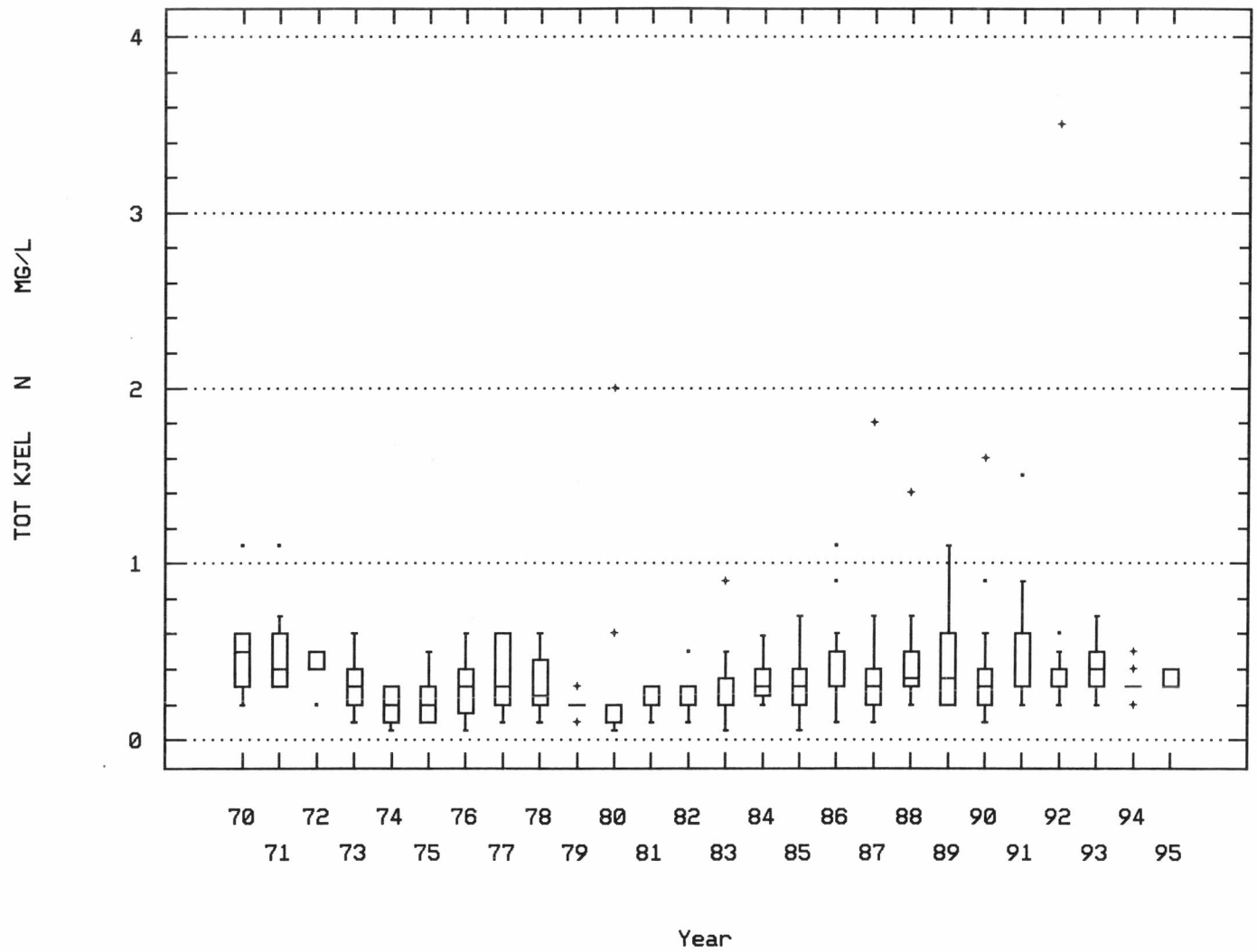
PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (M



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00625

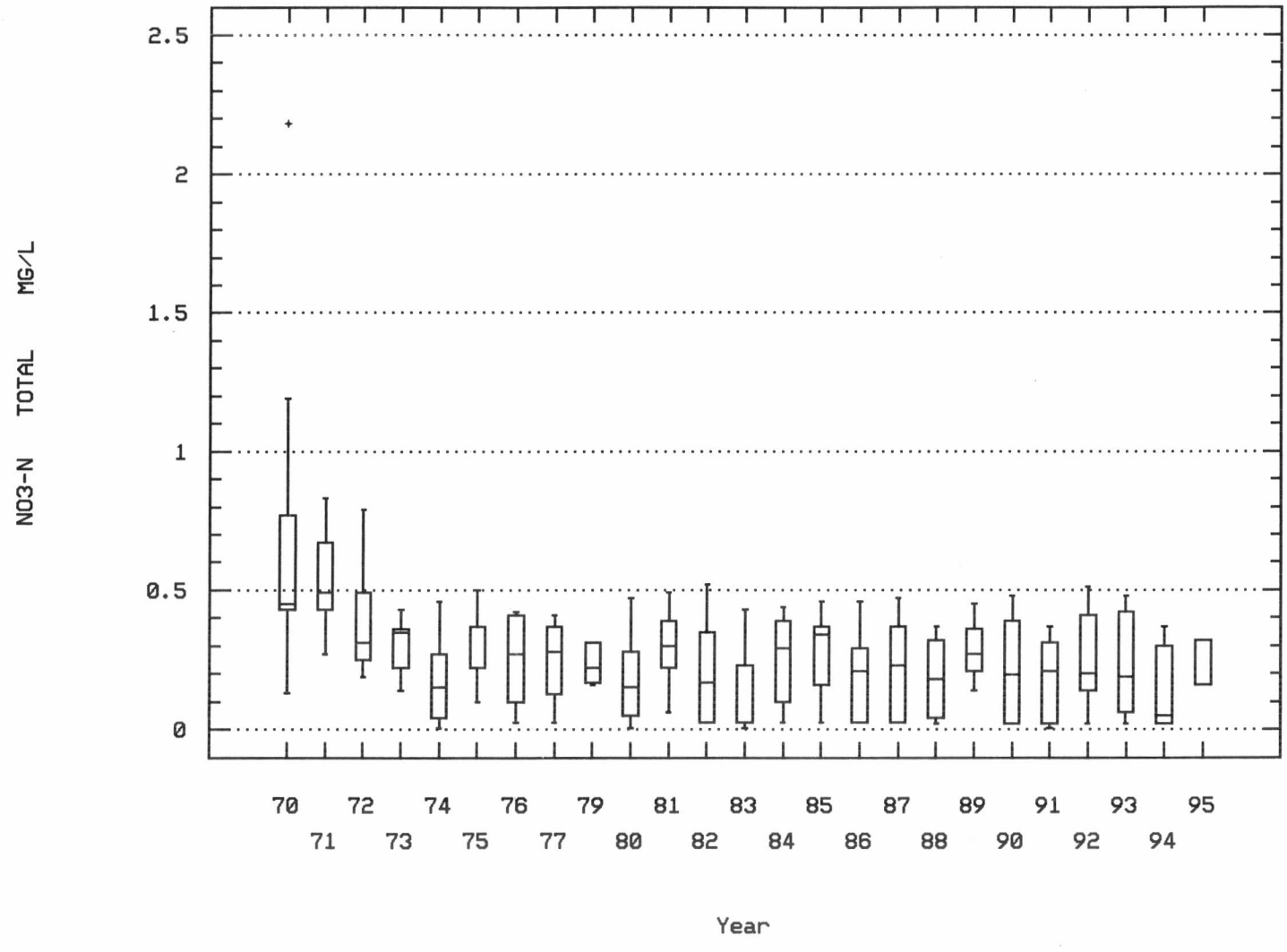
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00620

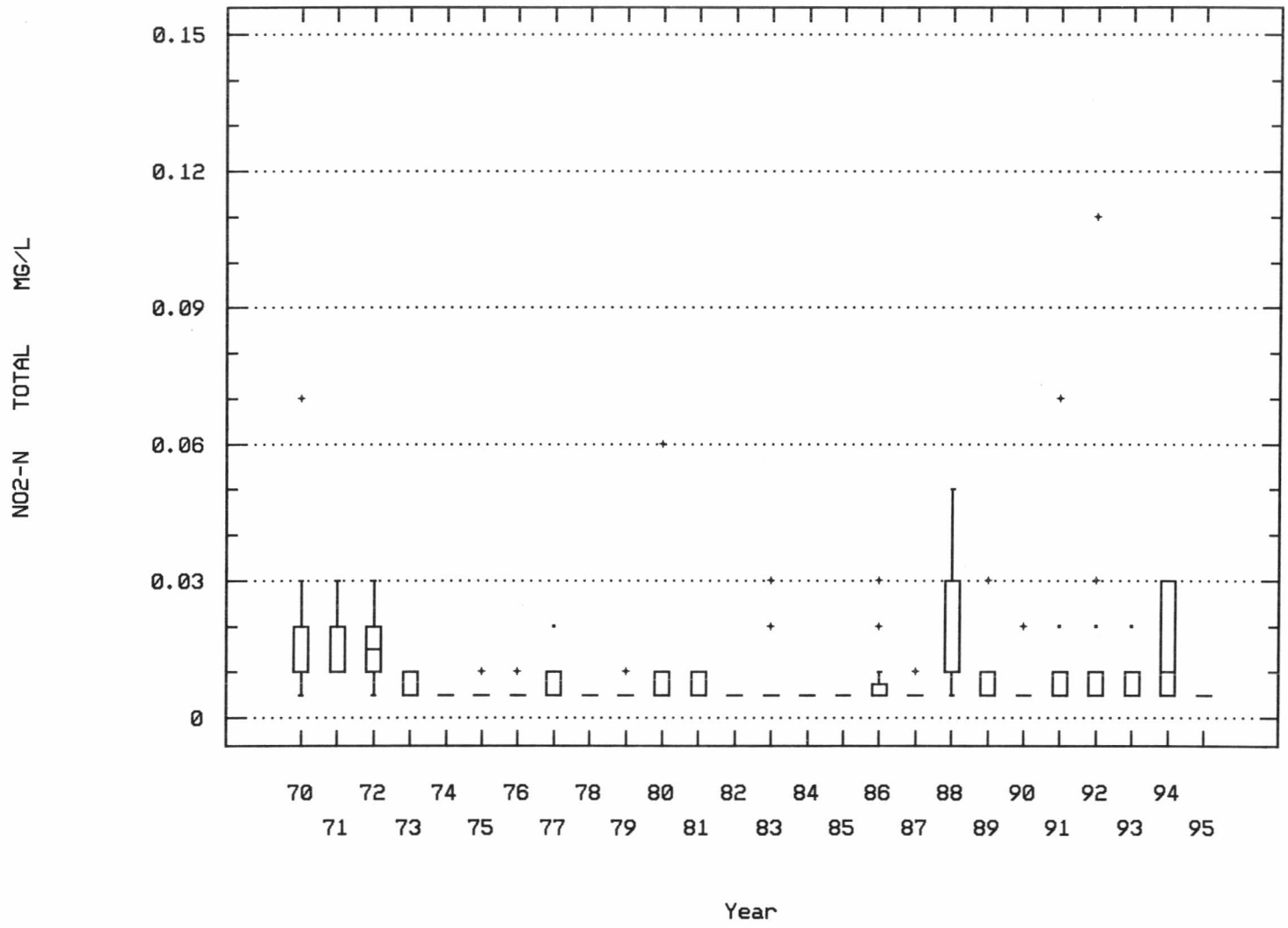
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00615

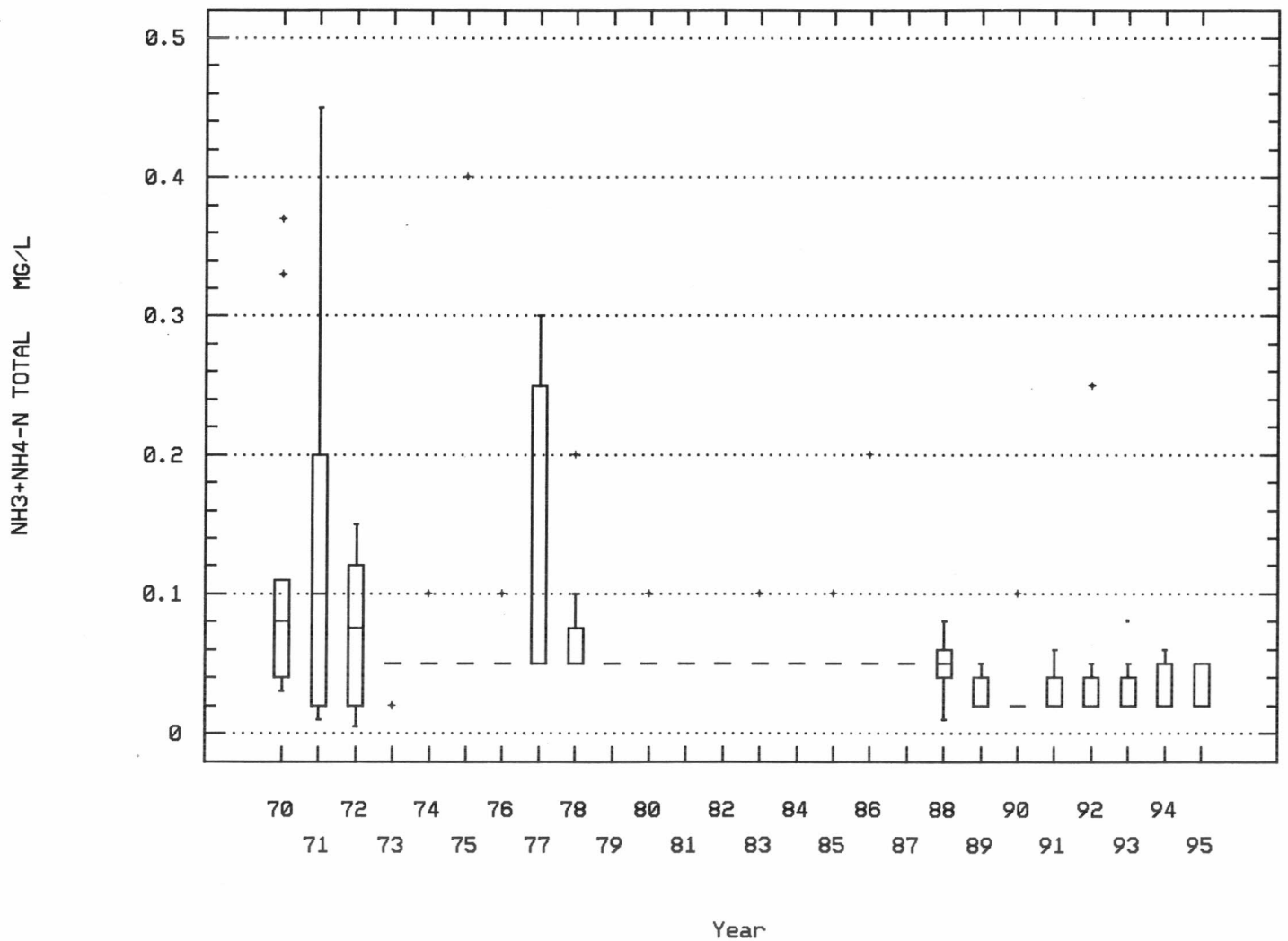
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00610

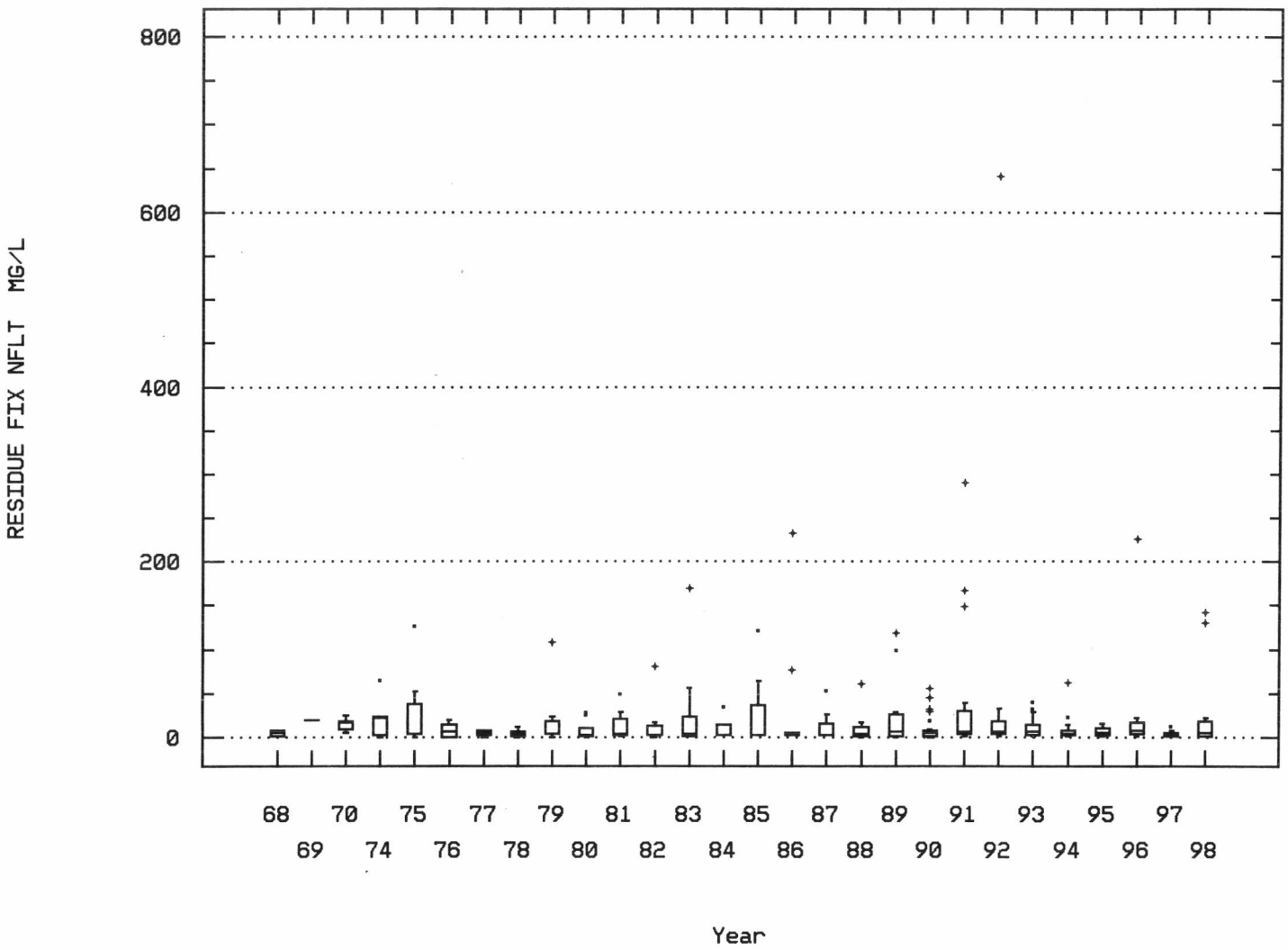
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00540

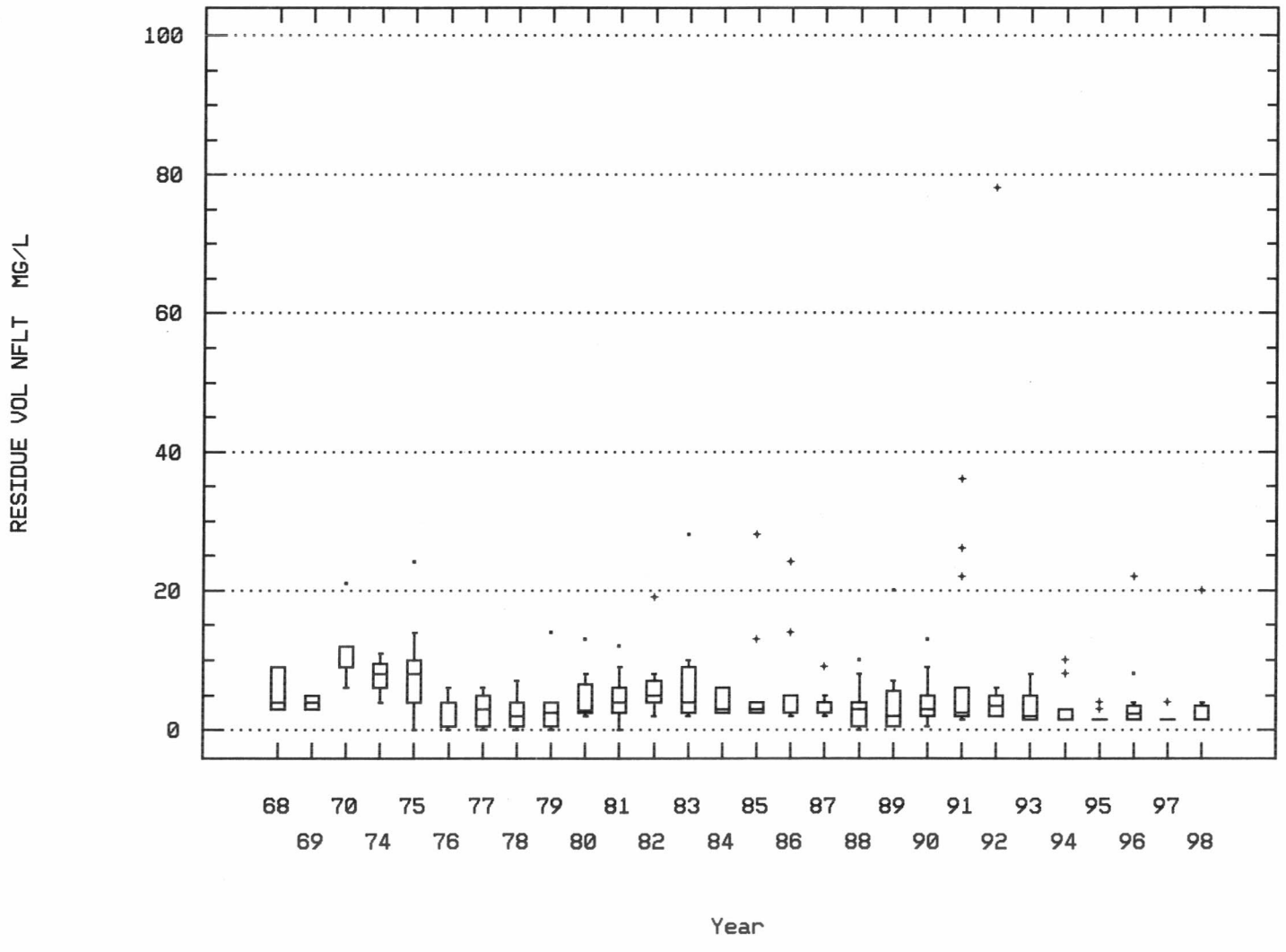
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00535

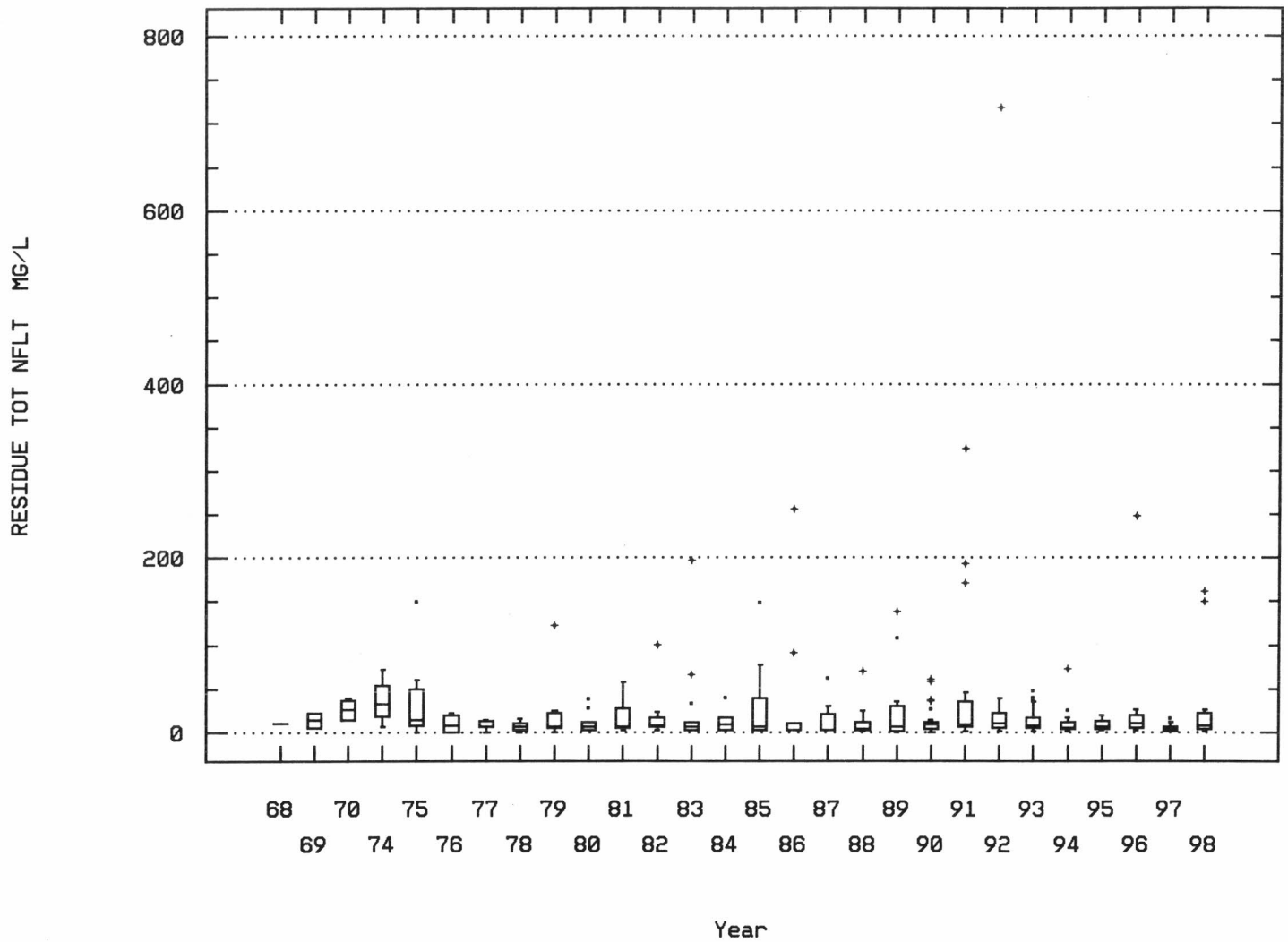
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00530

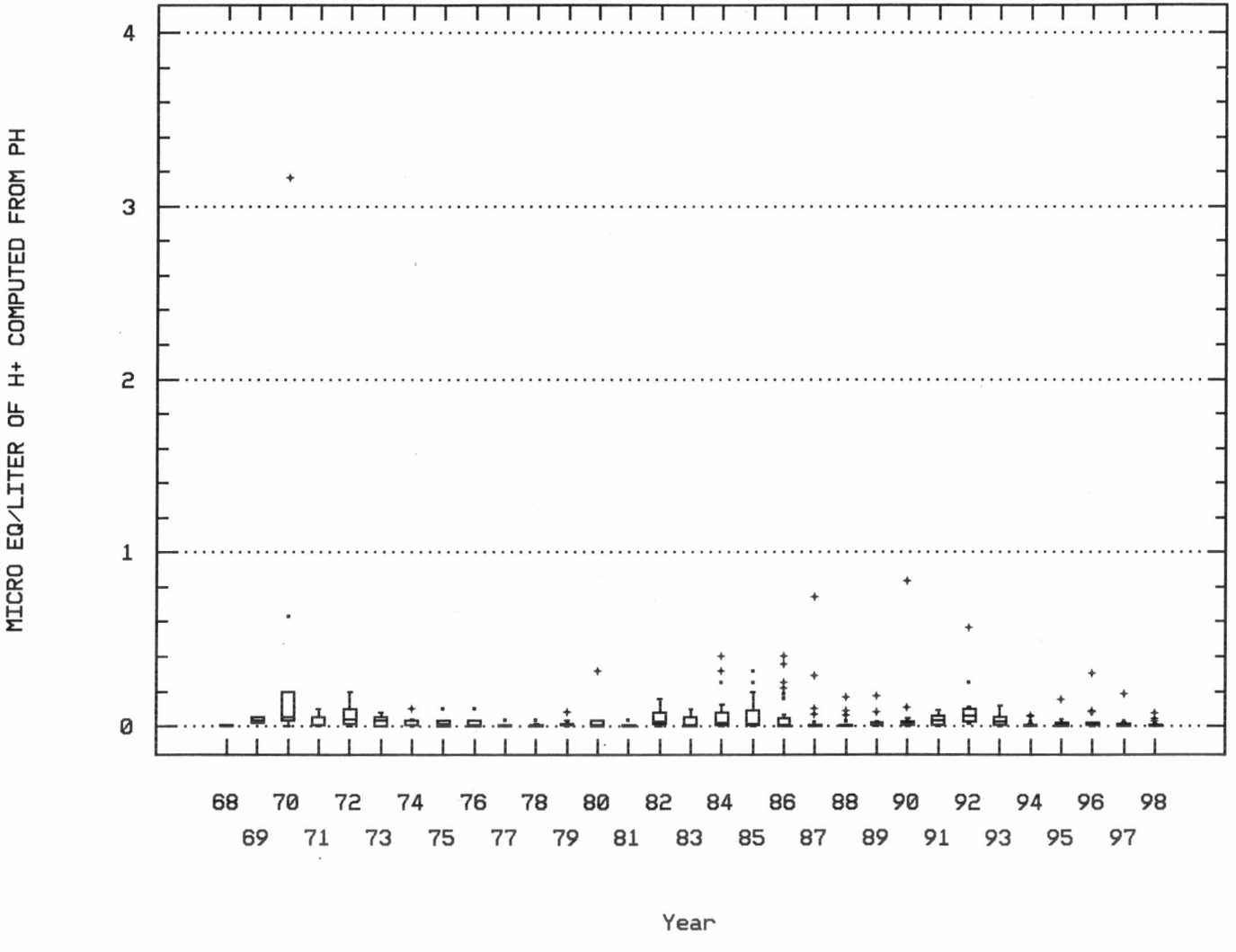
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00400

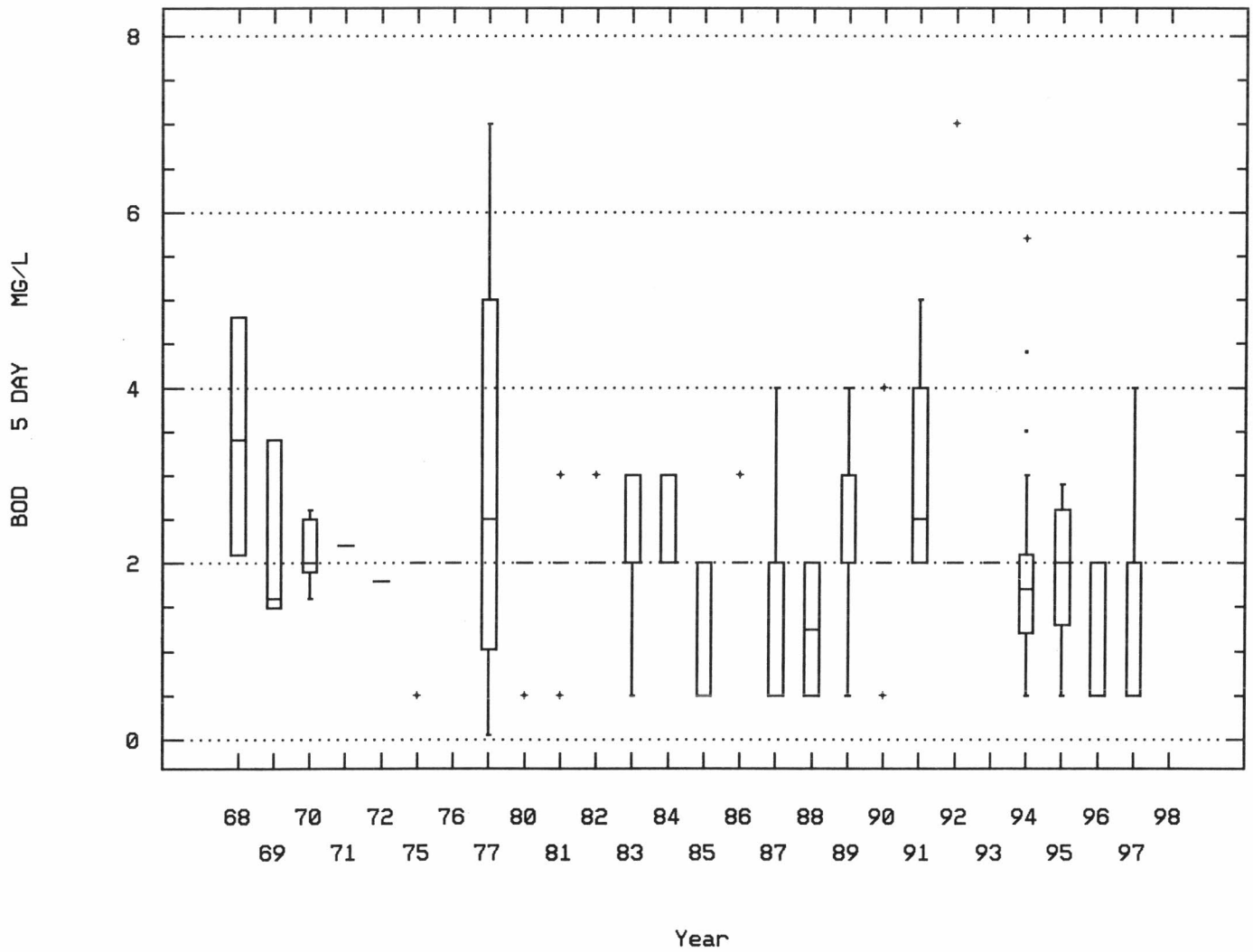
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00310

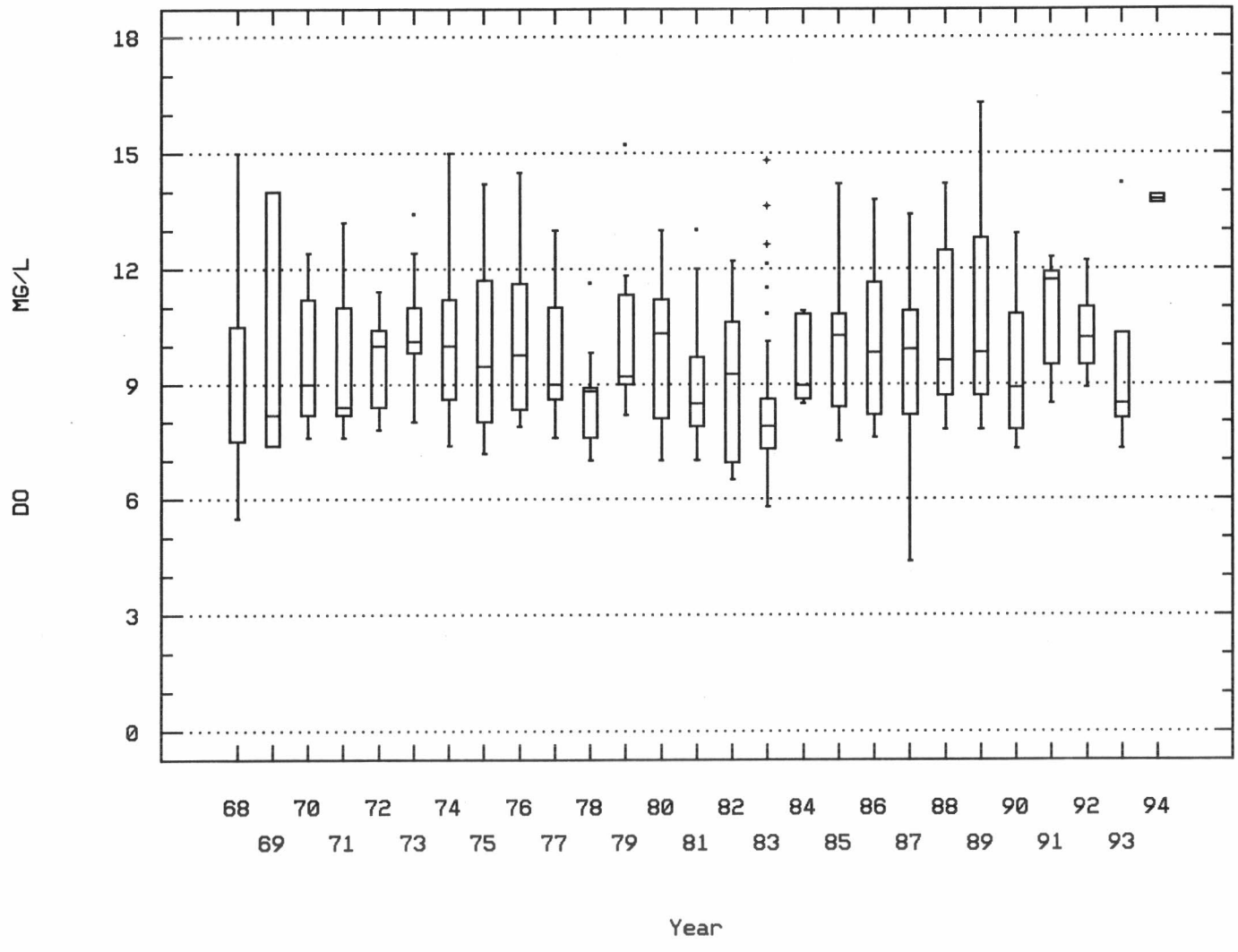
BOD, 5 DAY, 20 DEG C



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00300

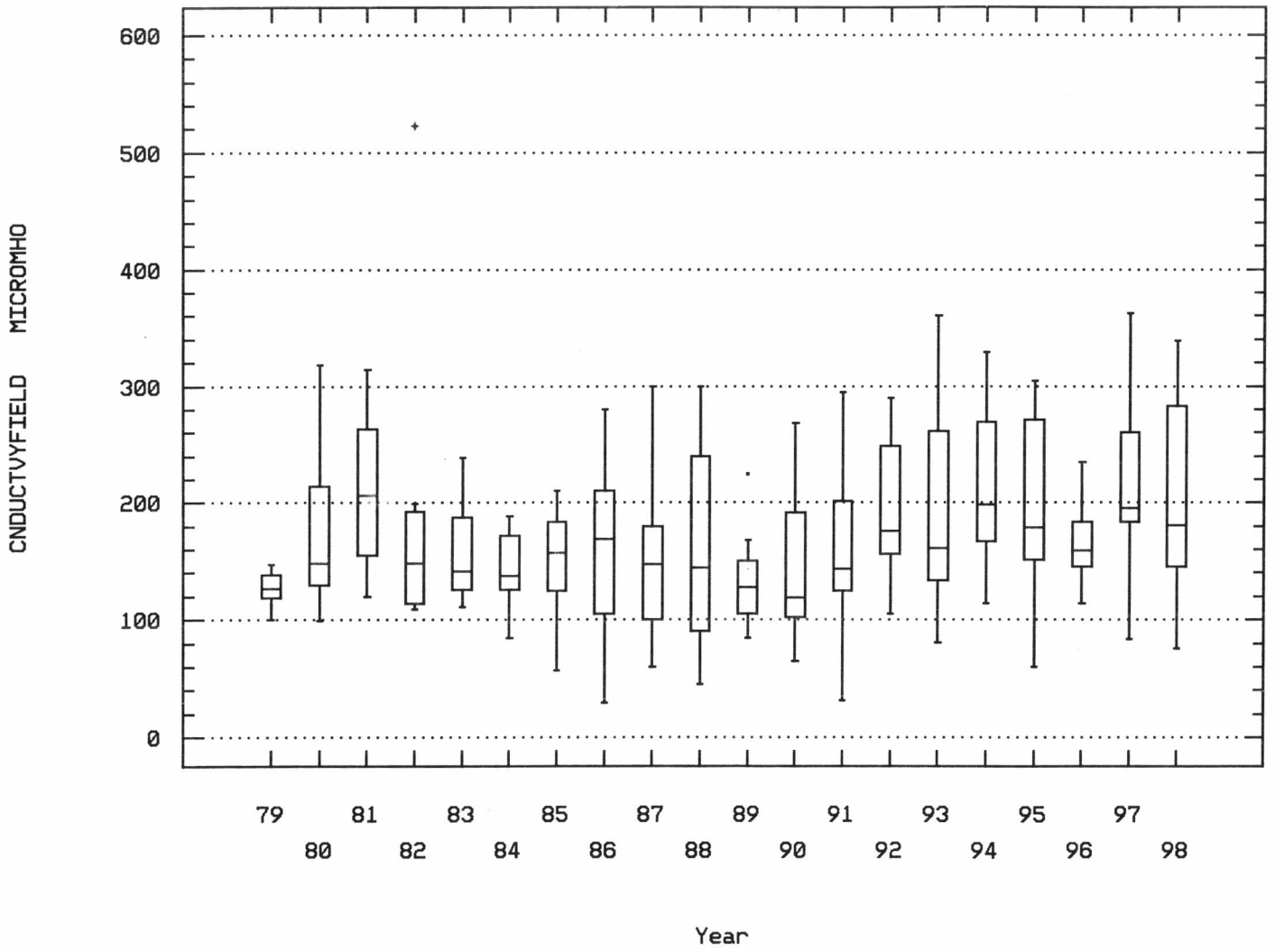
OXYGEN, DISSOLVED



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00094

SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @



RT. 360 BRIDGE

Annual Analysis for 1998 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	24	25.	21.925	32.3	6.	69.578	8.341	7.5	15.025	28.825	29.75
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	12	4.15	23.192	118.8	1.6	1847.219	42.979	1.75	2.4	11.25	116.46
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	24	181.	204.	339.	76.	6262.696	79.137	102.5	143.	287.25	309.5
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/68-12/15/98	12	189.5	201.917	436.	79.	11213.356	105.893	82.	117.5	275.	401.2
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	24	9.1	9.633	13.1	8.	2.43	1.559	8.05	8.55	10.6	12.65
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	12##	1.	1.167	2.	1.	0.152	0.389	1.	1.	1.	2.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	12	8.	10.833	24.	2.5	50.288	7.091	2.5	6.25	18.5	22.8
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	24	8.49	8.364	8.94	7.14	0.247	0.497	7.45	8.198	8.74	8.925
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	24	8.489	8.015	8.94	7.14	0.375	0.612	7.45	8.198	8.74	8.925
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	24	0.003	0.01	0.072	0.001	0.	0.017	0.001	0.002	0.006	0.036
00403 PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	12	7.25	7.2	8.	6.6	0.247	0.497	6.6	6.7	7.7	7.91
00403 CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	12	7.247	6.979	8.	6.6	0.301	0.548	6.6	6.7	7.7	7.91
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	12	0.057	0.105	0.251	0.01	0.009	0.095	0.013	0.02	0.2	0.251
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	12	54.	53.667	80.	24.	358.606	18.937	25.5	39.25	71.5	79.7
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	12	7.5	33.542	161.	1.5	3302.612	57.468	1.95	3.5	24.	157.7
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	12##	1.5	5.042	20.	1.5	49.521	7.037	1.5	1.5	3.75	20.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	12	5.5	28.333	141.	1.5	2554.697	50.544	1.5	1.5	21.	137.7
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	11	0.009	0.015	0.082	0.002	0.001	0.023	0.002	0.002	0.011	0.07
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12	0.002	0.002	0.003	0.001	0.	0.001	0.001	0.001	0.002	0.003
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12	0.135	0.138	0.41	0.005	0.017	0.131	0.006	0.009	0.24	0.365
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	12	0.023	0.026	0.054	0.016	0.	0.01	0.017	0.02	0.029	0.048
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	12	58.5	62.167	102.	32.	549.424	23.44	34.4	42.5	86.	99.6
00940 CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	12	8.5	8.75	22.	2.5	37.023	6.085	2.5	2.5	13.5	19.6
00945 SULFATE, TOTAL (MG/L AS SO4)	02/18/68-12/15/98	12	20.	24.25	52.	7.	265.295	16.288	7.3	9.25	42.25	50.5
00955 SILICA, DISSOLVED (MG/L AS SI02)	08/29/84-12/15/98	12	6.9	6.608	8.9	2.9	4.452	2.11	2.96	4.85	8.45	8.84
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	01/26/94-12/15/98	24	190.	1883.875	16000.	9.	14405267.071	3795.427	32.5	78.	1600.	7300.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	01/26/94-12/15/98	24	2.276	2.5	4.204	0.954	0.748	0.865	1.477	1.892	3.201	3.848
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		315.908									
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	02/22/95-12/15/98	12	0.01	0.034	0.146	0.006	0.003	0.052	0.007	0.009	0.022	0.145
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	02/22/95-12/15/98	12	0.482	1.149	5.794	0.302	2.761	1.662	0.311	0.368	0.759	5.01
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	02/22/95-12/15/98	12	0.046	0.106	0.458	0.034	0.019	0.138	0.034	0.038	0.077	0.42
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	02/22/95-12/15/98	12	0.377	0.369	0.518	0.16	0.012	0.109	0.19	0.272	0.466	0.509
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	02/22/95-12/15/98	12	0.03	0.033	0.067	0.022	0.	0.013	0.023	0.024	0.039	0.061

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	12	0.031	0.03	0.047	0.004	0.	0.012	0.009	0.023	0.038	0.047
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	8	4.05	4.25	7.	2.2	2.557	1.599	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	12	58.5	54.5	66.	28.	118.455	10.884	32.8	50.	62.25	66.
00940 CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	12	6.	6.625	13.	2.5	12.733	3.568	2.5	3.125	9.	12.7
00945 SULFATE, TOTAL (MG/L AS SO4)	02/18/68-12/15/98	12	11.	12.75	21.	8.	17.659	4.202	8.3	10.	15.5	20.7
00955 SILICA, DISSOLVED (MG/L AS SI02)	08/29/84-12/15/98	13	7.7	6.954	10.3	0.5	7.876	2.806	1.1	6.1	8.9	9.78
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	01/26/94-12/15/98	24	155.	2483.	16000.	40.	28541956.087	5342.467	45.	78.	700.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	01/26/94-12/15/98	24	2.188	2.511	4.204	1.602	0.698	0.836	1.653	1.892	2.845	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		324.455									
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	02/22/95-12/15/98	12	0.024	0.04	0.228	0.007	0.004	0.06	0.007	0.013	0.036	0.172
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	02/22/95-12/15/98	12	0.774	1.097	4.445	0.105	1.396	1.181	0.107	0.365	1.268	3.71
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	02/22/95-12/15/98	11	0.097	0.15	0.469	0.032	0.015	0.121	0.039	0.074	0.185	0.42
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	02/22/95-12/15/98	12	0.565	0.513	0.739	0.228	0.025	0.157	0.248	0.352	0.627	0.709
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	02/22/95-12/15/98	12	0.041	0.039	0.053	0.015	0.	0.011	0.018	0.033	0.048	0.052

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	21	21.9	19.19	30.8	0.8	80.125	8.951	5.68	12.1	27.8	29.76
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	12	5.65	6.6	18.3	1.4	22.307	4.723	1.58	2.65	9.35	15.9
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	21	195.	209.571	362.	84.	3932.057	62.706	127.	177.5	261.	275.8
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/68-12/15/98	12	176.	193.917	258.	129.	2090.811	45.725	132.9	161.5	242.5	257.7
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	9	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	21	9.9	10.19	16.	8.2	3.555	1.885	8.26	8.7	10.95	12.7
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	12##	1.	1.125	4.	0.5	1.006	1.003	0.5	0.5	1.	3.4
00340 COD, .25N K2CR207 MG/L	08/15/79-12/15/98	12	7.5	8.25	12.	6.	4.023	2.006	6.	7.	10.	11.7
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	21	8.34	8.235	8.97	6.74	0.287	0.536	7.61	7.895	8.67	8.888
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	21	8.34	7.799	8.97	6.74	0.487	0.698	7.61	7.895	8.67	8.888
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	21	0.005	0.016	0.182	0.001	0.002	0.039	0.001	0.002	0.013	0.025
00403 PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	12	7.65	7.708	8.3	7.2	0.106	0.326	7.23	7.5	7.975	8.24
00403 CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	12	7.647	7.605	8.3	7.2	0.118	0.343	7.23	7.5	7.975	8.24
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	12	0.023	0.025	0.063	0.005	0.	0.017	0.006	0.011	0.032	0.059
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	12	55.5	55.333	72.	36.	113.333	10.646	38.7	47.5	66.	70.5
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	12	4.	5.333	16.	1.5	20.879	4.569	1.5	1.5	6.75	14.8
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	12##	1.5	1.917	4.	1.5	0.947	0.973	1.5	1.5	1.5	4.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	12	3.	4.125	12.	1.5	10.824	3.29	1.5	1.5	5.75	10.8
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	10	0.008	0.007	0.012	0.002	0.	0.004	0.002	0.002	0.011	0.012
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12##	0.001	0.002	0.004	0.001	0.	0.001	0.001	0.001	0.003	0.004
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12	0.035	0.122	0.43	0.002	0.024	0.154	0.003	0.009	0.288	0.394
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	12	0.025	0.029	0.071	0.007	0.	0.016	0.01	0.018	0.036	0.062
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	12	58.	61.167	78.	45.	90.515	9.514	47.7	55.75	70.	77.1
00940 CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	12	11.	12.083	20.	6.	20.447	4.522	6.3	8.25	16.	19.4
00945 SULFATE, TOTAL (MG/L AS SO4)	02/18/68-12/15/98	12	21.5	20.417	35.	9.	72.629	8.522	9.3	12.25	28.25	33.5
00955 SILICA, DISSOLVED (MG/L AS SI02)	08/29/84-12/15/98	11	5.8	5.945	9.6	3.4	5.009	2.238	3.42	3.6	8.7	9.44
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	01/26/94-12/15/98	23	170.	961.	16000.	9.	10863858.636	3296.037	30.	45.	490.	1220.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	01/26/94-12/15/98	23	2.23	2.229	4.204	0.954	0.479	0.692	1.442	1.653	2.69	3.085
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		169.462									
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	02/22/95-12/15/98	12	0.004	0.005	0.015	0.001	0.	0.004	0.001	0.003	0.007	0.014
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	02/22/95-12/15/98	12	0.387	0.406	0.9	0.237	0.033	0.182	0.239	0.266	0.484	0.786
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	02/22/95-12/15/98	12	0.045	0.046	0.106	0.018	0.001	0.024	0.02	0.026	0.06	0.093
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	02/22/95-12/15/98	12	0.346	0.373	0.887	0.083	0.055	0.234	0.099	0.174	0.538	0.801
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	02/22/95-12/15/98	12	0.037	0.038	0.072	0.012	0.	0.018	0.015	0.023	0.051	0.069

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/18/68-06/01/95	3	32.	28.667	36.	18.	89.333	9.452	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	02/18/68-06/01/95	3	69.	79.333	105.	64.	500.333	22.368	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	15	7.	8.333	20.	3.	24.81	4.981	3.	4.	13.	17.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	15##	1.5	1.767	4.	1.5	0.531	0.729	1.5	1.5	1.5	3.4
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	15	5.	6.633	16.	1.5	17.731	4.211	2.4	3.	10.	14.2
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12	0.024	0.021	0.041	0.008	0.	0.01	0.008	0.011	0.028	0.038
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	3##	0.02	0.03	0.05	0.02	0.	0.017	**	**	**	**
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12	0.003	0.003	0.013	0.001	0.	0.003	0.001	0.001	0.004	0.011
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	3##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12	0.185	0.19	0.4	0.008	0.019	0.136	0.012	0.053	0.33	0.388
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	3	0.32	0.267	0.32	0.16	0.009	0.092	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	3	0.3	0.333	0.4	0.3	0.003	0.058	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	4	0.1	0.095	0.13	0.05	0.001	0.034	**	**	**	**
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	11	0.08	0.085	0.14	0.04	0.001	0.03	0.042	0.06	0.11	0.136
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	12	0.06	0.068	0.128	0.028	0.001	0.033	0.032	0.042	0.1	0.125
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	12	5.2	4.817	6.1	2.9	1.089	1.043	3.08	3.8	5.575	6.04
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	12	55.5	60.917	103.	30.	415.538	20.385	34.5	49.	78.5	97.9
00940 CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	15	9.	11.267	24.	6.	33.067	5.75	6.	7.	16.	22.2
00945 SULFATE, TOTAL (MG/L AS SO4)	02/18/68-12/15/98	15	15.	17.467	39.	11.	58.124	7.624	11.6	12.	23.	31.8
00955 SILICA, DISSOLVED (MG/L AS SI02)	08/29/84-12/15/98	12	8.15	7.65	10.2	3.7	4.728	2.174	3.91	5.675	9.4	10.2
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	01/26/94-12/15/98	22	330.	848.864	5400.	9.	1615185.171	1270.899	9.	81.	905.	2400.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	01/26/94-12/15/98	22	2.519	2.405	3.732	0.954	0.689	0.83	0.954	1.89	2.954	3.38
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		254.113									
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	02/22/95-12/15/98	11	0.019	0.062	0.495	0.012	0.021	0.144	0.012	0.013	0.028	0.402
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	02/22/95-12/15/98	9	0.49	0.527	0.94	0.072	0.058	0.24	0.072	0.415	0.681	0.94
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	02/22/95-12/15/98	10	0.051	0.061	0.107	0.033	0.001	0.024	0.034	0.044	0.079	0.105
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	02/22/95-12/15/98	11	0.428	0.51	0.89	0.309	0.041	0.202	0.31	0.336	0.714	0.87
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	02/22/95-12/15/98	11	0.066	0.078	0.13	0.047	0.001	0.029	0.047	0.052	0.106	0.127
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	3	0.08	0.083	0.1	0.07	0.	0.015	**	**	**	**

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Annual Analysis for 1996 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	24	21.15	19.213	28.8	4.5	63.607	7.975	5.1	15.025	26.7	28.2
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	12	7.75	28.892	237.	4.5	4344.41	65.912	4.65	5.025	17.025	174.3
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	24	159.	166.833	235.	114.	1024.667	32.01	124.	145.	184.5	215.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/68-12/15/98	12	140.	146.583	201.	110.	922.265	30.369	110.6	123.25	169.25	200.1
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	12	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	24	9.45	9.854	14.7	6.7	3.89	1.972	7.6	8.325	11.125	13.
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	12##	0.75	1.167	2.	0.5	0.561	0.749	0.5	0.5	2.	2.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	12	12.	11.833	19.	5.	16.697	4.086	5.6	8.25	15.	18.1
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	24	7.77	7.852	8.63	6.52	0.296	0.544	7.075	7.645	8.27	8.615
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	24	7.77	7.482	8.63	6.52	0.439	0.662	7.075	7.645	8.27	8.615
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	24	0.017	0.033	0.302	0.002	0.004	0.062	0.002	0.005	0.023	0.084
00403 PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	12	7.55	7.525	8.	7.2	0.075	0.273	7.2	7.225	7.7	7.97
00403 CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	12	7.547	7.452	8.	7.2	0.081	0.284	7.2	7.225	7.7	7.97
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	12	0.028	0.035	0.063	0.01	0.	0.02	0.011	0.02	0.06	0.063
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	12	43.	44.667	54.	34.	50.242	7.088	34.3	40.25	52.5	54.
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	12	11.	31.333	247.	3.	4670.424	68.341	3.3	4.75	22.	180.7
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	12##	2.25	4.333	22.	1.5	34.47	5.871	1.5	1.5	3.75	17.8
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	12	7.5	27.292	225.	1.5	3919.112	62.603	2.25	4.25	19.	164.1
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12	0.018	0.016	0.035	0.002	0.	0.011	0.002	0.005	0.025	0.033
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12	0.002	0.003	0.01	0.001	0.	0.003	0.001	0.001	0.004	0.009
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12	0.285	0.241	0.45	0.006	0.024	0.154	0.007	0.078	0.35	0.441
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	25	8.18	8.207	9.15	7.22	0.289	0.537	7.266	7.94	8.695	8.85
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	25	8.18	7.884	9.15	7.22	0.398	0.631	7.266	7.94	8.695	8.85
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	25	0.007	0.013	0.06	0.001	0.	0.018	0.001	0.002	0.012	0.054
00403 PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	21	7.4	7.452	8.4	6.6	0.247	0.497	6.84	7.1	7.7	8.36
00403 CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	21	7.4	7.231	8.4	6.6	0.298	0.546	6.84	7.1	7.7	8.36
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	21	0.04	0.059	0.251	0.004	0.003	0.059	0.004	0.02	0.079	0.147
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	21	54.	52.857	73.	28.	162.629	12.753	34.4	42.	63.	69.8
00500 RESIDUE, TOTAL (MG/L)	02/18/68-06/01/95	10	137.	144.4	179.	118.	465.6	21.578	118.6	124.75	165.	178.2
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/18/68-06/01/95	10	33.5	36.1	55.	16.	213.211	14.602	16.6	22.75	52.5	54.9
00510 RESIDUE, TOTAL FIXED (MG/L)	02/18/68-06/01/95	10	108.5	108.3	142.	64.	685.789	26.188	65.7	84.75	131.25	141.6
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	24	5.5	10.167	72.	1.5	205.949	14.351	2.25	4.	12.	21.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	24##	1.5	2.333	10.	1.	4.688	2.165	1.	1.5	2.75	5.5
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	24	4.5	8.	62.	1.5	155.326	12.463	1.5	1.875	8.75	18.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12	0.021	0.02	0.031	0.007	0.	0.008	0.007	0.013	0.027	0.03
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	10##	0.02	0.03	0.06	0.02	0.	0.016	0.02	0.02	0.05	0.059
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12##	0.001	0.002	0.003	0.001	0.	0.001	0.001	0.001	0.002	0.003
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	10	0.01	0.017	0.03	0.005	0.	0.012	0.005	0.005	0.03	0.03
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12	0.05	0.136	0.44	0.005	0.026	0.162	0.005	0.013	0.315	0.416
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	10	0.05	0.142	0.37	0.02	0.022	0.149	0.02	0.02	0.308	0.366
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	10	0.3	0.32	0.5	0.2	0.006	0.079	0.21	0.3	0.325	0.49
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	10	0.065	0.082	0.14	0.05	0.001	0.031	0.051	0.06	0.105	0.138
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	5	0.07	0.072	0.11	0.05	0.001	0.025	**	**	**	**
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	14	0.04	0.046	0.104	0.007	0.001	0.027	0.009	0.029	0.063	0.092
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	16	3.7	4.344	14.7	2.4	8.085	2.843	2.54	3.2	4.35	7.91
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	12	57.5	58.833	81.	38.	185.424	13.617	39.2	50.	70.5	78.9
00940 CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	14	15.	14.857	25.	4.	37.363	6.112	5.	10.	19.75	23.5
00945 SULFATE, TOTAL (MG/L AS SO4)	02/18/68-12/15/98	14	26.	24.5	37.	8.	90.115	9.493	10.	16.5	34.25	36.
00955 SILICA, DISSOLVED (MG/L AS SI02)	08/29/84-12/15/98	12	7.	6.867	8.7	4.3	1.61	1.269	4.66	6.	7.7	8.58
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	01/26/94-12/15/98	18	74.5	1723.333	16000.	9.	15937303.294	3992.155	18.9	33.5	1425.	7900.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	01/26/94-12/15/98	18	1.87	2.228	4.204	0.954	0.946	0.973	1.266	1.51	3.126	3.881
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		168.87									
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	3	100.	130.	240.	50.	9700.	98.489	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	3	2.	2.026	2.38	1.699	0.117	0.341	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		106.266									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	8	0.05	0.052	0.09	0.04	0.	0.017	**	**	**	**

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Annual Analysis for 1995 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	22	22.65	20.409	32.4	3.8	71.598	8.462	6.45	14.85	27.025	30.61
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/88-12/15/98	15	7.7	7.767	14.9	2.6	12.595	3.549	3.56	5.2	10.6	13.7
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	21	179.	196.095	304.	60.	5355.79	73.183	112.4	145.5	280.5	300.4
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/68-12/15/98	15	154.	184.267	342.	122.	3923.781	62.64	130.4	140.	231.	303.6
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	12	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	22	9.3	9.864	14.3	7.8	3.032	1.741	8.3	8.65	10.425	12.87
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	15	1.8	1.647	2.9	0.5	0.657	0.811	0.5	1.	2.2	2.9
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	12	11.5	11.958	27.	2.5	45.748	6.764	3.25	7.	16.	24.3
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	22	8.25	8.066	8.7	6.82	0.242	0.492	7.433	7.663	8.493	8.587
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	22	8.246	7.745	8.7	6.82	0.351	0.592	7.433	7.663	8.493	8.587
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	22	0.006	0.018	0.151	0.002	0.001	0.032	0.003	0.003	0.022	0.037
00403 PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	14	7.45	7.557	8.5	6.	0.47	0.686	6.4	7.15	8.15	8.4
00403 CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	14	7.447	6.965	8.5	6.	0.848	0.921	6.4	7.15	8.15	8.4
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	14	0.036	0.108	1.	0.003	0.068	0.26	0.004	0.007	0.072	0.579
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	15	44.	47.933	81.	9.	309.638	17.597	23.4	41.	57.	78.6
00500 RESIDUE, TOTAL (MG/L)	02/18/68-06/01/95	3	101.	108.	141.	82.	907.	30.116	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	25	22.3	18.964	31.3	2.7	95.767	9.786	4.5	8.4	28.5	30.28
00070 TURBIDITY, (JACKSON CANDLE UNITS)		02/21/89-02/01/94	15	3.8	9.507	39.	1.	146.978	12.123	1.24	2.3	11.	36.6
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		12/20/88-12/15/98	11	4.6	17.118	108.	0.6	990.714	31.476	0.88	2.3	15.1	92.8
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/15/98	19	161.	198.421	360.	81.	6320.035	79.499	128.	134.	261.	331.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		04/23/68-12/15/98	6	128.5	157.167	298.	105.	5514.967	74.263	**	**	**	**
00096 SALINITY AT 25 DEGREES C (MG/ML)		07/31/84-09/22/98	16	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/11/84-12/15/98	20	9.35	9.825	13.1	7.3	3.67	1.916	7.53	8.2	11.375	13.03
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	5	8.5	9.68	14.2	7.3	7.592	2.755	**	**	**	**
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	11	2.	1.545	2.	1.	0.273	0.522	1.	1.	2.	2.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/15/98	8	14.	12.25	16.	1.	22.786	4.773	**	**	**	**
00400p PH (STANDARD UNITS)		02/18/68-12/15/98	24	7.6	7.711	9.29	6.92	0.372	0.61	7.	7.25	8.153	8.61
00400p CONVERTED PH (STANDARD UNITS)		02/18/68-12/15/98	24	7.597	7.427	9.29	6.92	0.456	0.675	7.	7.25	8.153	8.61
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	24	0.025	0.037	0.12	0.001	0.001	0.036	0.002	0.007	0.057	0.1
00403 PH, LAB, STANDARD UNITS	SU	02/18/68-12/15/98	10	7.55	7.62	8.5	7.2	0.18	0.424	7.2	7.275	7.925	8.45
00403 CONVERTED PH, LAB, STANDARD UNITS		02/18/68-12/15/98	10	7.525	7.479	8.5	7.2	0.202	0.449	7.2	7.275	7.925	8.45
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	10	0.03	0.033	0.063	0.003	0.001	0.023	0.004	0.012	0.053	0.063
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/18/68-12/15/98	10	47.	52.	83.	30.	328.	18.111	30.4	38.5	68.75	82.4
00500 RESIDUE, TOTAL (MG/L)		02/18/68-06/01/95	10	116.	118.3	188.	76.	1372.233	37.044	76.6	84.25	135.25	186.4
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/18/68-06/01/95	10	20.5	22.6	40.	6.	137.822	11.74	6.3	12.75	35.25	39.6
00510 RESIDUE, TOTAL FIXED (MG/L)		02/18/68-06/01/95	10	82.	83.5	153.	14.	1304.722	36.121	18.3	66.75	103.75	148.6
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		02/18/68-12/15/98	26	8.5	13.288	47.	1.5	171.443	13.094	1.5	4.5	18.	37.6
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		02/18/68-12/15/98	26	2.	2.885	8.	1.	4.526	2.127	1.	1.5	4.25	6.6
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		02/18/68-12/15/98	26	6.5	10.75	39.	1.5	115.945	10.768	1.5	3.	14.5	31.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		07/11/84-12/15/98	16##	0.02	0.026	0.05	0.02	0.	0.01	0.02	0.02	0.035	0.043
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/01/95	11##	0.02	0.032	0.08	0.02	0.	0.019	0.02	0.02	0.04	0.074
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)		07/11/84-12/15/98	16##	0.005	0.005	0.01	0.005	0.	0.001	0.005	0.005	0.005	0.007
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	11##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.018
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)		07/11/84-12/15/98	16	0.12	0.176	0.47	0.02	0.025	0.158	0.02	0.03	0.313	0.463
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	11	0.19	0.24	0.48	0.02	0.031	0.176	0.02	0.06	0.42	0.476
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/01/95	27	0.4	0.393	0.7	0.2	0.012	0.111	0.28	0.3	0.5	0.5
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/14/95	27	0.09	0.081	0.15	0.03	0.001	0.035	0.038	0.05	0.1	0.122
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)		07/11/84-01/29/96	16	0.045	0.053	0.11	0.01	0.001	0.032	0.017	0.023	0.08	0.103
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-12/15/98	27	0.03	0.041	0.08	0.01	0.001	0.025	0.01	0.02	0.06	0.08
00680p CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-08/20/96	24	4.4	5.592	18.1	2.3	13.216	3.635	2.6	3.625	6.2	11.55
00900 HARDNESS, TOTAL (MG/L AS CACO3)		10/20/86-12/15/98	8	54.	60.625	90.	41.	303.696	17.427	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	02/18/68-12/15/98	10	6.5	12.	34.	3.	110.222	10.499	3.1	4.	21.5	32.9
00945 SULFATE, TOTAL (MG/L AS SO4)		02/18/68-12/15/98	10	12.5	22.4	65.	10.	328.933	18.137	10.	10.75	35.5	62.2
00955 SILICA, DISSOLVED (MG/L AS SI02)		08/29/84-12/15/98	18	6.8	6.839	9.1	3.8	2.215	1.488	4.25	6.1	8.025	8.56
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	11	100.	136.364	600.	50.	25545.455	159.829	50.	50.	100.	520.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	11	2.	1.989	2.778	1.699	0.106	0.325	1.699	1.699	2.	2.683
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		97.419									

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Annual Analysis for 1994 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	25	22.3	19.632	32.8	2.1	94.569	9.725	3.54	10.5	27.8	30.64
00070 TURBIDITY, (JACKSON CANDLE UNITS)		02/21/89-02/01/94	2	21.55	21.55	32.	11.1	218.405	14.779	**	**	**	**
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		12/20/88-12/15/98	21	2.8	3.971	14.8	1.6	10.518	3.243	1.72	2.	4.9	8.44
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/15/98	19	198.	209.579	329.	114.	3886.924	62.345	118.	167.	269.	294.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		04/23/68-12/15/98	24	187.	188.333	277.	94.	2799.536	52.911	116.	143.	237.25	264.5
00096 SALINITY AT 25 DEGREES C (MG/ML)		07/31/84-09/22/98	10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/11/84-12/15/98	23	8.9	9.73	13.8	6.9	3.346	1.829	7.98	8.3	11.3	12.64
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	2	13.8	13.8	13.9	13.7	0.02	0.141	**	**	**	**
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	25	1.6	1.864	5.7	0.5	1.562	1.25	0.5	1.05	2.1	3.86
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/15/98	6	13.	11.833	15.	4.	17.367	4.167	**	**	**	**

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Annual Analysis for 1991 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00945 SULFATE, TOTAL (MG/L AS SO4)	02/18/68-12/15/98	7	14.	17.	34.	8.	90.333	9.504	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SIO2)	08/29/84-12/15/98	27	6.7	6.9	10.2	2.4	3.789	1.947	3.96	5.8	8.5	9.86
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	9##	50.	66.667	100.	50.	625.	25.	50.	50.	100.	100.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	9##	1.699	1.799	2.	1.699	0.023	0.151	1.699	1.699	2.	2.
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		62.996									

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Annual Analysis for 1992 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	27	13.9	15.093	28.3	3.5	61.468	7.84	5.04	7.8	22.5	26.5
00070 TURBIDITY, (JACKSON CANDLE UNITS)	02/21/89-02/01/94	13	6.8	25.262	130.	2.1	1281.833	35.803	2.54	3.7	42.5	95.6
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	13	176.	196.077	290.	105.	3833.41	61.915	108.6	150.5	256.	284.4
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/68-12/15/98	12	157.	158.083	255.	24.	3925.538	62.654	50.4	116.75	213.75	248.1
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	14	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	22	9.9	10.195	13.4	7.5	4.026	2.007	7.5	8.4	11.975	13.16
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	5	10.2	10.36	12.2	8.9	1.673	1.293	**	**	**	**
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	13	1.	1.769	7.	1.	2.692	1.641	1.	1.	2.	5.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	14	15.	18.	75.	2.	296.923	17.231	4.	11.	17.5	48.5
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	27	7.25	7.251	7.82	6.25	0.143	0.378	6.872	7.	7.54	7.736
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	27	7.25	7.07	7.82	6.25	0.177	0.42	6.872	7.	7.54	7.736
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	27	0.056	0.085	0.562	0.015	0.012	0.108	0.018	0.029	0.1	0.142
00403 PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	13	7.6	7.585	8.3	7.	0.143	0.378	7.08	7.3	7.8	8.26
00403 CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	13	7.6	7.455	8.3	7.	0.161	0.402	7.08	7.3	7.8	8.26
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	13	0.025	0.035	0.1	0.005	0.001	0.026	0.006	0.016	0.05	0.085
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	13	50.	48.	69.	19.	222.	14.9	23.4	35.5	61.5	67.4
00500 RESIDUE, TOTAL (MG/L)	02/18/68-06/01/95	13	127.	181.769	861.	85.	42129.859	205.256	92.6	112.	151.	583.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/18/68-06/01/95	12	25.5	31.583	107.	15.	607.72	24.652	15.	19.	30.75	86.
00510 RESIDUE, TOTAL FIXED (MG/L)	02/18/68-06/01/95	13	93.	150.	754.	70.	33499.5	183.029	73.2	82.5	126.5	512.8
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	27	10.	38.667	718.	2.	18547.923	136.191	2.8	5.	22.	37.4
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	27	2.	5.296	78.	1.	213.986	14.628	1.	1.	4.	6.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	27	7.	33.37	640.	1.	14781.781	121.58	1.8	4.	18.	31.4
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	14##	0.02	0.026	0.05	0.02	0.	0.011	0.02	0.02	0.04	0.045
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	13##	0.02	0.043	0.25	0.02	0.004	0.063	0.02	0.02	0.04	0.17
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	14##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.02
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	13##	0.005	0.017	0.11	0.005	0.001	0.029	0.005	0.005	0.015	0.078
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	14	0.165	0.183	0.41	0.02	0.022	0.15	0.02	0.035	0.328	0.405
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	13	0.2	0.262	0.51	0.02	0.026	0.162	0.036	0.135	0.42	0.482
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	27	0.4	0.496	3.5	0.2	0.387	0.622	0.2	0.3	0.4	0.68
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	27	0.07	0.129	1.2	0.04	0.048	0.22	0.04	0.05	0.12	0.2
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	14	0.03	0.036	0.09	0.01	0.	0.019	0.015	0.028	0.043	0.07
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	27	0.03	0.036	0.19	0.01	0.001	0.034	0.01	0.02	0.04	0.06
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	28	5.35	6.311	25.5	1.1	32.272	5.681	1.68	3.4	6.725	10.3
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	14	63.	60.357	89.	29.	279.786	16.727	34.5	44.75	70.5	85.5
00940 CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	13	7.	8.615	16.	4.	17.09	4.134	4.	5.	13.	15.2
00945 SULFATE, TOTAL (MG/L AS SO4)	02/18/68-12/15/98	13	13.	16.769	31.	9.	43.359	6.585	9.4	12.	22.5	27.8
00955 SILICA, DISSOLVED (MG/L AS SIO2)	08/29/84-12/15/98	27	6.7	7.185	15.4	2.3	8.088	2.844	4.	5.1	9.	11.04
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH 44.5 C	11/23/70-02/17/94	12	100.	506.583	4000.	50.	1297883.72	1139.247	50.	50.	250.	3130.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	12	2.	2.151	3.602	1.699	0.362	0.601	1.699	1.699	2.358	3.434
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		141.636									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	19##	0.005	0.005	0.01	0.005	0.	0.001	0.005	0.005	0.005	0.005
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	11##	0.005	0.006	0.02	0.005	0.	0.005	0.005	0.005	0.005	0.017
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	19	0.27	0.227	0.47	0.02	0.026	0.161	0.02	0.02	0.35	0.41
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	12	0.195	0.214	0.48	0.02	0.035	0.187	0.02	0.02	0.4	0.468
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	31	0.3	0.361	1.6	0.1	0.079	0.281	0.12	0.2	0.4	0.58
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	31	0.09	0.105	0.47	0.04	0.008	0.091	0.05	0.05	0.1	0.174
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	19	0.04	0.045	0.08	0.01	0.	0.021	0.02	0.03	0.07	0.07
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	31	0.04	0.042	0.08	0.01	0.	0.019	0.02	0.02	0.06	0.06
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	33	3.1	3.215	5.9	1.2	1.245	1.116	1.94	2.45	3.85	5.06
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	14	69.	330.286	3600.	56.	886785.143	941.693	57.	58.	96.	1893.
00940 CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	14	8.	10.071	21.	4.	32.995	5.744	4.5	6.	13.75	20.5
00945 SULFATE, TOTAL (MG/L AS SO4)	02/18/68-12/15/98	14	12.5	16.357	36.	10.	60.709	7.792	10.	10.75	22.5	31.
00955 SILICA, DISSOLVED (MG/L AS SI02)	08/29/84-12/15/98	33	7.4	7.142	10.9	2.5	4.126	2.031	4.24	5.65	8.35	9.76
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	12##	50.	129.167	300.	50.	12481.061	111.719	50.	50.	275.	300.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	12##	1.699	1.969	2.477	1.699	0.127	0.356	1.699	1.699	2.433	2.477
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		93.06									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	26	19.7	17.931	27.7	6.5	62.309	7.894	7.69	9.175	26.15	27.4
00070 TURBIDITY, (JACKSON CANDLE UNITS)	02/21/89-02/01/94	8	19.15	55.213	180.	0.6	5682.57	75.383	**	**	**	**
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	19	143.	167.053	295.	31.	4350.275	65.957	113.	125.	201.	281.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/68-12/15/98	16	130.5	144.688	322.	2.	5122.896	71.574	67.8	109.25	172.25	276.5
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	19	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	19	9.5	9.695	12.4	7.8	2.424	1.557	7.8	8.2	11.2	11.9
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	7	11.7	10.843	12.3	8.5	2.1	1.449	**	**	**	**
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	6	2.	2.333	5.	1.	2.267	1.506	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	8	11.5	11.5	16.	6.	13.714	3.703	**	**	**	**
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	26	7.47	7.627	8.59	7.05	0.209	0.457	7.134	7.23	8.04	8.337
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	26	7.464	7.448	8.59	7.05	0.242	0.492	7.134	7.23	8.04	8.337
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	26	0.034	0.036	0.089	0.003	0.001	0.027	0.005	0.009	0.059	0.074
00403 PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	7	7.5	7.486	8.1	6.9	0.248	0.498	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	7	7.5	7.272	8.1	6.9	0.302	0.549	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	7	0.032	0.054	0.126	0.008	0.003	0.052	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	7	47.	53.	81.	33.	361.	19.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	02/18/68-06/01/95	7	150.	150.857	252.	97.	3183.81	56.425	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/18/68-06/01/95	7	31.	33.143	58.	19.	175.476	13.247	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	02/18/68-06/01/95	7	120.	117.714	212.	68.	2364.905	48.63	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	27	9.	37.537	325.	1.5	5463.229	73.914	1.5	6.	36.	174.4
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	27	2.	5.315	36.	1.	73.426	8.569	1.	1.	5.	22.8
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	27	7.	32.389	289.	1.5	4266.795	65.321	1.5	4.	30.	151.6
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	20##	0.02	0.032	0.06	0.02	0.	0.016	0.02	0.02	0.04	0.06
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	9##	0.02	0.031	0.06	0.02	0.	0.015	0.02	0.02	0.04	0.06
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	20##	0.005	0.005	0.01	0.005	0.	0.001	0.005	0.005	0.005	0.005
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	9##	0.005	0.015	0.07	0.005	0.	0.021	0.005	0.005	0.015	0.07
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	20	0.215	0.189	0.37	0.02	0.017	0.129	0.02	0.033	0.288	0.36
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	9	0.21	0.187	0.37	0.005	0.023	0.151	0.005	0.02	0.335	0.37
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	29	0.3	0.476	1.5	0.2	0.086	0.294	0.2	0.3	0.6	0.9
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	29	0.08	0.106	0.48	0.03	0.01	0.1	0.04	0.05	0.1	0.3
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	20	0.035	0.039	0.09	0.01	0.	0.017	0.03	0.03	0.048	0.06
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	29	0.03	0.037	0.07	0.01	0.	0.017	0.02	0.02	0.05	0.06
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	28	3.65	3.743	6.9	1.2	1.617	1.271	2.58	2.925	4.175	6.11
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	9	78.	74.111	116.	37.	625.611	25.012	37.	53.	94.	116.
00940 CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	7	5.	9.429	23.	2.	68.286	8.264	**	**	**	**

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Annual Analysis for 1989 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	11	0.032	0.045	0.126	0.008	0.001	0.036	0.01	0.02	0.079	0.117
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	11	45.	44.727	54.	23.	90.018	9.488	25.6	41.	53.	54.
00500 RESIDUE, TOTAL (MG/L)	02/18/68-06/01/95	8	108.	122.75	182.	82.	1285.071	35.848	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/18/68-06/01/95	8	29.5	30.625	47.	16.	90.839	9.531	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	02/18/68-06/01/95	8	83.	92.125	158.	56.	1146.125	33.854	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	16	4.5	22.031	138.	0.5	1690.016	41.11	0.85	2.	24.5	117.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	15	1.	3.3	20.	0.5	25.921	5.091	0.5	0.5	5.	12.2
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	16	2.	18.531	118.	0.5	1304.749	36.121	0.5	1.	19.5	104.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	5##	0.02	0.038	0.08	0.02	0.001	0.027	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	11##	0.02	0.027	0.05	0.02	0.	0.013	0.02	0.02	0.04	0.05
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	5	0.01	0.008	0.01	0.005	0.	0.003	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	11##	0.005	0.009	0.03	0.005	0.	0.007	0.005	0.005	0.01	0.026
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	5	0.26	0.254	0.35	0.18	0.004	0.065	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	11	0.27	0.287	0.45	0.14	0.009	0.093	0.152	0.21	0.36	0.442
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	16	0.35	0.431	1.1	0.2	0.07	0.265	0.2	0.2	0.65	0.89
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	16	0.1	0.123	0.3	0.05	0.004	0.063	0.064	0.1	0.148	0.23
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	5	0.08	0.08	0.14	0.04	0.001	0.037	**	**	**	**
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	16	0.08	0.081	0.15	0.04	0.001	0.027	0.047	0.063	0.098	0.122
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	16	3.4	3.719	6.9	2.7	1.247	1.117	2.7	2.85	4.1	5.64
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	10	53.	52.	64.	30.	102.222	10.111	31.6	46.	60.5	63.8
00940 CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	9	7.	8.778	25.	3.	45.944	6.778	3.	4.5	10.5	25.
00945 SULFATE, TOTAL (MG/L AS SO4)	02/18/68-12/15/98	9	11.	11.222	17.	7.	7.444	2.728	7.	10.	12.5	17.
00955 SILICA, DISSOLVED (MG/L AS SI02)	08/29/84-12/15/98	8	8.5	8.488	14.8	2.2	12.273	3.503	**	**	**	**
01140 SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	5	7100.	6820.	8000.	4900.	1327000.	1151.955	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	11	100.	1204.545	8000.	50.	5967227.273	2442.791	50.	50.	1600.	7000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	11	2.	2.307	3.903	1.699	0.676	0.822	1.699	1.699	3.204	3.818
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		202.905									

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Annual Analysis for 1990 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	30	20.25	19.	28.7	2.6	56.87	7.541	8.7	12.825	25.875	27.9
00070 TURBIDITY, (JACKSON CANDLE UNITS)	02/21/89-02/01/94	15	4.4	5.52	20.	1.9	18.596	4.312	2.5	3.3	5.8	12.74
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	20	119.	147.6	268.	65.	3984.358	63.122	80.	101.	192.75	257.7
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/23/68-12/15/98	32	164.5	176.781	351.	95.	3127.338	55.923	116.3	137.	217.75	260.4
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	19	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	19	9.5	9.674	12.7	7.3	2.612	1.616	7.5	8.4	10.8	12.2
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	10	8.9	9.45	12.9	7.3	4.207	2.051	7.32	7.725	11.275	12.88
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	14	1.5	1.607	4.	0.5	0.776	0.881	0.75	1.	2.	3.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	24	9.5	11.25	31.	4.	51.935	7.207	4.5	6.25	13.	26.5
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	30	7.915	7.879	8.76	6.08	0.337	0.581	7.024	7.573	8.388	8.577
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	30	7.914	7.323	8.76	6.08	0.657	0.811	7.024	7.573	8.388	8.577
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	30	0.012	0.048	0.832	0.002	0.023	0.15	0.003	0.004	0.027	0.097
00403 PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	15	7.3	7.4	8.2	6.8	0.177	0.421	6.86	7.	7.7	8.08
00403 CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	15	7.3	7.239	8.2	6.8	0.205	0.453	6.86	7.	7.7	8.08
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	15	0.05	0.058	0.158	0.006	0.002	0.046	0.009	0.02	0.1	0.139
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	15	48.	46.8	76.	3.	398.743	19.969	10.8	40.	60.	74.8
00500 RESIDUE, TOTAL (MG/L)	02/18/68-06/01/95	14	107.5	115.	166.	74.	808.	28.425	82.	94.	136.	164.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/18/68-06/01/95	14	22.5	22.357	54.	6.	146.247	12.093	7.5	10.75	28.25	41.5
00510 RESIDUE, TOTAL FIXED (MG/L)	02/18/68-06/01/95	14	83.5	92.643	138.	47.	671.016	25.904	60.5	75.	111.75	136.5
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	33	9.	12.152	60.	0.5	219.304	14.809	1.4	3.5	11.5	36.2
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	32	3.	3.469	13.	0.5	7.983	2.825	1.	1.25	5.	7.7
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	33	5.	8.773	55.	0.5	167.189	12.93	0.5	1.	8.	30.2
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	19##	0.02	0.032	0.19	0.02	0.002	0.04	0.02	0.02	0.02	0.07
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	12##	0.02	0.027	0.1	0.02	0.001	0.023	0.02	0.02	0.02	0.076

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	22	20.45	18.218	32.	2.	91.823	9.582	3.87	9.65	26.425	30.35
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		12/20/88-12/15/98	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/15/98	18	144.5	163.444	300.	45.	6666.732	81.65	54.	90.	244.	272.1
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		04/23/68-12/15/98	1	213.	213.	213.	213.	0.	0.	**	**	**	**
00096 SALINITY AT 25 DEGREES C (MG/ML)		07/31/84-09/22/98	10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/11/84-12/15/98	10	9.75	10.32	16.5	7.6	8.111	2.848	7.61	7.85	12.075	16.08
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	12	9.6	10.458	14.2	7.8	4.799	2.191	7.92	8.7	12.575	13.99
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	8	1.	1.125	2.	0.5	0.339	0.582	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/15/98	8	14.5	13.125	21.	4.	26.125	5.111	**	**	**	**
00400p PH (STANDARD UNITS)		02/18/68-12/15/98	22	8.385	8.279	9.18	6.79	0.392	0.626	7.117	8.065	8.675	9.066
00400p CONVERTED PH (STANDARD UNITS)		02/18/68-12/15/98	22	8.384	7.741	9.18	6.79	0.695	0.833	7.117	8.065	8.675	9.066
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	22	0.004	0.018	0.162	0.001	0.001	0.038	0.001	0.002	0.009	0.078
00403 PH, LAB, STANDARD UNITS	SU	02/18/68-12/15/98	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/18/68-12/15/98	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/18/68-12/15/98	1	61.	61.	61.	61.	0.	0.	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		02/18/68-12/15/98	18	4.	10.806	70.	1.	273.092	16.526	1.	2.375	11.25	29.5
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		02/18/68-12/15/98	18	3.	3.5	10.	0.	9.853	3.139	0.	0.5	4.5	10.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		02/18/68-12/15/98	18	2.75	7.611	60.	0.5	196.899	14.032	0.5	1.	8.25	21.3
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		07/11/84-12/15/98	9	0.05	0.051	0.08	0.02	0.	0.022	0.02	0.03	0.07	0.08
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/01/95	9	0.05	0.047	0.08	0.01	0.001	0.022	0.01	0.03	0.065	0.08
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)		07/11/84-12/15/98	10##	0.005	0.009	0.02	0.005	0.	0.006	0.005	0.005	0.013	0.02
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	9	0.01	0.018	0.05	0.005	0.	0.015	0.005	0.008	0.03	0.05
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)		07/11/84-12/15/98	10##	0.02	0.056	0.23	0.02	0.005	0.071	0.02	0.02	0.078	0.22
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	9	0.18	0.176	0.37	0.02	0.022	0.147	0.02	0.03	0.32	0.37
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/01/95	19	0.4	0.471	1.4	0.2	0.09	0.3	0.2	0.3	0.6	1.
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/14/95	19	0.26	0.268	0.5	0.1	0.009	0.096	0.13	0.2	0.3	0.4
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)		07/11/84-01/29/96	10	0.225	0.251	0.48	0.11	0.01	0.101	0.116	0.193	0.303	0.463
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-12/15/98	19	0.22	0.221	0.46	0.09	0.01	0.099	0.09	0.14	0.28	0.35
00680p CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-08/20/96	16	4.1	4.119	5.8	2.5	0.72	0.849	2.64	3.675	4.65	5.38
00900 HARDNESS, TOTAL (MG/L AS CACO3)		10/20/86-12/15/98	1	80.	80.	80.	80.	0.	0.	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	02/18/68-12/15/98	3	22.	23.333	29.	19.	26.333	5.132	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)		02/18/68-12/15/98	2	17.	17.	19.	15.	8.	2.828	**	**	**	**
01140 SILICON, DISSOLVED (UG/L AS SI)		07/31/84-04/13/89	10	5500.	6160.	10500.	4400.	4162666.667	2040.261	4400.	4475.	7750.	10270.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	11	100.	336.364	1500.	50.	225545.455	474.916	50.	50.	600.	1380.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	11	2.	2.182	3.176	1.699	0.299	0.547	1.699	1.699	2.778	3.132
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		152.163									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	16	14.65	14.744	28.	1.	64.024	8.001	4.57	8.575	20.85	27.58
00070 TURBIDITY, (JACKSON CANDLE UNITS)		02/21/89-02/01/94	11	9.8	32.082	138.	2.6	2284.518	47.797	2.7	3.4	34.	133.2
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/15/98	14	128.	132.143	224.	85.	1311.67	36.217	92.5	103.75	152.	196.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		04/23/68-12/15/98	5	135.	134.4	176.	75.	1572.3	39.652	**	**	**	**
00096 SALINITY AT 25 DEGREES C (MG/ML)		07/31/84-09/22/98	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/11/84-12/15/98	5	13.5	12.7	14.4	10.7	2.575	1.605	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	11	9.8	10.791	16.3	7.8	7.413	2.723	7.84	8.7	12.8	15.84
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	11	2.	1.955	4.	0.5	1.123	1.06	0.6	1.	3.	3.8
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/15/98	12	11.	12.25	19.	8.	18.386	4.288	8.	8.	16.5	19.
00400p PH (STANDARD UNITS)		02/18/68-12/15/98	16	8.1	7.971	9.03	6.76	0.289	0.537	7.005	7.633	8.248	8.575
00400p CONVERTED PH (STANDARD UNITS)		02/18/68-12/15/98	16	8.097	7.607	9.03	6.76	0.43	0.656	7.005	7.632	8.247	8.575
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	16	0.008	0.025	0.174	0.001	0.002	0.044	0.003	0.006	0.023	0.106
00403 PH, LAB, STANDARD UNITS	SU	02/18/68-12/15/98	11	7.5	7.482	8.1	6.9	0.13	0.36	6.94	7.1	7.7	8.04
00403 CONVERTED PH, LAB, STANDARD UNITS		02/18/68-12/15/98	11	7.5	7.351	8.1	6.9	0.148	0.385	6.94	7.1	7.7	8.04

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	32	0.004	0.059	0.398	0.001	0.011	0.107	0.001	0.002	0.049	0.241
00500 RESIDUE, TOTAL (MG/L)	02/18/68-06/01/95	1	147.	147.	147.	147.	0.	0.	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/18/68-06/01/95	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	02/18/68-06/01/95	1	125.	125.	125.	125.	0.	0.	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	11##	2.5	34.909	256.	2.5	6045.341	77.752	2.5	2.5	10.	222.8
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	11##	2.5	5.727	24.	2.	48.668	6.976	2.1	2.5	5.	22.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	11##	2.5	30.545	232.	2.5	4943.323	70.309	2.5	2.5	5.	200.8
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	20##	0.05	0.049	0.1	0.025	0.001	0.029	0.025	0.025	0.05	0.1
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	12##	0.05	0.063	0.2	0.05	0.002	0.043	0.05	0.05	0.05	0.155
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	20##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	12##	0.005	0.009	0.03	0.005	0.	0.008	0.005	0.005	0.009	0.027
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	20	0.06	0.147	0.46	0.025	0.022	0.15	0.025	0.025	0.3	0.386
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	12	0.21	0.19	0.46	0.025	0.023	0.153	0.025	0.025	0.29	0.43
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	32	0.3	0.434	1.1	0.1	0.084	0.289	0.13	0.3	0.5	1.04
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	32	0.145	0.156	0.32	0.04	0.006	0.077	0.05	0.1	0.2	0.285
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	20	0.095	0.116	0.31	0.03	0.006	0.078	0.03	0.06	0.19	0.228
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	32	0.1	0.113	0.28	0.005	0.006	0.079	0.027	0.035	0.185	0.227
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	32	6.	5.938	9.	3.	1.867	1.366	4.3	5.	6.	8.7
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	1	88.	88.	88.	88.	0.	0.	**	**	**	**
01140 SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	20	6300.	5830.	9500.	1900.	6373789.474	2524.637	2320.	3600.	8025.	9180.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	29##	50.	221.138	4300.	15.	622136.48	788.756	15.	50.	75.	300.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	29##	1.699	1.806	3.633	1.176	0.222	0.471	1.176	1.699	1.849	2.477
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		63.907									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	27	16.6	18.096	31.	2.5	88.715	9.419	6.4	10.	28.	29.8
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	25	147.	151.72	300.	60.	3914.377	62.565	76.	97.	181.5	250.
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	14	0.	0.007	0.1	0.	0.001	0.027	0.	0.	0.	0.05
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	16	9.5	9.75	12.6	7.6	2.963	1.721	7.74	8.225	11.45	12.18
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	25	9.9	9.78	13.4	4.4	3.941	1.985	7.8	8.2	10.95	12.46
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	11	1.	1.364	4.	0.5	1.005	1.002	0.5	1.	2.	3.6
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	11	12.	12.455	20.	4.	25.273	5.027	4.6	8.	17.	19.6
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	28	8.3	8.188	8.95	6.13	0.496	0.704	6.963	8.085	8.718	8.854
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	28	8.3	7.329	8.95	6.13	1.261	1.123	6.963	8.085	8.718	8.854
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	28	0.005	0.047	0.741	0.001	0.022	0.147	0.001	0.002	0.008	0.117
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	11##	2.5	13.545	62.	2.5	348.523	18.669	2.5	2.5	21.	55.6
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	11##	2.5	3.409	9.	2.	4.191	2.047	2.1	2.5	4.	8.2
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	11##	2.5	11.636	53.	2.5	252.305	15.884	2.5	2.5	16.	47.6
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	18##	0.025	0.029	0.07	0.025	0.	0.012	0.025	0.025	0.025	0.052
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	11##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	17##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	11##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	17	0.05	0.146	0.44	0.025	0.021	0.144	0.025	0.025	0.28	0.376
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	11	0.23	0.231	0.47	0.025	0.029	0.17	0.025	0.025	0.37	0.466
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	28	0.3	0.361	1.8	0.1	0.097	0.311	0.2	0.2	0.4	0.52
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	28	0.1	0.15	0.45	0.05	0.01	0.099	0.05	0.07	0.208	0.3
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	17	0.05	0.091	0.25	0.03	0.006	0.076	0.03	0.04	0.125	0.242
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	28	0.06	0.088	0.32	0.005	0.007	0.085	0.01	0.02	0.118	0.223
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	20	5.	5.25	12.	3.	4.092	2.023	3.1	4.	5.	8.7
01140 SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	17	6700.	6647.059	9600.	3900.	2841397.059	1685.644	4140.	5250.	8000.	8960.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	11	200.	250.	800.	50.	54000.	232.379	50.	50.	400.	740.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	11	2.301	2.228	2.903	1.699	0.173	0.416	1.699	1.699	2.602	2.862
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		168.943									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	20	4.	4.4	10.	2.	3.937	1.984	2.1	3.	5.	7.8
00955 SILICA, DISSOLVED (MG/L AS SI02)	08/29/84-12/15/98	1	11.8	11.8	11.8	11.8	0.	0.	**	**	**	**
01140 SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	9	8700.	8413.333	11840.	3400.	5859800.	2420.702	3400.	7100.	10000.	11840.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	8##	75.	191.25	930.	50.	91755.357	302.911	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	8##	1.849	2.008	2.968	1.699	0.199	0.446	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		101.9									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	28	22.75	19.111	30.5	0.	70.872	8.419	6.42	12.625	25.	28.1
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	28	157.	152.179	210.	57.	1694.004	41.158	88.	122.5	184.25	205.5
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	17	0.	0.006	0.1	0.	0.001	0.024	0.	0.	0.	0.02
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	17	9.8	9.871	13.8	7.8	2.57	1.603	8.12	8.5	11.1	12.04
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	22	10.25	9.891	14.2	7.5	2.67	1.634	8.09	8.4	10.85	11.74
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	11	1.	1.136	2.	0.5	0.205	0.452	0.6	1.	1.	2.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	11	8.	10.455	30.	4.	49.673	7.048	4.6	7.	11.	27.
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	28	7.83	7.714	8.9	6.5	0.517	0.719	6.69	7.025	8.3	8.7
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	28	7.829	7.213	8.9	6.5	0.778	0.882	6.69	7.025	8.3	8.7
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	28	0.015	0.061	0.316	0.001	0.008	0.087	0.002	0.005	0.095	0.205
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	11	6.	28.455	148.	2.5	2097.973	45.804	2.5	2.5	40.	133.8
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	11	3.	6.045	28.	2.5	62.523	7.907	2.5	2.5	4.	25.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	11	3.	23.227	120.	2.5	1416.368	37.635	2.5	2.5	37.	108.8
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	17##	0.025	0.034	0.05	0.025	0.	0.012	0.025	0.025	0.05	0.05
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	9##	0.05	0.061	0.1	0.05	0.	0.022	0.05	0.05	0.075	0.1
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	17##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	9##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	17	0.23	0.236	0.6	0.025	0.033	0.182	0.025	0.063	0.395	0.488
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	9	0.34	0.262	0.46	0.025	0.024	0.154	0.025	0.105	0.37	0.46
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	23	0.3	0.289	0.7	0.05	0.029	0.171	0.1	0.2	0.4	0.62
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	23	0.1	0.104	0.2	0.05	0.002	0.046	0.054	0.07	0.12	0.2
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	17	0.07	0.07	0.12	0.02	0.001	0.03	0.02	0.05	0.1	0.112
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	26	0.07	0.073	0.13	0.005	0.001	0.029	0.04	0.05	0.093	0.113
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	28	4.	4.75	12.	1.	5.157	2.271	2.9	4.	5.	8.3
01140 SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	17	7560.	6833.176	13000.	4.	10056531.529	3171.203	2560.8	4550.	9100.	10520.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	27	50.	302.648	2400.	1.5	388458.343	623.264	13.8	40.	230.	1100.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	27	1.699	1.92	3.38	0.176	0.48	0.692	1.132	1.602	2.362	2.995
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		83.092									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	31	21.	18.3	32.	2.	84.49	9.192	6.	9.	26.5	29.8
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	29	169.	163.828	280.	30.	4601.933	67.838	85.	105.	215.	251.
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	17	0.	0.006	0.1	0.	0.001	0.024	0.	0.	0.	0.02
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	19	8.8	9.911	14.5	7.9	4.404	2.099	8.1	8.4	11.8	14.
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	32	9.8	10.025	13.8	7.6	3.65	1.91	7.73	8.15	11.675	12.6
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	12	1.	1.5	3.	1.	0.455	0.674	1.	1.	2.	2.7
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	12	12.5	12.333	23.	4.	26.424	5.14	4.9	8.5	15.5	21.5
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	32	8.405	8.002	9.1	6.4	0.759	0.871	6.618	7.31	8.718	8.946
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	32	8.403	7.227	9.1	6.4	1.377	1.174	6.618	7.31	8.717	8.946

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	2008	28.	27.018	34.	1.	15.633	3.954	20.45	25.5	29.5	31.
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	12	141.5	157.667	239.	111.	1973.879	44.428	111.9	124.75	189.	236.9
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	2008	7.9	7.981	14.8	5.8	0.795	0.892	6.9	7.3	8.6	9.1
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	9	2.	1.722	3.	0.5	0.819	0.905	0.5	1.	2.5	3.
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	10	8.	10.6	23.	5.	34.711	5.892	5.1	6.75	13.75	22.6
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	11	8.	8.155	9.3	7.	0.651	0.807	7.06	7.3	9.	9.24
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	11	8.	7.628	9.3	7.	0.955	0.977	7.06	7.3	9.	9.24
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	11	0.01	0.024	0.1	0.001	0.001	0.032	0.001	0.001	0.05	0.09
00403 PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	3	53.	59.333	74.	51.	162.333	12.741	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	14	7.	25.786	197.	2.5	2725.489	52.206	2.5	2.5	17.25	131.5
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	14	4.	6.429	28.	2.	46.033	6.785	2.25	2.5	9.	19.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	10	3.5	27.05	169.	2.	2793.025	52.849	2.	2.	32.25	157.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	16##	0.05	0.053	0.1	0.05	0.	0.013	0.05	0.05	0.05	0.065
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	17##	0.005	0.007	0.03	0.005	0.	0.007	0.005	0.005	0.005	0.022
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	17##	0.025	0.124	0.43	0.003	0.016	0.128	0.021	0.025	0.24	0.31
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	12	0.2	0.296	0.9	0.05	0.051	0.226	0.065	0.2	0.375	0.78
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	12	0.1	0.098	0.2	0.05	0.003	0.055	0.05	0.05	0.123	0.2
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	12	0.065	0.067	0.13	0.02	0.001	0.034	0.023	0.035	0.098	0.121
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	12	4.5	5.083	13.	2.	10.447	3.232	2.	2.25	6.	11.8
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	11	100.	573.636	4900.	50.	2071865.455	1439.398	50.	50.	230.	4000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	11	2.	2.165	3.69	1.699	0.373	0.61	1.699	1.699	2.362	3.473
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		146.113									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	19	24.	21.489	29.	4.	42.355	6.508	10.5	19.	25.2	28.
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/15/79-12/15/98	17	138.	143.118	189.	85.	1064.985	32.634	90.6	121.5	173.5	187.4
00096 SALINITY AT 25 DEGREES C (MG/ML)	07/31/84-09/22/98	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/11/84-12/15/98	13	9.1	9.438	13.7	7.9	2.164	1.471	7.94	8.5	9.7	12.38
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	6	8.95	9.45	10.9	8.5	1.219	1.104	**	**	**	**
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	7	1.	1.571	3.	1.	0.619	0.787	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/15/79-12/15/98	7	9.	8.143	11.	3.	7.81	2.795	**	**	**	**
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	18	7.75	7.661	8.5	6.4	0.517	0.719	6.49	7.05	8.25	8.5
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	18	7.725	7.123	8.5	6.4	0.823	0.907	6.49	7.05	8.25	8.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	18	0.019	0.075	0.398	0.003	0.015	0.12	0.003	0.006	0.091	0.324
00403 PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	7	9.	13.143	40.	2.5	172.393	13.13	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	7	3.	3.714	6.	2.5	2.488	1.577	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	7	3.	10.143	34.	2.5	134.393	11.593	**	**	**	**
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	12##	0.025	0.035	0.08	0.01	0.	0.019	0.013	0.025	0.05	0.071
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	7##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	11##	0.005	0.015	0.04	0.005	0.	0.016	0.005	0.005	0.04	0.04
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	7##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	8	0.305	0.258	0.35	0.025	0.012	0.11	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	7	0.29	0.258	0.44	0.025	0.023	0.152	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	19	0.3	0.315	0.59	0.2	0.01	0.099	0.2	0.25	0.4	0.4
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	19	0.13	0.156	0.4	0.02	0.009	0.097	0.05	0.09	0.2	0.3
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	13	0.09	0.117	0.27	0.02	0.005	0.069	0.032	0.075	0.17	0.242
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	20	0.105	0.123	0.34	0.005	0.009	0.093	0.012	0.06	0.185	0.294

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	11	15.	16.727	28.	3.	82.818	9.1	3.4	6.	26.	27.6
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/15/98	11	206.	209.727	314.	120.	3909.018	62.522	125.4	155.	263.	305.
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	11	8.5	9.164	13.	7.	3.409	1.846	7.12	7.9	9.7	12.8
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	11	1.	1.409	3.	0.5	0.541	0.735	0.6	1.	2.	2.8
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/15/98	11	14.	14.091	21.	6.	27.691	5.262	6.2	10.	20.	20.8
00400p PH (STANDARD UNITS)		02/18/68-12/15/98	11	8.5	8.318	8.9	7.5	0.216	0.464	7.5	8.	8.6	8.86
00400p CONVERTED PH (STANDARD UNITS)		02/18/68-12/15/98	11	8.5	8.055	8.9	7.5	0.292	0.54	7.5	8.	8.6	8.86
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	11	0.003	0.009	0.032	0.001	0.	0.012	0.001	0.003	0.01	0.032
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		02/18/68-12/15/98	11	7.	16.818	58.	2.5	313.514	17.706	2.5	5.	27.	53.4
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		02/18/68-12/15/98	11	4.	4.818	12.	0.	10.914	3.304	0.5	2.5	6.	11.4
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		02/18/68-12/15/98	11	4.	12.455	49.	2.	228.423	15.114	2.1	2.5	21.	45.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/01/95	11##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	11##	0.005	0.007	0.01	0.005	0.	0.003	0.005	0.005	0.01	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	11	0.3	0.298	0.49	0.06	0.015	0.121	0.086	0.22	0.39	0.48
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/01/95	11	0.3	0.236	0.3	0.1	0.007	0.081	0.1	0.2	0.3	0.3
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/14/95	11	0.1	0.095	0.2	0.05	0.002	0.042	0.05	0.05	0.1	0.18
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-12/15/98	11	0.05	0.068	0.17	0.04	0.001	0.038	0.04	0.04	0.08	0.154
00680p CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-08/20/96	11	8.	9.364	29.	1.	52.655	7.256	1.6	5.	10.	25.8
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	9	100.	88.889	200.	50.	2361.111	48.591	50.	50.	100.	200.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	9	2.	1.9	2.301	1.699	0.045	0.213	1.699	1.699	2.	2.301
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		79.37									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	12	15.75	17.083	31.	0.5	77.402	8.798	2.75	12.	25.5	29.5
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/15/98	11	148.	179.182	522.	109.	13901.764	117.906	109.4	114.	193.	457.4
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	12	9.25	9.017	12.2	6.5	4.038	2.009	6.62	6.925	10.7	12.05
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	11	2.	1.727	3.	1.	0.418	0.647	1.	1.	2.	2.8
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/15/98	11	10.	12.364	24.	5.	36.855	6.071	5.2	8.	19.	23.
00400p PH (STANDARD UNITS)		02/18/68-12/15/98	12	7.65	7.683	8.9	6.8	0.447	0.669	6.86	7.05	7.975	8.87
00400p CONVERTED PH (STANDARD UNITS)		02/18/68-12/15/98	12	7.625	7.345	8.9	6.8	0.572	0.756	6.86	7.05	7.975	8.87
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	12	0.024	0.045	0.158	0.001	0.002	0.05	0.001	0.011	0.091	0.141
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		02/18/68-12/15/98	11	8.	17.955	99.	2.5	762.523	27.614	3.	6.	17.	84.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		02/18/68-12/15/98	11	5.	6.227	19.	2.	21.368	4.623	2.1	4.	7.	16.8
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		02/18/68-12/15/98	11	3.	11.955	80.	0.	539.723	23.232	0.2	1.	13.	67.4
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/01/95	11##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	11##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	11	0.17	0.208	0.52	0.025	0.036	0.19	0.025	0.025	0.35	0.506
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/01/95	11	0.3	0.259	0.5	0.1	0.012	0.111	0.1	0.2	0.3	0.46
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/14/95	11##	0.05	0.077	0.3	0.05	0.006	0.075	0.05	0.05	0.05	0.26
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-12/15/98	11	0.03	0.039	0.1	0.02	0.001	0.024	0.02	0.02	0.05	0.092
00680p CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-08/20/96	11	5.	6.273	27.	1.	49.818	7.058	1.2	4.	5.	23.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	10	150.	360.	2200.	50.	437111.111	661.144	50.	50.	275.	2030.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	10	2.151	2.174	3.342	1.699	0.291	0.54	1.699	1.699	2.401	3.278
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		149.292									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	6	1.	1.	1.	1.	0.	0.	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/15/98	5	10.	11.6	20.	8.	22.8	4.775	**	**	**	**
00400p PH (STANDARD UNITS)		02/18/68-12/15/98	9	8.	8.011	8.8	7.1	0.284	0.533	7.1	7.65	8.5	8.8
00400p CONVERTED PH (STANDARD UNITS)		02/18/68-12/15/98	9	8.	7.73	8.8	7.1	0.372	0.61	7.1	7.65	8.5	8.8
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	9	0.01	0.019	0.079	0.002	0.001	0.025	0.002	0.003	0.024	0.079
00500 RESIDUE, TOTAL (MG/L)		02/18/68-06/01/95	3	100.	96.333	102.	87.	66.333	8.145	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/18/68-06/01/95	3	21.	21.333	22.	21.	0.333	0.577	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		02/18/68-06/01/95	3	78.	75.	81.	66.	63.	7.937	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		02/18/68-12/15/98	9	6.	21.833	122.	0.5	1486.5	38.555	0.5	4.	24.	122.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		02/18/68-12/15/98	9	1.	2.944	14.	0.	18.778	4.333	0.	0.75	3.5	14.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		02/18/68-12/15/98	9	4.	18.944	108.	0.5	1181.028	34.366	0.5	3.	21.5	108.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/01/95	9##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	9##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.008	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	5	0.22	0.234	0.31	0.16	0.005	0.073	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/01/95	9	0.2	0.189	0.3	0.1	0.004	0.06	0.1	0.15	0.2	0.3
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/14/95	5##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-12/15/98	5	0.03	0.034	0.05	0.02	0.	0.011	**	**	**	**
00680p CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-08/20/96	9	6.	6.667	11.	3.	7.5	2.739	3.	4.5	9.5	11.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	8	100.	306.25	1100.	50.	166741.071	408.339	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	8	2.	2.168	3.041	1.699	0.291	0.539	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		147.164									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-09/11/80	4##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-06/01/95	4	0.02	0.024	0.05	0.005	0.	0.019	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	11	17.5	16.409	32.5	2.5	85.291	9.235	3.2	7.5	24.	30.8
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/15/98	8	148.	175.	318.	99.	5640.	75.1	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		04/23/68-12/15/98	3	234.	225.	330.	111.	12051.	109.777	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	11	10.3	10.	13.	7.	3.816	1.953	7.04	8.1	11.2	12.88
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	11	2.	1.5	2.	0.5	0.35	0.592	0.6	1.	2.	2.
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/15/98	11	9.	8.955	18.	0.5	19.423	4.407	1.6	6.	11.	16.8
00400p PH (STANDARD UNITS)		02/18/68-12/15/98	11	8.2	8.209	9.	6.5	0.699	0.836	6.7	7.5	9.	9.
00400p CONVERTED PH (STANDARD UNITS)		02/18/68-12/15/98	11	8.2	7.421	9.	6.5	1.382	1.176	6.7	7.5	9.	9.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	11	0.006	0.038	0.316	0.001	0.009	0.093	0.001	0.001	0.032	0.259
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		02/18/68-12/15/98	11	7.	10.864	38.	2.5	132.855	11.526	2.5	2.5	12.	36.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		02/18/68-12/15/98	11	2.5	3.773	13.	1.	13.618	3.69	1.	1.	5.	12.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		02/18/68-12/15/98	11	2.5	7.773	27.	0.	89.818	9.477	0.4	2.	11.	26.6
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/01/95	11##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.09
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	11##	0.005	0.011	0.06	0.005	0.	0.016	0.005	0.005	0.01	0.05
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	9	0.15	0.173	0.47	0.005	0.024	0.155	0.005	0.038	0.3	0.47
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/01/95	11	0.2	0.359	2.	0.05	0.317	0.563	0.06	0.1	0.2	1.72
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/15/79-12/14/95	8	0.1	0.119	0.3	0.05	0.008	0.088	**	**	**	**
00671p PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/15/79-12/15/98	8	0.025	0.039	0.1	0.01	0.001	0.034	**	**	**	**
00680p CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-08/20/96	11	8.	7.909	10.	6.	1.291	1.136	6.2	7.	9.	9.8
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	11##	50.	136.364	400.	50.	17045.455	130.558	50.	50.	300.	380.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	11##	1.699	1.977	2.602	1.699	0.136	0.368	1.699	1.699	2.477	2.577
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		94.904									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-09/11/80	3##	0.05	0.067	0.1	0.05	0.001	0.029	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-06/01/95	3	0.05	0.04	0.05	0.02	0.	0.017	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	7	3.	4.986	13.	0.	24.425	4.942	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	7	9.	9.729	13.	7.6	3.322	1.823	**	**	**	**
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	4	2.5	3.013	7.	0.05	8.567	2.927	**	**	**	**
00400p PH (STANDARD UNITS)		02/18/68-12/15/98	7	8.7	8.443	9.	7.5	0.363	0.602	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		02/18/68-12/15/98	7	8.7	8.09	9.	7.5	0.508	0.713	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	7	0.002	0.008	0.032	0.001	0.	0.011	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		02/18/68-12/15/98	8	7.	7.438	14.	0.5	24.388	4.938	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		02/18/68-12/15/98	8	2.5	2.563	6.	0.	4.531	2.129	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		02/18/68-12/15/98	8	5.5	4.938	8.	0.	11.174	3.343	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/01/95	8##	0.05	0.131	0.3	0.05	0.014	0.116	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	8##	0.005	0.008	0.02	0.005	0.	0.005	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	4	0.28	0.249	0.41	0.025	0.028	0.166	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/01/95	8	0.35	0.438	1.	0.1	0.083	0.288	**	**	**	**
00680p CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-08/20/96	8	5.5	5.5	8.	3.	3.714	1.927	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	7##	50.	64.286	100.	50.	595.238	24.398	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	7##	1.699	1.785	2.	1.699	0.022	0.147	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		60.951									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-09/11/80	8##	0.05	0.087	0.3	0.05	0.008	0.088	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-06/01/95	8	0.025	0.023	0.04	0.005	0.	0.015	**	**	**	**

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Annual Analysis for 1978 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	8	16.5	14.438	29.	1.	78.103	8.838	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	9	8.8	8.733	11.6	7.	1.903	1.379	7.	7.55	9.35	11.6
00400p PH (STANDARD UNITS)		02/18/68-12/15/98	9	8.7	8.489	9.3	7.5	0.359	0.599	7.5	7.9	8.95	9.3
00400p CONVERTED PH (STANDARD UNITS)		02/18/68-12/15/98	9	8.7	8.126	9.3	7.5	0.507	0.712	7.5	7.9	8.95	9.3
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	9	0.002	0.007	0.032	0.001	0.	0.01	0.001	0.001	0.013	0.032
00403 PH, LAB, STANDARD UNITS	SU	02/18/68-12/15/98	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/18/68-12/15/98	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/18/68-12/15/98	1	57.	57.	57.	57.	0.	0.	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		02/18/68-12/15/98	8	6.	6.938	16.	0.5	29.746	5.454	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		02/18/68-12/15/98	8	2.	2.438	7.	0.	5.103	2.259	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		02/18/68-12/15/98	8	4.	4.563	12.	0.5	13.103	3.62	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/01/95	8##	0.05	0.075	0.2	0.05	0.003	0.053	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		02/09/70-06/01/95	8##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		02/09/70-06/01/95	8	0.25	0.313	0.6	0.1	0.03	0.173	**	**	**	**
00680p CARBON, TOTAL ORGANIC (MG/L AS C)		03/24/75-08/20/96	8	7.	6.375	11.	3.	8.268	2.875	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	8##	50.	275.	1800.	50.	380000.	616.441	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-02/17/94	8##	1.699	1.931	3.255	1.699	0.297	0.545	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		85.337									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-09/11/80	8##	0.05	0.081	0.2	0.05	0.003	0.053	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-06/01/95	8##	0.008	0.028	0.1	0.005	0.002	0.039	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	9	14.	14.444	26.	4.5	59.028	7.683	4.5	7.5	22.25	26.
00094p SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/15/98	5	127.	126.4	147.	100.	333.8	18.27	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	9	9.2	10.189	15.2	8.2	4.959	2.227	8.2	8.85	11.55	15.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	14##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	11	13.9	15.964	25.6	5.6	53.911	7.342	5.82	10.	24.4	25.6
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	12	9.45	9.842	14.2	7.2	5.079	2.254	7.38	8.	11.85	13.78
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	9	1.	1.389	2.	0.5	0.361	0.601	0.5	1.	2.	2.
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	11	7.8	7.918	9.	7.	0.356	0.596	7.1	7.5	8.5	8.94
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	11	7.8	7.627	9.	7.	0.449	0.67	7.1	7.5	8.5	8.94
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	11	0.016	0.024	0.1	0.001	0.001	0.028	0.001	0.003	0.032	0.086
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	9	14.	35.333	150.	0.	2285.	47.802	0.	6.	55.	150.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	9	8.	8.222	24.	0.	53.444	7.311	0.	3.	12.	24.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	9	4.	27.333	126.	0.	1701.	41.243	0.	3.	45.	126.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	11##	0.05	0.082	0.4	0.05	0.011	0.106	0.05	0.05	0.05	0.33
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	10##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	9	0.22	0.269	0.5	0.1	0.018	0.133	0.1	0.17	0.39	0.5
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	11	0.2	0.245	0.5	0.1	0.017	0.129	0.1	0.1	0.3	0.48
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	10	6.	6.	9.	3.	2.667	1.633	3.2	5.	6.5	8.9
00940 CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	1	15.	15.	15.	15.	0.	0.	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	11##	50.	54.545	100.	50.	227.273	15.076	50.	50.	50.	90.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	11##	1.699	1.726	2.	1.699	0.008	0.091	1.699	1.699	1.699	1.94
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	53.252										
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-09/11/80	11##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	10##	0.05	0.043	0.06	0.005	0.	0.017	0.007	0.035	0.05	0.059

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	11	14.4	15.7	28.9	4.4	77.22	8.787	4.74	6.7	25.	28.24
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	12	9.75	10.192	14.5	7.9	4.361	2.088	7.99	8.275	12.	13.99
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	7	2.	1.571	2.	1.	0.286	0.535	**	**	**	**
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	12	8.1	8.142	9.	7.	0.475	0.689	7.15	7.5	8.95	9.
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	12	8.089	7.714	9.	7.	0.675	0.822	7.15	7.5	8.95	9.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	12	0.008	0.019	0.1	0.001	0.001	0.028	0.001	0.001	0.032	0.079
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	11	8.	10.136	22.	0.5	72.255	8.5	0.5	0.5	20.	21.6
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	11	4.	2.864	6.	0.	5.055	2.248	0.1	0.5	4.	6.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	10	7.	8.1	20.	0.	52.489	7.245	0.05	0.5	14.5	19.6
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	12##	0.05	0.054	0.1	0.05	0.	0.014	0.05	0.05	0.05	0.085
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	12##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	12	0.27	0.243	0.42	0.025	0.024	0.156	0.033	0.095	0.41	0.417
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	12	0.3	0.292	0.6	0.05	0.029	0.172	0.05	0.125	0.4	0.57
00680p CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	12	5.	5.417	9.	3.	2.811	1.676	3.	5.	6.75	8.4
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	12##	50.	95.833	500.	50.	16571.97	128.732	50.	50.	87.5	380.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	12##	1.699	1.832	2.699	1.699	0.088	0.297	1.699	1.699	1.925	2.489
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	67.995										
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-09/11/80	12##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	12	0.025	0.026	0.07	0.005	0.	0.018	0.007	0.01	0.038	0.061

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	10##	1.699	2.099	3.114	1.699	0.337	0.58	1.699	1.699	2.496	3.11
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		125.574									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-09/11/80	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	10	0.03	0.026	0.04	0.005	0.	0.013	0.006	0.01	0.04	0.04

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Annual Analysis for 1973 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	10	13.85	14.88	28.9	3.3	56.653	7.527	3.64	10.	20.55	28.23
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	10	10.1	10.42	13.4	8.	2.493	1.579	8.08	9.55	11.35	13.3
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	10	7.5	7.76	8.6	7.1	0.343	0.585	7.11	7.275	8.5	8.59
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	10	7.5	7.502	8.6	7.1	0.416	0.645	7.11	7.275	8.5	8.59
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	10	0.032	0.031	0.079	0.003	0.001	0.027	0.003	0.003	0.053	0.078
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	9##	0.05	0.047	0.05	0.02	0.	0.01	0.02	0.05	0.05	0.05
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	9##	0.005	0.007	0.01	0.005	0.	0.003	0.005	0.005	0.01	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	9	0.35	0.303	0.43	0.14	0.009	0.094	0.14	0.215	0.365	0.43
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	9	0.3	0.322	0.6	0.1	0.022	0.148	0.1	0.2	0.4	0.6
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	9##	50.	177.778	1000.	50.	97569.444	312.361	50.	50.	150.	1000.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	9##	1.699	1.944	3.	1.699	0.201	0.448	1.699	1.699	2.151	3.
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		87.876									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-09/11/80	9##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	9##	0.05	0.049	0.1	0.01	0.001	0.024	0.01	0.04	0.05	0.1

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Annual Analysis for 1974 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	13	18.9	17.4	27.8	6.7	49.643	7.046	6.9	10.55	22.8	27.36
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	14	10.	10.093	15.	7.4	3.847	1.961	7.7	8.525	11.25	13.3
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	14	7.5	7.664	8.5	7.	0.209	0.457	7.	7.475	8.	8.5
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	14	7.5	7.479	8.5	7.	0.245	0.495	7.	7.475	8.	8.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	14	0.032	0.033	0.1	0.003	0.001	0.031	0.003	0.01	0.034	0.1
00403 PH, LAB, STANDARD UNITS SU	02/18/68-12/15/98	2	7.4	7.4	7.5	7.3	0.02	0.141	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/18/68-12/15/98	2	7.389	7.389	7.5	7.3	0.02	0.142	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	2	0.041	0.041	0.05	0.032	0.	0.013	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	2	40.	40.	40.	40.	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	02/18/68-06/01/95	4	108.	112.5	140.	94.	379.667	19.485	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/18/68-06/01/95	4	47.	49.25	76.	27.	577.583	24.033	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	02/18/68-06/01/95	4	77.	63.25	81.	18.	913.583	30.226	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	5	31.	29.2	72.	1.	789.2	28.093	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	5	8.	6.4	11.	1.	15.3	3.912	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	5	23.	22.8	64.	0.	652.7	25.548	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	14##	0.05	0.054	0.1	0.05	0.	0.013	0.05	0.05	0.05	0.075
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	14##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	14	0.15	0.17	0.46	0.005	0.021	0.144	0.008	0.04	0.28	0.4
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	14	0.2	0.186	0.3	0.05	0.01	0.101	0.05	0.1	0.3	0.3
00940 CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	2	4.5	4.5	5.	4.	0.5	0.707	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	14	150.	1178.571	6000.	50.	4370274.725	2090.52	50.	50.	1400.	5400.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	14	2.151	2.391	3.778	1.699	0.583	0.763	1.699	1.699	2.927	3.73
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		245.88									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-09/11/80	14##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	5	0.063	0.069	0.126	0.025	0.002	0.043	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/18/68-12/15/98	5	33.	37.4	53.	30.	84.3	9.182	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	02/18/68-06/01/95	5	159.	337.4	1078.	118.	172601.8	415.454	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	02/18/68-06/01/95	5	62.	223.4	921.	11.	152586.3	390.623	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	02/18/68-06/01/95	5	107.	114.	157.	72.	1284.5	35.84	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/18/68-12/15/98	5	26.	26.2	39.	14.	138.7	11.777	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/18/68-12/15/98	5	9.	11.4	21.	6.	33.3	5.771	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	02/18/68-12/15/98	5	17.	14.8	25.	5.	62.2	7.887	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	9	0.08	0.129	0.37	0.03	0.017	0.129	0.03	0.035	0.22	0.37
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	9	0.02	0.021	0.07	0.005	0.	0.02	0.005	0.008	0.025	0.07
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	9	0.45	0.705	2.179	0.13	0.403	0.635	0.13	0.315	0.98	2.179
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	9	0.5	0.517	1.099	0.2	0.069	0.262	0.2	0.3	0.6	1.099
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	2	1700.	1700.	3200.	200.	4500000.	2121.32	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	2	2.903	2.903	3.505	2.301	0.725	0.851	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		800.									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-09/11/80	9##	0.05	0.05	0.1	0.025	0.	0.022	0.025	0.038	0.05	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	9	0.02	0.019	0.03	0.01	0.	0.009	0.01	0.01	0.03	0.03

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	11	20.	17.218	28.9	4.4	89.91	9.482	4.4	5.6	27.8	28.68
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	11	8.4	9.582	13.2	7.6	3.524	1.877	7.64	8.2	11.	12.96
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	11	8.	7.818	8.7	7.	0.382	0.618	7.	7.3	8.2	8.7
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	11	8.	7.483	8.7	7.	0.505	0.711	7.	7.3	8.2	8.7
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	11	0.01	0.033	0.1	0.002	0.001	0.037	0.002	0.006	0.05	0.1
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	11	0.1	0.156	0.45	0.01	0.021	0.144	0.012	0.02	0.2	0.434
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	11	0.02	0.019	0.03	0.01	0.	0.007	0.01	0.01	0.02	0.03
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	11	0.49	0.545	0.83	0.27	0.028	0.167	0.294	0.43	0.67	0.82
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	11	0.4	0.491	1.099	0.3	0.059	0.242	0.3	0.3	0.6	1.019
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	12	250.	11479.167	80000.	50.	621840662.879	24936.733	50.	50.	7150.	69200.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	12	2.301	2.734	4.903	1.699	1.501	1.225	1.699	1.699	3.843	4.825
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		542.35									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-09/11/80	11##	0.05	0.064	0.1	0.05	0.001	0.023	0.05	0.05	0.1	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	11	0.03	0.029	0.06	0.01	0.	0.016	0.01	0.01	0.04	0.058

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/18/68-12/15/98	11	12.2	13.527	27.2	1.1	75.984	8.717	1.88	6.1	24.4	26.88
00300p OXYGEN, DISSOLVED MG/L	02/18/68-02/01/94	9	10.	9.567	11.4	7.8	1.62	1.273	7.8	8.25	10.5	11.4
00310p BOD, 5 DAY, 20 DEG C MG/L	02/18/68-12/15/98	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)	02/18/68-12/15/98	10	7.4	7.52	8.8	6.7	0.397	0.63	6.73	7.	7.9	8.74
00400p CONVERTED PH (STANDARD UNITS)	02/18/68-12/15/98	10	7.389	7.231	8.8	6.7	0.49	0.7	6.73	7.	7.9	8.74
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/18/68-12/15/98	10	0.041	0.059	0.2	0.002	0.004	0.061	0.002	0.013	0.1	0.19
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/09/70-06/01/95	10	0.075	0.074	0.15	0.005	0.003	0.052	0.006	0.018	0.123	0.148
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	10	0.015	0.017	0.03	0.005	0.	0.009	0.006	0.01	0.023	0.03
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	10	0.31	0.405	0.79	0.19	0.044	0.209	0.195	0.248	0.548	0.783
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	10	0.4	0.4	0.5	0.2	0.013	0.115	0.2	0.35	0.5	0.5
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	10##	50.	320.	1300.	50.	244555.556	494.526	50.	50.	450.	1290.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1968 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	7	25.6	21.686	30.	2.8	88.705	9.418	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		04/23/68-12/15/98	1	164.	164.	164.	164.	0.	0.	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	7	7.5	8.829	15.	5.5	9.589	3.097	**	**	**	**
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	3	3.4	3.433	4.8	2.1	1.823	1.35	**	**	**	**
00400p PH (STANDARD UNITS)		02/18/68-12/15/98	7	8.4	8.271	8.5	8.	0.066	0.256	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		02/18/68-12/15/98	7	8.4	8.207	8.5	8.	0.071	0.266	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	7	0.004	0.006	0.01	0.003	0.	0.004	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	02/18/68-12/15/98	3	7.8	7.667	7.8	7.4	0.053	0.231	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/18/68-12/15/98	3	7.8	7.623	7.8	7.4	0.056	0.237	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	3	0.016	0.024	0.04	0.016	0.	0.014	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/18/68-12/15/98	3	43.	46.667	54.	43.	40.333	6.351	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		02/18/68-06/01/95	3	128.	159.	229.	120.	3691.	60.754	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/18/68-06/01/95	3	44.	46.333	56.	39.	76.333	8.737	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		02/18/68-06/01/95	2	82.5	82.5	84.	81.	4.5	2.121	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		02/18/68-12/15/98	2	11.	11.	11.	11.	0.	0.	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		02/18/68-12/15/98	3	4.	5.333	9.	3.	10.333	3.215	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		02/18/68-12/15/98	2	5.	5.	8.	2.	18.	4.243	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	02/18/68-12/15/98	2	9.	9.	11.	7.	8.	2.828	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)		02/18/68-12/15/98	2	18.	18.	18.	18.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	3	20.	16.667	27.8	2.2	172.173	13.121	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	3	8.2	9.867	14.	7.4	12.973	3.602	**	**	**	**
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	3	1.6	2.167	3.4	1.5	1.143	1.069	**	**	**	**
00400p PH (STANDARD UNITS)		02/18/68-12/15/98	3	7.5	7.5	7.7	7.3	0.04	0.2	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		02/18/68-12/15/98	3	7.5	7.47	7.7	7.3	0.041	0.203	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	3	0.032	0.034	0.05	0.02	0.	0.015	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	02/18/68-12/15/98	3	6.7	6.867	7.3	6.6	0.143	0.379	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/18/68-12/15/98	3	6.7	6.777	7.3	6.6	0.155	0.394	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	3	0.2	0.167	0.251	0.05	0.011	0.104	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/18/68-12/15/98	3	29.	27.667	34.	20.	50.333	7.095	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		02/18/68-06/01/95	3	146.	139.	155.	116.	417.	20.421	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/18/68-06/01/95	3	43.	49.	63.	41.	148.	12.166	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		02/18/68-06/01/95	2	82.5	82.5	92.	73.	180.5	13.435	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		02/18/68-12/15/98	2	14.	14.	23.	5.	162.	12.728	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		02/18/68-12/15/98	3	4.	4.	5.	3.	1.	1.	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		02/18/68-12/15/98	2	10.5	10.5	20.	1.	180.5	13.435	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

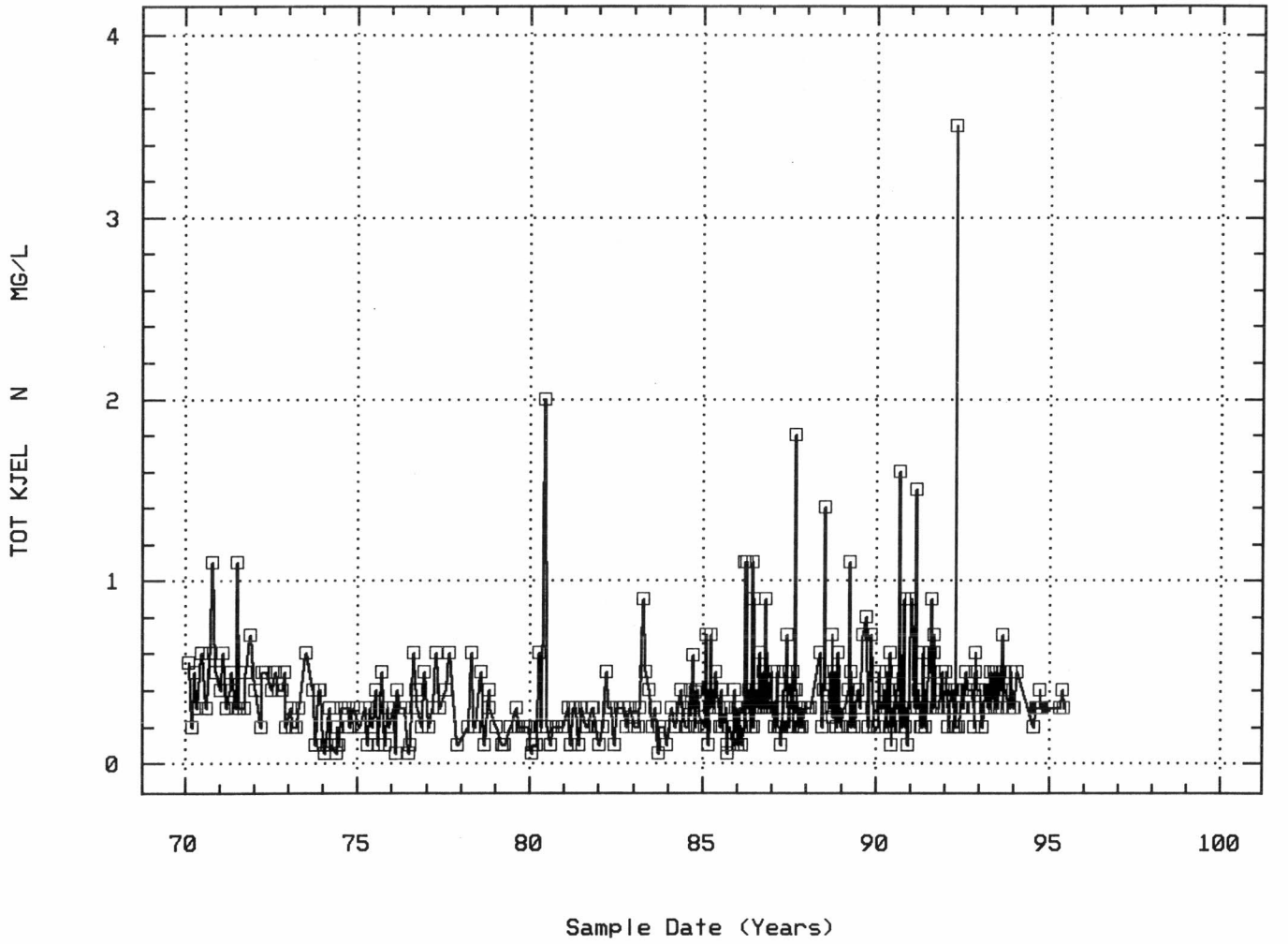
Annual Analysis for 1970 - Station RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	11	14.4	15.4	26.7	3.3	81.428	9.024	3.52	5.6	25.	26.48
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	11	9.	9.664	12.4	7.6	3.065	1.751	7.64	8.2	11.2	12.4
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	5	2.	2.12	2.6	1.6	0.177	0.421	**	**	**	**
00400p PH (STANDARD UNITS)		02/18/68-12/15/98	11	7.3	7.136	8.5	5.5	0.667	0.816	5.64	6.7	7.5	8.38
00400p CONVERTED PH (STANDARD UNITS)		02/18/68-12/15/98	11	7.3	6.4	8.5	5.5	1.264	1.124	5.64	6.7	7.5	8.38
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	11	0.05	0.398	3.162	0.003	0.873	0.934	0.005	0.032	0.2	2.656
00403 PH, LAB, STANDARD UNITS	SU	02/18/68-12/15/98	5	7.2	7.24	7.6	6.9	0.093	0.305	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/18/68-12/15/98	5	7.2	7.16	7.6	6.9	0.101	0.318	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: RICH0116 Parameter Code: 00625

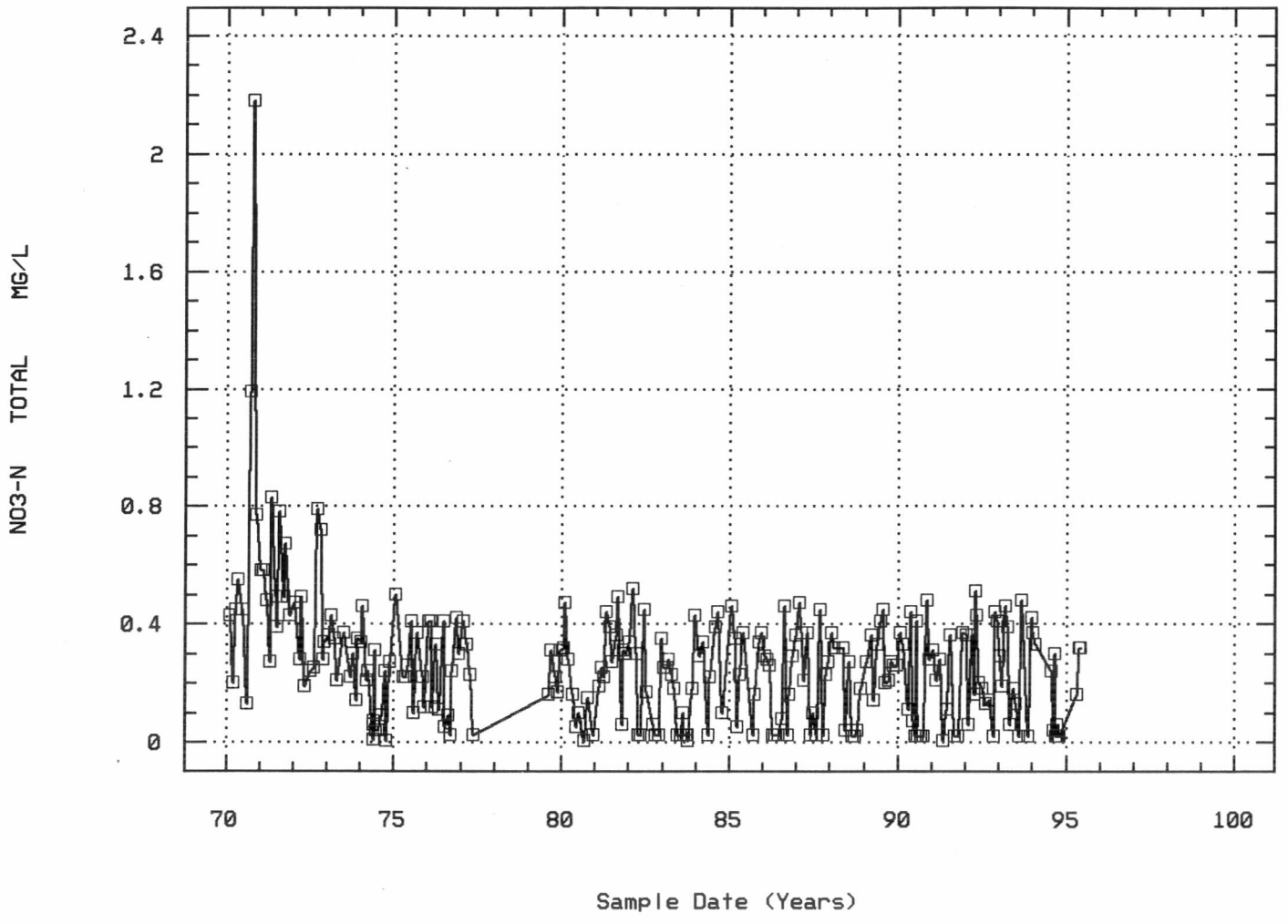
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00620

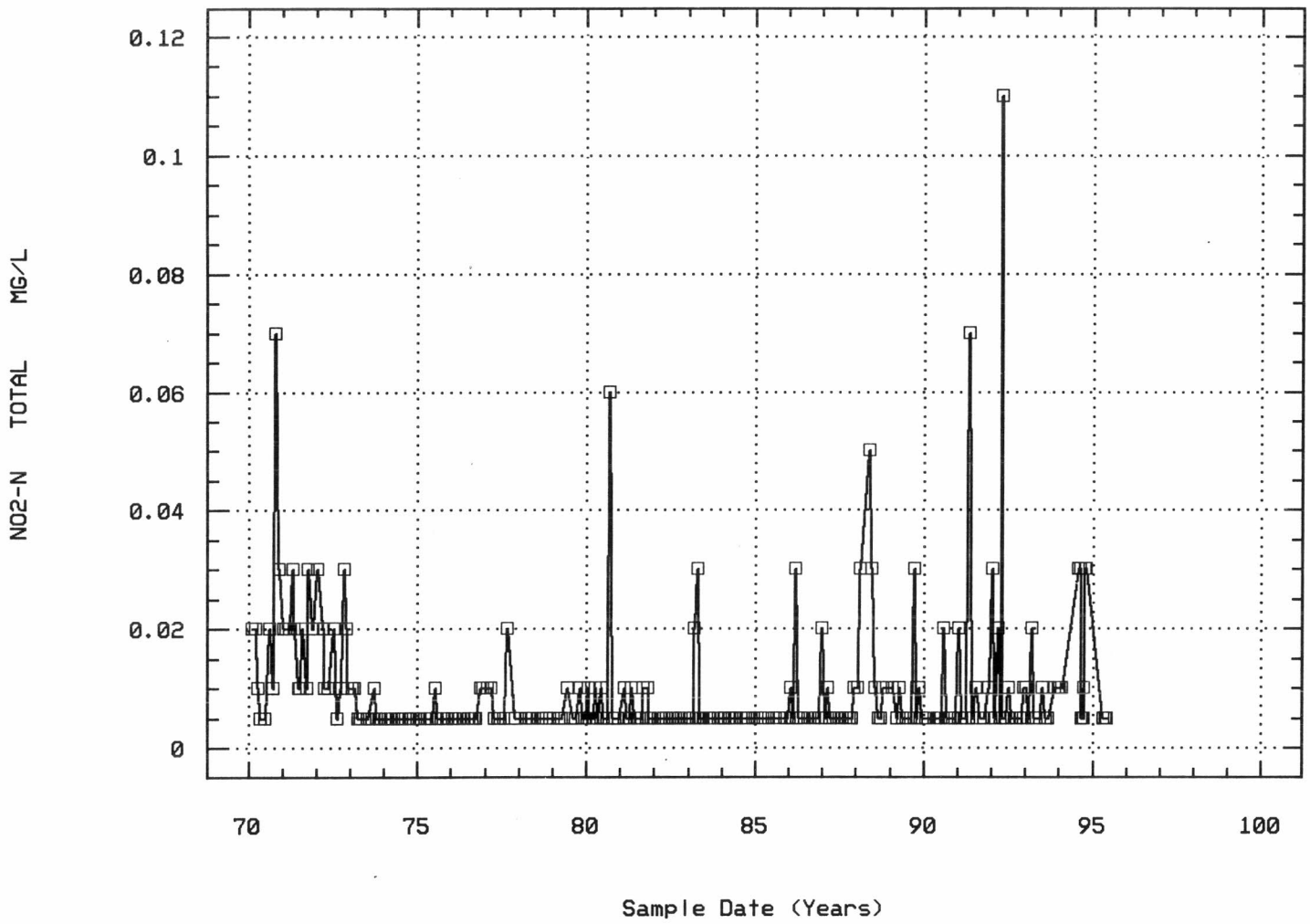
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00615

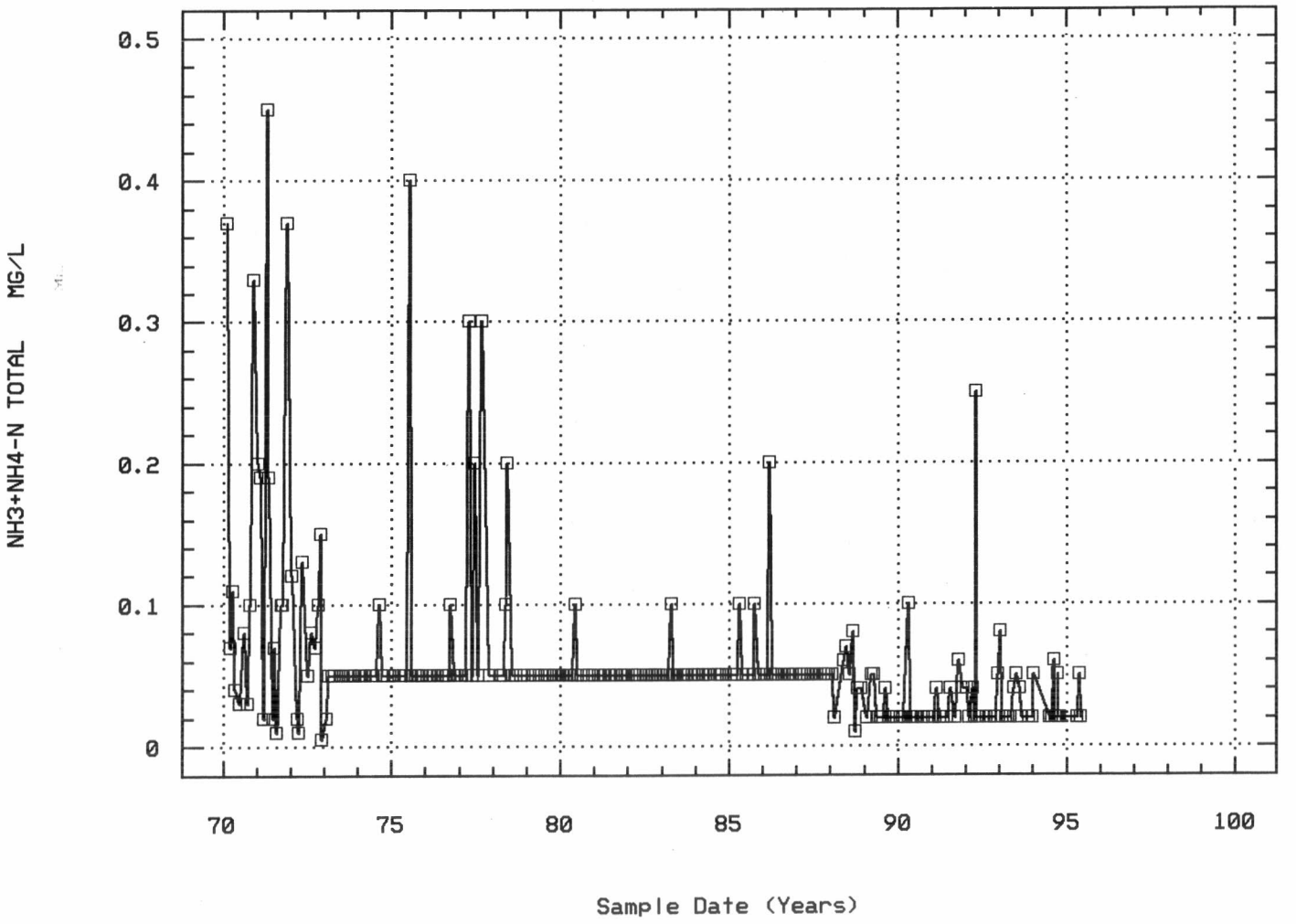
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00610

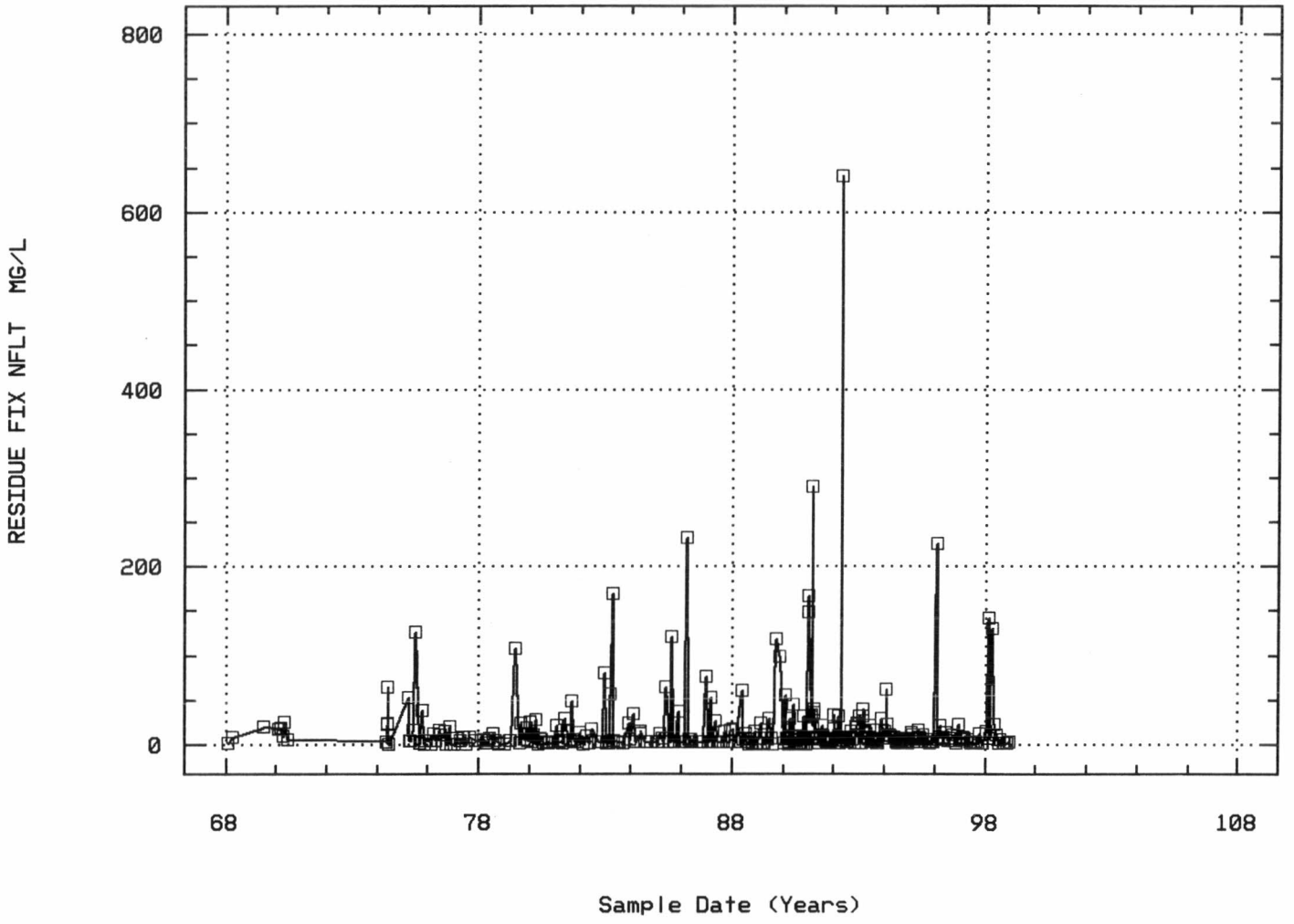
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00540

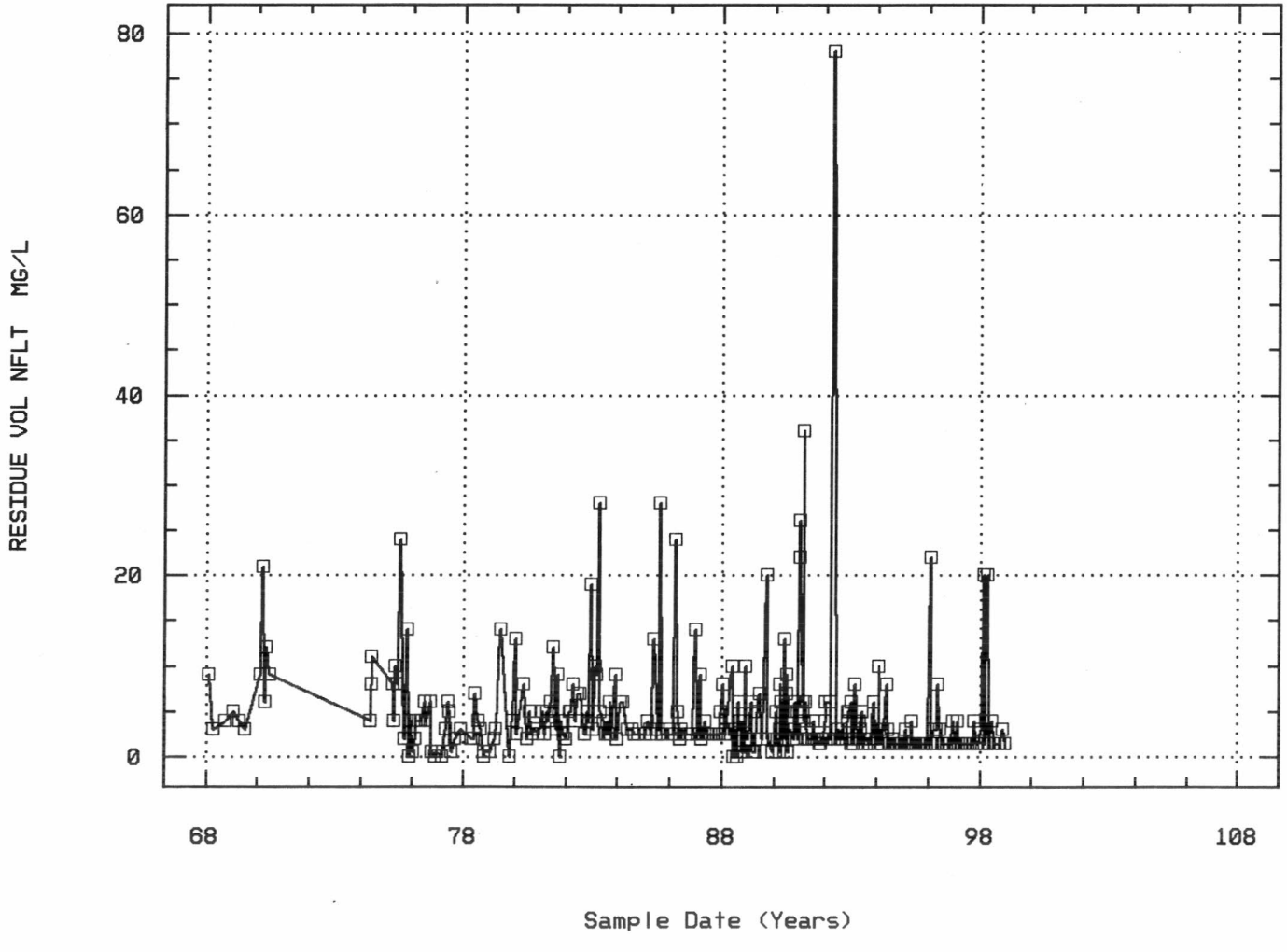
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00535

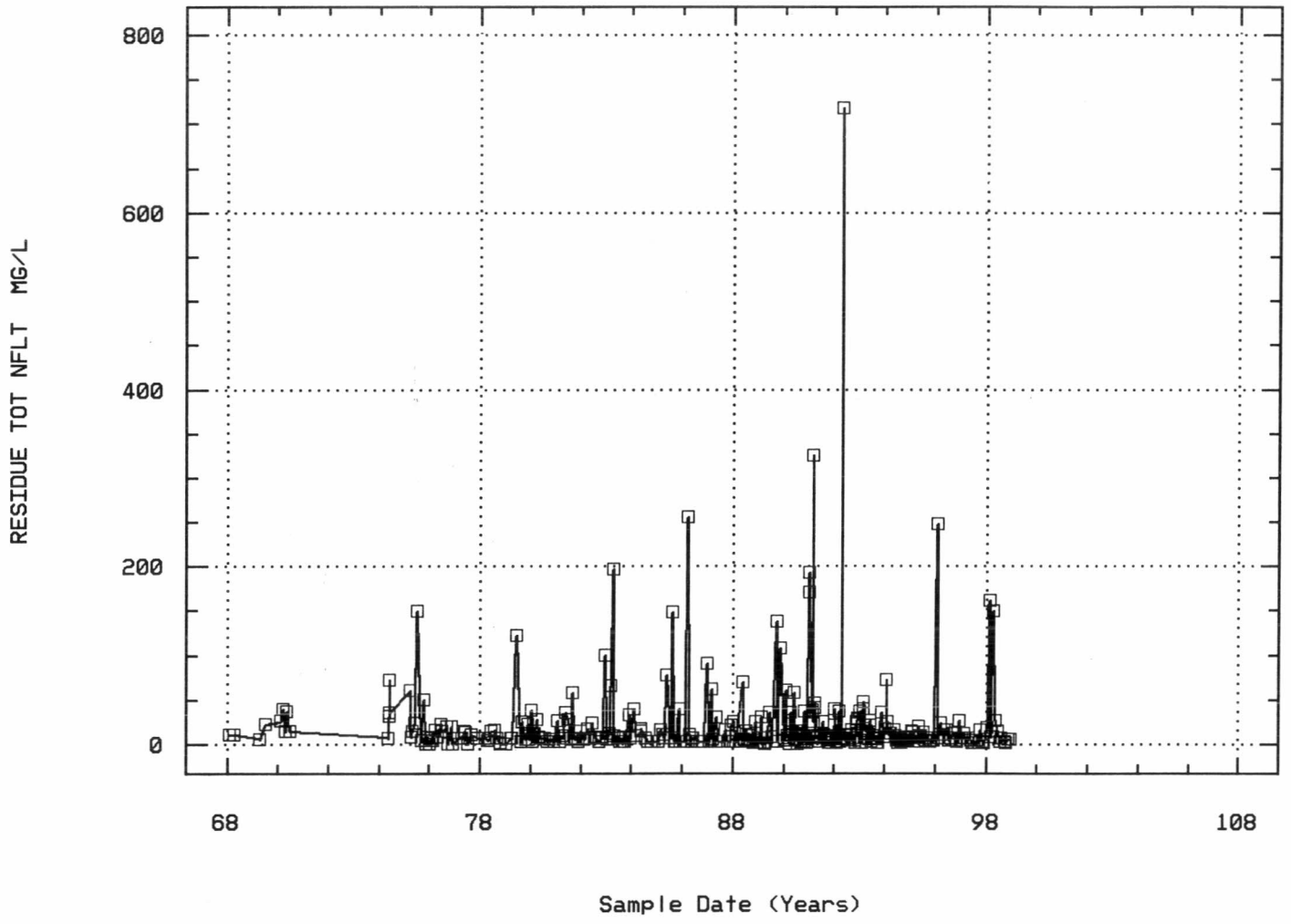
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00530

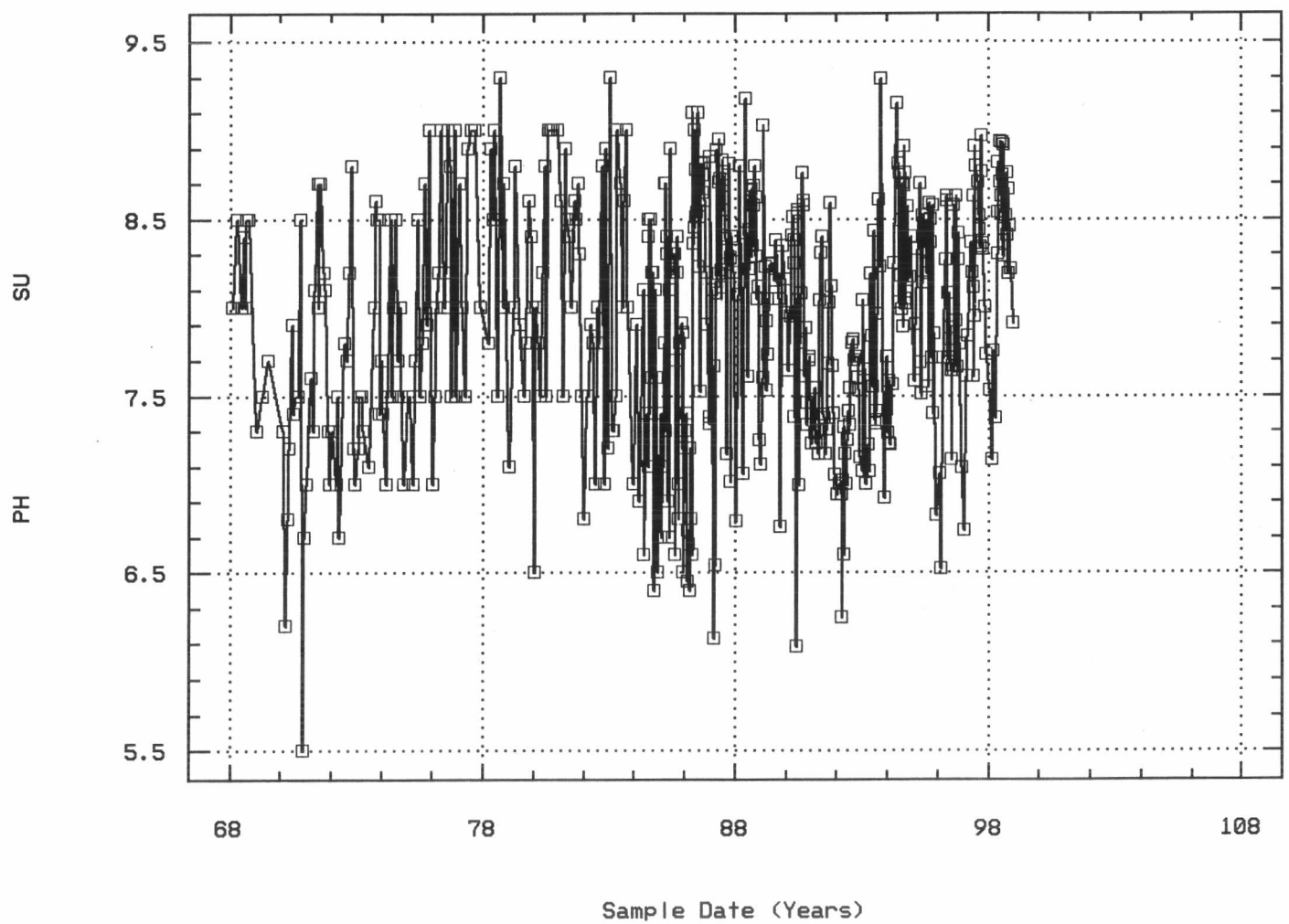
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00400

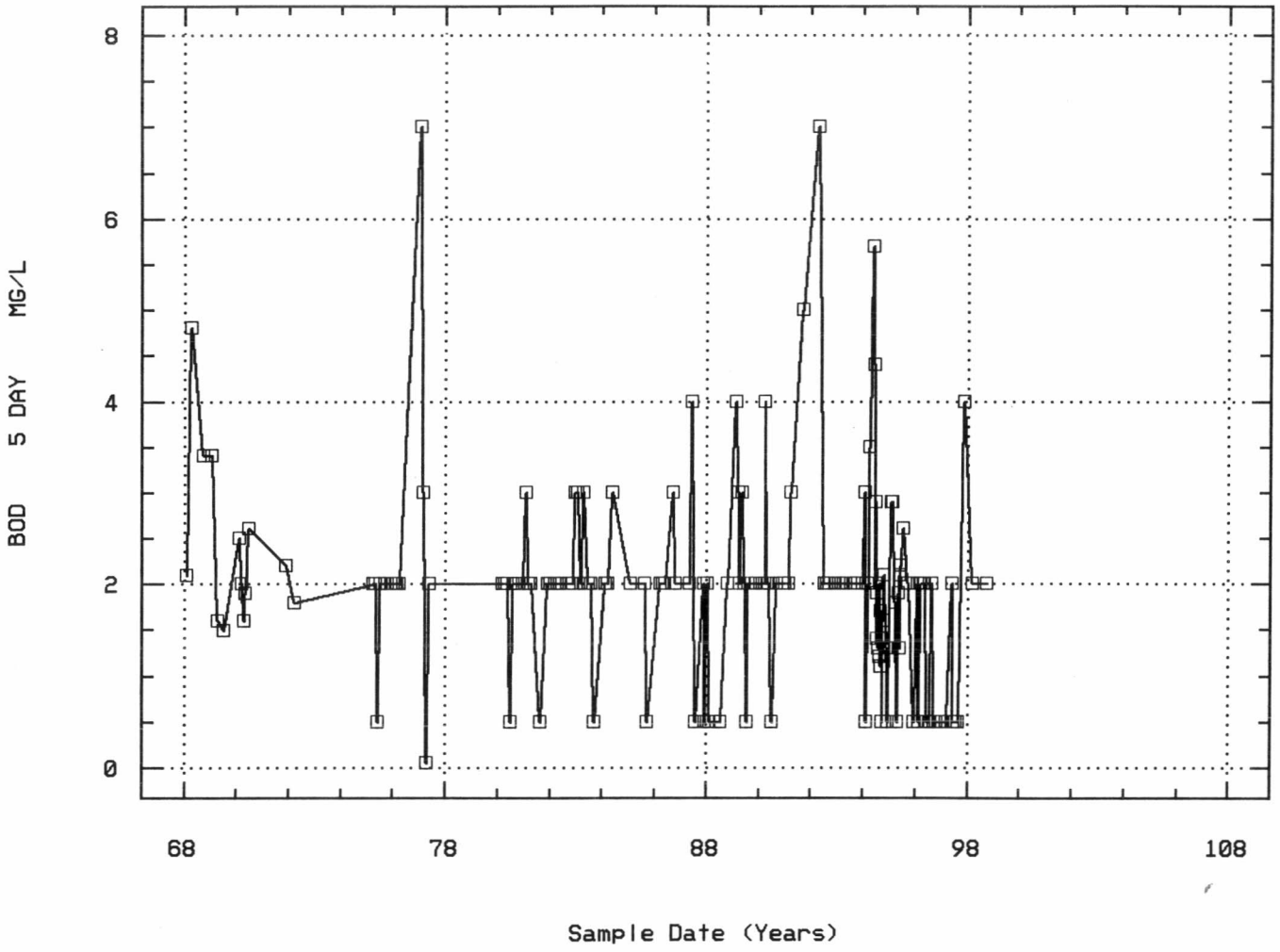
PH (STANDARD UNITS)



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00310

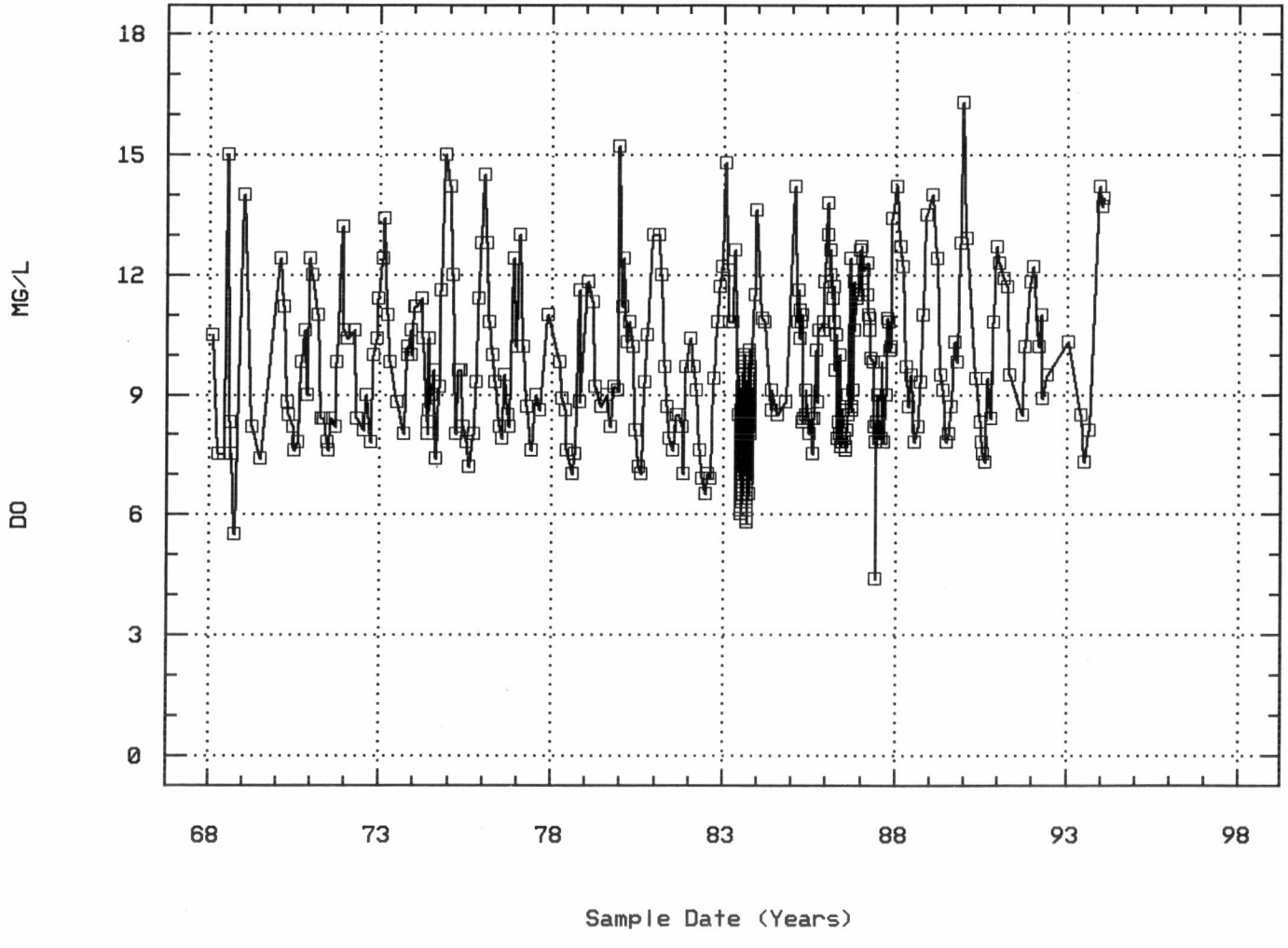
BOD, 5 DAY, 20 DEG C



RT. 360 BRIDGE

Station: RICH0116 Parameter Code: 00300

OXYGEN, DISSOLVED



RT. 360 BRIDGE

EPA Water Quality Criteria Analysis for Station: RICH0116

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	2	0	0.00	1	0	0.00	1	0	0.00						
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	1	0	0.00	1	0	0.00									
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	1.	2	0	0.00	1	0	0.00	1	0	0.00						
39730	2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0.00							1	0	0.00			
39760	SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0.00							1	0	0.00			
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	3	0	0.00	3	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	27&	1	0.04	5	1	0.20	11	0	0.00	11	0	0.00			
		Drinking Water	2.	27&	1	0.04	5	1	0.20	11	0	0.00	11	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: RICH0116

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	64	5	0.08	19	1	0.05	25	3	0.12	20	1	0.05			
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	84	4	0.05	27	0	0.00	30	3	0.10	27	1	0.04			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	274	0	0.00	109	0	0.00	80	0	0.00	85	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2293	0	0.00	1998	0	0.00	195	0	0.00	100	0	0.00			
00400	PH	Fresh Chronic	9.	526	23	0.04	182	10	0.05	178	5	0.03	166	8	0.05			
		Other-Lo Lim.	6.5	526	11	0.02	182	0	0.00	178	7	0.04	166	4	0.02			
00403	PH, LAB	Fresh Chronic	9.	144	0	0.00	39	0	0.00	54	0	0.00	51	0	0.00			
		Other-Lo Lim.	6.5	144	1	0.01	39	0	0.00	54	1	0.02	51	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	209	0	0.00	72	0	0.00	68	0	0.00	69	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	266	0	0.00	81	0	0.00	101	0	0.00	84	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	206	0	0.00	69	0	0.00	68	0	0.00	69	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	248	0	0.00	77	0	0.00	97	0	0.00	74	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	18	0	0.00	5	0	0.00	4	0	0.00	9	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	37	0	0.00	11	0	0.00	14	0	0.00	12	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	126	0	0.00	34	0	0.00	52	0	0.00	40	0	0.00			
		Drinking Water	250.	126	0	0.00	34	0	0.00	52	0	0.00	40	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	122	0	0.00	33	0	0.00	51	0	0.00	38	0	0.00			
00951	FLUORIDE, TOTAL AS F	Drinking Water	4.	48	0	0.00	13	0	0.00	20	0	0.00	15	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	19	0	0.00	3	0	0.00	6	0	0.00	10	0	0.00			
		Drinking Water	50.	19	0	0.00	3	0	0.00	6	0	0.00	10	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	2&	0	0.00							2	0	0.00			
		Drinking Water	5.	2&	0	0.00							2	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	32	0	0.00	4	0	0.00	12	0	0.00	16	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	31	2	0.06	4	0	0.00	12	1	0.08	15	1	0.07			
		Drinking Water	1300.	31	0	0.00	4	0	0.00	12	0	0.00	15	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	30	0	0.00	4	0	0.00	13	0	0.00	13	0	0.00			
		Drinking Water	15.	30	4	0.13	4	0	0.00	13	1	0.08	13	3	0.23			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	9	0	0.00				5	0	0.00	4	0	0.00			
		Drinking Water	100.	9	0	0.00				5	0	0.00	4	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	10	0	0.00	2	0	0.00	3	0	0.00	5	0	0.00			
		Drinking Water	100.	10	0	0.00	2	0	0.00	3	0	0.00	5	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	32	0	0.00	4	0	0.00	12	0	0.00	16	0	0.00			
		Drinking Water	5000.	32	0	0.00	4	0	0.00	12	0	0.00	16	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
		Drinking Water	50.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	18	13	0.72	8	8	1.00	3	1	0.33	7	4	0.57			
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	26	6	0.23	8	1	0.13	8	2	0.25	10	3	0.30			
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	4	1	0.25							4	1	0.25			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	111	51	0.46	50	28	0.56	29	8	0.28	32	15	0.47			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	278	77	0.28	79	26	0.33	110	33	0.30	89	18	0.20			
34356	ENDOSULFAN, BETA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
34361	ENDOSULFAN, ALPHA	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39300	P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39310	P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39320	P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
39340	GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	2.	2	0	0.00	1	0	0.00	1	0	0.00						
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39400	TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0.00							1	0	0.00			
		Drinking Water	3.	1	0	0.00							1	0	0.00			
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
		Drinking Water	0.4	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Parameter Inventory for Station: RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34671 PCB - 1016 TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
38442 DICAMBA (BANVEL) WATER,DISSUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38451 DICHLORPROP WATER,SUSPUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38745 2,4-DB WATER, TOTUG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39061 PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/27/92-08/27/92	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39062 CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39065 CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39068 CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39071 CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39300 P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39305 O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39310 P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39315 O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320 P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39327 ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39333 ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/06/81-08/27/92	2##	25.	25.	50.	0.	1250.	35.355	**	**	**	**
39337 ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39338 BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39340 GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39350 CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39351 CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/27/92-08/27/92	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39363 DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39368 DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39373 DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39380 DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39383 DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/27/92-08/27/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39390 ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/79-03/28/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39393 ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39400 TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39403 TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/27/92-08/27/92	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39410 HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39413 HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/27/92-08/27/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39488 PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39492 PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39496 PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39500 PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39508 PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39516 PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39526 PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	08/27/92-08/27/92	1##	250.	250.	250.	250.	0.	0.	**	**	**	**
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	08/15/82-08/15/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39631 ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/06/81-05/06/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/25/79-09/11/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39730 2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39740 2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39760 SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
49567 PHOSPHOROUS PARTICULATE, FIELD FILT.,SUSP,WTR MG/L	02/22/95-12/15/98	47	0.013	0.035	0.495	0.001	0.006	0.08	0.003	0.007	0.023	0.061
49569 CARBON PARICULATE, FIELD FILTERED, SUSP., WTR MG/L	02/22/95-12/15/98	45	0.479	0.813	5.794	0.072	1.173	1.083	0.24	0.348	0.765	1.579
49570 NITROGEN PARTICULATE, FIELD FILT., SUSP., WTR MG/L	02/22/95-12/15/98	45	0.052	0.091	0.469	0.018	0.01	0.1	0.031	0.042	0.095	0.201
49571 NITROGEN TOTAL, FIELD FILTERED, DISSOLVED,WTR MG/L	02/22/95-12/15/98	47	0.431	0.44	0.89	0.083	0.036	0.189	0.187	0.309	0.569	0.719
49572 PHOSPHOROUS TOTAL, FIELD FILTRED, DISSLVD,WTR MG/L	02/22/95-12/15/98	47	0.041	0.046	0.13	0.012	0.001	0.025	0.022	0.028	0.053	0.078
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	08/22/74-10/03/83	3	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-09/11/80	99##	0.05	0.058	0.3	0.025	0.001	0.032	0.05	0.05	0.05	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/01/95	109	0.04	0.036	0.1	0.005	0.	0.022	0.01	0.02	0.05	0.06
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-04/08/93	28##	0.25	0.404	2.5	0.15	0.364	0.603	0.15	0.15	0.25	0.88
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/25/79-08/27/92	4##	0.063	0.071	0.15	0.01	0.004	0.066	**	**	**	**
75045 HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	08/27/92-08/27/92	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
77825 ALACHLOR WHOLE WATER,UG/L	03/28/85-03/28/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
79799 DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	08/27/92-08/27/92	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
82032 CALCIUM - TOTAL UG/L (AS CA)	11/02/92-11/02/92	1	22400.	22400.	22400.	22400.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	266##	0.005	0.01	0.11	0.005	0.	0.011	0.005	0.005	0.01	0.02
00618 NITRATE NITROGEN, DISSOLVED (MG/L AS N)	07/11/84-12/15/98	206	0.17	0.178	0.6	0.002	0.022	0.15	0.02	0.025	0.31	0.393
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	02/09/70-06/01/95	248	0.255	0.26	2.179	0.003	0.049	0.221	0.025	0.09	0.37	0.461
00623 NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	08/16/83-10/03/83	2	0.35	0.35	0.5	0.2	0.045	0.212	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/09/70-06/01/95	410	0.3	0.371	3.5	0.05	0.083	0.288	0.2	0.2	0.4	0.6
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/15/77-08/07/80	18	0.255	0.237	0.6	0.025	0.04	0.2	0.025	0.025	0.38	0.6
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/16/83-12/15/98	37	0.1	0.158	0.5	0.	0.023	0.151	0.005	0.009	0.3	0.4
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/15/79-12/14/95	312	0.1	0.125	1.2	0.02	0.011	0.106	0.05	0.05	0.15	0.247
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	07/11/84-01/29/96	168	0.06	0.082	0.48	0.01	0.005	0.072	0.03	0.04	0.1	0.2
00667 PHOSPHORUS, SUSPENDED (MG/L AS P)	08/16/83-10/03/83	3	0.1	0.083	0.1	0.05	0.001	0.029	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/15/79-12/15/98	364	0.05	0.069	0.46	0.004	0.005	0.068	0.02	0.03	0.08	0.15
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-08/20/96	373	4.6	5.16	29.	1.	10.216	3.196	2.7	3.45	6.	8.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	10/20/86-12/15/98	117	59.	92.991	3600.	28.	107365.043	327.666	41.8	50.	72.	89.2
00927 MAGNESIUM, TOTAL (MG/L AS MG)	11/02/92-11/02/92	1	5000.	5000.	5000.	5000.	0.	0.	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	02/18/68-12/15/98	126	8.5	10.607	34.	2.	43.218	6.574	4.	6.	14.	21.
00945 SULFATE, TOTAL (MG/L AS SO4)	02/18/68-12/15/98	122	15.	18.484	65.	7.	106.5	10.32	10.	11.	23.	34.7
00951 FLUORIDE, TOTAL (MG/L AS F)	11/29/88-07/07/93	48##	0.05	0.091	0.25	0.025	0.004	0.062	0.05	0.05	0.12	0.196
00955 SILICA, DISSOLVED (MG/L AS SI02)	08/29/84-12/15/98	174	7.25	7.058	15.4	0.5	5.142	2.268	4.	5.75	8.5	9.55
01002 ARSENIC, TOTAL (UG/L AS AS)	04/28/71-04/08/93	19##	2.5	2.921	5.	0.5	3.618	1.902	1.	1.	5.	5.
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/25/79-08/27/92	4##	2.4	3.078	7.1	0.41	8.078	2.842	**	**	**	**
01013 BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	08/27/92-08/27/92	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	11/23/70-04/08/93	22##	5.	4.591	5.	0.5	1.753	1.324	1.85	5.	5.	5.
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-08/27/92	4##	0.07	0.673	2.5	0.05	1.484	1.218	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-08/27/92	4	17.85	18.65	25.	13.9	28.87	5.373	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-04/08/93	32##	5.	6.422	20.	0.5	21.147	4.599	5.	5.	5.	17.
01042 COPPER, TOTAL (UG/L AS CU)	03/24/70-04/08/93	31##	5.	7.226	20.	5.	17.914	4.232	5.	5.	10.	14.
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/25/79-08/27/92	4	4.085	6.39	14.	3.39	25.9	5.089	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	06/29/70-04/08/93	12	475.	888.333	3260.	160.	817851.515	904.351	187.	315.	1422.5	2792.
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-04/08/93	30##	5.	9.083	60.	1.	122.588	11.072	3.2	5.	9.	15.
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/25/79-08/27/92	4	8.84	10.12	21.2	1.6	77.748	8.817	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	03/24/70-04/08/93	12	35.	64.167	280.	10.	6281.061	79.253	10.	22.5	70.	244.
01065 NICKEL, DISSOLVED (UG/L AS NI)	01/29/73-11/01/78	9##	50.	40.	50.	5.	393.75	19.843	5.	27.5	50.	50.
01067 NICKEL, TOTAL (UG/L AS NI)	05/18/82-04/08/93	10##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/25/79-08/27/92	4	6.915	7.833	14.	3.5	23.386	4.836	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-04/08/93	32##	7.5	16.406	97.	5.	437.088	20.907	5.	5.	20.	30.
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/25/79-08/27/92	4	38.15	49.125	86.	34.2	618.209	24.864	**	**	**	**
01140 SILICON, DISSOLVED (UG/L AS SI)	07/31/84-04/13/89	78	7050.	6630.564	13000.	4.	5995298.067	2448.53	3490.	4575.	8500.	9610.
01147 SELENIUM, TOTAL (UG/L AS SE)	01/14/91-04/08/93	7##	5.	6.429	10.	5.	5.952	2.44	**	**	**	**
01148 SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	08/27/92-08/27/92	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/18/68-05/26/74	18	6050.	29803.889	230000.	430.	3354195872.222	57915.42	430.	930.	28000.	106700.
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	02/18/68-05/26/74	18	3.769	3.776	5.362	2.633	0.712	0.844	2.633	2.968	4.43	5.008
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	5977.14								
31506 COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	08/16/83-07/08/86	26	430.	1815.385	24000.	15.	22789951.846	4773.882	40.	150.	1072.5	3930.
31506 LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	08/16/83-07/08/86	26	2.633	2.626	4.38	1.176	0.525	0.724	1.602	2.176	3.02	3.529
31506 GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.			GEOMETRIC MEAN =	423.106								
31614 FECAL COLIFORM,MPN,TUBE CONFIGURATION	03/21/94-06/09/94	4	18.	145.75	540.	7.	69118.917	262.905	**	**	**	**
31614 LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	03/21/94-06/09/94	4	1.244	1.517	2.732	0.845	0.699	0.836	**	**	**	**
31614 GM FECAL COLIFORM,MPN,TUBE CONFIGURATION			GEOMETRIC MEAN =	32.848								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	01/26/94-12/15/98	111	170.	1591.018	16000.	9.	14312358.181	3783.168	20.	68.	790.	5400.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	01/26/94-12/15/98	111	2.23	2.383	4.204	0.954	0.691	0.831	1.301	1.833	2.898	3.732
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	241.643								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	278	50.	818.142	80000.	1.5	30659934.753	5537.141	50.	50.	200.	800.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-02/17/94	278	1.699	2.047	4.903	0.176	0.351	0.593	1.699	1.699	2.301	2.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	111.34								
32209 CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	08/16/83-10/03/83	4	1.25	1.375	2.	1.	0.229	0.479	**	**	**	**
32218 PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	08/16/83-10/03/83	4	1.25	1.275	1.6	1.	0.063	0.25	**	**	**	**
32240 TANNIN AND LIGNIN (MG/L)	01/12/94-01/12/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
34259 DELTA BENZENE HEXACHLORIDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34351 ENDOSULFAN SULFATE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34356 ENDOSULFAN, BETA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34361 ENDOSULFAN, ALPHA TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34366 ENDRIN ALDEHYDE TOTWUG/L	03/28/85-03/28/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34480 THALLIUM DRY WGTBOTMG/KG	08/27/92-08/27/92	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Station Inventory for Station: RICH0116

NPS Station ID: RICH0116 LAT/LON: 37.530503/ -77.434003 Agency: 21VASWCB Date Created: / /
Location: RT. 360 BRIDGE FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS110.30 /VA2-02-X0142/VA2-4X0142 /TF5.2
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206004603.50 RF3 Mile Point: 3.96 Distance from RF3: 0.04 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD INTENSIVE SURVEY NO. 835108 BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA
THIS STATION IS ALSO USED FOR SURVEY 845101

Parameter Inventory for Station: RICH0116

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/18/68-12/15/98	2521	27.5	25.156	34.	0.	41.43	6.437	17.	22.5	29.5	30.5
00070 TURBIDITY, (JACKSON CANDLE UNITS)		02/21/89-02/01/94	64	5.4	21.742	180.	0.6	1540.219	39.246	2.2	3.425	23.75	44.
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		12/20/88-12/15/98	84	5.05	13.04	237.	0.6	1034.032	32.156	2.	2.8	9.375	16.7
00078 TRANSPARENCY, SECCHI DISC (METERS)		08/16/83-10/03/83	2##	499.538	499.538	999.	0.075	498925.578	706.347	**	**	**	**
00080 COLOR (PLATINUM-COBALT UNITS)		02/25/91-01/12/94	20	35.5	70.2	630.	15.	17786.168	133.365	21.	26.	55.	86.5
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/15/79-12/15/98	358	160.	173.402	522.	30.	4510.275	67.159	100.	127.	210.	269.2
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		04/23/68-12/15/98	151	164.	174.364	436.	2.	4109.166	64.103	110.2	131.	213.	257.8
00096 SALINITY AT 25 DEGREES C (MG/ML)		07/31/84-09/22/98	178	0.	0.002	0.1	0.	0.	0.013	0.	0.	0.	0.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/11/84-12/15/98	274	9.4	9.901	16.5	6.7	3.388	1.841	7.95	8.4	11.2	12.6
00300p OXYGEN, DISSOLVED	MG/L	02/18/68-02/01/94	2293	8.	8.217	16.3	4.4	1.572	1.254	7.	7.4	8.8	9.5
00310p BOD, 5 DAY, 20 DEG C	MG/L	02/18/68-12/15/98	262	1.	1.591	7.	0.05	0.983	0.991	0.5	1.	2.	2.9
00335 COD, .025N K2CR2O7	MG/L	12/20/88-03/15/89	2	11.05	11.05	14.5	7.6	23.805	4.879	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/15/79-12/15/98	217	11.	11.797	75.	0.5	48.195	6.942	6.	8.	15.	19.
00400p PH (STANDARD UNITS)		02/18/68-12/15/98	526	8.	7.928	9.3	5.5	0.456	0.675	7.	7.448	8.5	8.773
00400p CONVERTED PH (STANDARD UNITS)		02/18/68-12/15/98	526	8.	7.358	9.3	5.5	0.782	0.884	7.	7.447	8.5	8.773
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	526	0.01	0.044	3.162	0.001	0.025	0.159	0.002	0.003	0.036	0.1
00403 PH, LAB, STANDARD UNITS	SU	02/18/68-12/15/98	144	7.5	7.482	8.5	6.	0.203	0.451	6.9	7.2	7.775	8.1
00403 CONVERTED PH, LAB, STANDARD UNITS		02/18/68-12/15/98	144	7.5	7.238	8.5	6.	0.264	0.513	6.9	7.2	7.775	8.1
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/18/68-12/15/98	144	0.032	0.058	1.	0.003	0.009	0.095	0.008	0.017	0.063	0.126
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/18/68-12/15/98	146	49.	49.096	83.	3.	227.37	15.079	30.7	40.	58.25	70.6
00415 ALKALINITY, PHENOLPHTHALEIN (MG/L)		08/16/83-10/03/83	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		02/18/68-06/01/95	84	122.5	147.964	1078.	74.	18125.384	134.631	88.5	102.5	154.5	180.5
00505 RESIDUE, TOTAL VOLATILE (MG/L)		02/18/68-06/01/95	83	28.	42.506	921.	6.	9825.326	99.123	14.4	21.	40.	57.2
00510 RESIDUE, TOTAL FIXED (MG/L)		02/18/68-06/01/95	82	85.5	103.256	754.	14.	6295.255	79.343	66.3	76.5	120.75	140.8
00515 RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L		08/16/83-10/03/83	2	154.5	154.5	190.	119.	2520.5	50.205	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		02/18/68-12/15/98	368	7.	20.194	718.	0.	2650.287	51.481	2.	3.25	16.	38.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		02/18/68-12/15/98	368	2.5	4.179	78.	0.	37.195	6.099	1.	1.5	5.	8.1
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		02/18/68-12/15/98	363	5.	16.512	640.	0.	2116.172	46.002	1.	2.5	13.	31.
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		07/11/84-12/15/98	207##	0.025	0.029	0.19	0.002	0.	0.022	0.01	0.02	0.04	0.05
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		02/09/70-06/01/95	267##	0.05	0.059	0.45	0.005	0.004	0.06	0.02	0.04	0.05	0.1
00613 NITRITE NITROGEN, DISSOLVED (MG/L AS N)		07/11/84-12/15/98	209##	0.005	0.005	0.04	0.001	0.	0.005	0.001	0.004	0.005	0.01

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Annual Analysis for 1998 - Station RICH0115

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	11	25.	24.691	29.1	16.	16.705	4.087	16.66	23.1	28.2	29.04
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	11	8.4	8.409	10.8	6.1	1.237	1.112	6.42	7.9	8.8	10.42
00400	PH (STANDARD UNITS)	06/27/94-10/26/98	11	8.07	8.115	8.32	7.91	0.019	0.136	7.924	8.01	8.24	8.31
00400	CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	11	8.07	8.096	8.32	7.91	0.019	0.138	7.924	8.01	8.24	8.31
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	11	0.009	0.008	0.012	0.005	0.	0.002	0.005	0.006	0.01	0.012
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	790.	5290.909	16000.	140.	49560309.091	7039.908	156.	330.	16000.	16000.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	2.898	3.183	4.204	2.146	0.628	0.793	2.185	2.519	4.204	4.204
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		1522.461									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station RICH0115

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/27/94-10/26/98	12	25.6	24.2	30.9	15.7	25.347	5.035	15.82	20.325	27.8	30.57
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	MG/L	06/27/94-10/26/98	12	8.1	8.3	10.	6.7	1.073	1.036	6.88	7.7	9.375	9.94
00400 PH (STANDARD UNITS)		06/27/94-10/26/98	12	7.74	7.749	8.55	6.92	0.174	0.417	7.061	7.558	7.92	8.475
00400 CONVERTED PH (STANDARD UNITS)		06/27/94-10/26/98	12	7.74	7.566	8.55	6.92	0.211	0.459	7.061	7.557	7.92	8.475
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/27/94-10/26/98	12	0.018	0.027	0.12	0.003	0.001	0.031	0.003	0.012	0.028	0.096
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/27/94-10/26/98	12	12000.	9501.667	16000.	20.	50320033.333	7093.661	344.	1525.	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/27/94-10/26/98	12	4.054	3.638	4.204	1.301	0.744	0.862	1.823	3.171	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		4347.598									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station RICH0115

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/27/94-10/26/98	10	24.	23.86	31.2	15.	28.963	5.382	15.1	20.65	28.25	31.13
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	MG/L	06/27/94-10/26/98	10	8.15	8.43	10.3	7.4	0.905	0.951	7.41	7.65	9.3	10.2
00400 PH (STANDARD UNITS)		06/27/94-10/26/98	10	7.765	7.747	8.2	7.26	0.12	0.347	7.277	7.43	8.043	8.191
00400 CONVERTED PH (STANDARD UNITS)		06/27/94-10/26/98	10	7.714	7.63	8.2	7.26	0.136	0.368	7.277	7.43	8.042	8.191
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/27/94-10/26/98	10	0.019	0.023	0.055	0.006	0.	0.017	0.006	0.009	0.037	0.053
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/27/94-10/26/98	10	1500.	4713.	16000.	130.	37697023.333	6139.79	187.	1000.	8050.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/27/94-10/26/98	10	3.172	3.314	4.204	2.114	0.404	0.635	2.187	2.992	3.85	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		2062.278									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station RICH0115

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/27/94-10/26/98	12	21.85	22.433	27.4	15.8	16.77	4.095	15.92	19.225	26.425	27.31
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	MG/L	06/27/94-10/26/98	12	9.15	8.942	10.9	6.	1.55	1.245	6.63	8.175	9.775	10.63
00400 PH (STANDARD UNITS)		06/27/94-10/26/98	12	7.6	7.71	8.64	7.23	0.147	0.383	7.257	7.455	7.938	8.466
00400 CONVERTED PH (STANDARD UNITS)		06/27/94-10/26/98	12	7.6	7.594	8.64	7.23	0.161	0.401	7.257	7.455	7.937	8.466
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/27/94-10/26/98	12	0.025	0.025	0.059	0.002	0.	0.016	0.004	0.012	0.035	0.056
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/27/94-10/26/98	12	5800.	7809.167	16000.	130.	58151862.879	7625.737	190.	467.5	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/27/94-10/26/98	12	3.672	3.433	4.204	2.114	0.666	0.816	2.235	2.67	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		2709.728									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0115

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/27/94-10/26/98	11	22.9	23.682	29.4	14.9	19.814	4.451	15.8	21.3	27.6	29.14
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	MG/L	06/27/94-10/26/98	10	8.65	8.4	10.3	6.4	1.776	1.332	6.42	7.125	9.7	10.24
00400 PH (STANDARD UNITS)		06/27/94-10/26/98	11	7.97	7.903	8.43	7.4	0.141	0.376	7.402	7.54	8.23	8.42
00400 CONVERTED PH (STANDARD UNITS)		06/27/94-10/26/98	11	7.97	7.763	8.43	7.4	0.163	0.404	7.402	7.54	8.23	8.42
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/27/94-10/26/98	11	0.011	0.017	0.04	0.004	0.	0.014	0.004	0.006	0.029	0.04
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/27/94-10/26/98	11	5400.	8310.909	16000.	110.	56327729.091	7505.18	132.	490.	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/27/94-10/26/98	11	3.732	3.514	4.204	2.041	0.667	0.817	2.102	2.69	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		GEOMETRIC MEAN =		3266.134									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

EPA Water Quality Criteria Analysis for Station: RICH0115

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	14	0	0.00	10	0	0.00	1	0	0.00	3	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	55	0	0.00	34	0	0.00	5	0	0.00	16	0	0.00			
00400 PH	Fresh Chronic	9.	56	0	0.00	35	0	0.00	5	0	0.00	16	0	0.00			
	Other-Lo Lim.	6.5	56	0	0.00	35	0	0.00	5	0	0.00	16	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	12	2	0.17	8	2	0.25	1	0	0.00	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	250.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	56	51	0.91	35	33	0.94	5	4	0.80	16	14	0.88			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1992 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	5	11.3	13.38	23.2	3.1	84.817	9.21	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	4	1.5	1.5	2.	1.	0.333	0.577	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	4	22.5	25.5	39.	18.	89.667	9.469	**	**	**	**
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	5	6.26	6.236	6.42	5.9	0.041	0.202	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	5	6.26	6.194	6.42	5.9	0.043	0.207	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	5	0.55	0.64	1.259	0.38	0.126	0.355	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	4	100.5	96.75	122.	64.	616.917	24.838	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	4	26.	24.5	39.	7.	190.333	13.796	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	4	70.5	72.25	91.	57.	198.25	14.08	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	4	4.	4.25	6.	3.	1.583	1.258	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	4	1.	1.5	3.	1.	1.	1.			**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	4	3.	2.75	3.	2.	0.25	0.5			**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	4	0.04	0.035	0.04	0.02	0.	0.01	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	4##	0.005	0.006	0.01	0.005	0.	0.003	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	4	0.065	0.085	0.16	0.05	0.003	0.051	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	4	0.5	0.575	0.8	0.5	0.023	0.15	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/14/98	4	0.07	0.07	0.1	0.04	0.001	0.029	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-06/08/94	4	7.7	8.95	14.8	5.6	17.317	4.161	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	3##	50.	66.667	100.	50.	833.333	28.868	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	3##	1.699	1.799	2.	1.699	0.03	0.174	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		62.996									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-12/14/98	4	0.05	0.053	0.09	0.02	0.001	0.033	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	4	16.45	16.25	27.4	4.7	109.537	10.466	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	4	1.5	2.25	5.	1.	3.583	1.893	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	4	20.5	24.75	42.	16.	138.25	11.758	**		**	**
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	4	6.21	6.245	6.6	5.96	0.07	0.265	**		**	**
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	4	6.21	6.19	6.6	5.96	0.074	0.272	**		**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	4	0.617	0.645	1.096	0.251	0.12	0.347	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	4	125.	139.	200.	106.	1904.667	43.642	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	4	37.	38.5	57.	23.	198.333	14.083	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	4	94.5	100.5	143.	70.	1304.333	36.116	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	4##	4.25	12.	38.	1.5	307.167	17.526	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	4##	2.25	6	18.	1.5	64.5	8.031	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	4##	2.75	[illegible]	20.	1.5	79.417	8.912	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	4##	0.02	0.053	0.15	0.02	0.004	0.065		**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	4##	0.005	0.006	0.01	0.005	0.	0.003	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	4	0.145	0.168	0.32	0.06	0.013	0.115	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	4	0.35	0.575	1.3	0.3	0.236	0.486	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/14/98	4	0.06	0.113	0.3	0.03	0.016	0.127	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-06/08/94	4	8.6	9.8	16.	6.	19.253	4.388	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	4##	50.	62.5	100.	50.	625.	25.	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	4##	1.699	1.774	2.	1.699	0.023	0.151	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		59.46									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-12/14/98	4	0.04	065	0.17	0.01	0.005	0.072	**		**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	8	11.3	13.5	23.2	6.9	41.823	6.467	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/14/98	1	179.	179.	179.	179.	0.	0.	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	8	9.95	8.813	12.5	3.8	12.616	3.552	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	9	2.	1.556	2.	1.	0.278	0.527	1.	1.	2.	2.
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	8	21.	23.125	38.	16.	59.554	7.717	**	**	**	**
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	8	6.98	7.126	7.91	6.78	0.15	0.387	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	8	6.98	7.021	7.91	6.78	0.162	0.403	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	8	0.105	0.095	0.166	0.012	0.003	0.052	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	9	107.	109.556	133.	93.	173.528	13.173	93.	100.	120.5	133.
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	9	30.	32.778	43.	22.	65.694	8.105	22.	26.	41.5	43.
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	9	83.	80.111	96.	57.	175.861	13.261	57.	69.	91.5	96.
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	9	5.	4.833	7.	0.5	4.875	2.208	0.5	3.5	7.	7.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	9	2.	1.889	3.	0.5	0.799	0.894	0.5	1.25	2.5	3.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	9	3.	3.056	5.	0.5	3.403	1.845	0.5	1.	5.	5.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	8##	0.02	0.028	0.05	0.02	0.	0.014	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	8##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	8	0.15	0.131	0.2	0.02	0.004	0.063	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	8	0.5	0.513	0.7	0.3	0.016	0.125	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/14/98	8	0.1	0.081	0.1	0.05	0.001	0.026	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/08/79-03/13/91	8	0.04	0.049	0.09	0.02	0.001	0.023	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-06/08/94	8	8.6	8.6	10.8	5.2	3.237	1.799	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	7##	50.	78.571	200.	50.	3214.286	56.695	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	7##	1.699	1.828	2.301	1.699	0.056	0.237	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		67.295									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-12/14/98	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	4	18.25	16.9	23.4	7.7	58.553	7.652	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	2	6.4	6.4	9.7	3.1	21.78	4.667	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	4	2.5	6.5	20.	1.	81.667	9.037	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	3	21.	22.667	29.	18.	32.333	5.686	**	**	**	**
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	4	6.42	6.443	6.95	5.98	0.157	0.397	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	4	6.42	6.319	6.95	5.98	0.178	0.422	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	4	0.38	0.48	1.047	0.112	0.159	0.399	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	4	124.	123.5	133.	113.	67.667	8.226	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	4	40.5	39.5	50.	27.	89.667	9.469	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	4	79.	84.	106.	72.	236.667	15.384	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	4##	3.25	7.	20.	1.5	77.833	8.822	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	4##	2.25	2.5	4.	1.5	1.5	1.225	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	4##	1.75	5.25	16.	1.5	51.417	7.171	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	3##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	3##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	3##	0.02	0.09	0.23	0.02	0.015	0.121	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	3	0.6	0.6	0.7	0.5	0.01	0.1	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/14/98	3	0.1	0.093	0.11	0.07	0.	0.021	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/08/79-03/13/91	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-06/08/94	3	9.5	9.2	10.9	7.2	3.49	1.868	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	3	200.	250.	500.	50.	52500.	229.129	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	3	2.301	2.233	2.699	1.699	0.253	0.503	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		170.998									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-12/14/98	3	0.07	0.06	0.08	0.03	0.001	0.026	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	13	13.9	14.7	27.	1.	65.183	8.074	3.6	8.15	21.9	26.6
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/14/98	10	168.5	201.5	452.	140.	8828.056	93.958	140.7	151.5	203.	432.5
00300p OXYGEN, DISSOLVED MG/L	06/18/68-06/10/91	13	5.6	5.638	11.8	1.7	8.143	2.854	1.9	3.45	7.05	10.76
00310 BOD, 5 DAY, 20 DEG C MG/L	09/20/67-12/14/98	9	2.	1.556	2.	1.	0.278	0.527	1.	1.	2.	2.
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/14/98	10	23.5	24.5	34.	17.	21.611	4.649	17.4	21.75	26.75	33.5
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	13	6.6	6.471	8.41	3.3	1.292	1.136	4.396	6.105	7.05	7.882
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	13	6.6	4.41	8.41	3.3	5.89	2.427	4.396	6.105	7.05	7.882
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	13	0.251	38.868	501.187	0.004	19295.951	138.91	0.035	0.09	0.794	301.077
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	10##	2.5	2.85	5.	1.	1.114	1.055	1.15	2.5	3.25	4.9
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	10##	2.5	2.35	3.	1.	0.558	0.747	1.	2.125	3.	3.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	10##	2.5	1.85	3.	0.	1.169	1.081	0.05	0.5	2.5	2.95
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	10	0.065	0.084	0.2	0.02	0.004	0.061	0.022	0.04	0.12	0.198
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	10	0.01	0.014	0.04	0.005	0.	0.011	0.005	0.005	0.02	0.038
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	9	0.11	0.147	0.44	0.04	0.016	0.128	0.04	0.06	0.2	0.44
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	10	0.6	0.67	1.4	0.4	0.078	0.279	0.41	0.5	0.725	1.34
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/14/98	10	0.1	0.135	0.2	0.05	0.003	0.058	0.055	0.1	0.2	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-03/13/91	10	0.055	0.059	0.12	0.02	0.001	0.031	0.021	0.03	0.083	0.117
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-06/08/94	7	8.4	8.657	12.1	6.8	3.11	1.763	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	10##	50.	119.	490.	50.	19276.667	138.84	50.	50.	125.	461.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	10##	1.699	1.919	2.69	1.699	0.116	0.341	1.699	1.699	2.075	2.651
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		82.89									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	10	16.1	16.31	27.1	0.2	88.148	9.389	0.48	10.2	24.85	26.92
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/14/98	7	168.	293.	1124.	99.	136019.	368.808	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/18/68-06/10/91	10	5.7	6.63	12.6	2.5	14.105	3.756	2.53	3.25	10.8	12.51
00310 BOD, 5 DAY, 20 DEG C MG/L	09/20/67-12/14/98	11	2.	2.091	3.	1.	0.891	0.944	1.	1.	3.	3.
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/14/98	11	34.	30.636	40.	16.	77.655	8.812	17.2	22.	40.	40.
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	10	6.765	6.937	7.77	6.38	0.279	0.528	6.392	6.508	7.56	7.767
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	10	6.764	6.734	7.77	6.38	0.325	0.57	6.392	6.507	7.56	7.767
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	10	0.172	0.184	0.417	0.017	0.019	0.137	0.017	0.028	0.311	0.407
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	9	124.	167.778	590.	72.	25538.444	159.808	72.	104.5	140.5	590
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	9	32.	32.222	52.	20.	99.944	9.997	20.	24.	38.	[illegible]
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	9	87.	135.556	570.	40.	27008.028	164.341	40.	67.	108.	570
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	11	4.	4.	7.	1.	2.6	1.612	1.2	3.	5.	6.6
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	11	2.	2.182	5.	1.	1.564	1.25	1.	1.	3.	4.6
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	11	2.	1.955	6.	0.5	2.673	1.635	0.5	0.5	3.	5.4
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	10	0.05	0.055	0.12	0.02	0.001	0.033	0.02	0.02	0.083	0.117
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	10##	0.008	0.009	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.019
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	10	0.125	0.162	0.48	0.04	0.016	0.127	0.043	0.078	0.193	0.458
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	10	0.6	0.6	0.8	0.5	0.011	0.105	0.5	0.5	0.7	0.79
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/14/98	10	0.1	0.078	0.1	0.03	0.001	0.029	0.032	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-03/13/91	10	0.06	0.058	0.1	0.02	0.001	0.03	0.021	0.03	0.09	0.099
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-06/08/94	11	9.	9.309	12.8	5.3	4.799	2.191	5.58	8.1	10.8	12.58
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	8##	50.	168.75	600.	50.	44955.357	212.027	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	8##	1.699	1.984	2.778	1.699	0.203	0.45	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		96.468									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	12	17.	14.892	24.5	3.	63.35	7.959	3.6	6.25	22.65	24.35
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/14/98	12	190.5	191.833	310.	118.	2229.97	47.223	123.7	171.5	207.5	283.3
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	12	3.75	5.1	11.	0.4	12.949	3.598	0.73	2.025	9.075	10.58
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	12	1.5	1.667	3.	1.	0.606	0.778	1.	1.	2.	3.
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	12	23.	21.417	28.	14.	21.174	4.602	14.3	17.	25.	27.4
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	12	6.775	6.796	8.09	5.5	0.519	0.721	5.65	6.525	6.89	8.078
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	12	6.775	6.323	8.09	5.5	0.763	0.874	5.65	6.525	6.89	8.078
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	12	0.168	0.475	3.162	0.008	0.783	0.885	0.008	0.129	0.3	2.514
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	12##	2.5	5.792	22.	2.5	33.021	5.746	2.5	2.5	7.75	18.4
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	12##	2.5	4.375	10.	2.5	7.369	2.715	2.5	2.5	5.75	9.7
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	12##	2.5	3.083	12.	0.	9.22	3.036	0.3	2.	2.5	9.9
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	12##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	12##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	12	0.08	0.133	0.4	0.025	0.015	0.122	0.025	0.031	0.228	0.361
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	12	0.55	0.533	0.9	0.3	0.03	0.172	0.3	0.4	0.6	0.84
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/14/98	12	0.1	0.121	0.3	0.05	0.007	0.084	0.05	0.05	0.2	0.27
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/08/79-03/13/91	12	0.045	0.059	0.25	0.01	0.004	0.064	0.01	0.023	0.068	0.199
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-06/08/94	12	8.	8.833	15.	6.	7.242	2.691	6.	7.25	9.75	14.4
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	11	100.	386.364	2500.	50.	555045.455	745.014	50.	50.	300.	2180.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	11	2.	2.12	3.398	1.699	0.339	0.582	1.699	1.699	2.477	3.309
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		131.94									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	13	16.9	16.792	28.2	3.	67.484	8.215	4.6	10.	25.3	27.16
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/14/98	12	159.5	172.167	276.	112.	2129.242	46.144	120.1	141.5	199.5	264.
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	13	4.5	4.608	10.1	1.2	8.761	2.96	1.32	1.8	7.15	9.42
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	12	1.	1.5	4.	0.5	1.136	1.066	0.5	1.	2.	3.7
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	12	24.	24.75	39.	15.	54.023	7.35	15.	18.75	30.75	37.2
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	13	7.	7.045	7.86	6.6	0.176	0.419	6.612	6.635	7.265	7.82
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	13	7.	6.902	7.86	6.6	0.198	0.445	6.612	6.635	7.265	7.82
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	13	0.1	0.125	0.251	0.014	0.008	0.087	0.015	0.057	0.232	0.244
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	12##	3.75	5.083	12.	2.5	10.129	3.183	2.5	2.5	7.	11.1
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	12##	2.5	3.583	7.	2.5	3.538	1.881	2.5	2.5	5.25	7.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	12##	2.5	3.292	8.	2.5	3.203	1.79	2.5	2.5	2.875	7.4
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	12##	0.05	0.075	0.2	0.05	0.003	0.058	0.05	0.05	0.05	0.2
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	12##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	12	0.07	0.127	0.36	0.025	0.012	0.112	0.033	0.053	0.208	0.345
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	12	0.6	0.592	0.8	0.4	0.028	0.168	0.4	0.4	0.775	0.8
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/14/98	12	0.1	0.096	0.2	0.05	0.003	0.054	0.05	0.05	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/08/79-03/13/91	12	0.045	0.052	0.1	0.01	0.001	0.031	0.013	0.023	0.085	0.097
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-06/08/94	8	10.	9.875	13.	7.	5.839	2.416	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	12##	50.	70.833	200.	50.	2026.515	45.017	50.	50.	87.5	170.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	12##	1.699	1.799	2.301	1.699	0.038	0.196	1.699	1.699	1.925	2.211
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		62.996									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	9	16.5	14.667	24.	0.5	67.75	8.231	0.5	7.	21.75	24.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/14/98	7	132.	132.	205.	69.	2604.	51.029	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/18/68-06/10/91	9	3.6	5.5	12.	0.4	17.308	4.16	0.4	2.1	9.7	12.
00310 BOD, 5 DAY, 20 DEG C MG/L	09/20/67-12/14/98	9	2.	2.333	5.	1.	2.	1.414	1.	1.	3.5	5.
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/14/98	9	18.	22.222	33.	13.	80.694	8.983	13.	14.	32.	33.
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	8	6.105	6.123	6.5	5.57	0.09	0.299	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	8	6.105	6.027	6.5	5.57	0.1	0.316	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	8	0.785	0.941	2.692	0.316	0.571	0.756	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	9	5.	12.611	60.	2.5	356.424	18.879	2.5	2.5	15.	60.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	9	3.	6.833	25.	2.	55.313	7.437	2.	2.5	9.	25.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	9	2.5	6.611	35.	0.	125.924	11.222	0.	1.	7.5	35.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	9##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	9##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	9##	0.025	0.093	0.27	0.025	0.009	0.096	0.025	0.025	0.19	0.27
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	9	0.4	0.433	0.6	0.3	0.013	0.112	0.3	0.35	0.55	0.6
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/14/98	9##	0.05	0.117	0.4	0.05	0.014	0.117	0.05	0.05	0.15	0.4
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-03/13/91	9	0.08	0.109	0.32	0.02	0.01	0.1	0.02	0.03	0.175	0.32
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-06/08/94	9	10.	11.333	18.	6.	16.75	4.093	6.	8.	15.	18.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	9##	50.	72.222	200.	50.	2569.444	50.69	50.	50.	75.	200.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	9##	1.699	1.799	2.301	1.699	0.045	0.213	1.699	1.699	1.849	2.301
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	62.996										

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	11	16.	15.709	29.	4.	63.601	7.975	4.3	9.	22.	27.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/14/98	11	166.	158.545	237.	94.	1808.873	42.531	96.8	118.	192.	229.8
00300p OXYGEN, DISSOLVED MG/L	06/18/68-06/10/91	11	6.5	6.545	12.5	1.6	10.443	3.232	1.66	4.5	8.9	11.92
00310 BOD, 5 DAY, 20 DEG C MG/L	09/20/67-12/14/98	10	2.	2.	4.	1.	1.333	1.155	1.	1.	2.5	4.
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/14/98	11	26.	26.091	35.	18.	33.891	5.822	18.4	20.	32.	34.8
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.5	6.436	7.	5.6	0.169	0.411	5.64	6.3	6.7	6.96
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.5	6.224	7.	5.6	0.218	0.467	5.64	6.3	6.7	6.96
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	11	0.316	0.597	2.512	0.1	0.568	0.754	0.112	0.2	0.501	2.326
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	1	111.	111.	111.	111.	0.	0.	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	1	91.	91.	91.	91.	0.	0.	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	11	5.	7.273	21.	2.5	33.918	5.824	2.5	2.5	10.	19.4
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	11	4.	5.364	11.	2.5	8.755	2.959	2.5	2.5	8.	10.4
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	11	2.5	2.818	10.	0.	7.464	2.732	0.2	1.	3.	9.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	10##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	10	0.085	0.1	0.25	0.025	0.007	0.084	0.025	0.025	0.163	0.248
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	8	0.65	0.65	1.1	0.3	0.066	0.256	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/14/98	8##	0.05	0.156	0.6	0.05	0.037	0.192	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-03/13/91	10	0.05	0.073	0.25	0.02	0.005	0.072	0.02	0.028	0.095	0.239
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-06/08/94	11	11.	12.091	18.	7.	13.491	3.673	7.4	9.	15.	18.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	11##	50.	250.	1100.	50.	159000.	398.748	50.	50.	200.	1080.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	11##	1.699	2.021	3.041	1.699	0.28	0.53	1.699	1.699	2.301	3.033
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	105.047										

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	10	14.	15.5	26.	5.	75.778	8.705	5.05	7.	25.5	25.95
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/14/98	9	193.	209.111	294.	133.	3479.111	58.984	133.	155.5	264.5	294.
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	10	6.05	6.	10.2	2.	10.156	3.187	2.	2.375	9.475	10.15
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	9	2.	1.778	2.	1.	0.194	0.441	1.	1.5	2.	2.
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	9	25.	25.444	39.	12.	53.028	7.282	12.	22.	29.	39.
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	10	6.5	6.48	6.5	6.3	0.004	0.063	6.32	6.5	6.5	6.5
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	10	6.5	6.475	6.5	6.3	0.004	0.063	6.32	6.5	6.5	6.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	10	0.316	0.335	0.501	0.316	0.003	0.058	0.316	0.316	0.316	0.483
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	9	5.	5.444	12.	2.5	11.153	3.34	2.5	2.5	7.5	12.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	9	2.5	3.556	8.	2.	5.153	2.27	2.	2.25	5.	8.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	9	2.5	3.	6.	0.	3.125	1.768	0.	2.25	4.5	6.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	10##	0.05	0.06	0.15	0.05	0.001	0.032	0.05	0.05	0.05	0.14
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	9##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	9	0.05	0.108	0.35	0.025	0.018	0.136	0.025	0.025	0.205	0.35
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	9	0.5	0.5	0.9	0.2	0.05	0.224	0.2	0.3	0.65	0.9
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/14/98	9##	0.05	0.083	0.2	0.05	0.003	0.05	0.05	0.05	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/08/79-03/13/91	9	0.05	0.377	3.	0.02	0.968	0.984	0.02	0.025	0.08	3.
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-06/08/94	9	11.	10.	14.	4.	11.	3.317	4.	7.	12.5	14.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	9##	50.	350.	2100.	50.	462500.	680.074	50.	50.	350.	2100.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	9##	1.699	2.066	3.322	1.699	0.346	0.588	1.699	1.699	2.389	3.322
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		116.449									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	9	10.5	10.333	23.5	-3.5	75.688	8.7	3.	5.75	18.5	23.5
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/14/98	9	139.	154.889	289.	67.	5259.111	72.52	67.	93.	207.	289.
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	9	8.2	7.989	15.8	1.8	19.811	4.451	1.8	4.05	11.	15.8
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	7	2.	2.143	3.	1.	0.81	0.9	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	9	19.	20.667	29.	14.	27.5	5.244	14.	16.5	26.	29.
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	9	6.3	6.3	6.7	5.8	0.1	0.316	5.8	6.	6.6	6.7
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	9	6.3	6.198	6.7	5.8	0.112	0.334	5.8	6.	6.6	6.7
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	9	0.501	0.633	1.585	0.2	0.218	0.467	0.2	0.258	1.	1.585
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	9##	2.5	4.889	18.	2.5	25.924	5.092	2.5	2.5	5.5	18.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	9##	2.5	3.778	11.	2.5	8.007	2.83	2.5	2.5	4.	11.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	9##	2.5	2.778	7.	0.	3.257	1.805	0.	2.5	2.75	7.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	9##	0.05	0.056	0.1	0.05	0.	0.017	0.05	0.05	0.05	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	9##	0.005	0.007	0.02	0.005	0.	0.005	0.005	0.005	0.008	0.02
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	9	0.15	0.179	0.5	0.06	0.02	0.141	0.06	0.075	0.25	0.5
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	9	0.4	0.517	1.1	0.15	0.094	0.306	0.15	0.3	0.75	1.1
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/14/98	9##	0.05	0.083	0.2	0.05	0.003	0.05	0.05	0.05	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/08/79-03/13/91	9	0.03	0.044	0.1	0.01	0.001	0.031	0.01	0.025	0.07	0.1
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-06/08/94	9	10.	10.	15.	6.	10.25	3.202	6.	7.	13.	15.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	8##	50.	225.	1300.	50.	191428.571	437.526	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	8##	1.699	1.951	3.114	1.699	0.265	0.515	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		89.351									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	11	14.	15.682	27.5	3.5	98.764	9.938	3.8	5.	27.	27.4
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/14/98	9	195.	191.222	267.	115.	2869.944	53.572	115.	147.	244.5	267.
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	11	7.4	6.364	10.4	1.1	9.825	3.134	1.44	3.7	9.6	10.32
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	10	1.5	1.6	3.	1.	0.489	0.699	1.	1.	2.	2.9
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	10	21.5	21.8	31.	16.	23.956	4.894	16.	17.5	24.75	30.6
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	11	6.4	6.509	7.5	5.8	0.189	0.435	5.9	6.3	6.6	7.4
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	11	6.4	6.351	7.5	5.8	0.216	0.465	5.9	6.3	6.6	7.4
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	11	0.398	0.445	1.585	0.032	0.167	0.409	0.045	0.251	0.501	1.368
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	10	5.	8.55	28.	2.5	64.414	8.026	2.5	2.5	12.75	26.7
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	10	4.	4.55	8.	2.5	4.636	2.153	2.5	2.5	7.	7.9
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	10	2.5	5.	21.	0.	35.444	5.954	0.2	2.375	5.5	19.6
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	10##	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.063	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	10##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.019
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	10	0.14	0.166	0.34	0.025	0.015	0.124	0.025	0.044	0.308	0.339
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	10	0.35	0.38	0.6	0.2	0.017	0.132	0.21	0.3	0.45	0.6
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/14/98	10##	0.075	0.085	0.2	0.05	0.002	0.047	0.05	0.05	0.1	0.19
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/08/79-03/13/91	10	0.05	0.05	0.09	0.02	0.001	0.024	0.02	0.028	0.065	0.089
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-06/08/94	10	13.	13.	18.	8.	10.889	3.3	8.2	10.	16.25	17.9
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	9##	50.	155.556	900.	50.	78402.778	280.005	50.	50.	100.	900.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	9##	1.699	1.905	2.954	1.699	0.172	0.414	1.699	1.699	2.	2.954
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		80.416									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	9	19.	17.944	29.5	6.	85.215	9.231	6.	7.	26.25	29.5
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/14/98	10	251.	317.5	998.	180.	58043.611	240.922	183.3	226.5	276.5	926.3
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	10	5.1	5.77	11.2	0.8	14.267	3.777	0.95	2.675	9.3	11.1
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	10	2.	1.9	4.	1.	0.767	0.876	1.	1.	2.	3.8
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	10	23.	22.3	32.	12.	42.678	6.533	12.5	17.	27.25	31.9
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	10	6.65	6.55	7.	6.	0.169	0.412	6.	6.	6.925	7.
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	10	6.647	6.371	7.	6.	0.205	0.453	6.	6.	6.925	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	10	0.225	0.425	1.	0.1	0.162	0.402	0.1	0.119	1.	1.
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	10##	3.75	6.55	21.	2.5	35.469	5.956	2.5	2.5	9.5	20.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	10##	2.5	3.35	8.	2.	4.003	2.001	2.	2.375	3.75	7.8
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	10##	2.5	4.45	15.	2.	16.136	4.017	2.05	2.5	5.5	14.2
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	10##	0.005	0.007	0.02	0.005	0	0.005	0.005	0.005	0.005	0.019
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	10##	0.025	0.082	0.39	0.025	0.011	0.114	0.025	0.025	0.113	0.363
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	10	0.5	0.58	1.	0.2	0.066	0.257	0.22	0.4	0.775	1.
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/14/98	10	0.1	0.09	0.2	0.05	0.002	0.046	0.05	0.05	0.1	0.19
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/08/79-03/13/91	10	0.05	0.063	0.12	0.01	0.001	0.039	0.012	0.03	0.103	0.119
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-06/08/94	10	14.	13.3	19.	5.	24.011	4.9	5.3	8.75	18.25	19.
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	10##	75.	265.	1400.	50.	181138.889	425.604	50.	50.	350.	1310.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	10##	1.849	2.082	3.146	1.699	0.268	0.518	1.699	1.699	2.533	3.101
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		120.7									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.5	6.478	7.	6.	0.1	0.316	6.08	6.4	6.8	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	11	0.316	0.333	1.	0.1	0.063	0.251	0.1	0.158	0.398	0.88
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	10	117.	123.4	220.	65.	1891.822	43.495	67.5	90.75	147.25	213.1
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	10	37.	40.2	84.	25.	274.178	16.558	25.2	31.5	42.75	80.1
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	10	69.5	83.2	175.	38.	1801.733	42.447	39.4	52.75	116.25	170.1
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	10	2.	4.55	18.	0.5	31.303	5.595	0.5	0.5	7.	17.2
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	10	1.	1.75	4.	0.	2.681	1.637	0.05	0.5	4.	4.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	10	0.75	2.95	14.	0.	20.414	4.518	0.	0.375	6.	13.2
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	10##	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.063	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	10##	0.005	0.007	0.01	0.005	0.	0.002	0.005	0.005	0.01	0.01
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	10	0.4	0.43	0.7	0.2	0.022	0.149	0.21	0.3	0.525	0.69
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	10##	75.	145.	700.	50.	40250.	200.624	50.	50.	125.	650.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	10##	1.849	1.964	2.845	1.699	0.138	0.372	1.699	1.699	2.075	2.791
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		92.066									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	10##	0.05	0.075	0.2	0.05	0.002	0.049	0.05	0.05	0.1	0.19
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/14/98	10	0.04	0.047	0.11	0.005	0.001	0.027	0.008	0.03	0.06	0.105

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Annual Analysis for 1979 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	8	14.5	15.125	29.	6.	70.982	8.425	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/14/98	5	134.	140.8	214.	89.	2513.7	50.137	**	**	**	**
00300p OXYGEN, DISSOLVED MG/L	06/18/68-06/10/91	9	7.6	6.989	10.5	2.3	7.819	2.796	2.3	4.6	9.3	10.5
00310 BOD, 5 DAY, 20 DEG C MG/L	09/20/67-12/14/98	4	1.5	1.5	2.	1.	0.333	0.577	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/14/98	5	20.	20.6	31.	5.	120.3	10.968	**	**	**	**
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	9	6.5	6.5	7.2	6.2	0.085	0.292	6.2	6.3	6.55	7.2
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	9	6.5	6.436	7.2	6.2	0.09	0.299	6.2	6.3	6.55	7.2
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	9	0.316	0.366	0.631	0.063	0.028	0.166	0.063	0.284	0.501	0.631
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	8	106.	103.875	133.	73.	312.982	17.691	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	8	37.5	133.	800.	29.	72666.	269.566	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	8	66.5	67.375	105.	35.	399.696	19.992	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	9	2.5	2.722	6.	0.5	4.132	2.033	0.5	1.	4.5	6.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	9	2.	2.389	5.	0.5	2.674	1.635	0.5	1.	3.75	5.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	9	1.	1.5	6.	0.	3.813	1.953	0.	0.	2.5	6.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	9##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	8##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	4##	0.063	0.083	0.18	0.025	0.005	0.074	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	9	0.4	0.411	0.6	0.2	0.019	0.136	0.2	0.3	0.55	0.6
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/14/98	5	0.1	0.08	0.1	0.05	0.001	0.027	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-03/13/91	4	0.055	0.053	0.06	0.04	0.	0.01	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-06/08/94	5	14.	14.	21.	9.	21.	4.583	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	8	100.	181.25	600.	50.	36383.929	190.746	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	8	2.	2.082	2.778	1.699	0.163	0.404	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		120.685									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	4##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/14/98	4	0.035	0.034	0.06	0.005	0.001	0.026	**	**	**	**

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Annual Analysis for 1976 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	9	17.2	16.044	23.3	6.1	37.823	6.15	6.1	10.	21.65	23.3
00300p OXYGEN, DISSOLVED MG/L	06/18/68-06/10/91	9	7.2	6.167	11.	1.3	10.755	3.279	1.3	3.2	8.5	11.
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	9	6.8	6.733	7.	6.5	0.055	0.235	6.5	6.5	7.	7.
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	9	6.8	6.68	7.	6.5	0.058	0.241	6.5	6.5	7.	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	9	0.158	0.209	0.316	0.1	0.011	0.104	0.1	0.1	0.316	0.316
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	9	127.	134.111	188.	97.	1028.111	32.064	97.	110.5	161.5	188.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	9	72.	70.556	101.	47.	367.278	19.164	47.	48.5	85.	101.
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	9	67.	63.556	105.	11.	961.528	31.009	11.	39.5	91.5	105.
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	9	2.	3.056	8.	0.5	7.09	2.663	0.5	0.5	5.	8.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	9	2.	2.611	8.	0.	7.924	2.815	0.	0.5	5.	8.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	9	0.	0.611	4.	0.	1.674	1.294	0.	0.	0.5	4.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	9##	0.05	0.061	0.1	0.05	0.	0.022	0.05	0.05	0.075	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	9##	0.005	0.015	0.07	0.005	0.	0.022	0.005	0.005	0.018	0.07
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	9##	0.025	0.068	0.32	0.005	0.01	0.097	0.005	0.025	0.07	0.32
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	8	0.5	0.538	0.9	0.3	0.051	0.226	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	8##	50.	62.5	100.	50.	535.714	23.146	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	8##	1.699	1.774	2.	1.699	0.019	0.139	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		59.46									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	8##	0.075	0.087	0.2	0.05	0.003	0.052	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/14/98	8	0.04	0.049	0.09	0.01	0.001	0.026	**	**	**	**

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Annual Analysis for 1977 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	9	13.	14.622	28.	0.6	52.134	7.22	0.6	13.	18.5	28.
00300p OXYGEN, DISSOLVED MG/L	06/18/68-06/10/91	9	5.8	6.289	11.4	1.	10.711	3.273	1.	4.	9.4	11.4
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	9	6.8	6.856	8.	6.	0.358	0.598	6.	6.5	7.25	8.
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	9	6.8	6.579	8.	6.	0.444	0.666	6.	6.5	7.25	8.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	9	0.158	0.264	1.	0.01	0.091	0.301	0.01	0.066	0.316	1.
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	10	119.	122.4	160.	88.	398.044	19.951	89.8	111.25	135.5	157.7
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	10	49.	51.6	72.	33.	154.933	12.447	33.6	42.	61.	71.5
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	10	71.5	70.8	117.	41.	407.956	20.198	42.3	58.5	77.25	113.4
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	10	5.	5.65	14.	0.5	24.503	4.95	0.5	0.5	9.25	13.9
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	10	2.5	2.75	8.	0.	7.014	2.648	0.05	0.5	4.5	7.8
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	9	4.	3.333	10.	0.	11.687	3.419	0.	0.25	5.5	10.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	9##	0.05	0.056	0.1	0.05	0.	0.017	0.05	0.05	0.05	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	9##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.008	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	5	0.07	0.083	0.17	0.025	0.003	0.054	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	7	0.4	0.443	0.7	0.3	0.02	0.14	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	9	100.	114.444	300.	50.	8127.778	90.154	50.	50.	165.	300.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	9	2.	1.959	2.477	1.699	0.088	0.297	1.699	1.699	2.181	2.477
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		91.078									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	9##	0.05	0.122	0.6	0.05	0.033	0.18	0.05	0.05	0.1	0.6
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/14/98	9	0.04	0.048	0.09	0.02	0.001	0.024	0.02	0.025	0.065	0.09

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	11	15.5	15.5	29.	0.	90.	9.487	1.2	6.	24.	28.8
00300p OXYGEN, DISSOLVED MG/L	06/18/68-06/10/91	11	6.2	7.209	13.	3.8	9.037	3.006	3.8	5.1	10.6	12.56
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.5	6.573	7.	6.	0.09	0.3	6.08	6.4	6.8	7.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	10	15.	15.33	25.6	7.2	51.476	7.175	7.26	7.8	22.75	25.48
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	11	7.4	7.618	12.	3.4	7.124	2.669	3.56	5.8	10.4	11.76
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	11	6.7	6.718	7.	6.5	0.056	0.236	6.5	6.5	7.	7.
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	11	6.7	6.665	7.	6.5	0.059	0.242	6.5	6.5	7.	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	11	0.2	0.216	0.316	0.1	0.01	0.102	0.1	0.1	0.316	0.316
00500 RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	12	98.	102.083	141.	77.	463.72	21.534	77.3	85.25	120.5	138.3
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	12	29.	29.417	60.	10.	305.174	17.469	10.	12.25	46.25	57.6
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	12	72.	72.667	106.	35.	468.97	21.656	37.1	57.5	91.	103.6
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	12	6.5	10.417	42.	0.	153.902	12.406	0.	1.75	16.	36.9
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	12	2.	4.417	18.	0.	31.356	5.6	0.	0.25	6.75	16.2
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	12	3.5	6.	24.	0.	60.	7.746	0.	0.	11.5	21.6
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	12##	0.05	0.075	0.3	0.05	0.005	0.072	0.05	0.05	0.05	0.24
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	12##	0.005	0.005	0.01	0.005	0.	0.001	0.005	0.005	0.005	0.009
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	12	0.095	0.138	0.34	0.03	0.012	0.111	0.033	0.05	0.203	0.337
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	12	0.7	0.658	0.9	0.4	0.024	0.156	0.43	0.5	0.8	0.87
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	12##	50.	66.667	200.	50.	1969.697	44.381	50.	50.	50.	170.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	12##	1.699	1.774	2.301	1.699	0.035	0.187	1.699	1.699	1.699	2.211
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		59.46									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-06/14/79	12##	0.05	0.087	0.2	0.05	0.003	0.057	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-12/14/98	12##	0.05	0.054	0.1	0.05	0.	0.014	0.05	0.05	0.05	0.085

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	13	17.8	16.277	26.7	1.1	75.584	8.694	2.42	8.9	25.	26.26
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	13	6.4	6.277	12.	1.6	11.597	3.405	2.	3.2	8.5	12.
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	13	6.5	6.154	7.	1.	2.459	1.568	3.	6.5	6.65	7.
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	13	6.5	2.114	7.	1.	20.14	4.488	3.	6.5	6.65	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	13	0.316	7692.595	100000.	0.1	769225981.812	27734.924	0.1	0.225	0.316	60000.4
00500 RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	12	105.	112.417	163.	75.	1096.083	33.107	75.3	82.	148.5	163.
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	12	51.5	54.833	127.	28.	623.242	24.965	30.1	40.25	59.75	107.2
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	12	52.5	57.583	116.	26.	824.811	28.72	27.8	33.25	76.5	110.6
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	12	9.	12.917	42.	3.	132.265	11.501	3.3	4.5	18.5	37.2
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	12	2.	4.667	20.	0.	30.061	5.483	0.	2.	6.	16.4
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	12	4.	8.25	40.	0.	138.205	11.756	0.6	2.25	7.	35.2
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	12##	0.05	0.075	0.2	0.05	0.003	0.058	0.05	0.05	0.05	0.2
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	12##	0.005	0.006	0.02	0.005	0.	0.004	0.005	0.005	0.005	0.016
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	12	0.07	0.13	0.42	0.025	0.013	0.114	0.033	0.06	0.188	0.369
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	12	0.45	0.608	1.299	0.3	0.101	0.317	0.3	0.4	0.85	1.209
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	13##	50.	88.462	300.	50.	8814.103	93.883	50.	50.	50.	300.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	13##	1.699	1.819	2.477	1.699	0.085	0.292	1.699	1.699	1.699	2.477
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		65.87									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-06/14/79	12	0.1	0.108	0.2	0.05	0.004	0.06	0.05	0.05	0.175	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-12/14/98	12	0.05	0.062	0.1	0.03	0.001	0.023	0.033	0.05	0.085	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	11	12.2	13.791	28.9	2.2	68.415	8.271	2.88	7.2	21.7	27.56
00300p OXYGEN, DISSOLVED MG/L	06/18/68-06/10/91	10	9.	8.56	13.	4.2	10.212	3.196	4.24	5.5	11.6	12.86
00310 BOD, 5 DAY, 20 DEG C MG/L	09/20/67-12/14/98	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.5	6.536	6.8	6.2	0.033	0.18	6.22	6.5	6.7	6.78
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.5	6.501	6.8	6.2	0.034	0.184	6.22	6.5	6.7	6.78
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	11	0.316	0.315	0.631	0.158	0.02	0.141	0.167	0.2	0.316	0.605
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	11	108.	113.636	174.	77.	901.855	30.031	79.2	95.	126.	171.4
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	11	44.	47.909	96.	28.	367.691	19.175	28.2	33.	55.	89.6
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	11	64.	65.727	106.	13.	570.618	23.888	20.	55.	80.	102.2
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	11	7.	8.182	15.	3.	17.164	4.143	3.2	4.	12.	14.4
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	11	2.	3.545	12.	0.	13.673	3.698	0.2	1.	7.	11.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	11	4.	4.636	11.	0.	13.255	3.641	0.2	2.	8.	10.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	11	0.04	0.044	0.2	0.005	0.003	0.055	0.005	0.01	0.04	0.172
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	11	0.01	0.01	0.01	0.005	0.	0.002	0.006	0.01	0.01	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	11	0.16	0.185	0.41	0.03	0.017	0.13	0.038	0.09	0.29	0.406
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	11	0.5	0.536	1.	0.3	0.055	0.234	0.3	0.4	0.7	0.98
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	11##	50.	154.545	400.	50.	25227.273	158.831	50.	50.	400.	400.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	11##	1.699	2.	2.602	1.699	0.163	0.404	1.699	1.699	2.602	2.602
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		100.									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	11	0.1	0.086	0.2	0.05	0.002	0.045	0.05	0.05	0.1	0.18
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/14/98	11	0.06	0.073	0.13	0.03	0.001	0.033	0.032	0.05	0.1	0.128

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	12	16.95	15.375	25.	6.7	53.375	7.306	6.7	7.8	21.925	24.82
00300p OXYGEN, DISSOLVED MG/L	06/18/68-06/10/91	12	6.9	7.3	12.6	3.	9.553	3.091	3.06	4.4	9.75	12.12
00310 BOD, 5 DAY, 20 DEG C MG/L	09/20/67-12/14/98	3	2.	2.	2.	2.	0.	0.	**	**	**	**
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	12	6.6	6.6	7.	6.	0.06	0.245	6.15	6.5	6.775	6.94
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	12	6.6	6.525	7.	6.	0.066	0.257	6.15	6.5	6.775	6.94
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	12	0.251	0.299	1.	0.1	0.054	0.233	0.118	0.169	0.316	0.795
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	11	105.	112.364	166.	57.	956.855	30.933	62.6	97.	134.	162.8
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	11	43.	40.182	62.	21.	123.764	11.125	21.8	34.	46.	58.8
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	11	64.	72.182	121.	11.	1164.764	34.129	16.8	51.	107.	119.2
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	12	6.5	9.333	36.	1.	93.515	9.67	1.3	4.	14.	30.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	12	5.5	5.583	16.	0.	22.265	4.719	0.3	1.25	7.5	14.8
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	11	2.	4.091	24.	0.	49.091	7.006	0.	0.	4.	20.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.05	0.067	0.1	0.01	0.001	0.031	0.022	0.05	0.1	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.005	0.007	0.01	0.005	0.	0.002	0.005	0.005	0.01	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12	0.135	0.214	0.49	0.06	0.026	0.162	0.06	0.075	0.333	0.487
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	12	0.9	0.883	1.199	0.4	0.049	0.221	0.49	0.725	1.074	1.169
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	12	100.	170.833	800.	50.	49299.242	222.034	50.	50.	175.	680.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	12	2.	2.025	2.903	1.699	0.156	0.395	1.699	1.699	2.226	2.813
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		105.946									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	12##	0.075	0.1	0.2	0.05	0.004	0.064	0.05	0.05	0.175	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/14/98	12	0.1	0.08	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	10	17.5	15.66	23.3	5.	44.729	6.688	5.06	8.9	21.1	23.08
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	10	6.3	6.9	10.8	2.8	8.233	2.869	2.92	4.6	10.1	10.76
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	8	2.2	2.175	2.9	1.2	0.308	0.555	**	**	**	**
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	10	6.5	6.52	6.9	5.8	0.102	0.319	5.85	6.375	6.8	6.89
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	10	6.5	6.39	6.9	5.8	0.121	0.347	5.85	6.375	6.8	6.89
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	10	0.316	0.408	1.585	0.126	0.185	0.43	0.129	0.158	0.424	1.477
00500 RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	10	150.5	153.5	245.	82.	2642.722	51.407	84.7	112.75	191.5	239.8
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	10	60.	56.9	74.	33.	165.878	12.879	33.7	46.75	66.5	73.4
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	10	97.5	95.6	184.	27.	1920.933	43.828	29.9	62.75	119.	178.1
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	10	7.	10.7	35.	3.	96.9	9.844	3.2	5.75	12.	33.6
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	10	5.	6.4	17.	2.	22.711	4.766	2.	2.75	8.25	16.5
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	10	1.	5.3	19.	1.	51.344	7.166	1.	1.	9.	18.9
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	9	0.09	0.131	0.5	0.05	0.02	0.141	0.05	0.065	0.12	0.5
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	9	0.01	0.009	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.02
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	9	0.1	0.13	0.24	0.04	0.006	0.077	0.04	0.065	0.21	0.24
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	9	0.5	1.055	2.199	0.4	0.67	0.818	0.4	0.45	2.1	2.199
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	1##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		50.									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-06/14/79	9	0.1	0.122	0.2	0.05	0.003	0.051	0.05	0.1	0.175	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-12/14/98	9	0.07	0.079	0.16	0.02	0.002	0.043	0.02	0.045	0.105	0.16

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	11	15.6	14.455	27.8	1.7	70.873	8.419	2.48	5.6	21.1	26.68
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	11	7.	7.109	10.8	3.6	8.403	2.899	3.68	4.2	10.	10.72
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	4	1.8	2.05	3.	1.6	0.437	0.661	**	**	**	**
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	11	6.7	6.655	7.8	6.	0.197	0.444	6.06	6.5	6.7	7.6
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	11	6.7	6.507	7.8	6.	0.221	0.47	6.06	6.5	6.7	7.6
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	11	0.2	0.311	1.	0.016	0.067	0.259	0.044	0.2	0.316	0.9
00500 RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	11	149.	139.636	178.	98.	983.655	31.363	99.	103.	171.	177.
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	11	47.	47.182	65.	20.	206.964	14.386	22.2	40.	62.	65.
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	11	95.	101.545	163.	51.	1082.873	32.907	53.	84.	126.	158.4
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	10	7.5	13.5	39.	4.	140.944	11.872	4.	5.5	19.25	38.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	10	4.	5.4	20.	2.	29.156	5.4	2.	2.	5.5	18.7
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	10	5.	8.1	22.	1.	62.767	7.923	1.	1.	15.25	21.7
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	11	0.07	0.085	0.23	0.01	0.006	0.076	0.014	0.03	0.11	0.228
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	11	0.01	0.011	0.02	0.01	0.	0.003	0.01	0.01	0.01	0.018
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	11	0.19	0.209	0.49	0.005	0.027	0.164	0.02	0.09	0.34	0.49
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	11	0.5	0.509	0.8	0.3	0.021	0.145	0.32	0.4	0.6	0.78
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	11	100.	781.818	5400.	50.	2672636.364	1634.82	50.	50.	400.	4720.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	11	2.	2.264	3.732	1.699	0.488	0.698	1.699	1.699	2.602	3.646
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		183.826									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-06/14/79	11	0.1	0.132	0.3	0.05	0.005	0.072	0.06	0.1	0.2	0.28
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-12/14/98	11	0.1	0.085	0.13	0.05	0.001	0.028	0.052	0.06	0.1	0.128

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1967 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	2	18.05	18.05	22.2	13.9	34.445	5.869	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	2	1.6	1.6	1.8	1.4	0.08	0.283	**	**	**	**
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	1	5.2	5.2	5.2	5.2	0.	0.	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	1	5.2	5.2	5.2	5.2	0.	0.	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	1	6.31	6.31	6.31	6.31	0.	0.	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	2	140.5	140.5	176.	105.	2520.5	50.205	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	2	3.5	3.5	6.	1.	12.5	3.536	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1968 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	5	23.3	21.88	26.1	14.4	23.287	4.826	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	5	4.5	4.18	5.2	2.2	1.442	1.201	**		**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	1	4.	4.	4.	4.	0.	0.	**		**	**
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	5	6.5	6.64	7.5	6.	0.298	0.546	**		**	**
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	5	6.5	6.429	7.5	6.	0.354	0.595	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	5	0.316	0.373	1.	0.032	0.137	0.37	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	1	193.	193.	193.	193.	0.	0.	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	1	49.	49.	49.	49.	0.	0.	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	1	2.099	2.099	2.099	2.099	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

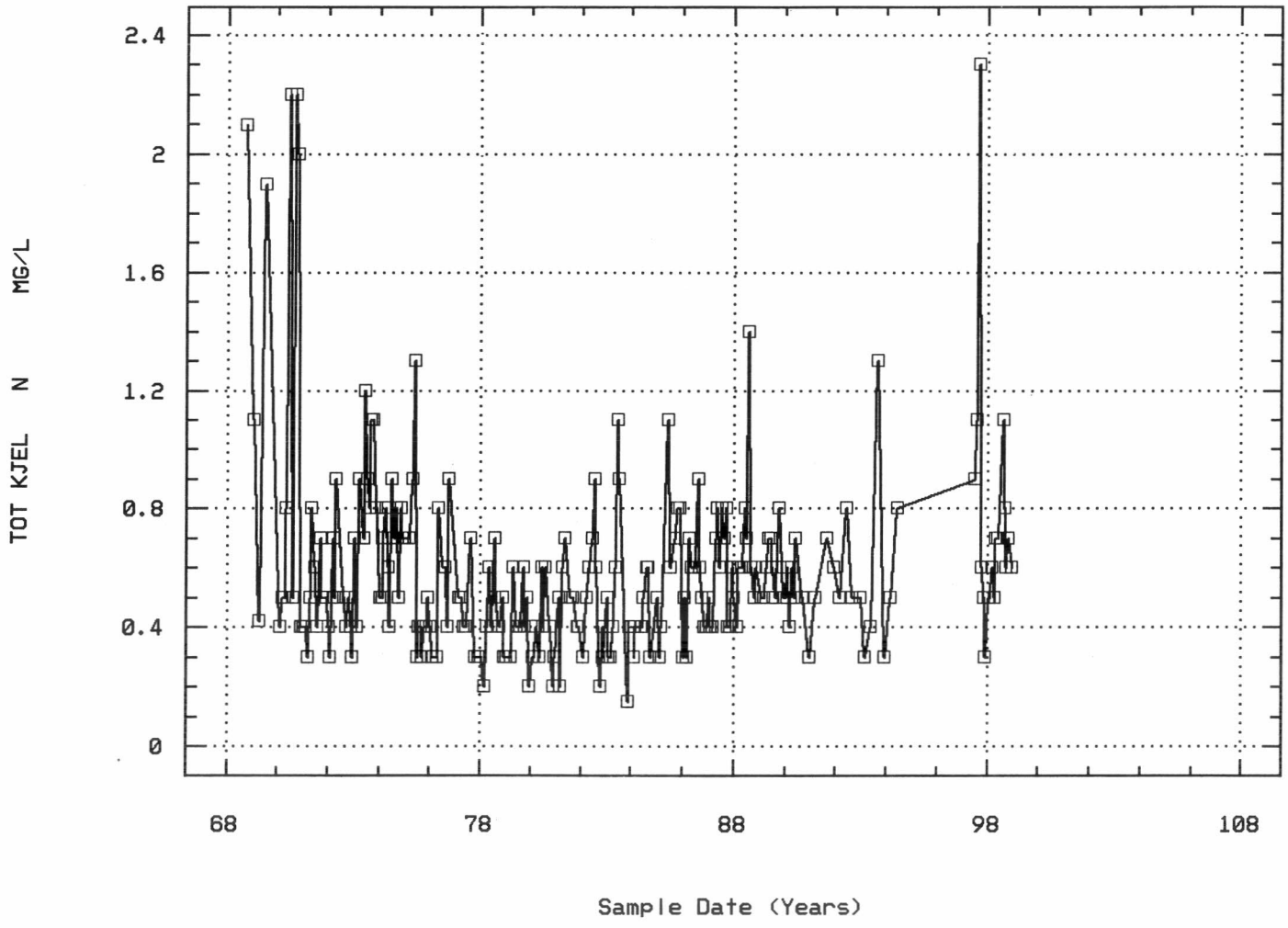
Annual Analysis for 1969 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	3	21.1	17.4	27.8	3.3	160.33	12.662	**	**	**	**
00300p OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	3	8.8	7.167	9.6	4.	9.173	3.029	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	3	2.2		3.	2.1	0.243	0.493	**	**	**	**
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	3	6.5	6.5	6.7	6.3	0.04	0.2	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	3	6.5	6.47	6.7	6.3	0.041	0.203	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	3	0.316	0.339	0.501	0.2	0.023	0.152	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	3	116.	127.333	162.	104.	937.333	30.616	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	3	30.	39.667	68.	21.	622.333	24.947	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	2	84.	84.	94.	74.	200.	14.142	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	2	7.5	7.5	8.	7.	0.5	0.707	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	3	5.	5.	6.	4.	1.	1.	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	2	2.5	2.5	4.	1.	4.5	2.121	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	3	0.16	0.137	0.17	0.08	0.002	0.049	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	3##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	3	0.21	0.173	0.24	0.07	0.008	0.091	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	3	1.099	1.139	1.899	0.42	0.548	0.74	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: RICH0134 Parameter Code: 00625

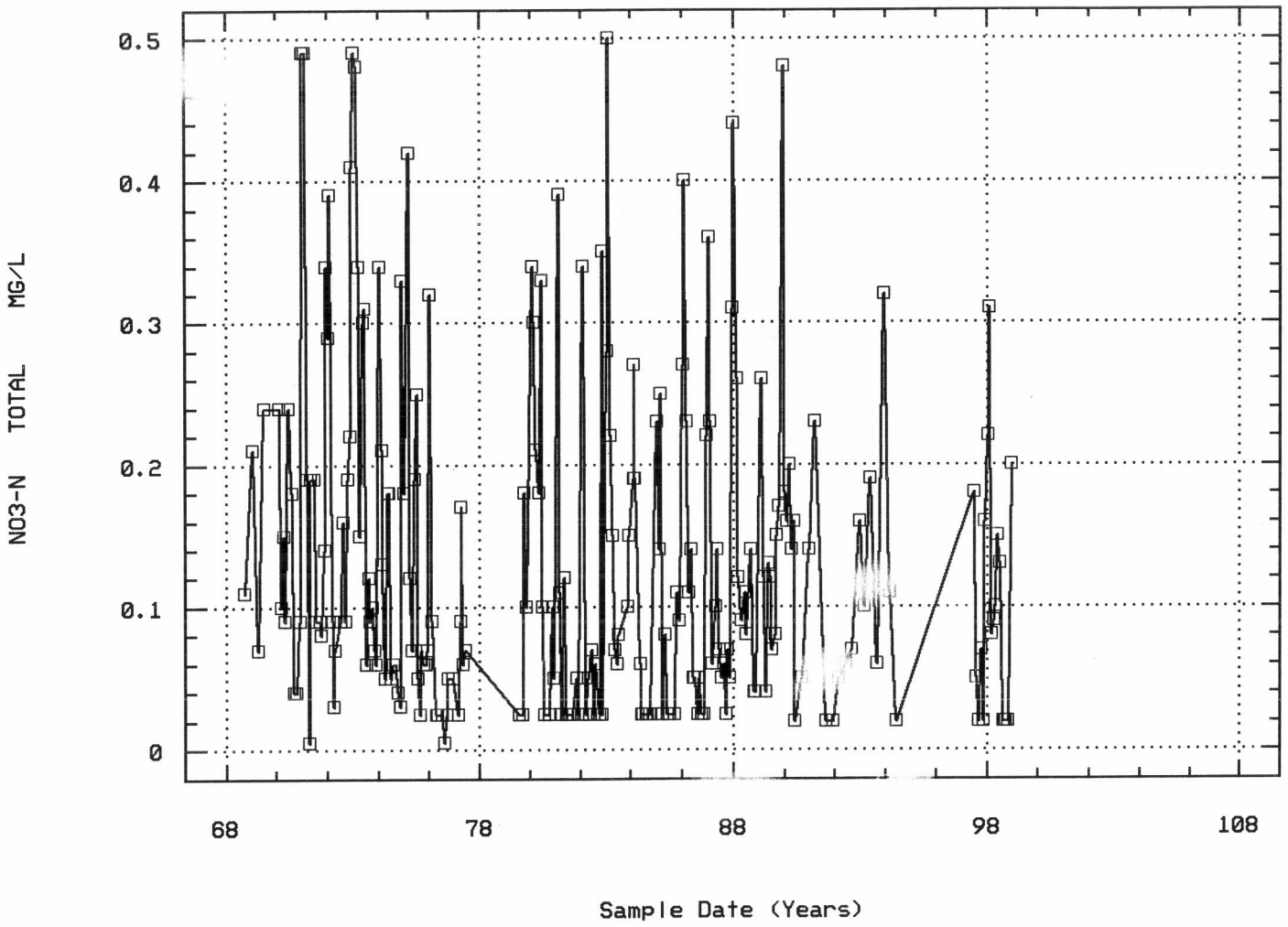
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00620

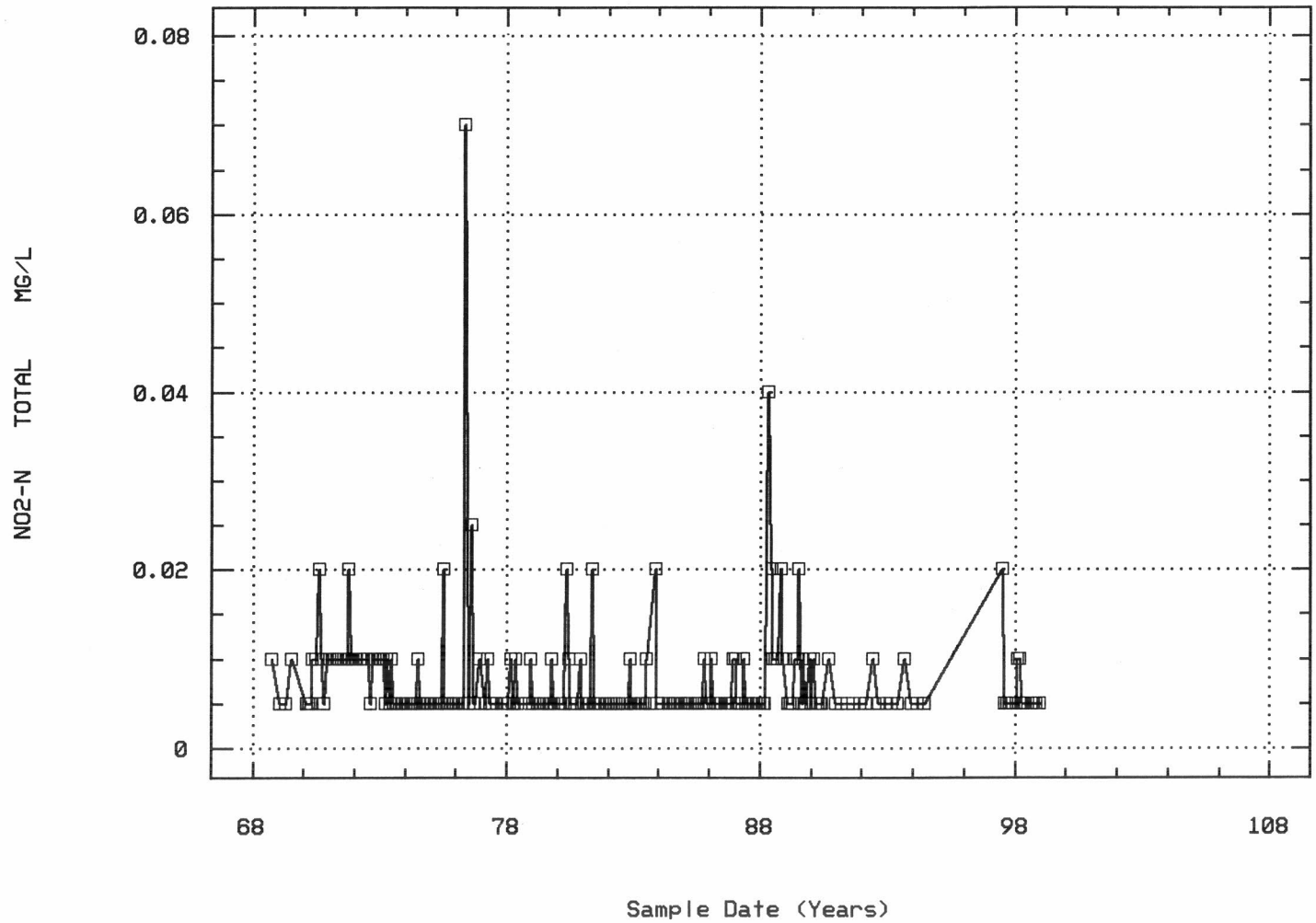
NITRATE NITROGEN, TOTAL (MG/L



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00615

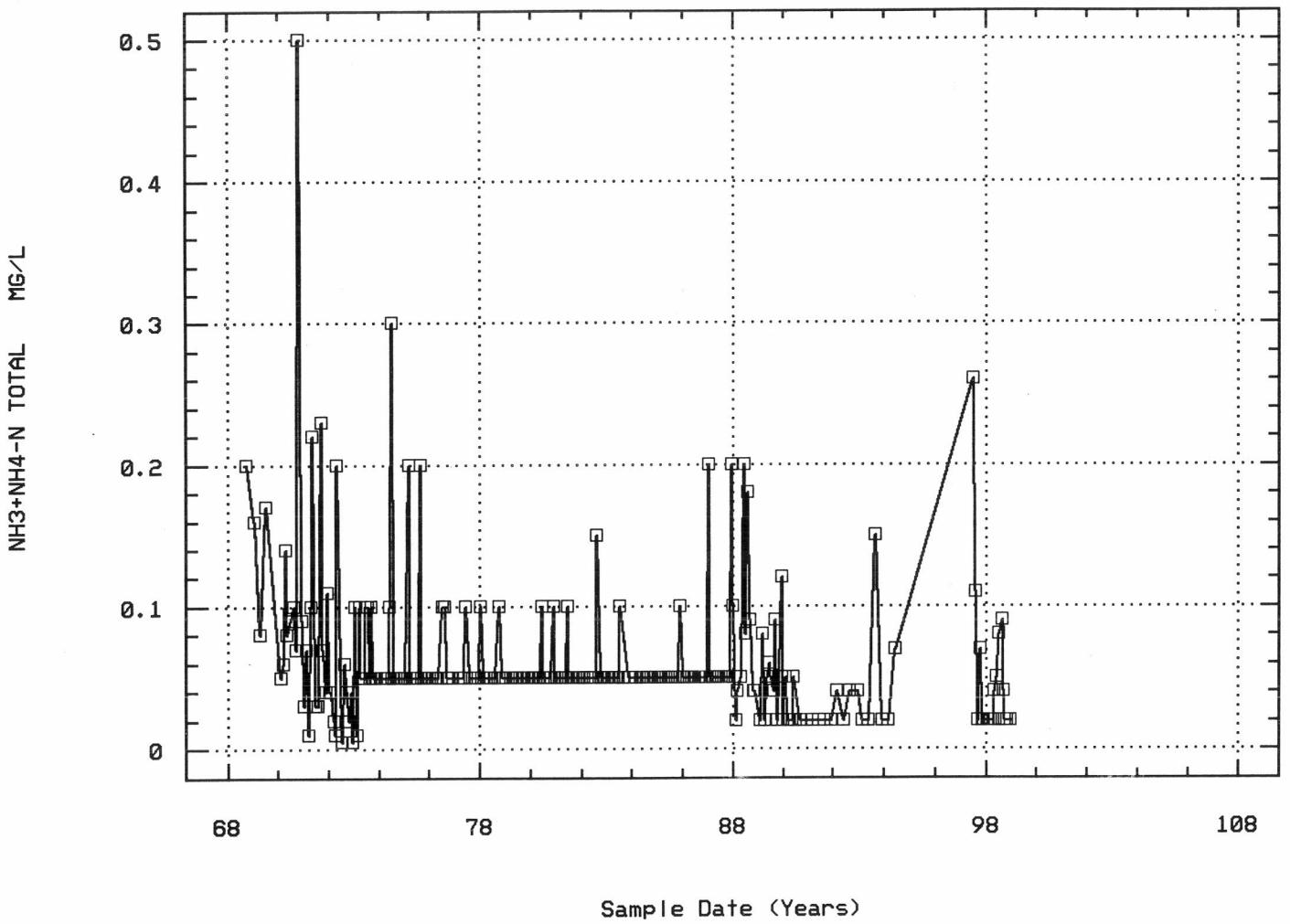
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00610

NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 360 BRIDGE

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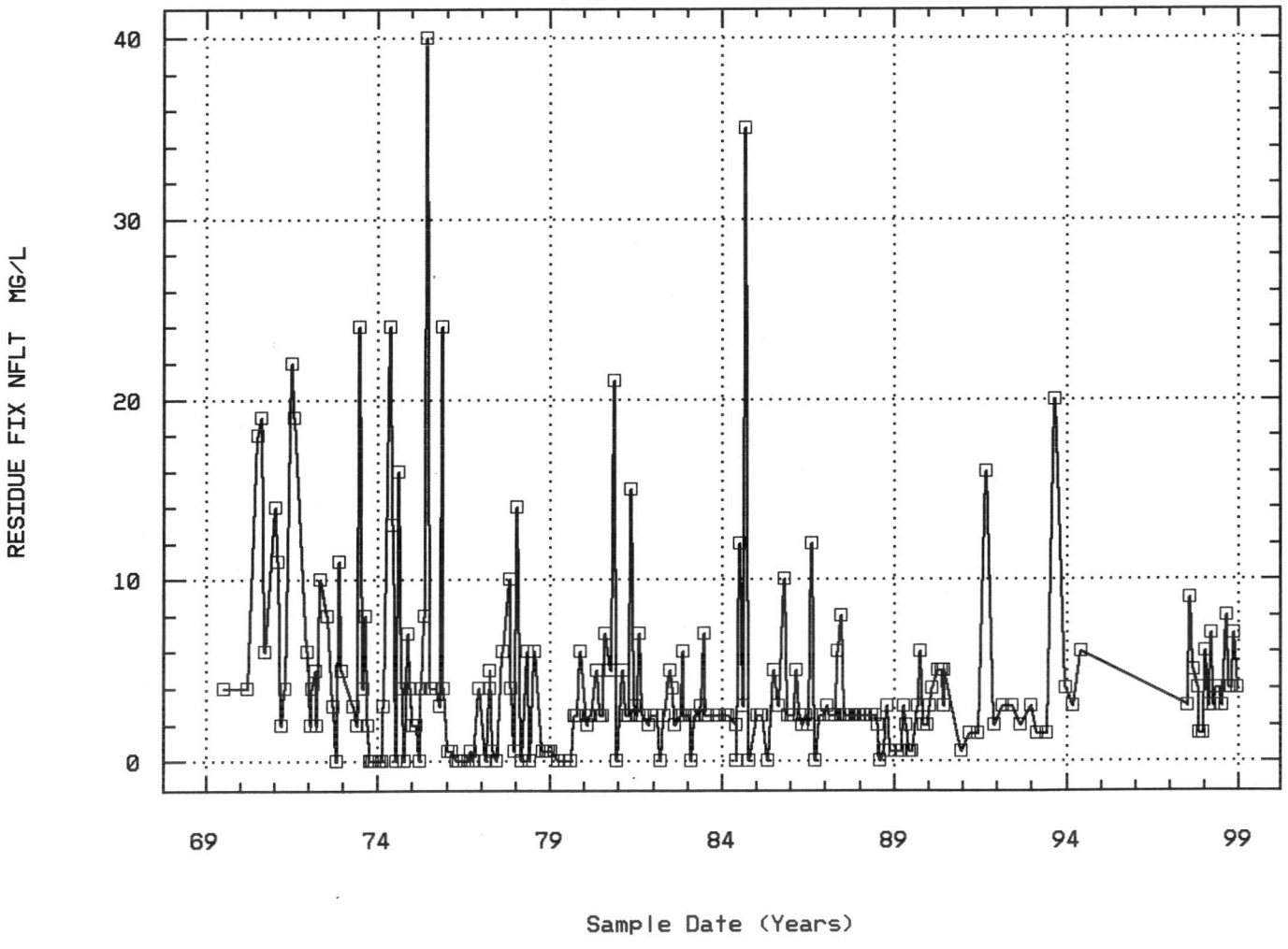
Station: RICH0134 Parameter Code: 00540

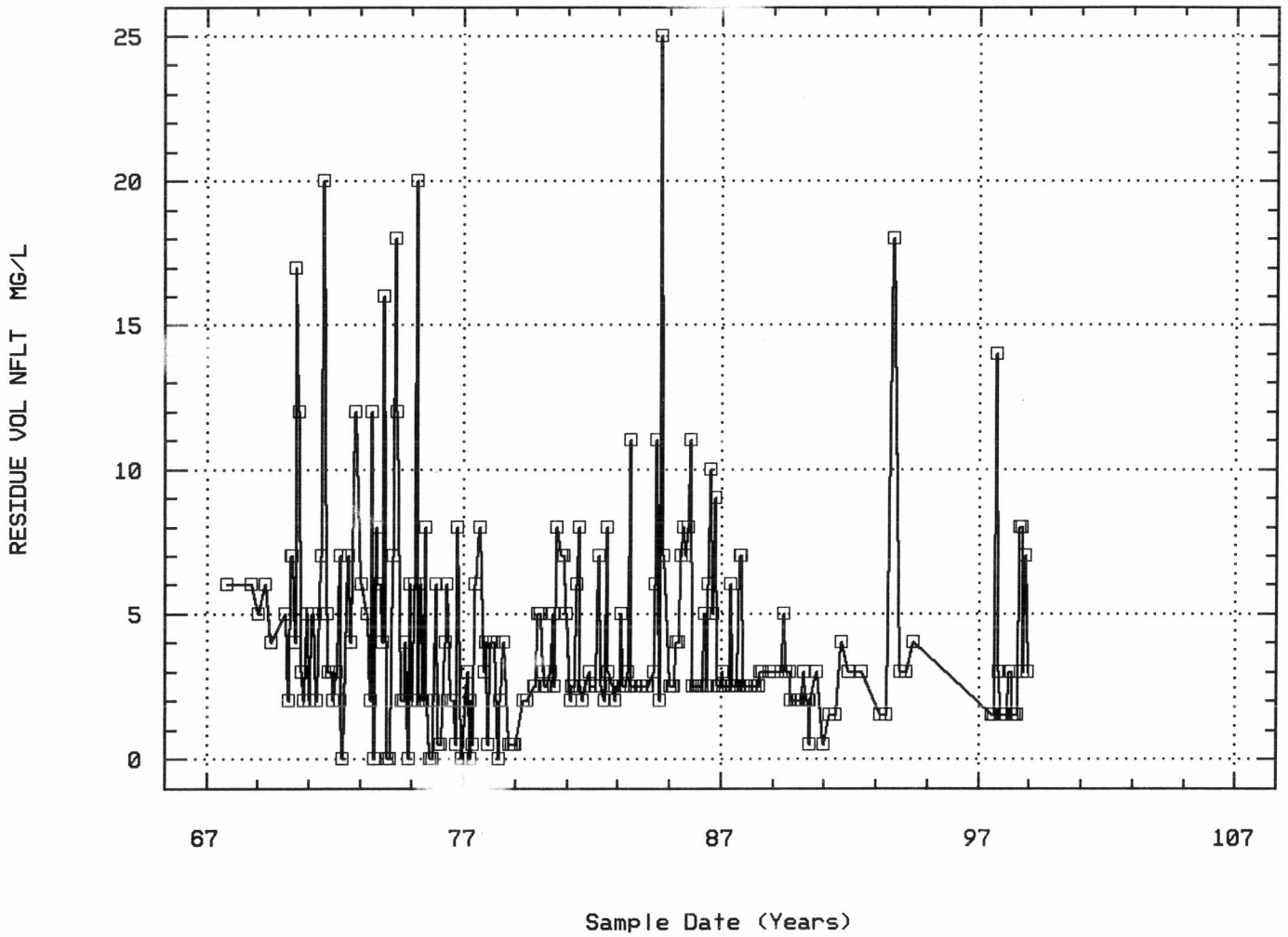
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00535

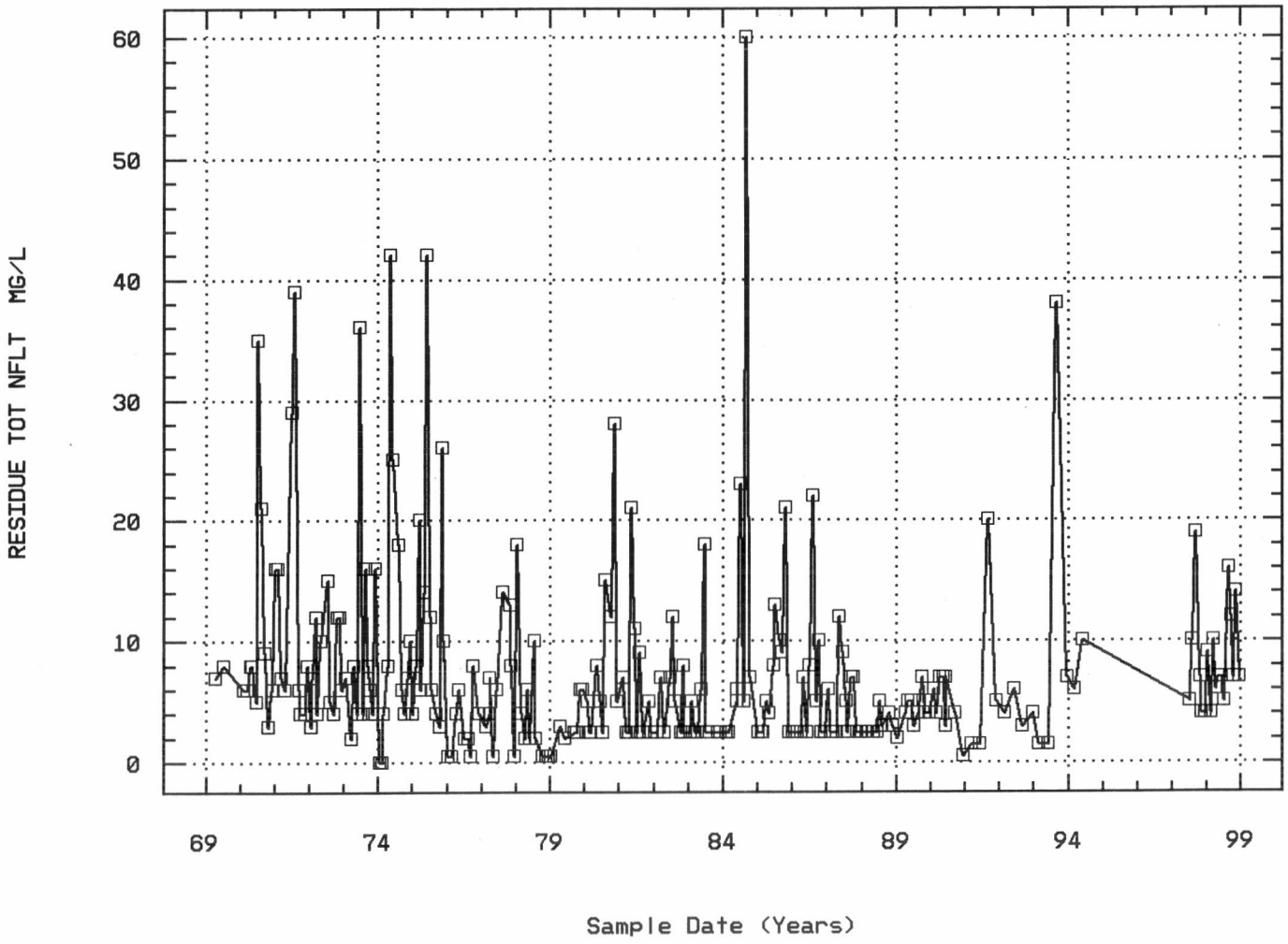
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00530

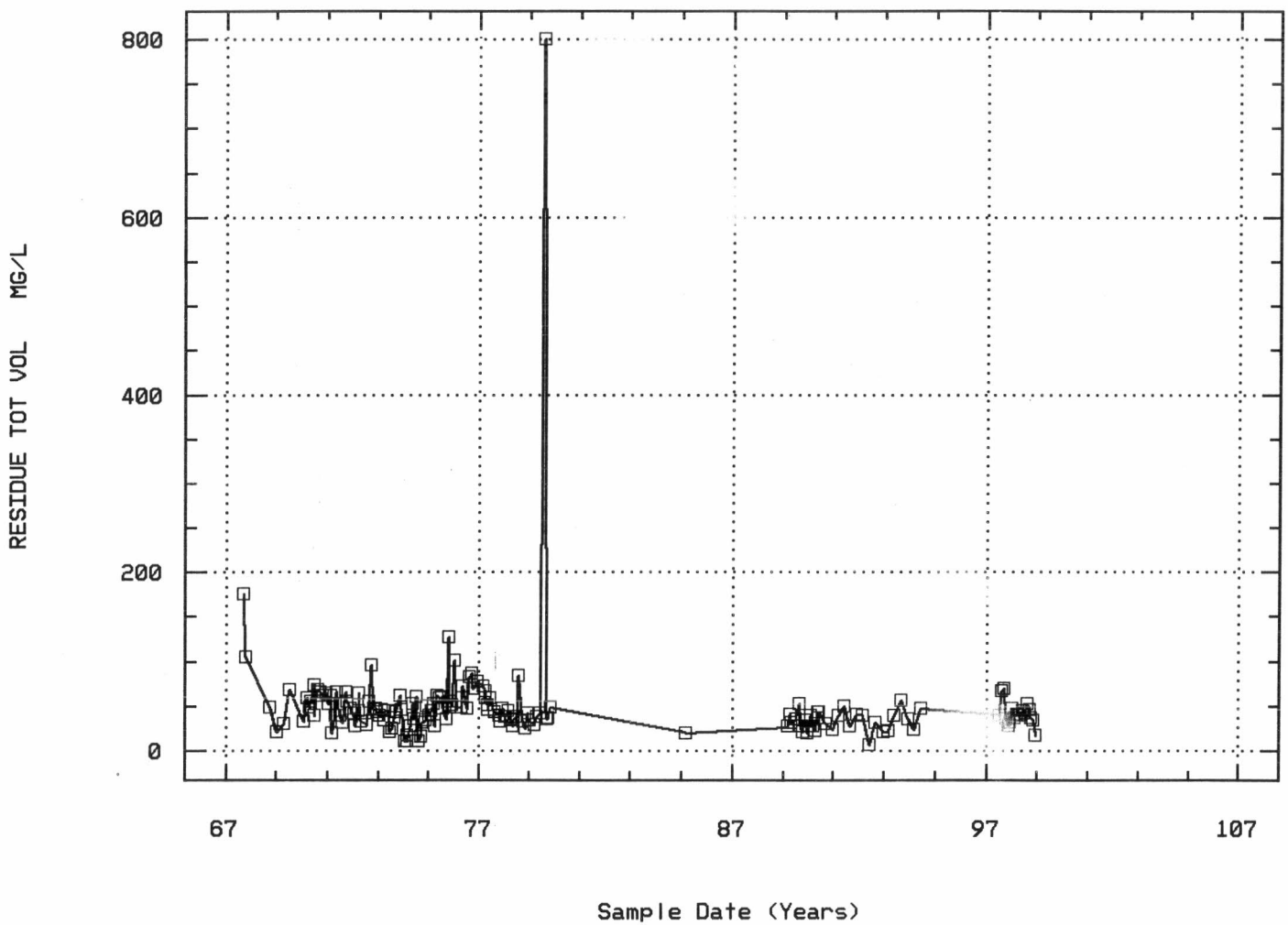
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00505

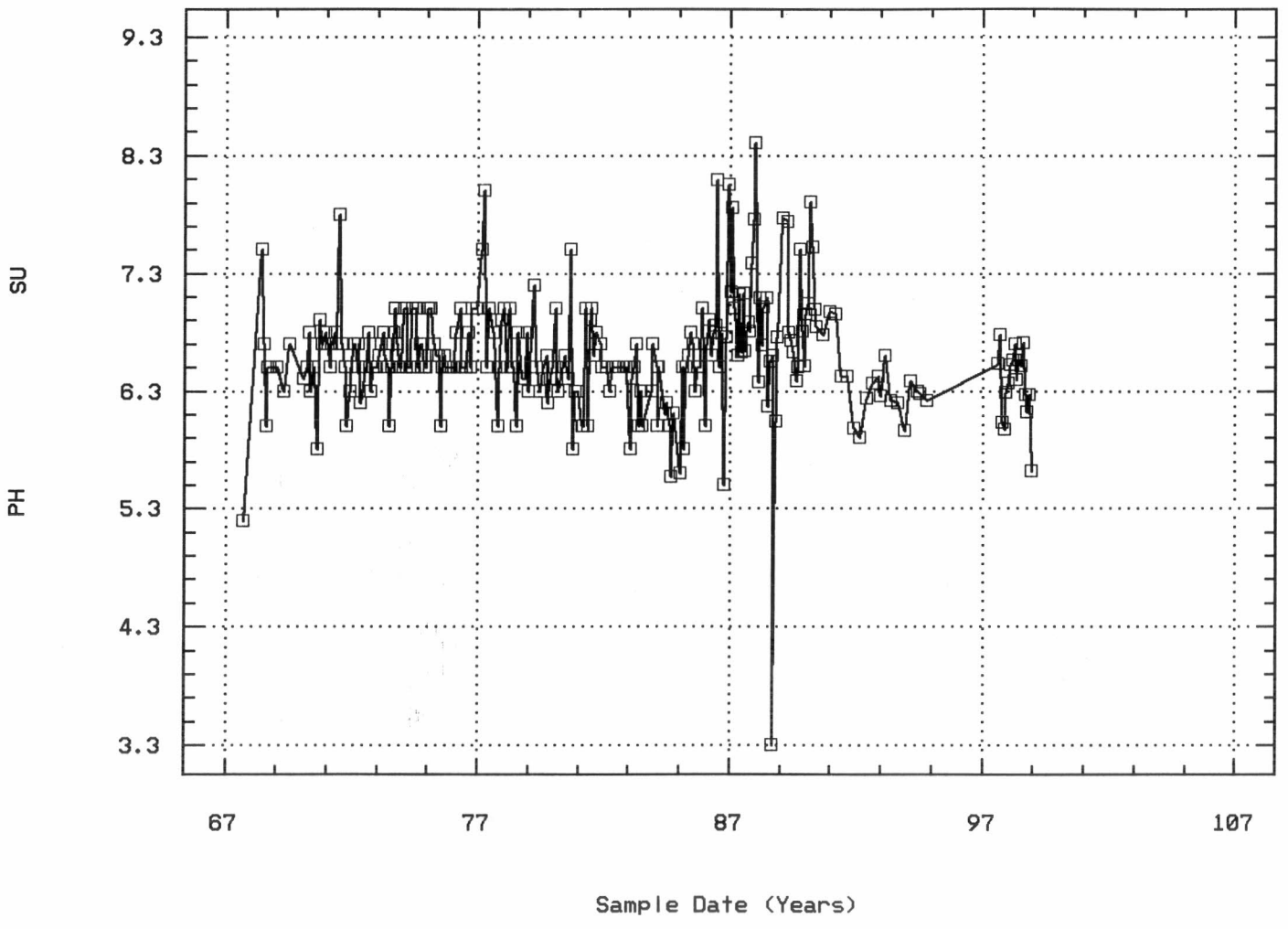
RESIDUE, TOTAL VOLATILE (MG/L)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00400

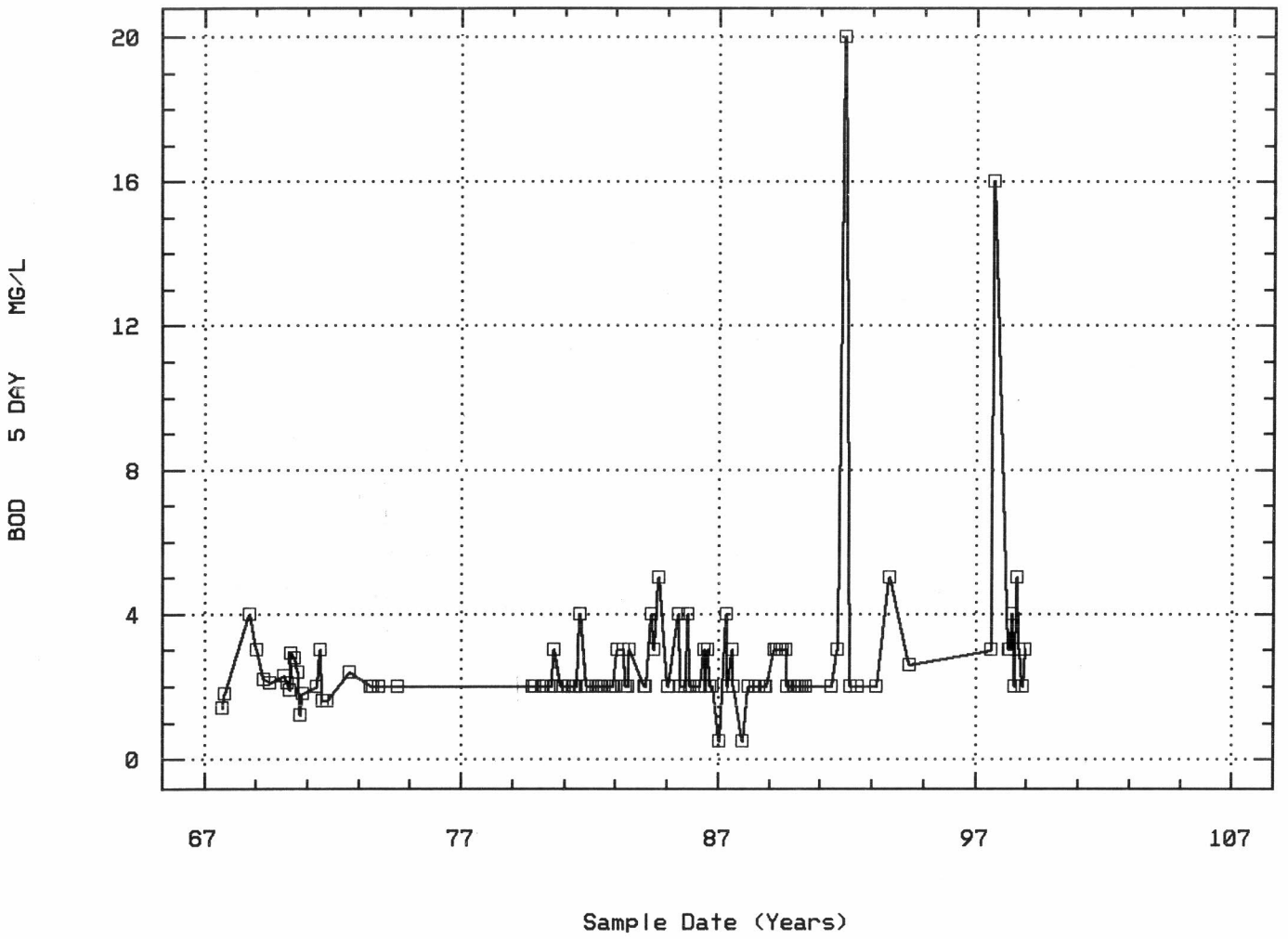
PH (STANDARD UNITS)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00310

BOD, 5 DAY, 20 DEG C



RT. 360 BRIDGE

EPA Water Quality Criteria Analysis for Station: RICH0134

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	10	0	0.00	1	0	0.00	3	0	0.00	6	0	0.00			
		Drinking Water	100.	10	0	0.00	1	0	0.00	3	0	0.00	6	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	10	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00			
		Drinking Water	100.	10	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	32	0	0.00	5	0	0.00	13	0	0.00	14	0	0.00			
		Drinking Water	5000.	32	0	0.00	5	0	0.00	13	0	0.00	14	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	8	1	0.13	2	1	0.50	5	0	0.00	1	0	0.00			
		Drinking Water	50.	8	0	0.00	2	0	0.00	5	0	0.00	1	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	18	6	0.33	9	2	0.22	4	2	0.50	5	2	0.40			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	18	6	0.33	7	3	0.43	8	3	0.38	3	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	211	43	0.20	63	19	0.30	87	12	0.14	61	12	0.20			
34356	ENDOSULFAN, BETA	Fresh Acute	0.22	1	0	0.00				1	0	0.00						
34361	ENDOSULFAN, ALPHA	Fresh Acute	0.22	1	0	0.00				1	0	0.00						
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	1.	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39300	P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39310	P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39320	P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
39340	GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0.00				1	0	0.00						
		Drinking Water	0.2	1	0	0.00				1	0	0.00						
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	2.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
		Drinking Water	2.	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39400	TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0.00				1	0	0.00						
		Drinking Water	3.	1	0	0.00				1	0	0.00						
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00				1	0	0.00						
		Drinking Water	0.4	1	0	0.00				1	0	0.00						
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00				1	0	0.00						
		Drinking Water	0.2	1	0	0.00				1	0	0.00						
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	1	0	0.00							1	0	0.00			
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39730	2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0.00				1	0	0.00						
39760	SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0.00				1	0	0.00						
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00	1	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	29	0	0.00	6	0	0.00	13	0	0.00	10	0	0.00			
		Drinking Water	2.	29	0	0.00	6	0	0.00	13	0	0.00	10	0	0.00			
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	12	1	0.08	3	1	0.33	6	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Parameter Inventory for Station: RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39390 ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/16/79-03/06/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39400 TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39410 HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/16/79-05/12/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39488 PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39492 PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39496 PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39500 PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39508 PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39516 PCBS IN WHOLE WATER SAMPLE (UG/L)	10/16/79-05/12/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	06/29/82-06/29/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/16/79-05/12/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39730 2,4-D IN WHOLE WATER SAMPLE (UG/L)	03/06/85-03/06/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39740 2,4,5-TP (SILVEX) IN WHOLE WATER SAMPLE (UG/L)	03/06/85-03/06/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39760 SILVEX IN WHOLE WATER SAMPLE (UG/L)	03/06/85-03/06/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
46570 HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	03/13/91-06/01/93	8	33.	35.25	44.	30.	32.5	5.701	**	**	**	**
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	08/11/74-08/11/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	98	0.1	0.1	0.6	0.05	0.006	0.076	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/14/98	130	0.055	0.065	0.2	0.005	0.001	0.033	0.03	0.04	0.09	0.1
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-06/01/93	29##	0.25	0.204	0.25	0.025	0.004	0.06	0.15	0.15	0.25	0.25
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	05/12/81-07/21/92	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
77825 ALACHLOR WHOLE WATER,UG/L	03/06/85-03/06/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82032 CALCIUM - TOTAL UG/L (AS CA)	09/02/92-03/03/93	3	9510.	10340.	13080.	8430.	5922300.	2433.578	**	**	**	**
82078 TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	09/04/91-06/08/94	12	7.05	16.742	120.	3.	1066.632	32.659	3.42	6.025	11.125	88.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0134

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	22	0	0.00	5	0	0.00	10	0	0.00	7	0	0.00			
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	18	0	0.00	7	0	0.00	8	0	0.00	3	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	35	16	0.46	11	10	0.91	18	2	0.11	6	4	0.67			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	231	65	0.28	69	42	0.61	93	4	0.04	69	19	0.28			
00400 PH	Fresh Chronic	9.	264	0	0.00	81	0	0.00	109	0	0.00	74	0	0.00			
	Other-Lo Lim.	6.5	263&	140	0.53	80	42	0.53	109	64	0.59	74	34	0.46			
00403 PH, LAB	Fresh Chronic	9.	67	0	0.00	20	0	0.00	27	0	0.00	20	0	0.00			
	Other-Lo Lim.	6.5	67	22	0.33	20	1	0.05	27	17	0.63	20	4	0.20			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	247	0	0.00	73	0	0.00	103	0	0.00	71	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	228	0	0.00	68	0	0.00	95	0	0.00	65	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	18	0	0.00	4	0	0.00	8	0	0.00	6	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	53	0	0.00	16	0	0.00	24	0	0.00	13	0	0.00			
	Drinking Water	250.	53	1	0.02	16	0	0.00	24	1	0.04	13	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	51	0	0.00	15	0	0.00	23	0	0.00	13	0	0.00			
00951 FLUORIDE, TOTAL AS F	Drinking Water	4.	27	0	0.00	7	0	0.00	11	0	0.00	9	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	19	0	0.00	4	0	0.00	9	0	0.00	6	0	0.00			
	Drinking Water	50.	19	0	0.00	4	0	0.00	9	0	0.00	6	0	0.00			
01012 BERYLLIUM, TOTAL	Fresh Acute	130.	3	0	0.00	1	0	0.00	2	0	0.00						
	Drinking Water	4.	0&	0	0.00												
01027 CADMIUM, TOTAL	Fresh Acute	3.9	4&	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
	Drinking Water	5.	4&	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	32	0	0.00	5	0	0.00	13	0	0.00	14	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	31	2	0.06	5	1	0.20	13	0	0.00	13	1	0.08			
	Drinking Water	1300.	31	0	0.00	5	0	0.00	13	0	0.00	13	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	28	0	0.00	5	0	0.00	13	0	0.00	10	0	0.00			
	Drinking Water	15.	28	1	0.04	5	0	0.00	13	1	0.08	10	0	0.00			
01059 THALLIUM, TOTAL	Fresh Acute	1400.	3	0	0.00	1	0	0.00	2	0	0.00						
	Drinking Water	2.	0&	0	0.00												

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Parameter Inventory for Station: RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-06/08/94	122	10.	10.543	21.	4.	12.63	3.554	6.49	8.	13.	16.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	50	40.	43.84	93.	20.	264.709	16.27	23.1	30.	54.25	61.
00927 MAGNESIUM, TOTAL (MG/L AS MG)	09/02/92-03/03/93	3	2320.	2343.333	2640.	2070.	81633.333	285.715	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	07/30/75-12/14/98	53	18.	26.66	317.	7.	1754.306	41.884	12.4	16.	24.	35.2
00945 SULFATE, TOTAL (MG/L AS SO4)	11/21/88-12/14/98	51	10.	14.549	105.	2.	228.893	15.129	6.	8.	16.	23.8
00951 FLUORIDE, TOTAL (MG/L AS F)	11/21/88-03/03/93	27	0.14	0.149	0.4	0.05	0.007	0.086	0.05	0.1	0.19	0.264
00955 SILICA, DISSOLVED (MG/L AS SI02)	05/10/89-12/28/92	22	10.35	9.777	15.9	4.7	11.145	3.338	5.05	6.725	11.75	14.9
01002 ARSENIC, TOTAL (UG/L AS AS)	04/28/71-06/01/93	19##	2.5	3.105	5.	0.5	3.738	1.933	0.5	1.	5.	5.
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	05/12/81-07/21/92	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
01012 BERYLLIUM, TOTAL (UG/L AS BE)	09/02/92-03/03/93	3##	5.	5.	5.	5.	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	04/28/71-06/01/93	22##	5.	4.159	5.	0.005	3.341	1.828	0.5	5.	5.	5.
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/12/81-07/21/92	1	0.39	0.39	0.39	0.39	0.	0.	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/12/81-07/21/92	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-06/01/93	32##	5.	6.438	20.	0.5	12.883	3.589	5.	5.	10.	10.
01042 COPPER, TOTAL (UG/L AS CU)	03/24/70-06/01/93	31##	5.	7.097	30.	5.	27.957	5.287	5.	5.	5.	10.
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	05/12/81-07/21/92	1	11.3	11.3	11.3	11.3	0.	0.	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	06/29/70-06/01/93	11	1299.	1435.636	2425.	463.	328594.655	573.232	544.2	1155.	1823.	2391.2
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-06/01/93	28##	5.	5.536	20.	0.5	16.721	4.089	1.	2.75	5.	10.1
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	05/12/81-07/21/92	1	156.	156.	156.	156.	0.	0.	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	03/24/70-06/01/93	12	119.7	480.542	3900.	26.6	1184902.274	1088.532	29.42	65.	362.35	2894.91
01059 THALLIUM, TOTAL (UG/L AS TL)	09/02/92-03/03/93	3##	10.	10.	10.	10.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	01/23/73-11/20/78	10##	50.	41.	50.	5.	360.	18.974	5.	38.75	50.	50.
01067 NICKEL, TOTAL (UG/L AS NI)	06/28/82-06/01/93	10##	5.	5.9	14.	5.	8.1	2.846	5.	5.	5.	13.1
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/12/81-07/21/92	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-06/01/93	32	17.5	21.688	90.	5.	358.48	18.934	5.	10.	30.	37.
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	05/12/81-07/21/92	1	105.	105.	105.	105.	0.	0.	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	03/13/91-06/01/93	8##	10.	12.	26.	10.	32.	5.657	**	**	**	**
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/20/67-10/28/77	18	930.	8548.944	93000.	91.	486534168.291	22057.52	144.1	230.	4550.	30900.
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	09/20/67-10/28/77	18	2.968	3.075	4.968	1.959	0.704	0.839	2.154	2.362	3.546	4.439
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	1189.83								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/02/97-12/14/98	18	104.	548.722	3500.	9.	943627.036	971.405	9.	45.	522.5	2510.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/02/97-12/14/98	18	2.003	2.138	3.544	0.954	0.588	0.767	0.954	1.653	2.649	3.397
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	137.368								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	211##	50.	192.749	5400.	50.	234316.218	484.062	50.	50.	100.	400.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	211##	1.699	1.952	3.732	1.699	0.17	0.413	1.699	1.699	2.	2.602
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	89.59								
32240 TANNIN AND LIGNIN (MG/L)	12/03/91-03/03/93	5	1.2	1.06	1.4	0.6	0.098	0.313	**	**	**	**
34259 DELTA BENZENE HEXACHLORIDE TOTWUG/L	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34351 ENDOSULFAN SULFATE TOTWUG/L	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34356 ENDOSULFAN, BETA TOTWUG/L	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34361 ENDOSULFAN, ALPHA TOTWUG/L	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34366 ENDRIN ALDEHYDE TOTWUG/L	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34671 PCB - 1016 TOTWUG/L	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
38442 DICAMBA (BANVEL) WATER,DISSUG/L	03/06/85-03/06/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38451 DICHLORPROP WATER,SUSPUG/L	03/06/85-03/06/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38745 2,4-DB WATER, TOTUG/L	03/06/85-03/06/85	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/16/79-03/06/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39062 CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/16/79-05/12/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39065 CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/16/79-05/12/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39068 CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/16/79-05/12/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39071 CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/16/79-05/12/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39300 P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/16/79-03/06/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39305 O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/16/79-05/12/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39310 P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/16/79-03/06/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39315 O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/16/79-05/12/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39320 P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/16/79-03/06/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39327 ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/16/79-05/12/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/16/79-03/06/85	5	0.	0.01	0.05	0.	0.001	0.022	**	**	**	**
39337 ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39338 BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39340 GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	03/06/85-03/06/85	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39350 CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/16/79-05/12/81	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39380 DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/16/79-03/06/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Station Inventory for Station: RICH0134

NPS Station ID: RICH0134 LAT/LON: 37.595281/ -77.382504 Agency: 21VASWCB Date Created: / /
Location: RT. 360 BRIDGE FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-CHK062.57 /VA2-05-X0057/VA2-4X0057
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206062 RF1 Mile Point: 14.800 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080205075000.00 RF3 Mile Point: 0.19 Distance from RF3: 0.11 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: CHICKAHOMINY RI. SECTION: 05 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	263	16.	15.506	29.5	-3.5	63.467	7.967	5.5	8.	22.5	25.6
00070 TURBIDITY, (JACKSON CANDLE UNITS)		11/21/88-06/10/91	22	7.15	7.473	11.3	4.2	4.472	2.115	5.06	5.65	8.925	11.15
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		07/02/97-12/14/98	18	11.85	15.594	37.	4.9	86.666	9.309	6.88	9.475	17.475	33.94
00080 COLOR (PLATINUM COBALT UNITS)		03/13/91-03/03/93	8	92.	95.375	156.	44.	1206.554	34.735	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		08/08/79-12/14/98	120	171.	193.25	1124.	67.	16397.651	128.053	105.3	139.25	213.	264.3
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/10/89-12/14/98	44	155.5	159.364	261.	76.	1507.539	38.827	105.5	133.75	181.75	219.5
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/17/90-12/14/98	35	5.2	5.717	12.6	0.4	14.717	3.836	1.	2.1	9.2	11.18
00300 OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	231	6.2	6.53	15.8	0.4	10.802	3.287	2.2	3.9	9.4	11.
00310p BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	168	2.	2.084	20.	0.5	3.97	1.993	1.	1.	2.075	3.
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	147	23.	23.939	42.	5.	50.798	7.127	16.	18.	29.	34.
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	264	6.5	6.56	8.41	1.	0.356	0.596	6.	6.38	6.8	7.
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	264	6.5	3.419	8.41	1.	10.256	3.203	6.	6.38	6.8	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	264	0.316	381.091	100000.	0.004	37877986.903	6154.509	0.1	0.158	0.417	1.
00403 PH, LAB, STANDARD UNITS	SU	09/20/67-12/14/98	67	6.7	6.666	7.4	5.9	0.089	0.298	6.3	6.5	6.8	7.02
00403 CONVERTED PH, LAB, STANDARD UNITS		09/20/67-12/14/98	67	6.7	6.567	7.4	5.9	0.099	0.314	6.3	6.5	6.8	7.02
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	67	0.2	0.271	1.259	0.04	0.044	0.211	0.096	0.158	0.316	0.501
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		09/20/67-12/14/98	65	23.	27.785	71.	6.	255.328	15.979	10.6	14.	40.5	50.4
00415 ALKALINITY, PHENOLPHTHALEIN (MG/L)		05/06/70-05/06/70	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	159	114.	124.56	590.	57.	2440.172	49.398	86.	100.	140.	171.
00505p RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	160	42.	49.55	800.	7.	4017.758	63.386	23.1	33.	52.75	68.
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	156	76.	81.558	570.	11.	2413.629	49.129	40.	59.25	96.75	116.3
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	251	5.	7.327	60.	0.	63.913	7.995	2.	2.5	8.	16.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	255	2.5	3.878	25.	0.	13.631	3.692	1.	2.	5.	8.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	249	2.5	4.074	40.	0.	29.58	5.439	0	1.	4.	9.
00545 RESIDUE, SETTLEABLE (ML/L)		08/18/82-08/18/82	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	249##	0.05	0.063	0.5	0.005	0.003	0.052	0.02	0.05	0.05	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	247##	0.005	0.007	0.07	0.005	0.	0.006	0.005	0.005	0.01	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	228	0.09	0.134	0.5	0.005	0.013	0.116	0.025	0.05	0.19	0.32
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	243	0.5	0.607	2.3	0.15	0.11	0.332	0.4	0.4	0.7	0.96
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		08/17/77-06/14/79	18##	0.025	0.106	0.37	0.025	0.015	0.124		0.025	0.21	0.334
00660 PHOSPHATE, ORTHO (MG/L AS PO4)		10/07/68-07/16/69	4	0	0.325	0.44	0.25	0.008	0.089			**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/14/98	143	0	0.101	0.6	0.03	0.006	0.077	0.0	0.05	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/08/79-07/13/91	114	0.0	0.086	3.	0.01	0.078	0.28	0.01	0.03	0.08	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Station Inventory for Station: RICH0133

NPS Station ID: RICH0133 LAT/LON: 37.576948/ -77.334171 Agency: 21VASWCB Date Created: 05/06/95
Location: CHICKAHOMINY RIVER, RT. 615 BRIDGE FIPS State/County: 51085 VIRGINIA/HANOVER
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-CHK059.27
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: CHICKAHOMINY RIVER SECTION: 05 TOPO MAP #: 0039 TOPO MAP NAME: SEVEN PINES, VA

Parameter Inventory for Station: RICH0133

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		07/19/94-10/19/94	4	25.65	22.825	26.9	13.1	43.422	6.59	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		10/19/94-10/19/94	1	135.	135.	135.	135.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	07/19/94-10/19/94	4	4.	4.45	6.5	3.3	1.977	1.406	**	**	**	**
00400 PH (STANDARD UNITS)		07/19/94-10/19/94	4	6.405	6.363	6.44	6.2	0.013	0.113	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		07/19/94-10/19/94	4	6.404	6.351	6.44	6.2	0.013	0.114	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/19/94-10/19/94	4	0.395	0.446	0.631	0.363	0.016	0.127	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0133

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	4	3	0.75	3	3	1.00	1	0	0.00						
00400 PH	Fresh Chronic	9.	4	0	0.00	3	0	0.00	1	0	0.00						
	Other-Lo Lim.	6.5	4	4	1.00	3	3	1.00	1	1	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Parameter Inventory for Station: RICH0132

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01051 LEAD, TOTAL (UG/L AS PB)	04/12/88-09/12/89	4##	2.5	2.375	2.5	2.	0.063	0.25	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/12/89	6	365.	503.333	1200.	100.	183146.667	427.956	**	**	**	**
01056 MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-04/12/88	3	140.	441.333	1100.	84.	326165.333	571.109	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	04/12/88-04/07/90	6	3.	2.917	6.	0.5	4.042	2.01	**	**	**	**
01090 ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	2	144.5	144.5	260.	29.	26680.5	163.342	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/12/89	4	30.	85.	260.	20.	13700.	117.047	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	04/12/88-09/12/89	4##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70331 SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/12/89	4	87.	88.25	98.	81.	66.917	8.18	**	**	**	**
71890 MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
71900 MERCURY, TOTAL (UG/L AS HG)	04/12/88-09/12/89	4##	0.05	0.088	0.2	0.05	0.006	0.075	**	**	**	**
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-09/12/89	4	7.5	7.75	9.	7.	0.917	0.957	**	**	**	**

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EPA Water Quality Criteria Analysis for Station: RICH0132

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	7	1	0.14	2	1	0.50				5	0	0.00			
00400 PH	Fresh Chronic	9.	8	0	0.00	3	0	0.00				5	0	0.00			
	Other-Lo Lim.	6.5	8	4	0.50	3	2	0.67				5	2	0.40			
00403 PH, LAB	Fresh Chronic	9.	6	0	0.00	3	0	0.00				3	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	3	1	0.33				3	0	0.00			
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	6	0	0.00	3	0	0.00				3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	6	0	0.00	3	0	0.00				3	0	0.00			
	Drinking Water	250.	6	0	0.00	3	0	0.00				3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	3	0	0.00				3	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	6	0	0.00	3	0	0.00				3	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	50.	4	0	0.00	2	0	0.00				2	0	0.00			
01025 CADMIUM, DISSOLVED	Fresh Acute	3.9	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	5.	2	0	0.00	1	0	0.00				1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	6	1	0.17	2	0	0.00				4	1	0.25			
	Drinking Water	5.	6	1	0.17	2	0	0.00				4	1	0.25			
01034 CHROMIUM, TOTAL	Drinking Water	100.	6	0	0.00	2	0	0.00				4	0	0.00			
01040 COPPER, DISSOLVED	Fresh Acute	18.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	1300.	2	0	0.00	1	0	0.00				1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	1300.	4	0	0.00	2	0	0.00				2	0	0.00			
01049 LEAD, DISSOLVED	Fresh Acute	82.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	15.	2	0	0.00	1	0	0.00				1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	15.	4	0	0.00	2	0	0.00				2	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	6	0	0.00	2	0	0.00				4	0	0.00			
	Drinking Water	100.	6	0	0.00	2	0	0.00				4	0	0.00			
01090 ZINC, DISSOLVED	Fresh Acute	120.	2	1	0.50	1	1	1.00				1	0	0.00			
	Drinking Water	5000.	2	0	0.00	1	0	0.00				1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	4	1	0.25	2	1	0.50				2	0	0.00			
	Drinking Water	5000.	4	0	0.00	2	0	0.00				2	0	0.00			
01147 SELENIUM, TOTAL	Fresh Acute	20.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	50.	4	0	0.00	2	0	0.00				2	0	0.00			
71890 MERCURY, DISSOLVED	Fresh Acute	2.4	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	2.	2	0	0.00	1	0	0.00				1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	2.	4	0	0.00	2	0	0.00				2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0132

NPS Station ID: RICH0132 LAT/LON: 37.576671/ -77.334171 Agency: 112WRD Date Created: 01/09/88
Location: CHICKAHOMINY RIV AT RT 615 NR HIGHLAND SPGS, VA FIPS State/County: 51085 VIRGINIA/HANOVER
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02042435
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206003304.88 RF3 Mile Point: 5.89 Distance from RF3: 0.00 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0132

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/10/84-04/07/90	13	20.5	18.731	25.5	10.	30.859	5.555	10.8	13.	24.25	25.3
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/10/84-04/07/90	11	21.5	20.409	26.5	11.	34.041	5.834	11.3	13.	25.5	26.3
00025 BAROMETRIC PRESSURE (MM OF HG)	04/08/87-04/07/90	8	755.	756.125	767.	746.	54.411	7.376	**	**	**	**
00061 FLOW, STREAM, INSTANTANEOUS CFS	09/10/84-09/12/89	11	34.	62.364	190.	5.	4176.855	64.629	5.	7.	124.	181.6
00080 COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/12/89	6	60.	74.667	110.	52.	757.867	27.529	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/10/84-04/07/90	13	135.	139.846	200.	87.	1071.974	32.741	90.2	119.	158.5	196.
00300 OXYGEN, DISSOLVED MG/L	04/08/87-04/07/90	7	5.8	6.171	9.3	3.9	4.409	2.1	**	**	**	**
00400 PH (STANDARD UNITS)	04/08/87-04/07/90	8	6.665	6.641	7.1	6.	0.158	0.398	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/08/87-04/07/90	8	6.634	6.481	7.1	6.	0.188	0.433	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-04/07/90	8	0.232	0.33	1.	0.079	0.098	0.313	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	04/08/87-09/12/89	6	7.2	7.15	7.7	6.5	0.171	0.414	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	04/08/87-09/12/89	6	7.2	6.98	7.7	6.5	0.206	0.453	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-09/12/89	6	0.063	0.105	0.316	0.02	0.012	0.11	**	**	**	**
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/08/87-09/12/89	6	0.025	0.027	0.06	0.01	0.	0.019	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/08/87-09/12/89	5	0.6	0.72	1.3	0.5	0.107	0.327	**	**	**	**
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/08/87-09/12/89	6	0.045	0.055	0.1	0.01	0.001	0.037	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	04/08/87-09/12/89	6	0.067	0.069	0.082	0.053	0.	0.011	**	**	**	**
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/12/89	6	0.027	0.033	0.069	0.01	0.	0.02	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/08/87-09/12/89	6	0.017	0.021	0.042	0.006	0.	0.013	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/08/87-09/12/89	5	9.5	9.08	11.	6.7	2.787	1.669	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	04/08/87-09/12/89	6	8.5	8.383	10.	7.1	1.23	1.109	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/08/87-09/12/89	6	2.1	2.167	2.6	1.9	0.063	0.25	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	04/08/87-09/12/89	6	13.	13.833	17.	11.	6.567	2.563	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/08/87-09/12/89	6	2.35	2.05	3.2	0.8	1.039	1.019	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	04/08/87-09/12/89	6	15.	16.833	24.	13.	20.967	4.579	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	04/08/87-09/12/89	6	21.5	20.167	37.	4.	134.167	11.583	**	**	**	**
00950 FLUORIDE, DISSOLVED (MG/L AS F)	04/08/87-09/12/89	6	0.1	0.117	0.2	0.1	0.002	0.041	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	04/08/87-09/12/89	6	6.65	6.95	13.	1.5	23.579	4.856	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/12/89	4	1.	0.875	1.	0.5	0.063	0.25	**	**	**	**
01025 CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	2##	1.25	1.25	2.	0.5	1.125	1.061	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	04/12/88-04/07/90	6##	0.75	2.083	9.	0.5	11.542	3.397	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-04/07/90	6##	0.75	0.917	2.	0.5	0.342	0.585	**	**	**	**
01037 COBALT, TOTAL (UG/L AS CO)	04/12/88-09/12/89	4	1.	1.125	2.	0.5	0.396	0.629	**	**	**	**
01040 COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	2##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	04/12/88-09/12/89	4	3.	3.25	4.	3.	0.25	0.5	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	04/08/87-09/12/89	6	1950.	1933.333	2400.	1300.	190666.667	436.654	**	**	**	**
01046 IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/12/89	6	670.	723.333	1500.	120.	268026.667	517.713	**	**	**	**
01049 LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	2##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0131

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/11/84-09/04/91	14	22.6	23.014	29.2	16.5	10.167	3.189	18.4	21.25	24.55	28.65
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)		09/11/84-09/04/91	13	27.	25.946	31.5	20.5	13.369	3.656	20.9	22.5	28.75	31.26
00061 FLOW, STREAM, INSTANTANEOUS	CFS	09/11/84-09/04/91	14	29.	62.714	230.	6.	4936.22	70.258	8.	12.75	134.25	187.5
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/11/84-09/04/91	14	119.5	128.	188.	100.	698.308	26.426	101.	109.75	148.25	176.5
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		09/11/84-09/04/91	13	0.7	0.762	1.5	0.3	0.098	0.312	0.38	0.55	0.95	1.34
00665 PHOSPHORUS, TOTAL (MG/L AS P)		09/11/84-09/04/91	13	0.083	0.1	0.19	0.063	0.002	0.041	0.063	0.074	0.121	0.183
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		09/11/84-09/04/91	13	8.5	9.315	14.	6.6	4.253	2.062	6.92	7.9	10.5	13.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0131

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/11/84-09/04/91	3	9.7	10.633	15.5	6.7	20.013	4.474	**	**	**	**
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)		09/11/84-09/04/91	3	13.5	14.067	16.7	12.	5.763	2.401	**	**	**	**
00061 FLOW, STREAM, INSTANTANEOUS	CFS	09/11/84-09/04/91	3	64.	72.333	95.	58.	394.333	19.858	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/11/84-09/04/91	3	126.	131.	162.	105.	831.	28.827	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		09/11/84-09/04/91	3	0.4	0.4	0.5	0.3	0.01	0.1	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		09/11/84-09/04/91	3	0.037	0.037	0.04	0.034	0.	0.003	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		09/11/84-09/04/91	3	6.4	6.7	8.6	5.1	3.13	1.769	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0131

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/11/84-09/04/91	16	15.95	16.244	25.2	10.9	19.068	4.367	10.97	12.275	18.75	23.38
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)		09/11/84-09/04/91	16	18.2	18.581	31.	6.5	45.996	6.782	8.95	14.05	21.75	30.51
00061 FLOW, STREAM, INSTANTANEOUS	CFS	09/11/84-09/04/91	14	210.5	464.286	1373.	7.	217603.451	466.48	52.5	148.25	984.	1291.5
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/11/84-09/04/91	16	87.5	95.563	145.	48.	1015.863	31.873	52.9	71.25	123.25	144.3
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		09/11/84-09/04/91	14	0.7	0.693	1.	0.5	0.028	0.169	0.5	0.5	0.825	0.95
00665 PHOSPHORUS, TOTAL (MG/L AS P)		09/11/84-09/04/91	14	0.082	0.088	0.194	0.034	0.001	0.037	0.047	0.066	0.097	0.156
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		09/11/84-09/04/91	14	11.	10.879	14.	7.3	2.83	1.682	8.45	9.775	12.	13.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

EPA Water Quality Criteria Analysis for Station: RICH0131

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01090 ZINC, DISSOLVED	Fresh Acute	120.	2	1	0.50	1	1	1.00				1	0	0.00			
	Drinking Water	5000.	2	0	0.00	1	0	0.00				1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	27	2	0.07	11	2	0.18	3	0	0.00	13	0	0.00			
	Drinking Water	5000.	27	0	0.00	11	0	0.00	3	0	0.00	13	0	0.00			
01147 SELENIUM, TOTAL	Fresh Acute	20.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00			
	Drinking Water	50.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00			
71890 MERCURY, DISSOLVED	Fresh Acute	2.4	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	2.	2	0	0.00	1	0	0.00				1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	27	0	0.00	11	0	0.00	3	0	0.00	13	0	0.00			
	Drinking Water	2.	27	0	0.00	11	0	0.00	3	0	0.00	13	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Parameter Inventory for Station: RICH0131

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01034 CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-09/04/91	29	2.	1.948	6.	0.5	2.845	1.687	0.5	0.5	2.	5.
01037 COBALT, TOTAL (UG/L AS CO)	04/12/88-10/31/89	5	1.	2.	4.	1.	2.	1.414	**	**	**	**
01040 COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	2##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	04/12/88-09/04/91	27	3.	4.056	18.	0.5	10.276	3.206	2.	2.	4.	7.
01045 IRON, TOTAL (UG/L AS FE)	04/08/87-09/04/91	29	1900.	1993.448	4100.	910.	464887.685	681.827	1200.	1550.	2300.	3000.
01046 IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/04/91	29	600.	730.69	1600.	150.	134528.079	366.781	280.	455.	960.	1300.
01049 LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	2##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	04/12/88-09/04/91	26	2.5	2.962	10.	0.5	3.438	1.854	1.	2.	3.25	5.
01055 MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/04/91	29	290.	399.655	2800.	60.	307003.448	554.079	70.	95.	450.	680.
01056 MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-04/02/91	15	80.	267.	2800.	40.	492945.857	702.101	40.	50.	120.	1234.
01067 NICKEL, TOTAL (UG/L AS NI)	04/12/88-09/04/91	28	3.5	4.946	20.	0.5	17.599	4.195	1.	2.	7.	10.2
01090 ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	2	184.	184.	340.	28.	48672.	220.617	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/04/91	27	20.	36.667	140.	5.	1578.846	39.735	5.	10.	40.	112.
01147 SELENIUM, TOTAL (UG/L AS SE)	04/12/88-10/31/89	5##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
32209 CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	10/31/89-01/25/90	2	2.05	2.05	3.3	0.8	3.125	1.768	**	**	**	**
32213 PHEOPHYTIN-A,FLUORI[illegible]METHOD (UG/L)	10/31/89-01/25/90	2	2.75	2.75	3.5	2.	1.125	1.061	**	**	**	**
32730 PHENOLICS, TOTAL, RECOVERABLE (UG/L)	10/31/89-09/04/91	23##	0.5	1.478	5.	0.5	2.125	1.458	0.5	0.5	2.	4.6
39086 ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CACO3,MG/L	06/11/91-06/11/91	1	27.	27.	27.	27.	0.	0.	**	**	**	**
70331 SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/12/89	4	82.	80.	89.	67.	110.	10.488	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/31/89-09/04/91	23	0.056	0.055	0.088	0.001	0.	0.02	0.022	0.049	0.068	0.081
71890 MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
71900 MERCURY, TOTAL (UG[illegible]HG)	04/12/88-09/04/91	27##	0.05	0.054	0.1	0.05	0.	0.013	0.05	[illegible]	0.05	0.06
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-08/02/91	24	14.	19.792	91.	3.	390.694	19.766	6.		20.	54.

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EPA Water Quality Criteria Analysis for Station: RICH0131

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	[illegible] Obs	[illegible] Exceed	[illegible] Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	31	4	0.13	12	3	0.25	3	0	0.00	16	1	0.06			
00400 PH	Fresh Chronic	9.	32	0	0.00	13	0	0.00	3	0	0.00	16	0	0.00			
	Other-Lo Lim.	6.5	32	13	0.41	13	5	0.38	3	1	0.33	16	7	0.44			
00403 PH, LAB	Fresh Chronic	9.	7	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	7	1	0.14	3	1	0.33	1	0	0.00	3	0	0.00			
00630 NITRITE PLUS NITRATE, TOT[illegible]	[illegible]ing Water	10.	23	0	0.00	9	0	0.00	3	0	0.00	11	0	0.00			
00631 NITRITE PLUS NITRATE, DISS. [illegible] DET	[illegible]ing Water	10.	7	0	0.00	4	0	0.00				3	0	0.00			
00720 CYANIDE, TOTAL	[illegible]esh Acute	0.022	15	0	0.00	6	0	0.00	2	0	0.00	7	0	0.00			
	Drinking Water	0.2	15	0	0.00	6	0	0.00	2	0	0.00	7	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	29	0	0.00	12	0	0.00	3	0	0.00	14	0	0.00			
	Drinking Water	250.	29	0	0.00	12	0	0.00	3	0	0.00	14	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	29	0	0.00	12	0	0.00	3	0	0.00	14	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	7	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	27	0	0.00	11	0	0.00	3	0	0.00	13	0	0.00			
	Drinking Water	50.	27	0	0.00	11	0	0.00	3	0	0.00	13	0	0.00			
01025 CADMIUM, DISSOLVED	Fresh Acute	3.9	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	5.	2	0	0.00	1	0	0.00				1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	28	2	0.07	11	1	0.09	3	0	0.00	14	1	0.07			
	Drinking Water	5.	28	2	0.07	11	1	0.09	3	0	0.00	14	1	0.07			
01034 CHROMIUM, TOTAL	Drinking Water	100.	29	0	0.00	11	0	0.00	3	0	0.00	15	0	0.00			
01040 COPPER, DISSOLVED	Fresh Acute	18.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	1300.	2	0	0.00	1	0	0.00				1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	27	1	0.04	11	0	0.00	3	0	0.00	13	1	0.08			
	Drinking Water	1300.	27	0	0.00	11	0	0.00	3	0	0.00	13	0	0.00			
01049 LEAD, DISSOLVED	Fresh Acute	82.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking [illegible]	15.	2	0	0.00	1	0	0.00				1	0	0.00			
01051 LEAD, TOTAL	Fresh Ac[illegible]	82.	26	0	0.00	10	0	0.00	3	0	0.00	13	0	0.00			
	Drinki[illegible]	15.	26	0	0.00	10	0	0.00	3	0	0.00	13	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400	28	0	0.00	10	0	0.00	3	0	0.00	15	0	0.00			
	Drinking Water	100	28	0	0.00	10	0	0.00	3	0	0.00	15	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0131

NPS Station ID: RICH0131 LAT/LON: 37.551948/ -77.271392 Agency: 112WRD Date Created: 12/22/84
Location: CHICKAHOMINY RIVER AT RT 156 NR SEVEN PINES, VA FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02042440
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.30 On/Off RF1:
RF3 Index: 02080206161400.00 RF3 Mile Point: 0.00 Distance from RF3: 0.02 On/Off RF3:
Description:

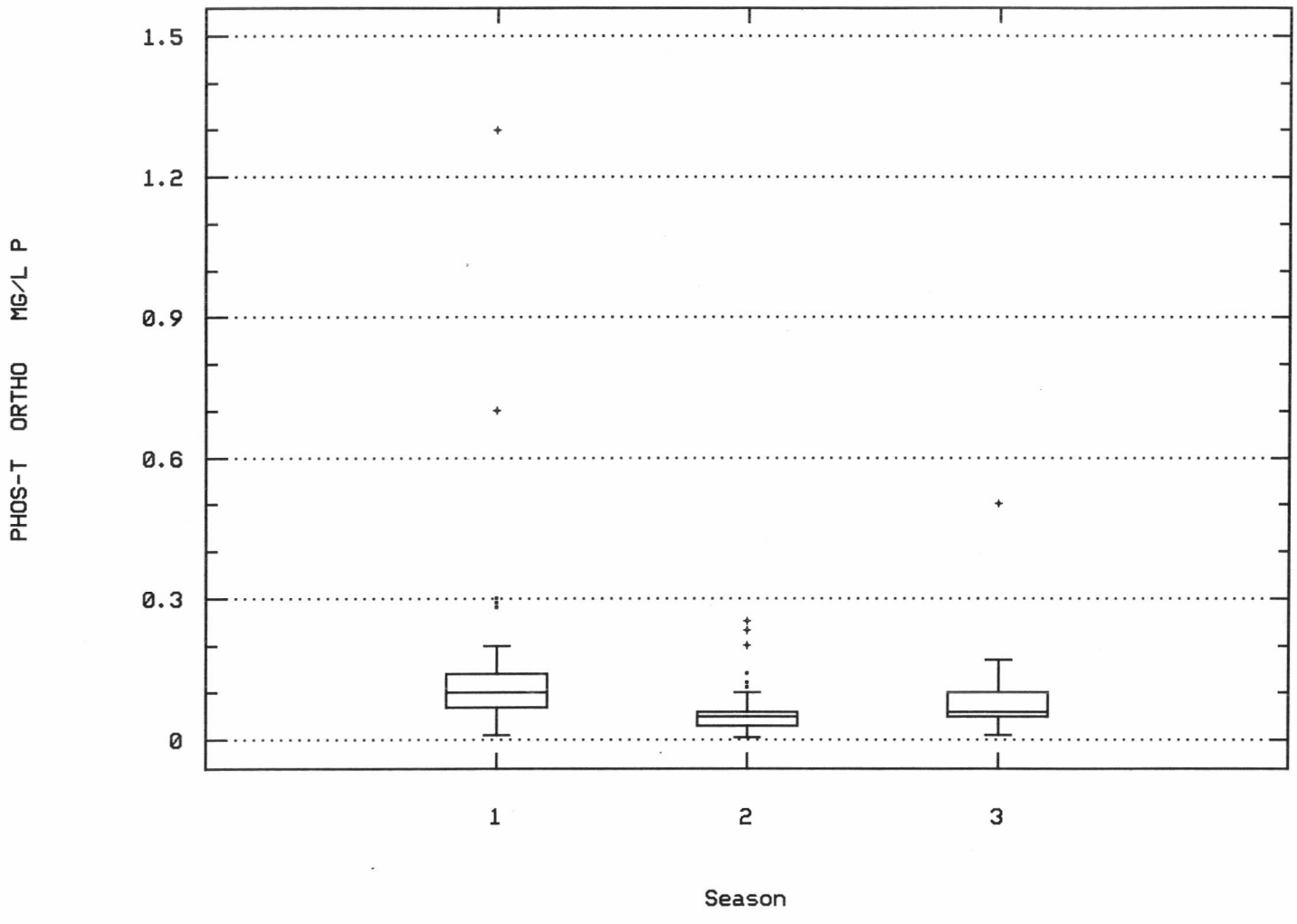
Parameter Inventory for Station: RICH0131

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/11/84-09/04/91	33	19.	18.606	29.2	6.7	31.571	5.619	10.94	14.7	22.8	25.12
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/11/84-09/04/91	32	21.25	21.15	31.5	6.5	45.711	6.761	12.45	14.975	27.075	30.72
00025 BAROMETRIC PRESSURE (MM OF HG)	04/08/87-09/04/91	32	760.	758.531	767.	745.	35.483	5.957	750.3	754.25	763.5	766.7
00061 FLOW, STREAM, INSTANTANEOUS CFS	09/11/84-09/04/91	31	116.	245.	1373.	6.	137388.2	370.659	10.4	22.	230.	992.8
00065 STAGE, STREAM (FEET)	06/11/91-06/11/91	1	16.82	16.82	16.82	16.82	0.	0.	**	**	**	**
00080 COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/04/91	29	65.	68.69	130.	13.	883.865	29.73	27.	52.5	85.	120.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/11/84-09/04/91	33	112.	112.545	188.	48.	1092.443	33.052	65.2	87.5	134.5	160.4
00300 OXYGEN, DISSOLVED MG/L	04/08/87-09/04/91	31	6.8	6.716	11.3	3.3	4.763	2.182	3.64	5.2	8.6	10.16
00400 PH (STANDARD UNITS)	04/08/87-09/04/91	32	6.6	6.689	7.8	5.5	0.267	0.517	6.106	6.4	6.958	7.51
00400 CONVERTED PH (STANDARD UNITS)	04/08/87-09/04/91	32	6.6	6.406	7.8	5.5	0.35	0.592	6.106	6.4	6.958	7.51
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-09/04/91	32	0.251	0.393	3.162	0.016	0.352	0.593	0.033	0.112	0.398	0.784
00403 PH, LAB, STANDARD UNITS SU	04/08/87-10/31/89	7	7.1	6.957	7.3	6.2	0.133	0.364	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	04/08/87-10/31/89	7	7.1	6.783	7.3	6.2	0.168	0.41	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-10/31/89	7	0.079	0.165	0.631	0.05	0.043	0.208	**	**	**	**
00452 CARBONATE,WATER,DISS,INCR TIT, FIELD, AS CO3, MG/L	06/11/91-06/11/91	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00453 BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	06/11/91-06/11/91	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00556 OIL & GREASE (FREON EXTR.-GRAV METH) TOT,REC,MG/L	10/31/89-09/04/91	18##	0.5	0.5	0.5	0.5	0.	0.	0.5	0.5	0.5	0.5
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/11/84-09/12/89	7	0.04	0.043	0.13	0.01	0.002	0.042	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/31/89-09/04/91	23	0.047	0.064	0.308	0.009	0.003	0.059	0.027	0.033	0.082	0.106
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/11/84-09/04/91	30	0.65	0.693	1.5	0.3	0.065	0.255	0.41	0.5	0.825	1.
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/31/89-09/04/91	23	0.08	0.351	5.3	0.02	1.173	1.083	0.024	0.06	0.21	0.356
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/11/84-09/12/89	7	0.03	0.054	0.1	0.005	0.002	0.044	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	09/11/84-09/04/91	30	0.079	0.088	0.194	0.034	0.002	0.04	0.037	0.063	0.097	0.168
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/12/89	6	0.026	0.028	0.05	0.01	0.	0.015	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/11/84-09/12/89	7	0.017	0.021	0.033	0.006	0.	0.011	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	09/11/84-09/04/91	30	9.75	9.783	14.	5.1	4.905	2.215	6.67	8.175	11.25	12.9
00720 CYANIDE, TOTAL (MG/L AS CN) MG/L	10/31/89-03/31/91	15##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00915 CALCIUM, DISSOLVED (MG/L AS CA)	04/08/87-09/12/89	6	7.65	8.6	15.	6.1	10.46	3.234	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/08/87-09/12/89	6	2.1	2.167	2.8	1.7	0.151	0.388	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	04/08/87-09/12/89	6	13.5	13.833	17.	11.	5.367	2.317	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/08/87-09/12/89	6	2.2	1.967	3.	0.8	0.779	0.882	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	04/08/87-09/04/91	29	13.	14.345	32.	7.	25.52	5.052	9.	12.	15.5	20.
00945 SULFATE, TOTAL (MG/L AS SO4)	04/08/87-09/04/91	29	8.	12.759	57.	2.	134.69	11.606	3.	6.	21.	27.
00950 FLUORIDE, DISSOLVED (MG/L AS F)	04/08/87-02/05/91	7	0.1	0.107	0.2	0.05	0.002	0.045	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SIO2)	04/08/87-09/12/89	6	6.55	7.183	15.	1.1	30.854	5.555	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/04/91	27##	0.5	1.722	28.	0.5	27.641	5.257	0.5	0.5	1.	1.
01025 CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	04/12/88-09/04/91	28##	0.5	1.464	8.	0.5	3.276	1.81	0.5	0.5	2.	3.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Station: RICH0130 Parameter Code: 70507

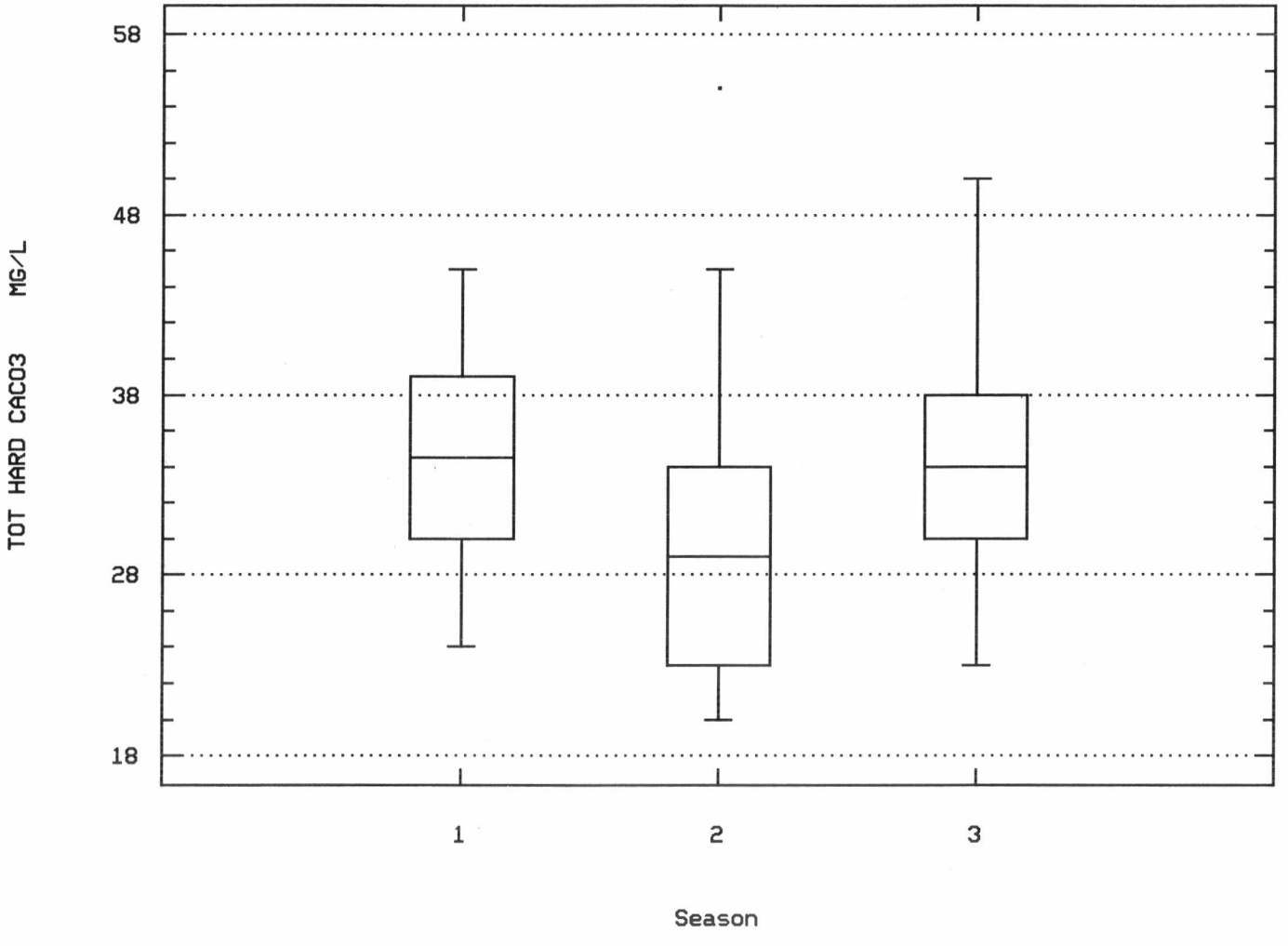
PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00900

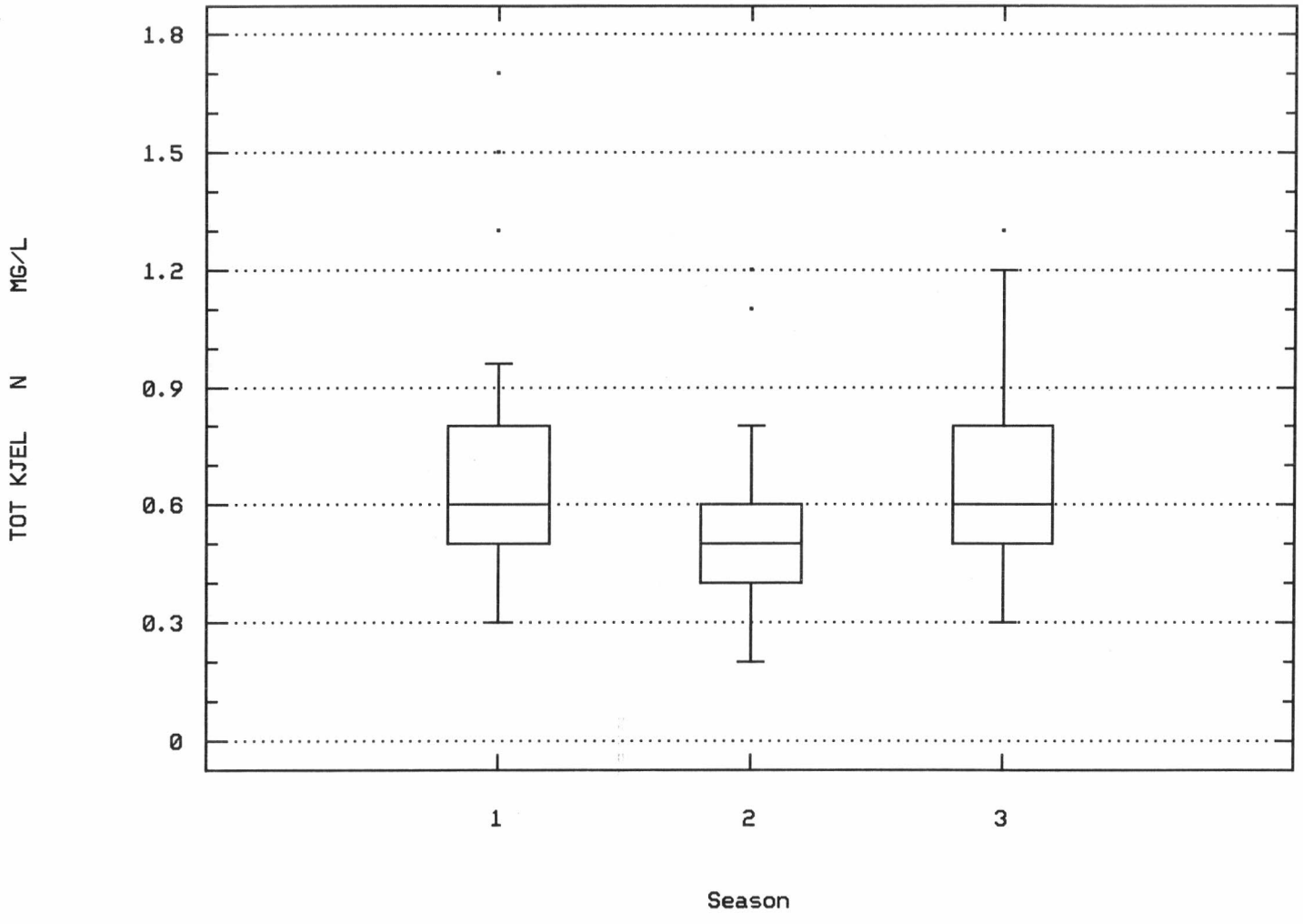
HARDNESS, TOTAL (MG/L AS CACO3)



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00625

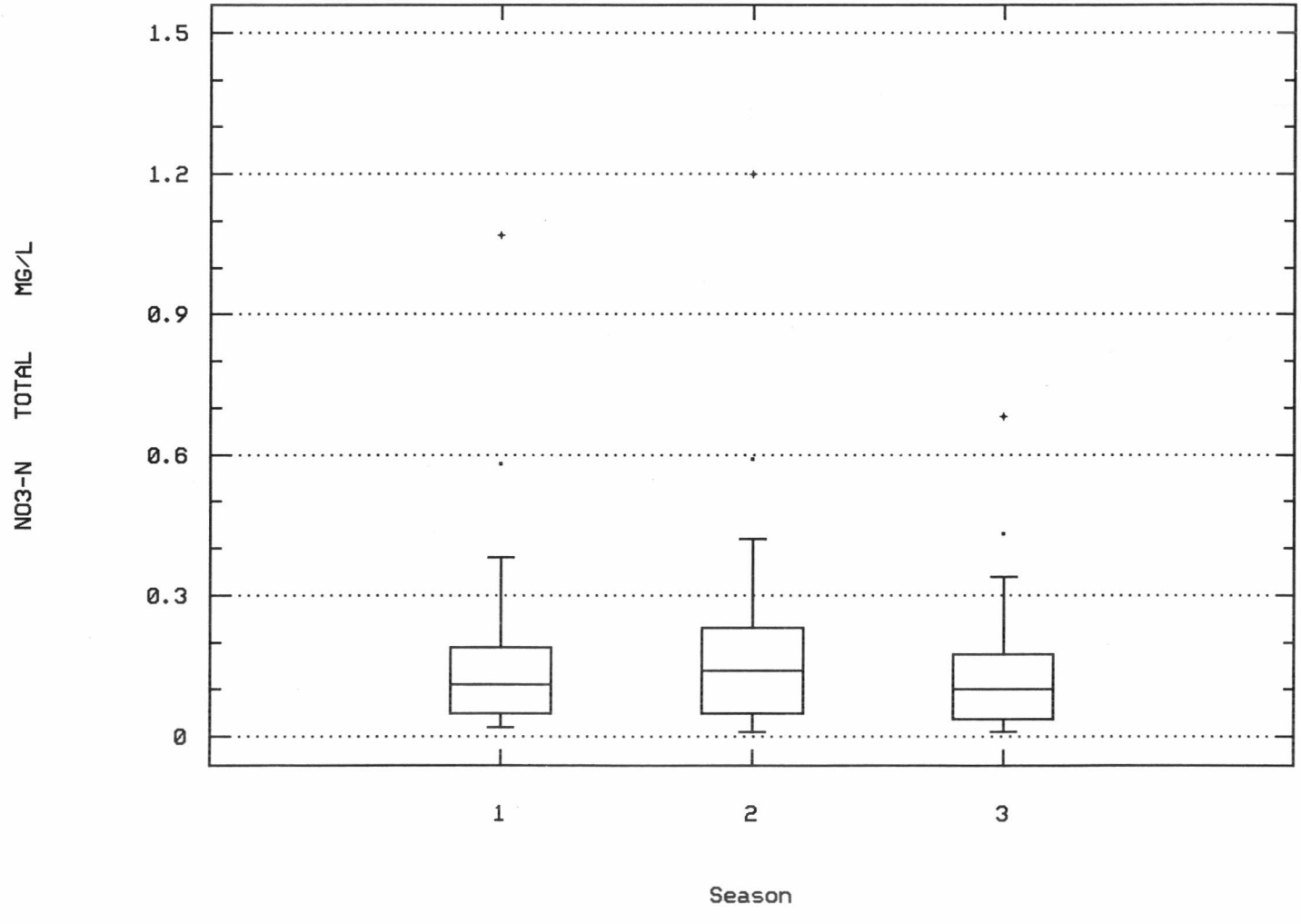
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00620

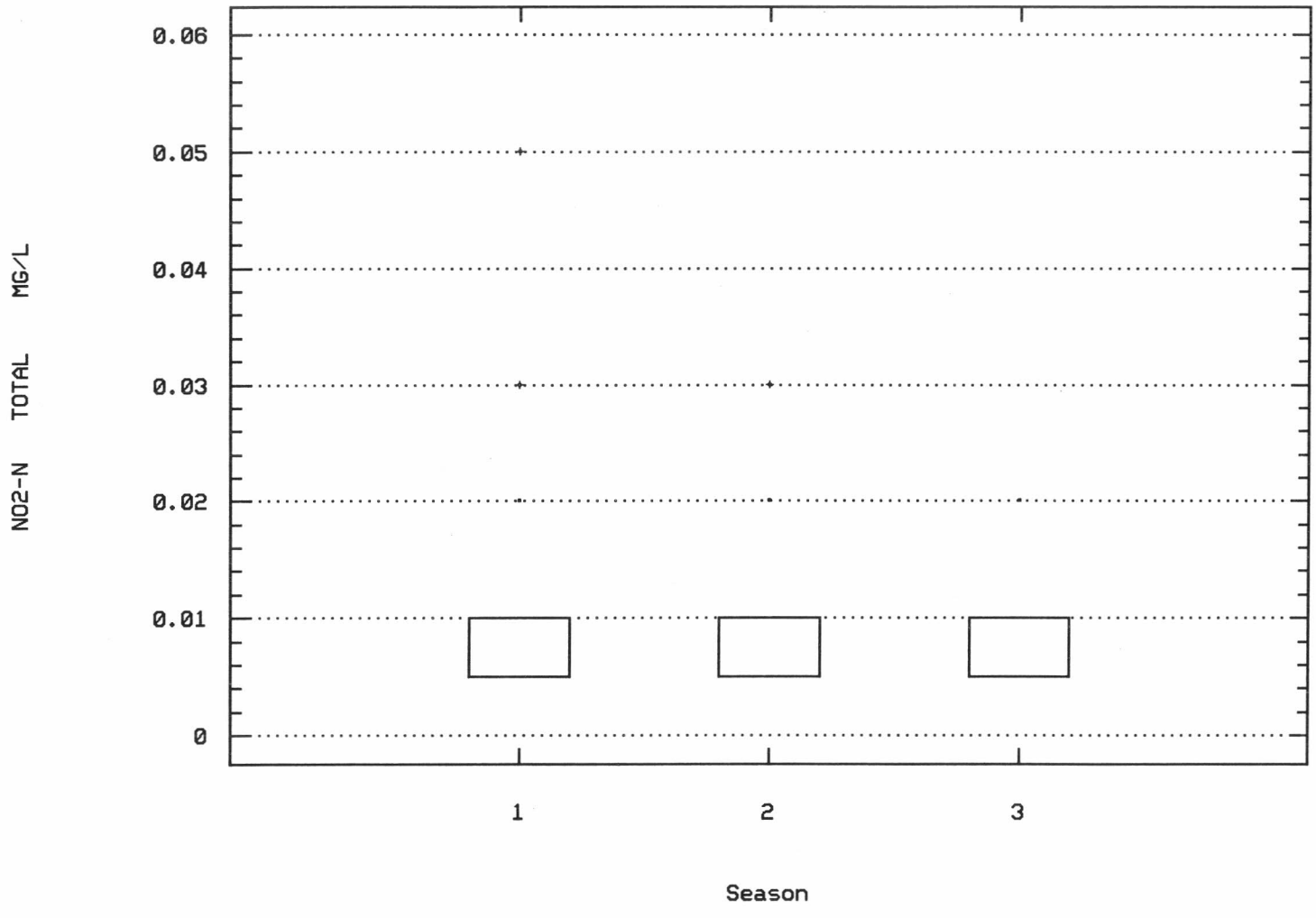
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00615

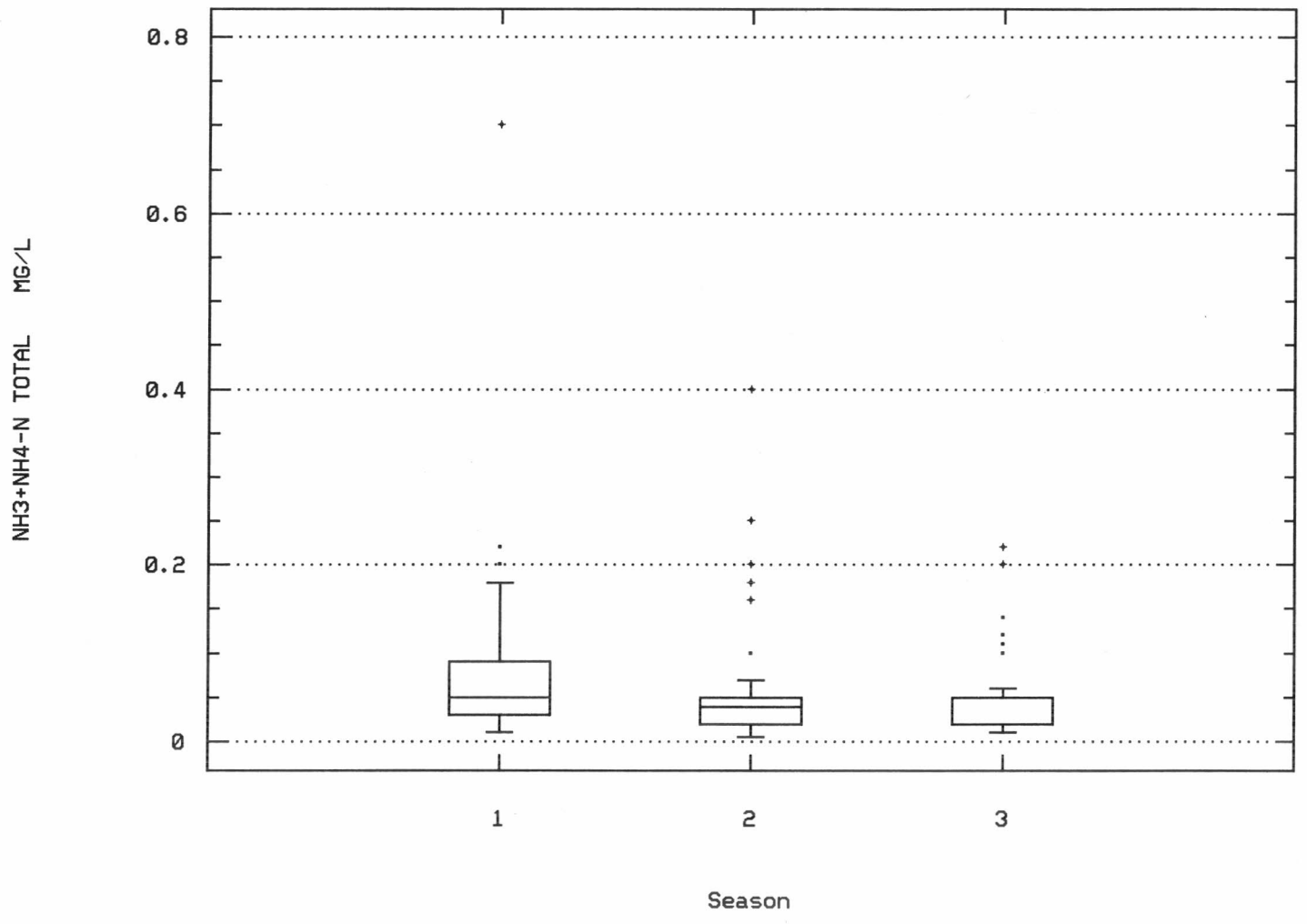
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00610

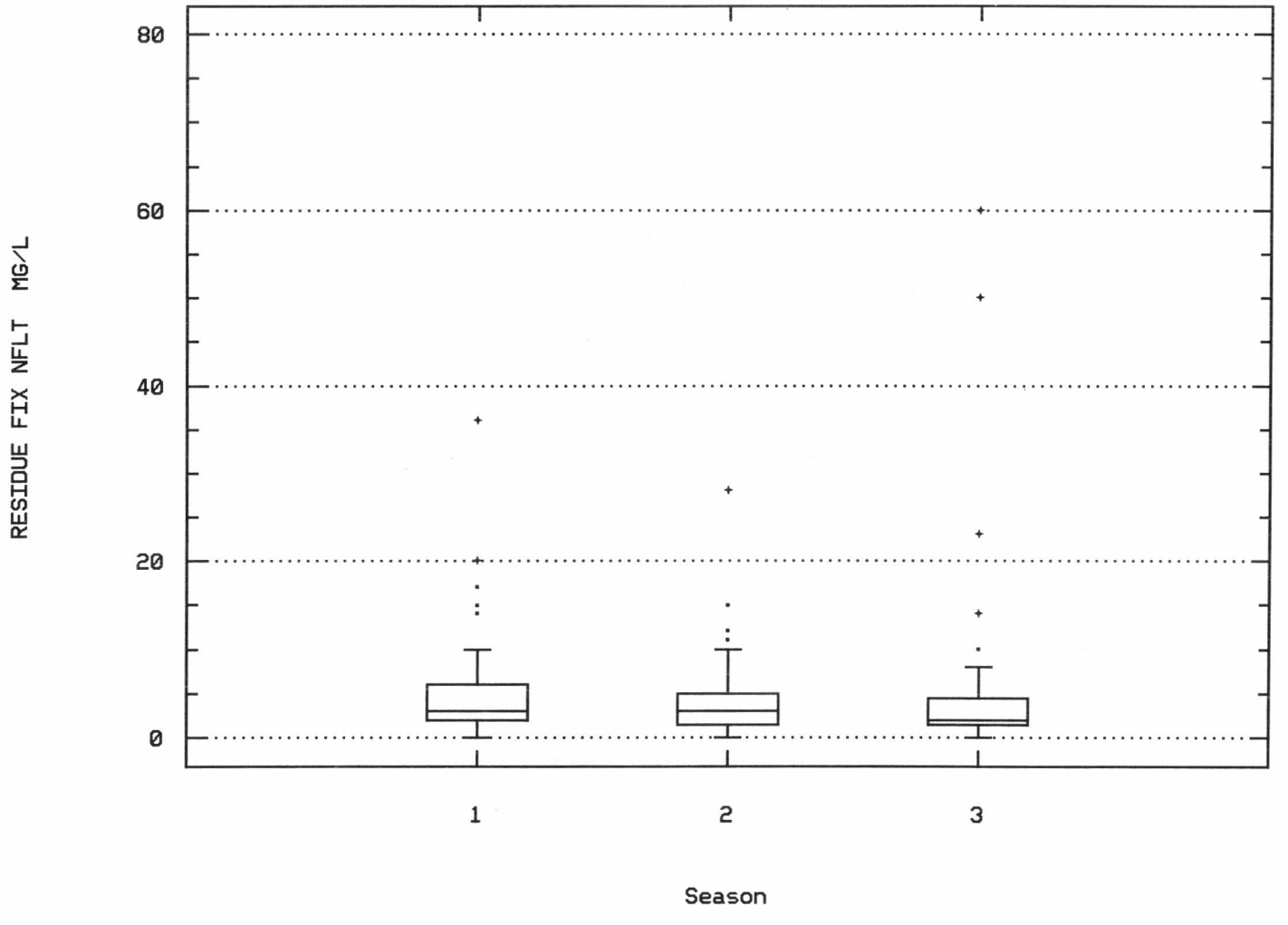
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00540

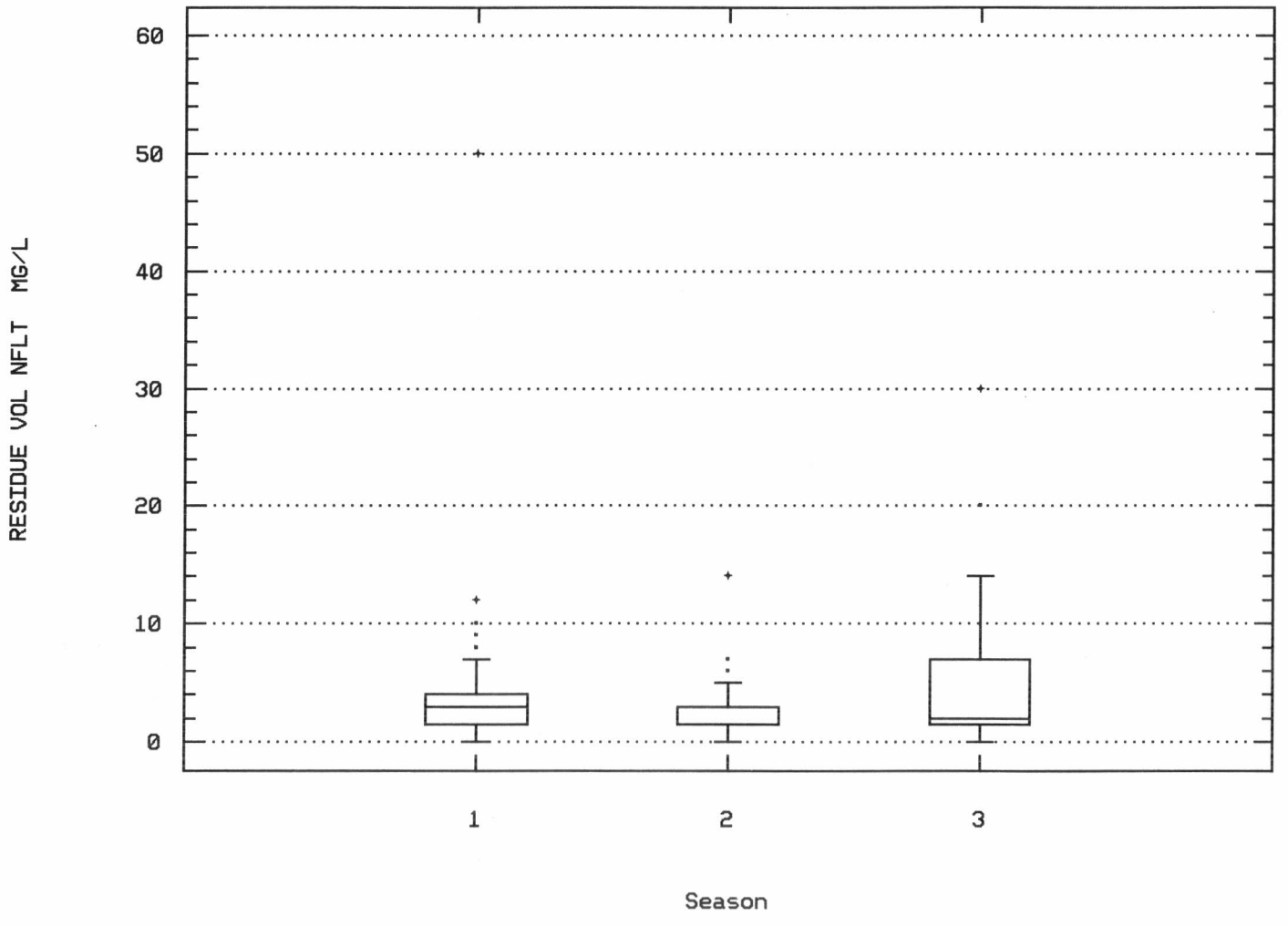
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00535

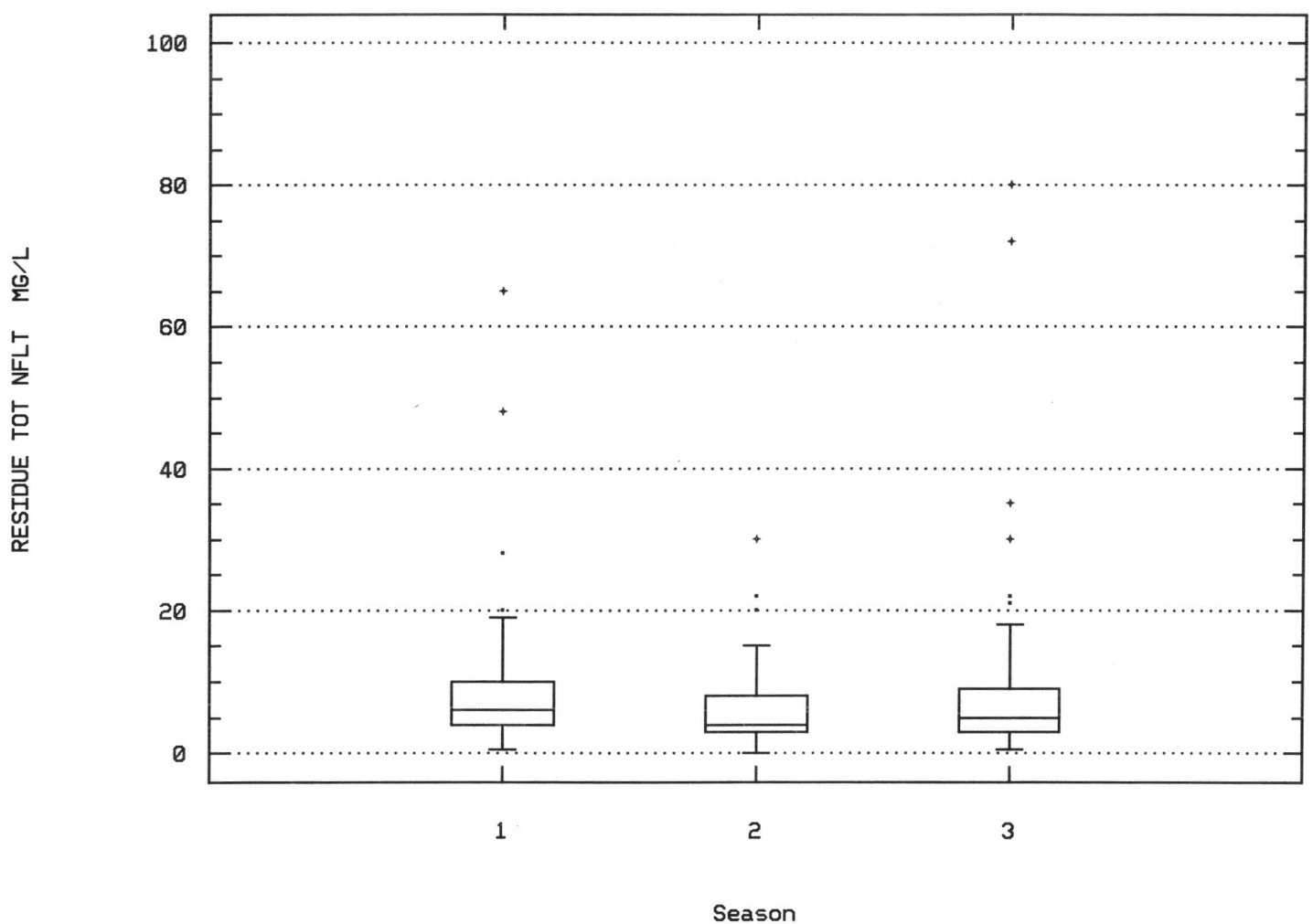
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00530

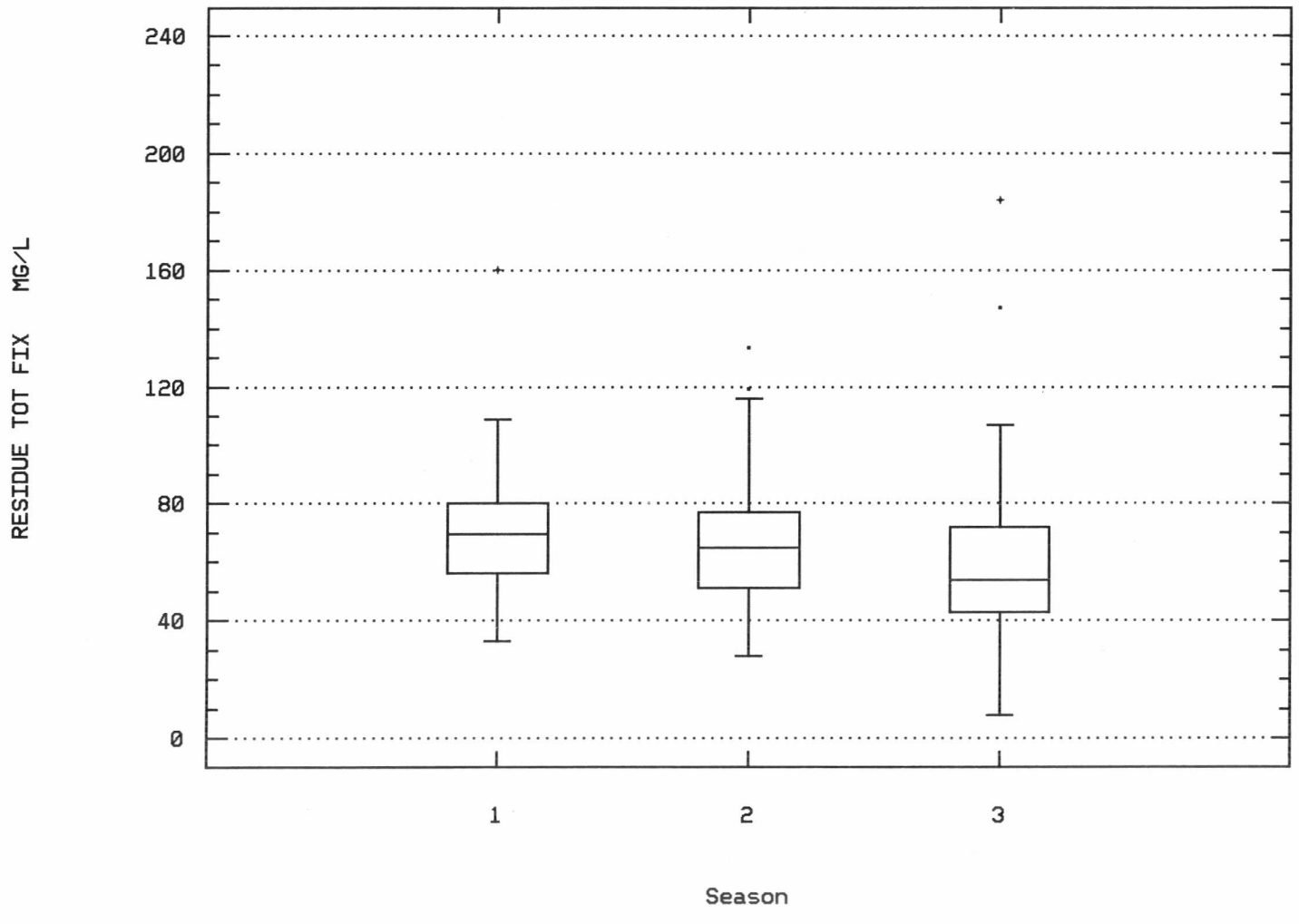
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00510

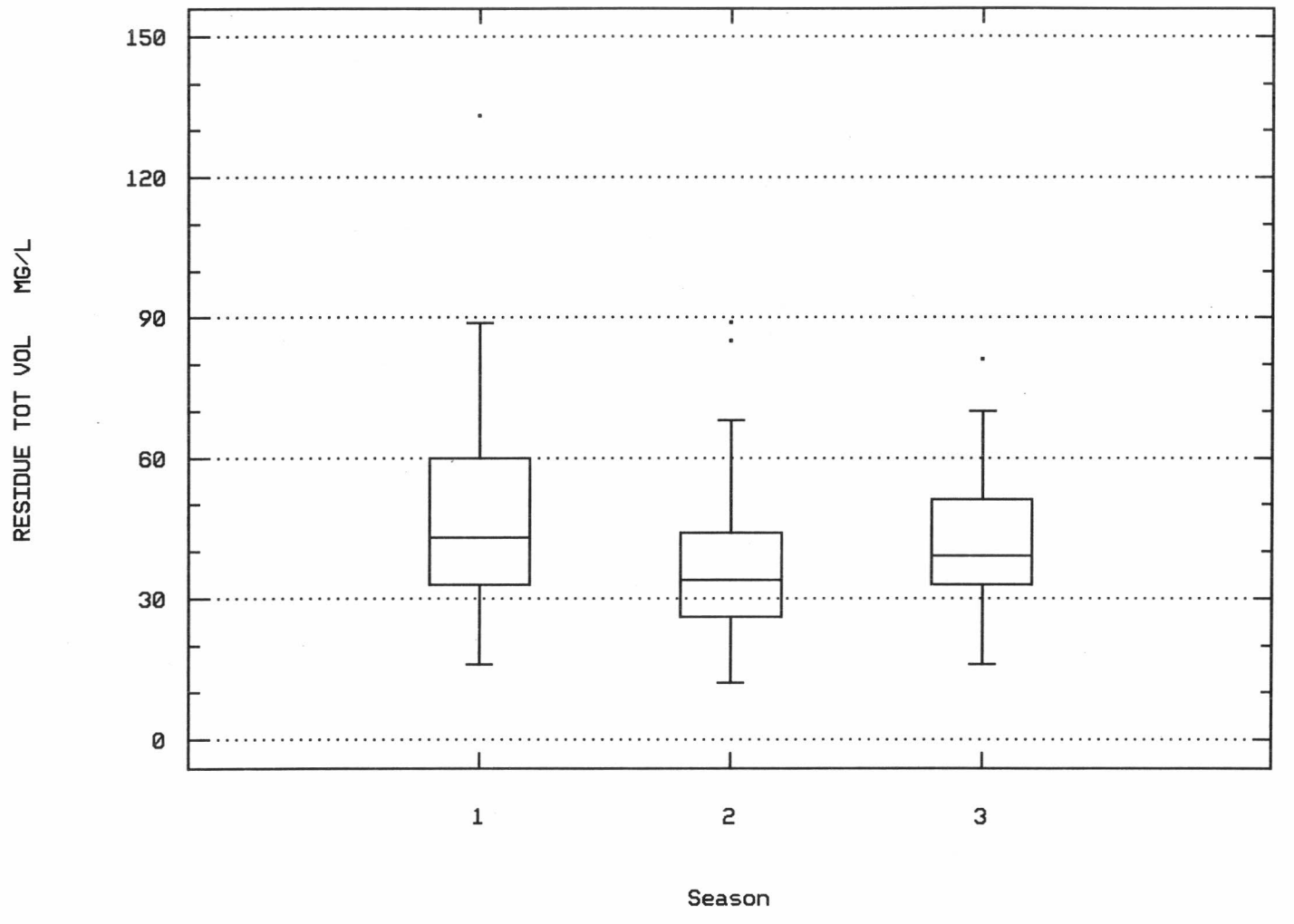
RESIDUE, TOTAL FIXED (MG/L)



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00505

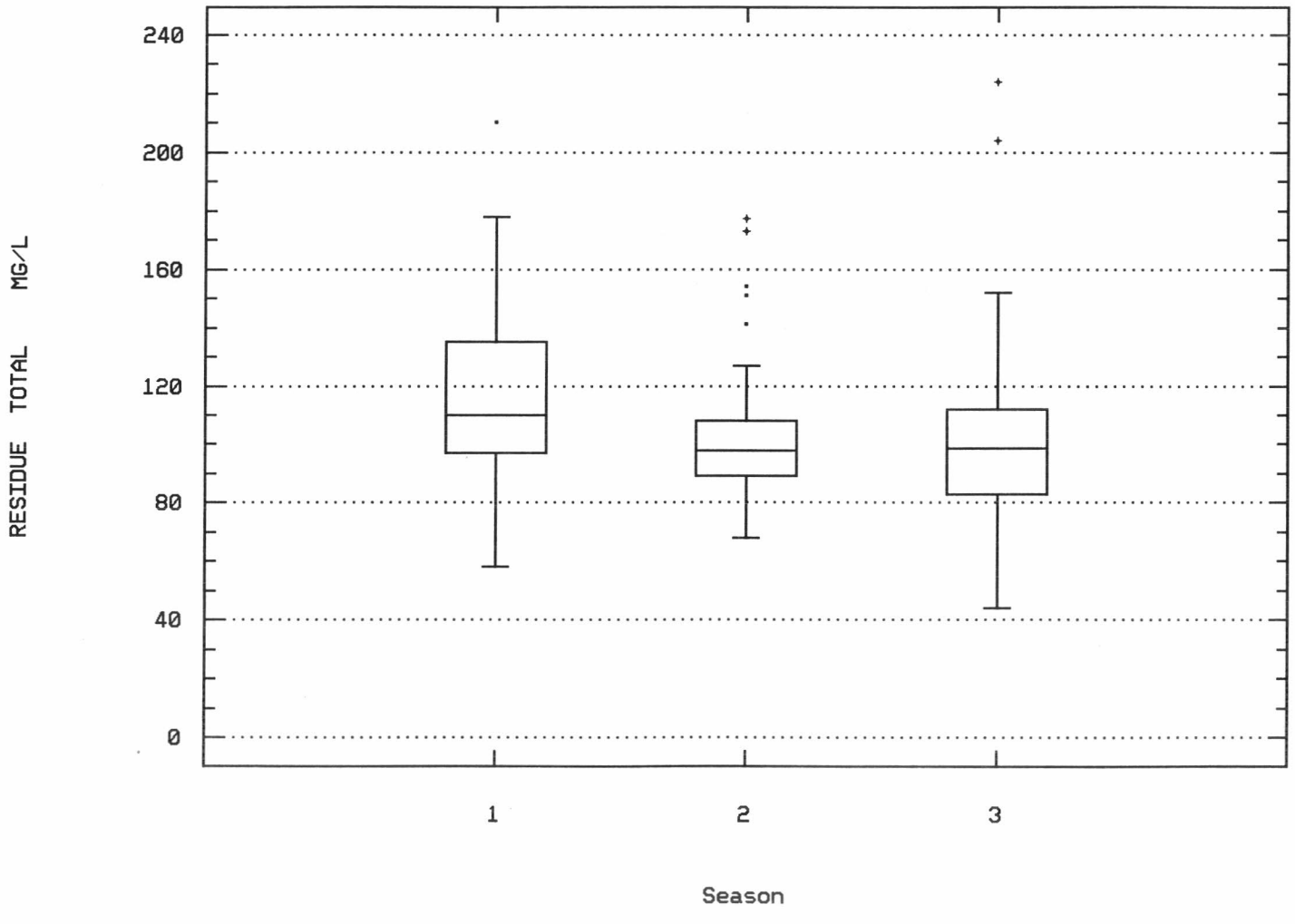
RESIDUE, TOTAL VOLATILE (MG/L)



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00500

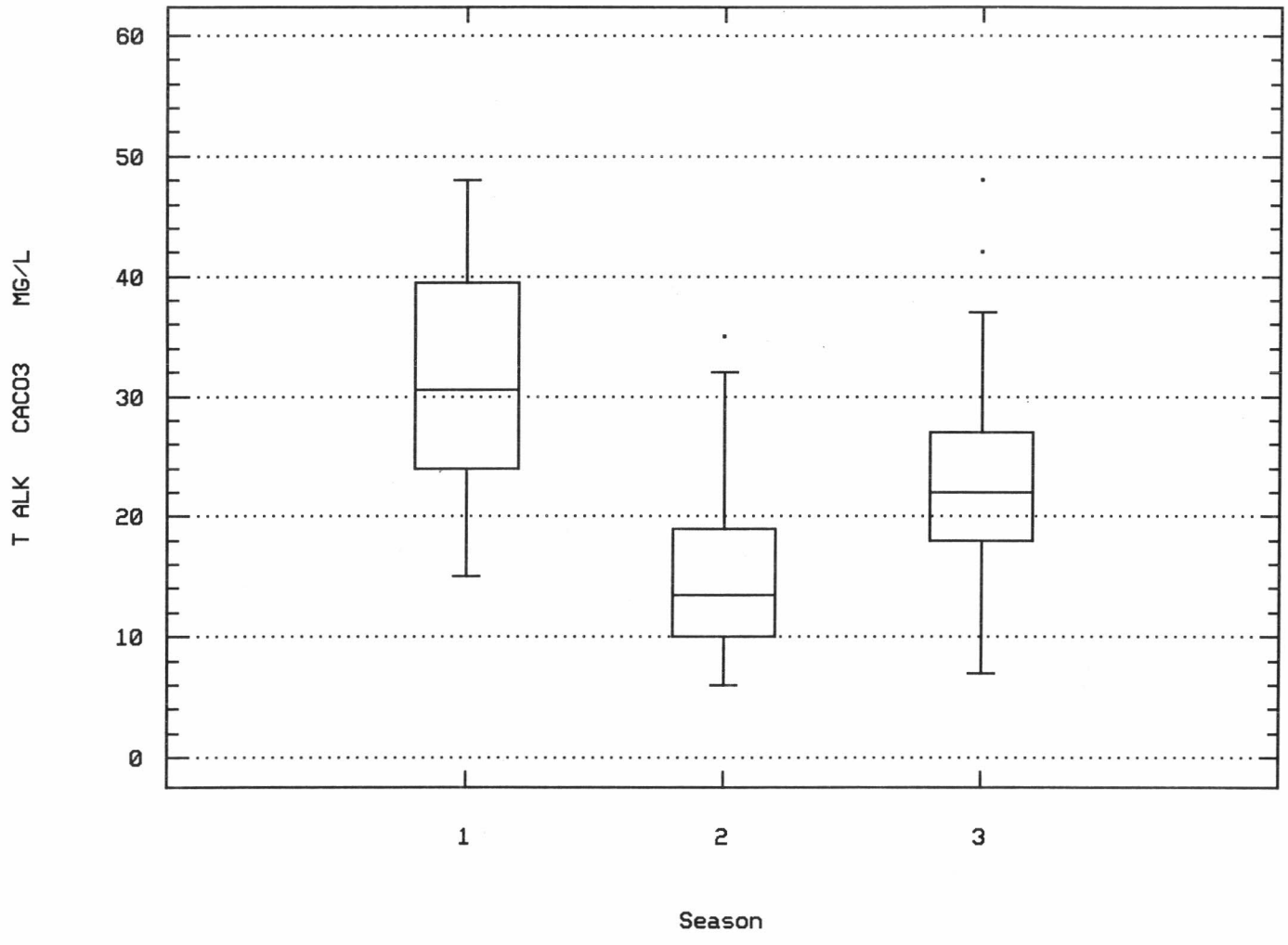
RESIDUE, TOTAL (MG/L)



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00410

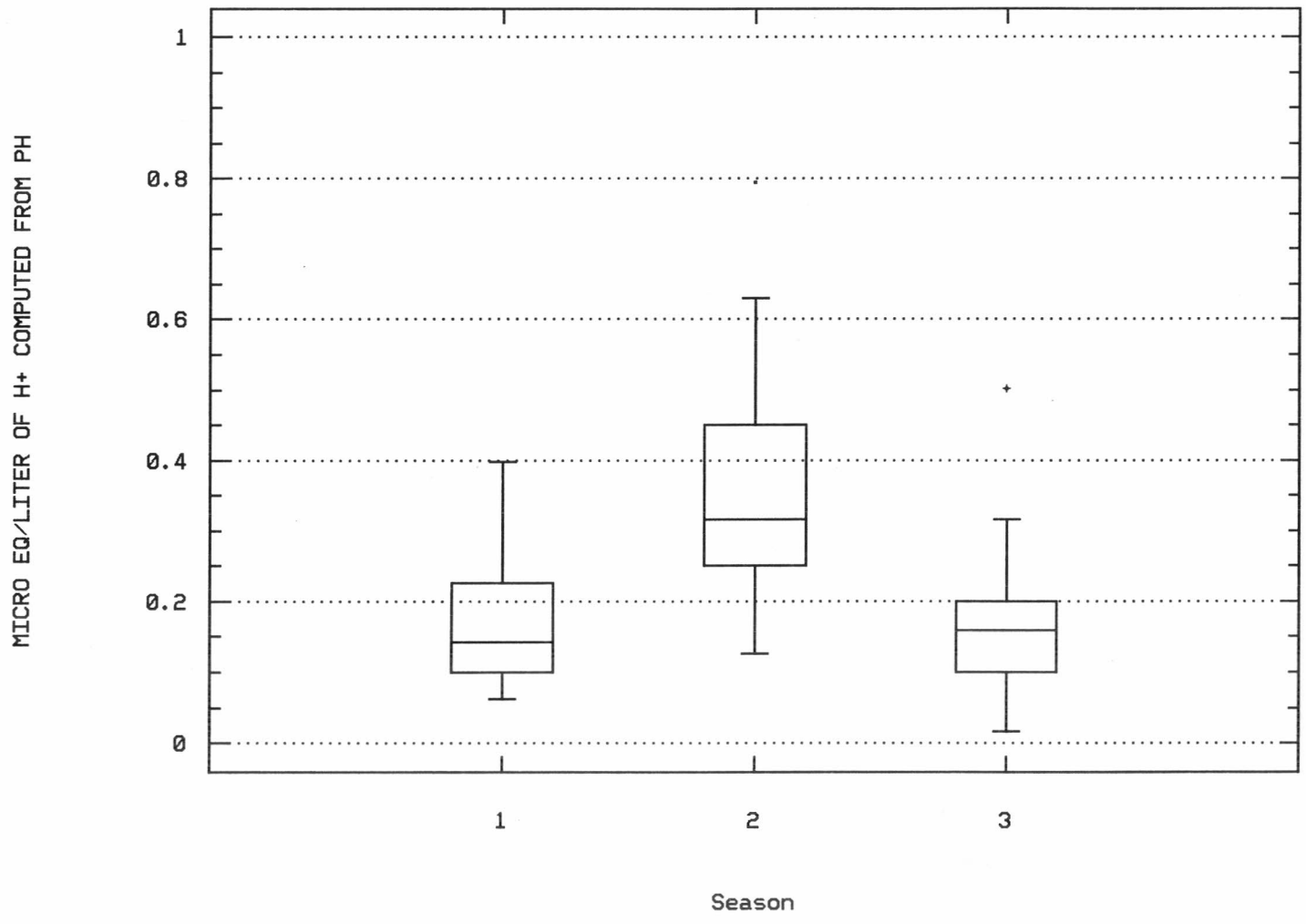
ALKALINITY, TOTAL (MG/L AS CACO3)



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00403

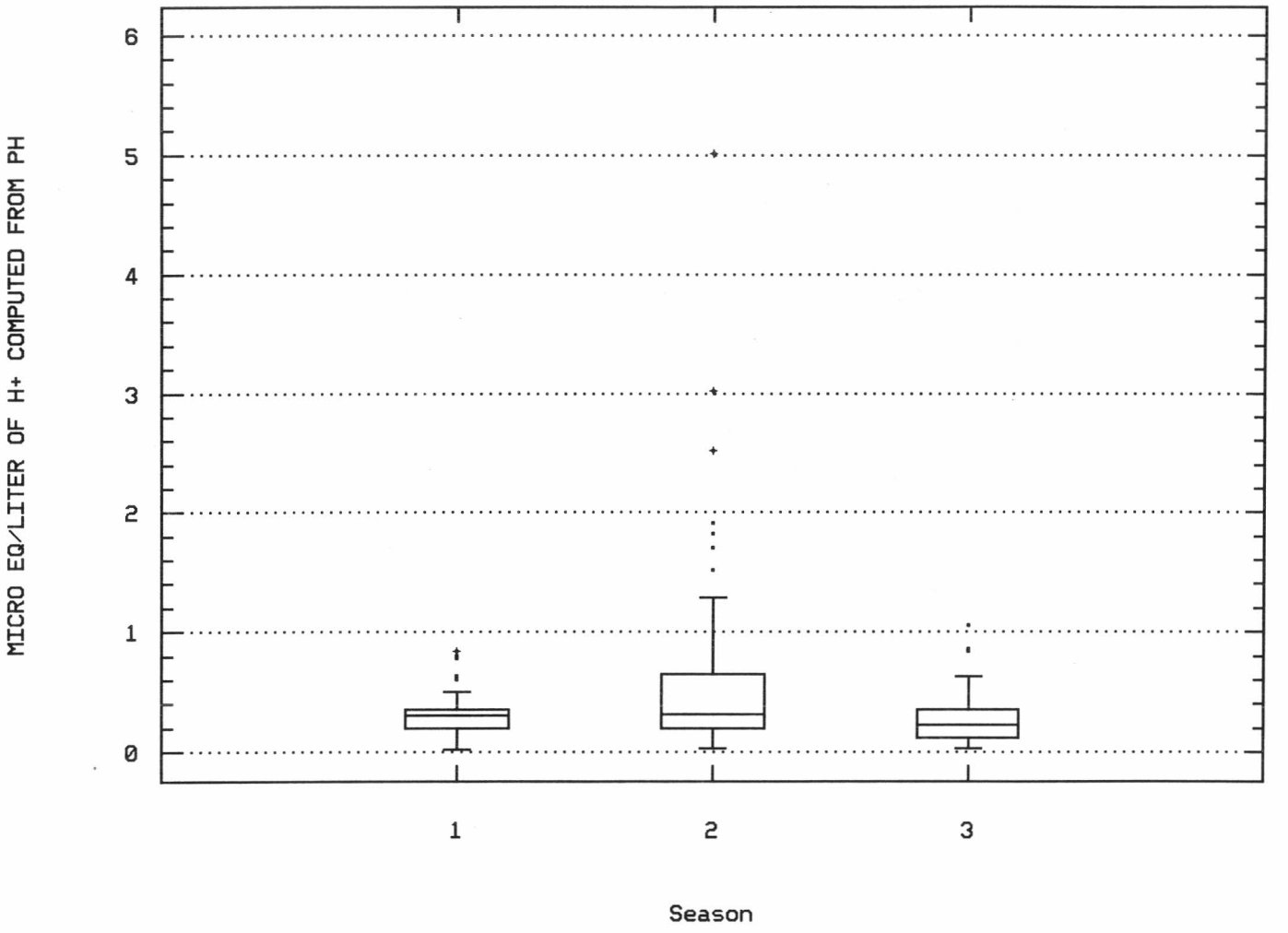
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00400

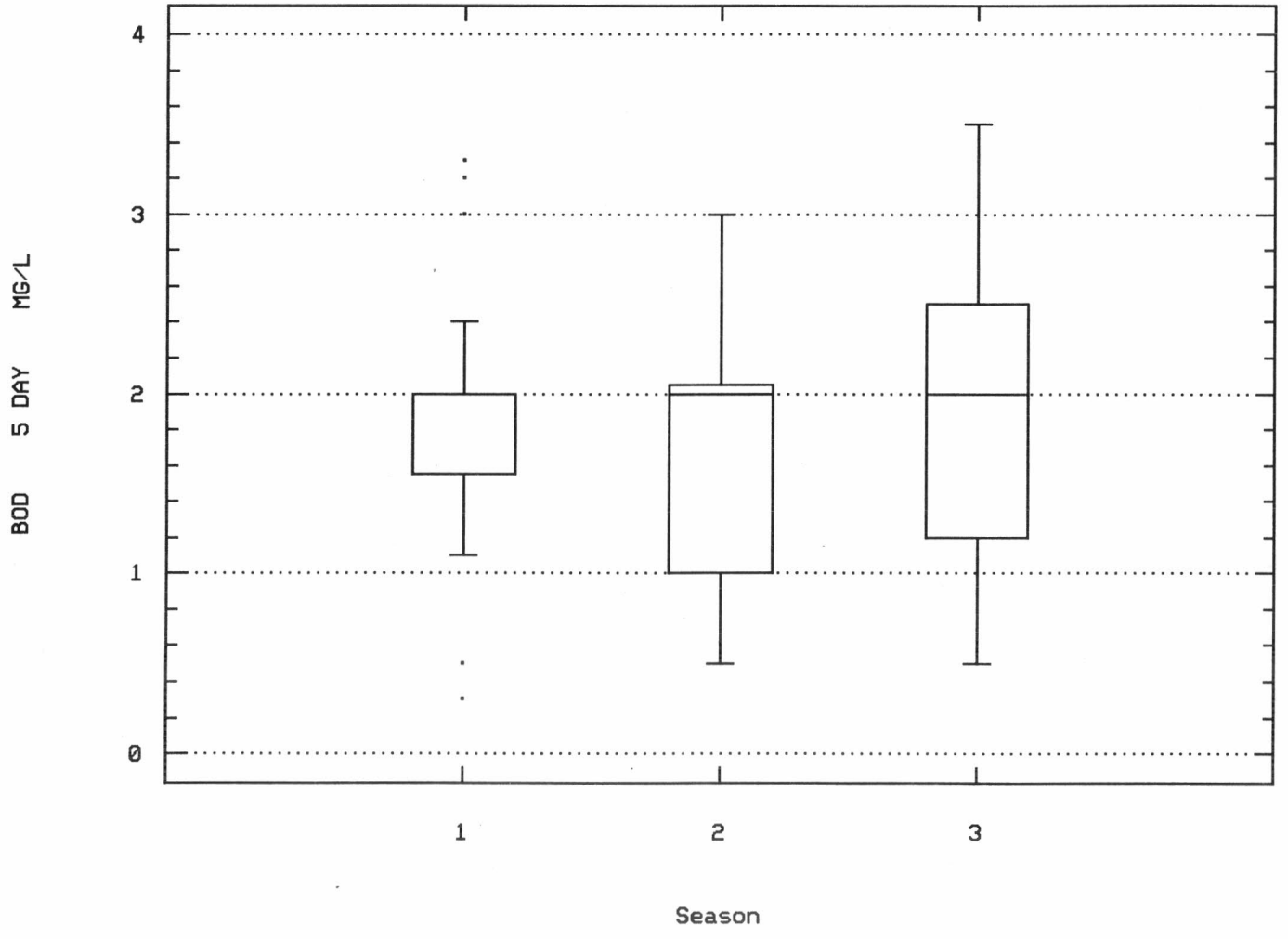
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00310

BOD, 5 DAY, 20 DEG C



RT. 156 BRIDGE

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-11/20/78	9##	5.	8.222	20.	5.	29.694	5.449	5.	5.	12.	20.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	38##	50.	118.421	1500.	50.	55597.44	235.791	50.	50.	100.	200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	38##	1.699	1.88	3.176	1.699	0.094	0.306	1.699	1.699	2.	2.301
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	75.934								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	39##	0.05	0.094	0.3	0.05	0.006	0.076	0.05	0.05	0.1	0.2
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	64	0.05	0.056	0.25	0.005	0.002	0.047	0.02	0.03	0.06	0.105
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-11/20/78	9##	0.25	0.239	0.25	0.15	0.001	0.033	0.15	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	45	18.9	18.002	26.4	8.9	19.064	4.366	11.02	15.2	21.05	24.16
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	34	7.65	7.388	12.	3.2	4.442	2.108	4.6	5.8	8.6	10.3
00310p BOD, 5 DAY, 20 DEG C MG/L	10/12/67-12/14/98	20	1.5	1.7	3.5	0.5	0.788	0.888	0.55	1.	2.3	3.19
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	45	6.64	6.638	7.5	5.98	0.12	0.346	6.152	6.425	6.935	7.
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	45	6.64	6.513	7.5	5.98	0.136	0.368	6.152	6.425	6.935	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	45	0.229	0.307	1.047	0.032	0.059	0.242	0.1	0.117	0.376	0.711
00403p PH, LAB, STANDARD UNITS SU	09/20/67-12/14/98	18	6.75	6.794	7.8	6.	0.142	0.376	6.27	6.65	7.	7.17
00403p CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/14/98	18	6.747	6.649	7.8	6.	0.164	0.405	6.27	6.65	7.	7.17
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	18	0.179	0.225	1.	0.016	0.05	0.223	0.073	0.1	0.229	0.551
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	18	22.	23.889	48.	7.	108.105	10.397	13.3	17.25	28.5	42.6
00500p RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	46	98.5	101.5	224.	44.	1048.122	32.375	70.1	82.25	112.25	137.2
00505p RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	45	39.	42.022	81.	16.	236.795	15.388	22.8	31.5	52.	64.2
00510p RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	45	54.	60.044	184.	8.	963.907	31.047	28.2	42.5	73.	87.4
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	46	5.	9.913	80.	0.5	256.937	16.029	1.2	2.75	9.	24.4
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	46	2.	4.543	30.	0.	32.52	5.703	0.5	1.5	5.5	12.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	45	2.	5.522	60.	0.	134.34	11.591	0.5	1.	4.	11.6
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	46##	0.05	0.06	0.22	0.01	0.002	0.05	0.02	0.02	0.05	0.126
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	46##	0.005	0.008	0.02	0.005	0.	0.004	0.005	0.005	0.01	0.013
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	40	0.1	0.132	0.68	0.01	0.017	0.132	0.021	0.031	0.178	0.28
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	46	0.6	0.67	1.299	0.3	0.054	0.232	0.4	0.5	0.8	1.
00900p HARDNESS, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	13	34.	33.923	50.	23.	55.91	7.477	23.4	27.5	39.	46.
00940 CHLORIDE,TOTAL IN WATER MG/L	07/30/75-12/14/98	13	17.	17.231	26.	9.	31.526	5.615	9.	13.	23.	24.8
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-11/20/78	8	6.	11.938	50.	1.5	249.46	15.794	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	28##	50.	78.571	300.	50.	3042.328	55.157	50.	50.	100.	110.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	28##	1.699	1.834	2.477	1.699	0.044	0.209	1.699	1.699	2.	2.03
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	68.277								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	32	0.075	0.106	0.5	0.05	0.009	0.095	0.05	0.05	0.1	0.2
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	45	0.06	0.082	0.5	0.01	0.006	0.075	0.03	0.05	0.1	0.154
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-11/20/78	8##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	52	23.3	22.813	29.	13.3	13.401	3.661	17.92	20.375	25.6	27.27
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	35	5.2	5.311	10.	1.9	2.422	1.556	3.28	4.6	6.	6.96
00310p BOD, 5 DAY, 20 DEG C MG/L	10/12/67-12/14/98	30	1.65	1.653	3.3	0.3	0.571	0.756	0.55	1.	2.	2.94
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	50	6.505	6.548	7.6	6.	0.098	0.313	6.101	6.3	6.7	7.
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	50	6.505	6.448	7.6	6.	0.108	0.329	6.101	6.3	6.7	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	50	0.313	0.356	1.	0.025	0.06	0.245	0.1	0.2	0.501	0.793
00403p PH, LAB, STANDARD UNITS SU	09/20/67-12/14/98	20	6.85	6.815	7.2	6.4	0.064	0.254	6.41	6.625	7.	7.19
00403p CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/14/98	20	6.847	6.745	7.2	6.4	0.07	0.264	6.41	6.625	7.	7.19
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	20	0.142	0.18	0.398	0.063	0.011	0.106	0.065	0.1	0.238	0.39
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	20	30.5	31.1	48.	15.	78.832	8.879	20.1	23.5	39.75	41.9
00500p RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	47	110.	117.447	210.	58.	845.687	29.081	82.4	97.	135.	156.2
00505p RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	49	43.	48.347	133.	16.	447.523	21.155	25.	32.5	60.5	71.
00510p RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	46	69.5	70.326	160.	33.	492.314	22.188	44.5	55.5	80.25	94.6
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	45	6.	10.111	65.	0.5	140.953	11.872	3.6	4.	10.	20.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	49	3.	4.663	50.	0.	53.962	7.346	1.5	1.5	4.	10.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	46	3.	5.239	36.	0.	40.819	6.389	1.	2.	6.	14.3
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	47	0.05	0.076	0.7	0.01	0.011	0.103	0.02	0.03	0.09	0.116
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	47##	0.005	0.01	0.05	0.005	0.	0.011	0.005	0.005	0.01	0.022
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	43	0.11	0.158	1.069	0.02	0.034	0.184	0.02	0.05	0.19	0.306
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	47	0.6	0.686	1.699	0.3	0.088	0.296	0.4	0.5	0.8	1.
00900p HARDNESS, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	18	34.5	34.389	45.	24.	35.075	5.922	25.8	29.5	39.25	42.3
00940 CHLORIDE,TOTAL IN WATER MG/L	07/30/75-12/14/98	17	15.	14.824	24.	10.	11.154	3.34	10.8	12.5	16.	20.
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-11/20/78	3##	5.	6.667	10.	5.	8.333	2.887	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	27##	50.	98.148	500.	50.	11438.746	106.952	50.	50.	100.	300.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	27##	1.699	1.861	2.699	1.699	0.086	0.293	1.699	1.699	2.	2.477
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	72.534								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	28	0.2	0.214	1.3	0.05	0.056	0.237	0.05	0.1	0.275	0.4
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	44	0.1	0.154	1.299	0.01	0.044	0.209	0.05	0.07	0.145	0.295
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-11/20/78	4##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	68	7.2	8.137	19.	0.	20.073	4.48	2.11	5.	11.8	15.01
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	41	10.4	9.88	14.2	3.8	6.315	2.513	5.6	8.15	11.6	13.
00310p BOD, 5 DAY, 20 DEG C MG/L	10/12/67-12/14/98	27	2.	1.556	3.	0.5	0.599	0.774	0.5	1.	2.	2.6
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	67	6.5	6.446	7.5	5.3	0.195	0.441	5.81	6.1	6.7	7.
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	67	6.5	6.215	7.5	5.3	0.249	0.499	5.81	6.1	6.7	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	67	0.316	0.61	5.012	0.032	0.643	0.802	0.1	0.2	0.794	1.55
00403p PH, LAB, STANDARD UNITS SU	09/20/67-12/14/98	28	6.5	6.5	6.9	6.1	0.044	0.211	6.2	6.325	6.6	6.81
00403p CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/14/98	28	6.5	6.453	6.9	6.1	0.047	0.216	6.2	6.325	6.6	6.81
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	28	0.316	0.353	0.794	0.126	0.027	0.166	0.155	0.251	0.475	0.631
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	28	13.5	15.286	35.	6.	44.878	6.699	8.	10.	19.5	22.1
00500p RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	66	98.	100.242	177.	1.	608.063	24.659	80.4	87.75	108.5	127.
00505p RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	66	34.	36.682	89.	12.	233.82	15.291	20.7	26.	44.25	56.
00510p RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	65	65.	65.662	133.	28.	463.821	21.537	38.6	50.	77.	92.4
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	65	4.	5.638	30.	0.	29.309	5.414	0.5	2.	7.5	12.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	66	1.5	2.212	14.	0.	4.754	2.18	0.	1.	3.	5.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	64	3.	3.586	28.	0.	19.465	4.412	0.	1.	4.75	8.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	64##	0.04	0.054	0.4	0.005	0.004	0.063	0.02	0.02	0.05	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	65##	0.005	0.007	0.03	0.005	0.	0.005	0.005	0.005	0.01	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	57	0.14	0.174	1.199	0.01	0.034	0.184	0.02	0.05	0.235	0.362
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	65	0.5	0.498	1.199	0.2	0.042	0.204	0.3	0.4	0.6	0.7
00900p HARDNESS, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	25	29.	30.2	55.	20.	81.167	9.009	20.6	22.5	36.	43.2
00940 CHLORIDE,TOTAL IN WATER MG/L	07/30/75-12/14/98	25	19.	20.92	52.	6.	113.493	10.653	9.6	15.5	23.	38.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station RICH0130

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	12	6.358	6.242	6.97	5.72	0.112	0.335	5.804	6.198	6.51	6.871
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	12	0.438	0.573	1.905	0.107	0.229	0.479	0.144	0.309	0.635	1.634
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/14/98	12	6.4	6.458	6.7	6.3	0.021	0.144	6.3	6.325	6.575	6.7
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/14/98	12	6.4	6.438	6.7	6.3	0.021	0.146	6.3	6.325	6.575	6.7
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	12	0.398	0.365	0.501	0.2	0.012	0.11	0.2	0.267	0.475	0.501
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	12	21.5	22.833	39.	10.	110.697	10.521	10.	11.5	33.5	38.4
00500	RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	12	104.	107.833	210.	71.	1289.242	35.906	72.5	86.75	115.	183.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	11	38.	37.273	50.	21.	70.018	8.368	22.6	33.	43.	49.4
00510	RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	11	74.	73.455	160.	37.	1071.073	32.727	38.	53.	79.	143.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	12	6.	6.167	11.	4.	5.061	2.25	4.	4.	7.75	10.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	12##	1.5	2.042	4.	1.5	1.021	1.01	1.5	1.5	2.625	4.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	12##	2.25	3.167	8.	1.5	5.106	2.26	1.5	1.5	5.25	7.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.02	0.022	0.04	0.02	0.	0.006	0.02	0.02	0.02	0.034
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12	0.08	0.083	0.18	0.02	0.004	0.061	0.02	0.02	0.14	0.177
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	12	0.6	0.617	1.	0.4	0.031	0.175	0.4	0.5	0.7	0.94
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/19/94-12/14/98	12	0.095	0.094	0.17	0.04	0.001	0.037	0.043	0.063	0.118	0.158
00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	12	31.5	31.417	45.	23.	54.992	7.416	23.	24.25	35.	44.1
00940	CHLORIDE,TOTAL IN WATER MG/L	07/30/75-12/14/98	12	13.	12.25	20.	6.	18.386	4.288	6.	9.	15.	18.8
00945	SULFATE, TOTAL (MG/L AS SO4)	07/19/94-12/14/98	12	7.5	8.958	20.	2.5	38.157	6.177	2.5	3.125	15.75	18.8
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/19/94-12/14/98	12	330.	1697.	16000.	9.	20407099.818	4517.422	12.3	76.25	767.5	11530.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/19/94-12/14/98	12	2.519	2.444	4.204	0.954	0.742	0.862	1.058	1.798	2.884	3.855
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		278.19									
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	12	0.08	0.078	0.14	0.03	0.001	0.032	0.033	0.05	0.098	0.131

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/19/94-12/14/98	12	1.833	1.68	2.431	0.954	0.278	0.527	0.954	1.041	2.083	2.399
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		47.917									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	12	0.045	0.059	0.11	0.03	0.001	0.028	0.03	0.04	0.08	0.107

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Annual Analysis for 1997 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	11	13.8	13.218	26.7	5.2	46.724	6.835	5.26	7.	16.	25.76
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/19/94-12/14/98	12	8.4	8.583	13.8	3.9	10.922	3.305	4.2	5.425	10.85	13.74
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/18/94-12/14/98	11	170.	163.818	247.	128.	1125.964	33.555	128.2	131.	175.	233.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/19/94-12/14/98	12	150.5	156.417	227.	126.	745.174	27.298	126.9	136.5	170.25	211.4
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/19/94-12/14/98	11	7.2	7.036	10.3	2.6	5.071	2.252	3.18	5.7	9.1	10.22
00310 BOD, 5 DAY, 20 DEG C MG/L	10/12/67-12/14/98	12	1.	1.375	2.	0.5	0.324	0.569	0.65	1.	2.	2.
00340 COD, .25N K2CR2O7 MG/L	07/19/94-12/14/98	12	19.5	20.833	29.	12.	24.152	4.914	13.2	18.	25.25	28.4
00400 PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.1	6.219	6.7	5.52	0.138	0.372	5.594	5.98	6.57	6.69
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.1	6.071	6.7	5.52	0.162	0.403	5.594	5.98	6.57	6.69
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	11	0.794	0.849	3.02	0.2	0.659	0.812	0.204	0.269	1.047	2.674
00403 PH, LAB, STANDARD UNITS SU	09/20/67-12/14/98	12	6.8	6.758	7.2	6.3	0.081	0.284	6.33	6.5	6.975	7.17
00403 CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/14/98	12	6.8	6.674	7.2	6.3	0.089	0.298	6.33	6.5	6.975	7.17
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	12	0.158	0.212	0.501	0.063	0.019	0.139	0.068	0.106	0.316	0.47
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	12	20.	21.333	42.	6.	125.152	11.187	6.6	14.	31.5	40.2
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	12	104.5	109.833	177.	78.	568.697	23.847	83.4	98.5	115.	160.2
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	12	34.	36.583	65.	22.	142.811	11.95	23.2	27.	43.	60.5
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	12	73.	73.25	133.	46.	491.295	22.165	47.5	57.5	77.75	118.3
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	12	4.	4.292	9.	1.5	3.566	1.888	1.95	3.	5.	8.1
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	12##	1.5	1.625	3.	1.5	0.188	0.433	1.5	1.5	1.5	2.55
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	12##	1.5	2.542	6.	1.5	2.203	1.484	1.5	1.5	3.75	5.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.02	0.028	0.06	0.02	0.	0.016	0.02	0.02	0.035	0.06
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.005	0.005	0.01	0.005	0.	0.001	0.005	0.005	0.005	0.009
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12	0.12	0.133	0.27	0.02	0.007	0.081	0.02	0.083	0.18	0.267
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	12	0.6	0.55	0.8	0.4	0.014	0.117	0.4	0.425	0.6	0.74
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/19/94-12/14/98	12	0.07	0.073	0.13	0.04	0.001	0.029	0.04	0.045	0.09	0.124
00900 HARDNESS, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	12	37.	37.167	55.	30.	49.061	7.004	30.	30.75	39.75	51.1
00940 CHLORIDE,TOTAL IN WATER MG/L	07/30/75-12/14/98	12	18.5	19.333	31.	13.	26.788	5.176	13.6	15.25	20.75	29.8
00945 SULFATE, TOTAL (MG/L AS SO4)	07/19/94-12/14/98	12	10.	16.208	52.	2.5	212.157	14.566	3.55	6.	21.75	46.9
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/19/94-12/14/98	11	210.	763.909	5400.	40.	2592557.091	1610.142	40.	45.	330.	4660.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/19/94-12/14/98	11	2.322	2.28	3.732	1.602	0.49	0.7	1.602	1.653	2.519	3.632
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		190.374									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	12	0.05	0.057	0.1	0.03	0.001	0.023	0.03	0.04	0.068	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	12	17.95	16.667	27.3	4.2	66.659	8.164	5.07	9.175	25.2	27.09
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/19/94-12/14/98	12	12.25	12.367	23.5	4.4	30.739	5.544	5.12	8.	15.95	22.24
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/18/94-12/14/98	12	127.	122.083	161.	81.	851.538	29.181	82.5	88.75	149.75	158.3
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/19/94-12/14/98	12	130.5	119.083	147.	69.	682.083	26.117	75.	91.75	140.5	145.8
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/19/94-12/14/98	12	5.35	6.408	12.2	1.9	14.621	3.824	1.99	2.825	10.5	11.93
00310 BOD, 5 DAY, 20 DEG C MG/L	10/12/67-12/14/98	12##	1.	1.5	3.	1.	0.455	0.674	1.	1.	2.	2.7
00340 COD, .25N K2CR2O7 MG/L	07/19/94-12/14/98	12	24.	21.417	27.	10.	34.265	5.854	11.2	16.	26.	27.
00400 PH (STANDARD UNITS)	09/20/67-12/14/98	12	6.36	6.349	6.97	5.72	0.099	0.315	5.804	6.198	6.51	6.871

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station RICH0130

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/14/98	12	6.65	6.633	7.	6.2	0.077	0.277	6.23	6.4	6.9	7.
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/14/98	12	6.647	6.555	7.	6.2	0.084	0.289	6.23	6.4	6.9	7.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	12	0.225	0.279	0.631	0.1	0.03	0.173	0.1	0.126	0.398	0.592
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	12	22.	22.	42.	8.	129.636	11.386	8.6	13.	30.5	41.4
00500	RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	12	104.	103.833	127.	81.	117.061	10.819	85.8	97.5	107.75	122.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	12	28.	29.75	50.	19.	89.114	9.44	19.3	22.25	32.75	48.5
00510	RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	12	72.	74.083	106.	58.	186.083	13.641	58.3	62.5	79.75	100.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	12	4.	5.125	15.	1.5	12.097	3.478	1.95	3.	6.	12.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	12##	1.5	1.75	3.	1.5	0.341	0.584	1.5	1.5	1.5	3.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	12	3.	3.375	12.	1.5	8.506	2.916	1.5	1.5	4.	9.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.02	0.094	0.7	0.02	0.037	0.193	0.02	0.02	0.075	0.52
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.01	0.013	0.05	0.005	0.	0.013	0.005	0.005	0.018	0.041
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12	0.08	0.087	0.24	0.02	0.004	0.064	0.02	0.028	0.118	0.21
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	12	0.5	0.533	0.8	0.2	0.022	0.15	0.26	0.5	0.6	0.77
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/19/94-12/14/98	12	0.085	0.083	0.11	0.03	0.	0.02	0.042	0.08	0.098	0.107
00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	12	31.	30.75	42.	20.	65.295	8.081	20.3	22.5	39.5	41.4
00940	CHLORIDE,TOTAL IN WATER MG/L	07/30/75-12/14/98	12	16.5	19.167	49.	13.	95.606	9.778	13.3	14.25	18.75	41.2
00945	SULFATE, TOTAL (MG/L AS SO4)	07/19/94-12/14/98	12	10.5	10.75	22.	2.	37.841	6.151	2.3	5.5	16.25	20.5
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/19/94-12/14/98	12	565.	2014.5	16000.	9.	20387562.091	4515.259	12.3	46.25	1472.5	12250.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/19/94-12/14/98	12	2.748	2.516	4.204	0.954	0.922	0.96	1.058	1.665	3.147	4.006
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		327.776									
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	12	0.06	0.114	0.7	0.02	0.034	0.185	0.029	0.053	0.078	0.517

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station RICH0130

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	12	14.35	13.425	26.4	1.3	74.404	8.626	1.96	4.875	22.25	25.53
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/19/94-12/14/98	12	8.05	7.7	10.	4.6	3.836	1.959	4.66	5.725	9.625	9.97
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/18/94-12/14/98	12	166.5	162.167	235.	105.	1482.515	38.503	107.1	127.5	188.5	225.1
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/19/94-12/14/98	12	154.5	153.083	225.	102.	1208.992	34.771	103.2	126.75	176.75	213.3
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/19/94-12/14/98	12	6.85	6.867	11.4	3.1	8.35	2.89	3.19	4.15	9.625	11.07
00310	BOD, 5 DAY, 20 DEG C MG/L	10/12/67-12/14/98	12	1.	1.125	2.	0.5	0.46	0.678	0.5	0.5	2.	2.
00340	COD, .25N K2CR2O7 MG/L	07/19/94-12/14/98	12	26.	25.833	40.	18.	40.152	6.337	18.3	19.5	29.	37.6
00400	PH (STANDARD UNITS)	09/20/67-12/14/98	12	6.235	6.3	7.04	5.92	0.113	0.336	5.926	6.04	6.545	6.893
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	12	6.208	6.202	7.04	5.92	0.124	0.352	5.926	6.04	6.545	6.893
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	12	0.62	0.628	1.202	0.091	0.143	0.378	0.148	0.285	0.913	1.186
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/14/98	12	6.8	6.9	7.8	6.6	0.111	0.333	6.6	6.7	7.075	7.59
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/14/98	12	6.8	6.819	7.8	6.6	0.118	0.343	6.6	6.7	7.075	7.59
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	12	0.158	0.152	0.251	0.016	0.005	0.073	0.035	0.085	0.2	0.251
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	12	19.	24.75	48.	11.	163.114	12.772	11.3	15.25	38.75	45.9
00500	RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	12	112.5	114.	144.	85.	391.818	19.794	87.7	97.5	135.5	143.1
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	12	30.5	32.333	53.	20.	108.788	10.43	20.6	24.25	38.5	51.5
00510	RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	12	84.	81.667	116.	55.	321.697	17.936	55.6	64.5	94.	110.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	12	4.	3.875	7.	1.5	1.733	1.316	1.95	3.	4.	6.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	12##	1.5	1.5	1.5	1.5	0.	0.	1.5	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	12	3.	2.792	5.	1.5	0.93	0.964	1.5	1.875	3.	4.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.02	0.03	0.05	0.02	0.	0.013	0.02	0.02	0.04	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.005	0.007	0.02	0.005	0.	0.005	0.005	0.005	0.009	0.017
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12	0.12	0.128	0.3	0.02	0.005	0.072	0.026	0.087	0.165	0.264
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	12	0.55	0.567	0.8	0.3	0.028	0.167	0.33	0.425	0.75	0.8
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/19/94-12/14/98	12	0.075	0.078	0.12	0.04	0.001	0.027	0.043	0.053	0.108	0.117
00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	12	32.	33.583	50.	21.	82.447	9.08	21.3	25.25	39.75	48.5
00940	CHLORIDE,TOTAL IN WATER MG/L	07/30/75-12/14/98	12	22.	23.083	52.	12.	107.356	10.361	12.6	17.	25.5	45.1
00945	SULFATE, TOTAL (MG/L AS SO4)	07/19/94-12/14/98	12	9.	8.	15.	2.5	20.636	4.543	2.5	2.5	11.75	14.4
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/19/94-12/14/98	12	68.	83.667	270.	9.	6971.152	83.493	9.	11.75	124.5	252.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	4	0.035	0.03	0.04	0.01	0.	0.014	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	7	12.9	15.7	25.3	4.9	56.057	7.487	**	**	**	**
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/19/94-12/14/98	6	8.8	8.417	9.7	6.1	1.55	1.245	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/18/94-12/14/98	2	130.	130.	130.	130.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/19/94-12/14/98	6	109.	114.	138.	94.	318.4	17.844	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/19/94-12/14/98	7	4.6	5.186	8.9	2.9	4.445	2.108	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/12/67-12/14/98	6	1.3	1.483	2.5	1.	0.322	0.567	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	07/19/94-12/14/98	6	32.	32.667	46.	21.	155.867	12.485	**	**	**	**
00400 PH (STANDARD UNITS)	09/20/67-12/14/98	7	6.11	6.181	6.55	5.77	0.069	0.262	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	7	6.11	6.115	6.55	5.77	0.074	0.272	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	7	0.776	0.767	1.698	0.282	0.218	0.467	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	09/20/67-12/14/98	6	6.6	6.617	7.2	6.1	0.126	0.354	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/14/98	6	6.6	6.505	7.2	6.1	0.141	0.375	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	6	0.251	0.313	0.794	0.063	0.063	0.251	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	6	20.5	21.	32.	13.	47.6	6.899	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	6	97.	97.167	108.	83.	84.967	9.218	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	6	32.	31.833	42.	21.	90.967	9.538	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	6	65.5	65.333	77.	54.	63.067	7.941	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	6	5.5	5.417	9.	1.5	6.642	2.577	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	6##	1.5	2.	3.	1.5	0.6	0.775	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	6	3.5	3.75	6.	1.5	2.575	1.605	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	6##	0.02	0.032	0.06	0.02	0.	0.018	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	6##	0.005	0.013	0.03	0.005	0.	0.013	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	6##	0.02	0.027	0.06	0.02	0.	0.016	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	6	0.6	0.6	0.8	0.4	0.036	0.19	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/19/94-12/14/98	6	0.105	0.105	0.14	0.06	0.001	0.033	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	6	27.	27.	34.	20.	23.6	4.858	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	07/30/75-12/14/98	6	16.	16.833	24.	11.	30.967	5.565	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	07/19/94-12/14/98	6	8.5	7.833	12.	3.	15.767	3.971	**	**	**	**
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/19/94-12/14/98	6	505.	1500.	5400.	20.	4436760.	2106.362	**	**	**	**
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/19/94-12/14/98	6	2.577	2.633	3.732	1.301	0.79	0.889	**	**	**	**
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		429.67									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	6	0.085	0.085	0.12	0.05	0.001	0.027	**	**	**	**

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Annual Analysis for 1995 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	12	14.85	15.008	27.5	1.1	63.588	7.974	2.6	9.325	20.85	27.14
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/19/94-12/14/98	12	7.95	9.692	24.	3.6	29.363	5.419	4.26	5.95	12.05	20.91
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/18/94-12/14/98	9	151.	146.	178.	116.	506.75	22.511	116.	126.5	166.	178.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/19/94-12/14/98	12	145.	144.5	226.	113.	921.909	30.363	113.6	121.	150.5	208.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/19/94-12/14/98	12	5.7	6.15	12.7	2.5	9.654	3.107	2.59	3.425	8.075	11.92
00310 BOD, 5 DAY, 20 DEG C MG/L	10/12/67-12/14/98	11	2.	1.609	3.5	0.5	0.829	0.91	0.5	0.5	2.	3.2
00340 COD, .25N K2CR2O7 MG/L	07/19/94-12/14/98	12	27.	26.25	37.	16.	47.841	6.917	16.	20.25	30.	36.7
00400 PH (STANDARD UNITS)	09/20/67-12/14/98	12	6.33	6.292	6.73	5.74	0.076	0.275	5.764	6.218	6.45	6.652
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	12	6.33	6.2	6.73	5.74	0.085	0.291	5.764	6.217	6.45	6.652
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	12	0.468	0.631	1.82	0.186	0.252	0.502	0.232	0.355	0.606	1.728

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station RICH0130

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	8	0.7	0.613	0.9	0.2	0.064	0.253	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	8##	50.	256.25	1500.	50.	255312.5	505.285	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	8##	1.699	1.996	3.176	1.699	0.275	0.525	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		99.197									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	8##	0.05	0.087	0.3	0.05	0.008	0.088	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	8	0.035	0.068	0.28	0.02	0.008	0.088	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station RICH0130

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	11	15.5	15.364	27.5	0.	82.555	9.086	1.	6.	24.	27.2
00300	OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	11	7.6	7.645	13.	3.6	8.931	2.988	3.74	4.6	10.4	12.6
00400	PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.7	6.727	7.5	6.1	0.142	0.377	6.18	6.5	7.	7.4
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.7	6.596	7.5	6.1	0.161	0.401	6.18	6.5	7.	7.4
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	11	0.2	0.254	0.794	0.032	0.043	0.208	0.045	0.1	0.316	0.699
00500	RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	10	87.	92.6	151.	68.	558.933	23.642	68.8	77.5	103.25	146.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	10	32.5	32.9	63.	14.	160.767	12.679	15.1	25.	36.	60.6
00510	RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	10	51.5	59.7	119.	27.	758.233	27.536	28.4	42.5	75.	116.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	10	3.5	4.5	20.	0.5	34.833	5.902	0.5	0.5	5.5	18.7
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	10	1.5	1.9	5.	0.5	2.656	1.63	0.5	0.5	3.25	4.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	10##	1.25	2.85	15.	0.5	19.781	4.448	0.5	0.5	3.25	13.9
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	10##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.006	0.01
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	10	0.35	0.38	0.6	0.2	0.015	0.123	0.21	0.3	0.5	0.59
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	10##	75.	95.	300.	50.	5805.556	76.194	50.	50.	100.	280.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	10##	1.849	1.897	2.477	1.699	0.064	0.253	1.699	1.699	2.	2.429
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		78.922									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	10##	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.063	0.1
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	10	0.05	0.049	0.15	0.005	0.002	0.045	0.005	0.009	0.068	0.144

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station RICH0130

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	3	20.	15.667	21.	6.	70.333	8.386	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	4	8.8	8.6	10.2	6.6	2.453	1.566	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-12/14/98	4	6.75	6.75	7.1	6.4	0.123	0.351	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	4	6.682	6.651	7.1	6.4	0.136	0.369	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	4	0.208	0.223	0.398	0.079	0.025	0.158	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	4	77.	74.	85.	57.	166.667	12.91	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	4	34.	33.	39.	25.	36.667	6.055	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	4	46.	41.	51.	21.	183.333	13.54	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	4##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	4##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	4##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	4##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	4##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	4	0.45	0.425	0.5	0.3	0.009	0.096	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	4##	50.	62.5	100.	50.	625.	25.	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	4##	1.699	1.774	2.	1.699	0.023	0.151	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		59.46									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	4##	0.05	0.063	0.1	0.05	0.001	0.025	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.005	0.007	0.02	0.005	0.	0.004	0.005	0.005	0.005	0.017
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12	0.105	0.17	0.68	0.025	0.033	0.181	0.036	0.083	0.195	0.578
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	12	0.45	0.558	1.199	0.3	0.066	0.257	0.33	0.4	0.75	1.079
00940 CHLORIDE,TOTAL IN WATER MG/L	07/30/75-12/14/98	1	12.	12.	12.	12.	0.	0.	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	13##	50.	61.538	200.	50.	1730.769	41.603	50.	50.	50.	140.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	13##	1.699	1.745	2.301	1.699	0.028	0.167	1.699	1.699	1.699	2.06
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		55.627									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	12	0.1	0.146	0.3	0.05	0.008	0.092	0.05	0.063	0.2	0.3
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	12	0.05	0.068	0.17	0.02	0.001	0.039	0.026	0.05	0.08	0.149

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	10	17.25	16.56	23.9	5.6	39.736	6.304	5.87	11.225	22.475	23.84
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	10	7.6	7.2	11.8	3.2	8.756	2.959	3.24	4.5	9.65	11.6
00400 PH (STANDARD UNITS)	09/20/67-12/14/98	10	6.85	6.82	7.5	6.5	0.113	0.336	6.5	6.5	7.	7.45
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	10	6.825	6.722	7.5	6.5	0.124	0.351	6.5	6.5	7.	7.45
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	10	0.15	0.19	0.316	0.032	0.013	0.116	0.038	0.1	0.316	0.316
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	10	96.	103.4	157.	73.	653.378	25.561	73.8	87.75	116.5	154.9
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	10	56.	56.4	89.	30.	249.156	15.785	31.2	48.75	65.25	87.
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	10	42.	47.	72.	30.	208.667	14.445	30.4	34.75	60.5	71.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	10	2.	3.55	10.	0.5	11.414	3.378	0.5	0.5	6.5	9.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	10	2.	1.95	4.	0.5	1.636	1.279	0.5	0.5	2.5	4.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	10	0.5	1.75	6.	0.	4.681	2.163	0.	0.	4.	5.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	10##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	10##	0.025	0.072	0.36	0.025	0.012	0.11	0.025	0.025	0.059	0.34
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	10	0.5	0.52	1.	0.3	0.044	0.21	0.3	0.375	0.625	0.97
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	10##	50.	60.	100.	50.	444.444	21.082	50.	50.	62.5	100.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	10##	1.699	1.759	2.	1.699	0.016	0.127	1.699	1.699	1.774	2.
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		57.435									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	9##	0.05	0.078	0.2	0.05	0.003	0.051	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	9	0.03	0.048	0.12	0.01	0.002	0.04	0.01	0.025	0.08	0.12

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	8	16.5	15.813	29.	0.5	65.424	8.089	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	8	6.7	6.838	11.	1.9	10.377	3.221	**	**	**	**
00400 PH (STANDARD UNITS)	09/20/67-12/14/98	8	6.9	6.875	7.5	6.	0.251	0.501	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	8	6.889	6.616	7.5	6.	0.327	0.572	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	8	0.129	0.242	1.	0.032	0.103	0.32	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	8	112.5	112.375	147.	83.	348.268	18.662	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	8	55.	50.25	67.	29.	250.5	15.827	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	8	57.	62.125	100.	42.	330.982	18.193	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	8	4.5	9.25	35.	0.5	147.857	12.16	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	8	1.5	4.125	12.	0.	26.054	5.104	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	8	2.5	5.25	23.	0.	59.286	7.7	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	8##	0.075	0.075	0.1	0.05	0.001	0.027	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	8##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	4##	0.048	0.058	0.11	0.025	0.002	0.041	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.05	0.055	0.1	0.005	0.001	0.025	0.019	0.05	0.05	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12	0.275	0.276	0.59	0.05	0.019	0.137	0.077	0.18	0.355	0.527
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	12	0.85	0.933	1.699	0.4	0.108	0.328	0.49	0.725	1.149	1.549
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	12##	50.	79.167	300.	50.	5208.333	72.169	50.	50.	87.5	240.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	12##	1.699	1.814	2.477	1.699	0.057	0.239	1.699	1.699	1.925	2.334
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	65.161										
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	12##	0.075	0.125	0.3	0.05	0.01	0.099	0.05	0.05	0.2	0.3
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	12	0.1	0.108	0.2	0.05	0.004	0.06	0.05	0.05	0.175	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	11	15.6	15.709	25.	5.6	54.375	7.374	5.92	7.8	23.9	24.88
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	11	7.2	7.773	14.	4.2	7.516	2.742	4.36	6.	9.	13.32
00310 BOD, 5 DAY, 20 DEG C MG/L	10/12/67-12/14/98	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	09/20/67-12/14/98	10	6.6	6.64	7.	6.2	0.085	0.291	6.21	6.45	7.	7.
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	10	6.589	6.556	7.	6.2	0.093	0.305	6.21	6.45	7.	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	10	0.258	0.278	0.631	0.1	0.032	0.178	0.1	0.1	0.362	0.618
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	12	89.	92.75	126.	74.	219.659	14.821	74.9	80.5	104.	120.3
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	12	38.	40.833	89.	12.	507.424	22.526	12.9	22.25	57.75	80.6
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	12	57.5	55.5	73.	29.	140.091	11.836	33.2	48.25	64.75	70.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	12	8.	7.583	18.	0.	26.083	5.107	0.	3.75	10.	16.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	12	4.	4.917	12.	0.	18.265	4.274	0.	0.25	9.25	11.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	12	2.	2.667	6.	0.	6.606	2.57	0.	0.25	6.	6.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	11##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.09
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.005	0.005	0.01	0.005	0.	0.001	0.005	0.005	0.005	0.009
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12	0.085	0.202	1.199	0.01	0.104	0.323	0.022	0.053	0.225	0.908
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	12	0.7	0.65	0.9	0.4	0.03	0.173	0.4	0.5	0.775	0.9
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	12##	50.	62.5	100.	50.	511.364	22.613	50.	50.	87.5	100.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	12##	1.699	1.774	2.	1.699	0.019	0.136	1.699	1.699	1.925	2.
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	59.46										
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	12	0.1	0.113	0.4	0.05	0.01	0.1	0.05	0.05	0.1	0.34
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	12##	0.05	0.083	0.3	0.05	0.005	0.072	0.05	0.05	0.1	0.24

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	13	17.2	16.1	25.6	1.1	67.067	8.189	2.42	9.45	23.85	25.36
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	13	5.2	6.692	12.	2.6	10.704	3.272	2.68	4.2	9.5	11.84
00310 BOD, 5 DAY, 20 DEG C MG/L	10/12/67-12/14/98	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	09/20/67-12/14/98	13	6.5	6.538	7.	6.	0.086	0.293	6.	6.5	6.75	6.96
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	13	6.5	6.439	7.	6.	0.097	0.311	6.	6.5	6.75	6.96
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	13	0.316	0.364	1.	0.1	0.086	0.293	0.11	0.179	0.316	1.
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	12	92.	103.417	204.	58.	1533.356	39.158	63.4	81.25	113.	187.8
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	12	48.5	50.25	70.	25.	205.841	14.347	27.4	40.	64.25	69.7
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	12	45.5	53.167	147.	18.	1141.424	33.785	21.6	34.	61.	127.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	12	8.	17.	72.	0.	434.545	20.846	0.6	2.	29.5	59.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	12	2.	5.333	20.	0.	36.606	6.05	0.	2.	9.5	17.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	12	5.	11.833	60.	0.	302.879	17.403	0.	2.	17.5	50.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.05	0.062	0.1	0.05	0.001	0.023	0.05	0.05	0.088	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	11	3.	5.636	15.	1.	19.655	4.433	1.2	3.	10.	14.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	11	0.04	0.07	0.22	0.01	0.004	0.065	0.012	0.03	0.09	0.208
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	11	0.01	0.014	0.02	0.01	0.	0.005	0.01	0.01	0.02	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	11	0.19	0.204	0.58	0.01	0.031	0.177	0.013	0.04	0.33	0.54
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	11	0.5	0.5	0.8	0.3	0.024	0.155	0.3	0.4	0.6	0.78
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	11	100.	145.455	500.	50.	17727.273	133.144	50.	50.	200.	440.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	11	2.	2.036	2.699	1.699	0.111	0.333	1.699	1.699	2.301	2.619
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN = 108.687											
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	11	0.2	0.177	0.4	0.05	0.012	0.11	0.05	0.05	0.2	0.38
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	11	0.12	0.132	0.3	0.02	0.009	0.097	0.022	0.04	0.17	0.298

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	11	12.2	13.482	27.8	2.2	63.662	7.979	2.64	7.2	21.1	26.58
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	10	9.15	9.27	13.4	4.8	11.311	3.363	4.86	5.7	12.85	13.36
00310 BOD, 5 DAY, 20 DEG C MG/L	10/12/67-12/14/98	2	1.7	1.7	2.2	1.2	0.5	0.707	**	**	**	**
00400 PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.5	6.527	7.	6.2	0.054	0.233	6.22	6.3	6.7	6.94
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.5	6.476	7.	6.2	0.057	0.239	6.22	6.3	6.7	6.94
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	11	0.316	0.334	0.631	0.1	0.026	0.161	0.12	0.2	0.501	0.605
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	11	87.	99.455	178.	67.	1155.473	33.992	67.2	77.	117.	170.2
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	11	40.	38.909	89.	16.	412.891	20.32	16.	24.	45.	80.8
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	11	52.	60.545	94.	28.	543.473	23.313	29.8	39.	89.	93.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	10	5.	14.7	80.	3.	553.344	23.523	3.1	4.	14.	74.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	11	2.	5.636	30.	0.	75.055	8.663	0.	1.	7.	26.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	11	3.	8.273	50.	0.	203.618	14.269	0.2	2.	10.	42.2
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	11	0.02	0.028	0.12	0.005	0.001	0.033	0.005	0.01	0.04	0.104
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	11	0.01	0.009	0.01	0.005	0.	0.002	0.005	0.005	0.01	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	11	0.17	0.147	0.26	0.01	0.007	0.085	0.01	0.1	0.19	0.26
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	11	0.5	0.518	1.	0.3	0.052	0.227	0.3	0.3	0.6	0.96
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	11	100.	104.545	300.	50.	6227.273	78.913	50.	50.	100.	280.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	11	2.	1.934	2.477	1.699	0.072	0.269	1.699	1.699	2.	2.442
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN = 85.883											
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	11	0.1	0.095	0.2	0.05	0.003	0.057	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	11	0.07	0.078	0.15	0.02	0.002	0.047	0.022	0.03	0.13	0.146

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	12	17.8	15.658	27.2	6.1	57.363	7.574	6.28	8.075	21.55	26.54
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	12	8.7	8.5	14.2	4.8	7.975	2.824	4.8	6.2	10.85	13.3
00310 BOD, 5 DAY, 20 DEG C MG/L	10/12/67-12/14/98	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.7	6.691	6.9	6.5	0.023	0.151	6.5	6.5	6.8	6.9
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	11	6.7	6.667	6.9	6.5	0.024	0.153	6.5	6.5	6.8	6.9
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	11	0.2	0.215	0.316	0.126	0.006	0.074	0.126	0.158	0.316	0.316
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	12	96.5	100.	224.	1.	2802.727	52.941	13.9	84.75	121.75	197.3
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	12	38.5	38.083	52.	18.	81.538	9.03	21.6	33.75	42.25	51.7
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	12	61.	70.667	184.	8.	1946.061	44.114	15.2	45.25	87.75	160.9
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	12	5.	10.833	48.	1.	186.697	13.664	1.3	3.25	18.25	40.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	12	4.5	5.	14.	0.	19.091	4.369	0.3	1.25	7.25	13.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	11	2.	6.364	36.	0.	113.855	10.67	0.2	1.	8.	31.6

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Annual Analysis for 1969 - Station RICH0130

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	2	7.	7.	9.	5.	8.	2.828	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	3	5.	5.	7.	3.	4.	2.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	3	0.2	0.193	0.2	0.18	0.	0.012	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	3	0.01	0.022	0.05	0.005	0.001	0.025	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	3	0.27	0.26	0.42	0.09	0.027	0.165	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	3	1.099	1.013	1.5	0.44	0.286	0.535	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station RICH0130

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	11	17.2	14.636	22.2	4.4	51.977	7.209	4.4	5.6	21.1	22.1
00300	OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	11	7.4	7.536	12.	5.	5.377	2.319	5.08	5.5	9.8	11.64
00310	BOD, 5 DAY, 20 DEG C	MG/L	10/12/67-12/14/98	8	2.4	2.25	3.2	1.4	0.314	0.561	**	**	**	**
00400	PH (STANDARD UNITS)		09/20/67-12/14/98	11	6.5	6.609	7.6	5.6	0.235	0.485	5.74	6.5	6.8	7.48
00400	CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	11	6.5	6.346	7.6	5.6	0.311	0.558	5.74	6.5	6.8	7.48
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	11	0.316	0.451	2.512	0.025	0.484	0.696	0.04	0.158	0.316	2.11
00403	PH, LAB, STANDARD UNITS	SU	09/20/67-12/14/98	6	6.65	6.6	7.1	6.	0.188	0.434	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS		09/20/67-12/14/98	6	6.647	6.424	7.1	6.	0.225	0.475	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	6	0.225	0.377	1.	0.079	0.133	0.365	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		09/20/67-12/14/98	6	16.5	16.667	33.	7.	85.067	9.223	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	11	127.	123.091	173.	91.	686.491	26.201	91.6	95.	141.	168.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	11	55.	52.818	85.	14.	477.964	21.862	18.2	36.	71.	84.2
00510	RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	11	71.	70.273	92.	35.	293.218	17.124	38.4	59.	88.	91.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	11	8.	10.273	21.	1.	40.618	6.373	1.8	6.	18.	20.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	11	4.	4.364	14.	1.	12.055	3.472	1.2	2.	5.	12.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		07/16/69-12/14/98	11	5.	5.909	17.	0.	27.691	5.262	0.2	2.	7.	16.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	10	0.16	0.172	0.4	0.05	0.011	0.104	0.052	0.093	0.228	0.385
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	10	0.01	0.013	0.03	0.005	0.	0.009	0.005	0.005	0.02	0.029
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	10	0.2	0.307	1.069	0.1	0.08	0.283	0.104	0.17	0.333	1.005
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	10	0.8	0.82	1.299	0.3	0.122	0.349	0.31	0.475	1.149	1.299
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-06/14/79	2##	125.	125.	200.	50.	11250.	106.066	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-06/14/79	2##	2.	2.	2.301	1.699	0.181	0.426	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		100.									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/11/70-06/14/79	10	0.2	0.32	1.3	0.05	0.137	0.37	0.05	0.088	0.35	1.22
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/11/70-12/14/98	10	0.155	0.287	1.299	0.04	0.144	0.38	0.041	0.08	0.313	1.219

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Annual Analysis for 1971 - Station RICH0130

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	11	15.6	14.973	26.7	1.1	80.862	8.992	1.88	5.6	22.2	26.48
00300	OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	11	6.8	7.673	11.6	4.6	6.674	2.583	4.68	5.	10.4	11.4
00310	BOD, 5 DAY, 20 DEG C	MG/L	10/12/67-12/14/98	4	1.6	1.85	3.2	1.	0.89	0.943	**	**	**	**
00400	PH (STANDARD UNITS)		09/20/67-12/14/98	10	6.7	6.59	6.8	5.3	0.208	0.456	5.44	6.7	6.8	6.8
00400	CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	10	6.7	6.175	6.8	5.3	0.399	0.632	5.44	6.7	6.8	6.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	10	0.2	0.668	5.012	0.158	2.329	1.526	0.158	0.158	0.2	4.531
00500	RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	11	120.	122.182	161.	95.	564.564	23.761	95.2	97.	136.	159.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	11	48.	49.727	74.	28.	225.618	15.021	28.6	36.	65.	72.8
00510	RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	11	69.	72.455	109.	48.	303.073	17.409	49.4	60.	86.	104.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	11	9.	14.182	65.	4.	301.964	17.377	4.2	6.	12.	55.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	11	4.	8.545	50.	2.	194.073	13.931	2.	2.	7.	41.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1967 - Station RICH0130

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	2	20.85	20.85	21.7	20.	1.445	1.202	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/12/67-12/14/98	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		09/20/67-12/14/98	1	6.6	6.6	6.6	6.6	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	1	6.6	6.6	6.6	6.6	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	1	0.251	0.251	0.251	0.251	0.	0.	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	09/20/67-12/14/98	2	6.8	6.8	6.9	6.7	0.02	0.141	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		09/20/67-12/14/98	2	6.789	6.789	6.9	6.7	0.02	0.142	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	2	0.163	0.163	0.2	0.126	0.003	0.052	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		09/20/67-12/14/98	2	23.5	23.5	27.	20.	24.5	4.95	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	2	100.	100.	133.	67.	2178.	46.669	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	2	2.5	2.5	3.	2.	0.5	0.707	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)		09/20/67-12/14/98	2	29.	29.	32.	26.	18.	4.243	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1968 - Station RICH0130

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	5	23.3	21.88	26.7	14.4	22.297	4.722	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	5	5.4	6.32	10.	5.	4.372	2.091	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/12/67-12/14/98	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		09/20/67-12/14/98	5	7.	6.7	7.	6.	0.2	0.447	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	5	7.	6.49	7.	6.	0.255	0.505	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	5	0.1	0.323	1.	0.1	0.152	0.39	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	09/20/67-12/14/98	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		09/20/67-12/14/98	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	1	0.126	0.126	0.126	0.126	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		09/20/67-12/14/98	1	48.	48.	48.	48.	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	1	156.	156.	156.	156.	0.	0.	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	1	0.22	0.22	0.22	0.22	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	1	0.21	0.21	0.21	0.21	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	1	0.96	0.96	0.96	0.96	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station RICH0130

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	3	21.1	16.667	25.6	3.3	139.063	11.793	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	3	9.3	8.433	11.6	4.4	13.523	3.677	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/12/67-12/14/98	3	3.	2.133	3.1	0.3	2.523	1.589	**	**	**	**
00400 PH (STANDARD UNITS)		09/20/67-12/14/98	3	6.5	6.433	6.6	6.2	0.043	0.208	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	3	6.5	6.399	6.6	6.2	0.045	0.212	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	3	0.316	0.399	0.631	0.251	0.041	0.203	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	09/20/67-12/14/98	3	6.5	6.6	6.9	6.4	0.07	0.265	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		09/20/67-12/14/98	3	6.5	6.553	6.9	6.4	0.073	0.271	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	3	0.316	0.28	0.398	0.126	0.02	0.14	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		09/20/67-12/14/98	3	21.	22.667	29.	18.	32.333	5.686	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	3	106.	113.	135.	98.	379.	19.468	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	3	40.	41.	60.	23.	343.	18.52	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	2	70.5	70.5	75.	66.	40.5	6.364	**	**	**	**

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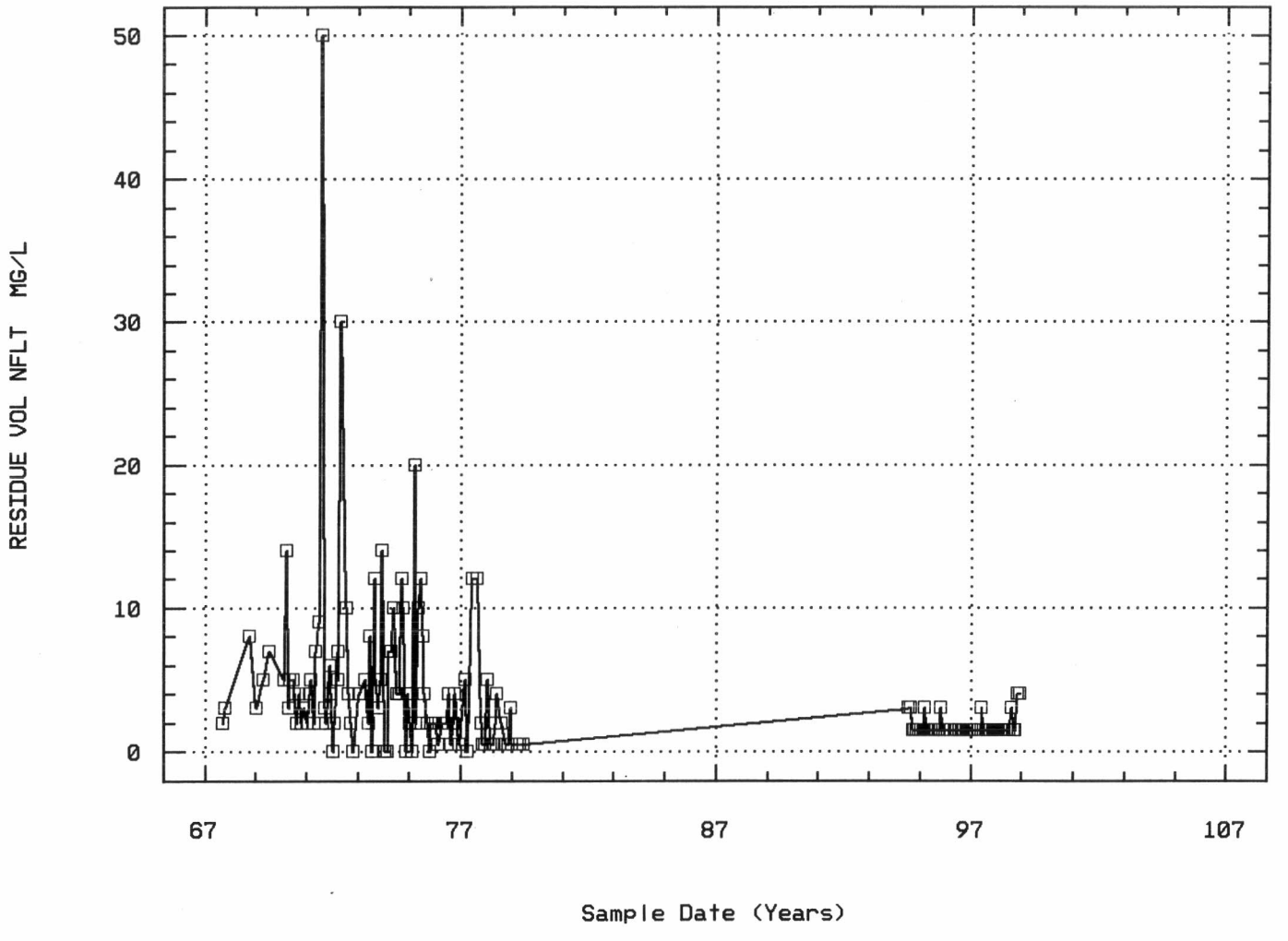
Station: RICH0130 Parameter Code: 00535

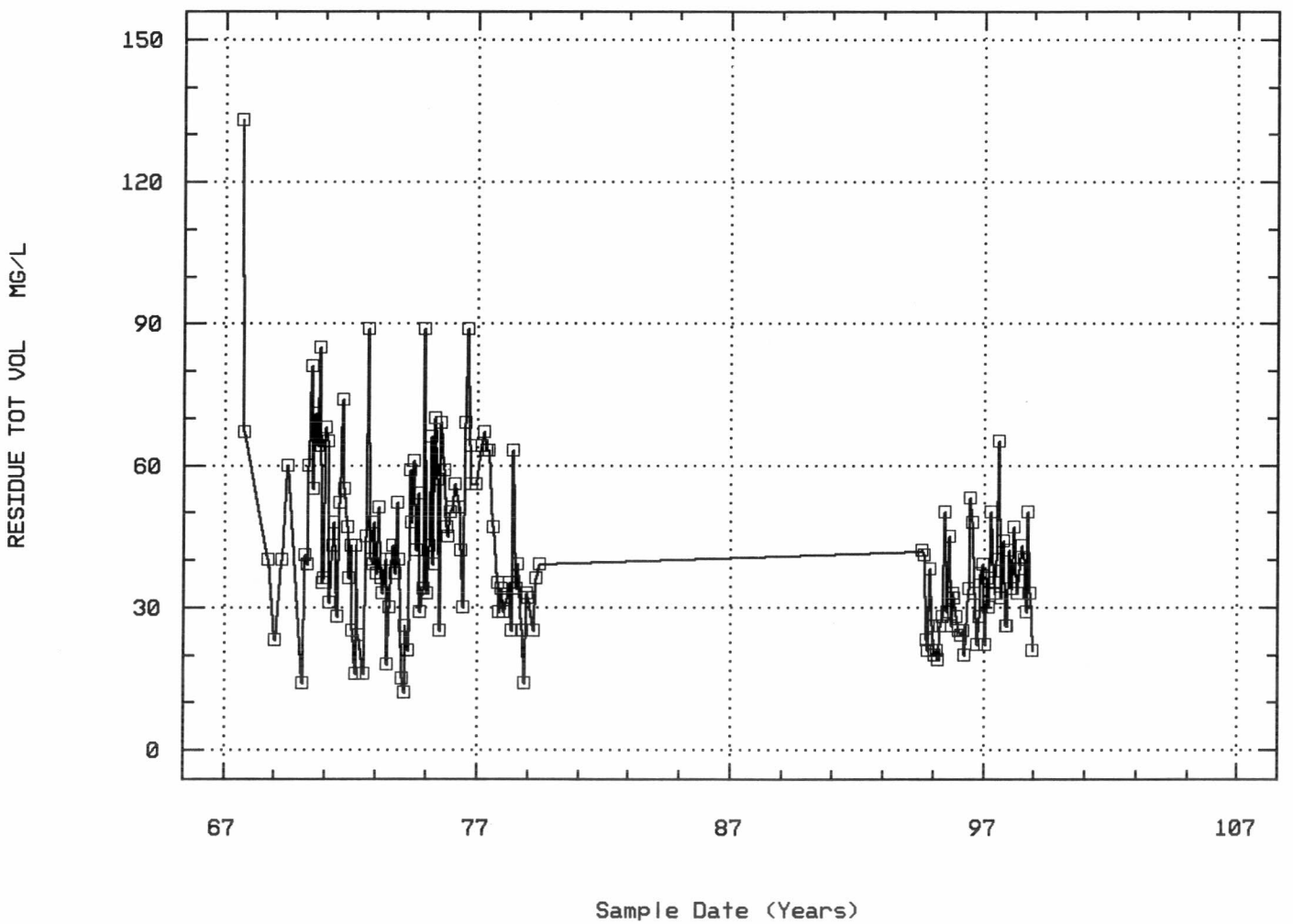
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



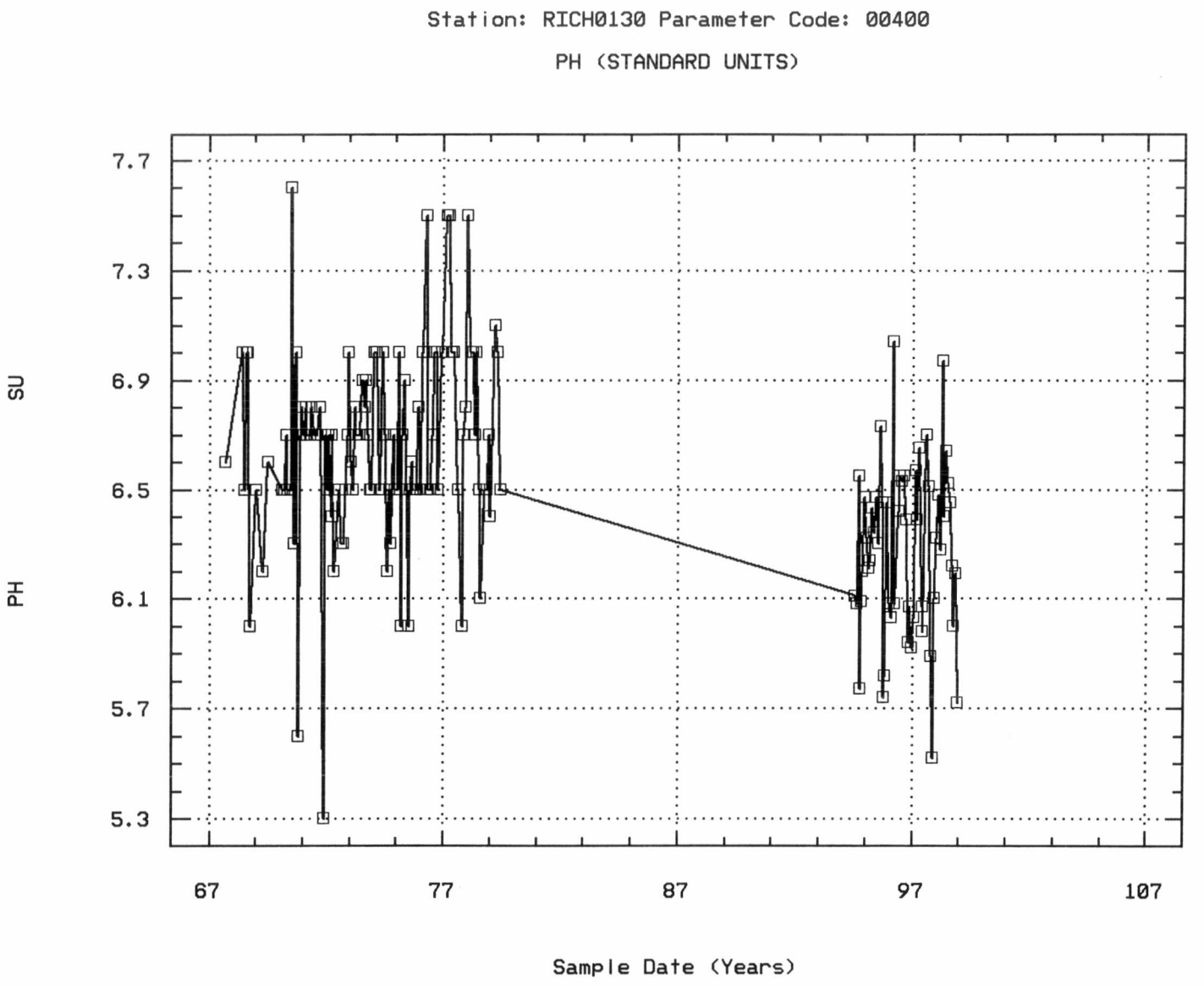
RT. 156 BRIDGE

Station: RICH0130 Parameter Code: 00505

RESIDUE, TOTAL VOLATILE (MG/L)



RT. 156 BRIDGE



RT. 156 BRIDGE

EPA Water Quality Criteria Analysis for Station: RICH0130

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	3	0	0.00	1	0	0.00				2	0	0.00			
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	54	0	0.00	16	0	0.00	25	0	0.00	13	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	54	14	0.26	15	10	0.67	26	2	0.08	13	2	0.15			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	110	8	0.07	35	5	0.14	41	1	0.02	34	2	0.06			
00400 PH	Fresh Chronic	9.	162	0	0.00	50	0	0.00	67	0	0.00	45	0	0.00			
	Other-Lo Lim.	6.5	162	88	0.54	50	25	0.50	67	42	0.63	45	21	0.47			
00403 PH, LAB	Fresh Chronic	9.	66	0	0.00	20	0	0.00	28	0	0.00	18	0	0.00			
	Other-Lo Lim.	6.5	66	24	0.36	20	4	0.20	28	16	0.57	18	4	0.22			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	158	0	0.00	47	0	0.00	65	0	0.00	46	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	140	0	0.00	43	0	0.00	57	0	0.00	40	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	18	0	0.00	4	0	0.00	8	0	0.00	6	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	55	0	0.00	17	0	0.00	25	0	0.00	13	0	0.00			
	Drinking Water	250.	55	0	0.00	17	0	0.00	25	0	0.00	13	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	54	0	0.00	16	0	0.00	25	0	0.00	13	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	10	0	0.00	2	0	0.00	4	0	0.00	4	0	0.00			
	Drinking Water	50.	10	0	0.00	2	0	0.00	4	0	0.00	4	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	2&	1	0.50	1	0	0.00				1	1	1.00			
	Drinking Water	5.	2&	1	0.50	1	0	0.00				1	1	1.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	23	0	0.00	3	0	0.00	8	0	0.00	12	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	22	3	0.14	3	1	0.33	8	1	0.13	11	1	0.09			
	Drinking Water	1300.	22	0	0.00	3	0	0.00	8	0	0.00	11	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	20	0	0.00	3	0	0.00	9	0	0.00	8	0	0.00			
	Drinking Water	15.	20	2	0.10	3	0	0.00	9	1	0.11	8	1	0.13			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	10	0	0.00	1	0	0.00	3	0	0.00	6	0	0.00			
	Drinking Water	100.	10	0	0.00	1	0	0.00	3	0	0.00	6	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	23	0	0.00	3	0	0.00	8	0	0.00	12	0	0.00			
	Drinking Water	5000.	23	0	0.00	3	0	0.00	8	0	0.00	12	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	18	10	0.56	9	6	0.67	4	2	0.50	5	2	0.40			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	53	27	0.51	16	12	0.75	24	9	0.38	13	6	0.46			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	93	12	0.13	27	4	0.15	38	6	0.16	28	2	0.07			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00	1	0	0.00									
71900 MERCURY, TOTAL	Fresh Acute	2.4	21	0	0.00	4	0	0.00	9	0	0.00	8	0	0.00			
	Drinking Water	2.	21	0	0.00	4	0	0.00	9	0	0.00	8	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Parameter Inventory for Station: RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900 HARDNESS, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	56	32.	32.411	55.	20.	62.501	7.906	22.	26.	38.75	42.
00940 CHLORIDE,TOTAL IN WATER MG/L	07/30/75-12/14/98	55	17.	18.164	52.	6.	67.991	8.246	10.6	13.	21.	26.4
00945 SULFATE, TOTAL (MG/L AS SO4)	07/19/94-12/14/98	54	9.	10.63	52.	2.	75.709	8.701	2.5	5.	14.25	19.
01002 ARSENIC, TOTAL (UG/L AS AS)	03/15/71-11/20/78	10##	2.	2.	5.	0.5	1.722	1.312	0.55	1.	2.5	4.75
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	02/15/95-11/10/97	2##	3.75	3.75	5.	2.5	3.125	1.768	**	**	**	**
01013 BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	02/15/95-11/10/97	2##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	11/23/70-11/20/78	13##	5.	5.077	10.	1.	3.41	1.847	2.6	5.	5.	8.
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	02/15/95-11/10/97	2##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	02/15/95-11/10/97	2	20.71	20.71	22.8	18.62	8.736	2.956	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-11/20/78	23##	5.	7.826	35.	5.	40.514	6.365	5.	5.	10.	10.
01042 COPPER, TOTAL (UG/L AS CU)	03/24/70-11/20/78	22##	5.	9.091	30.	5.	58.658	7.659	5.	5.	10.	27.
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	02/15/95-11/10/97	2##	13.7	13.7	24.9	2.5	250.88	15.839	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	06/29/70-11/20/78	4	1249.	1234.25	1839.	600.	257810.25	507.75	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-11/20/78	20##	5.	9.475	50.	1.5	109.828	10.48	4.1	5.	10.	19.4
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	02/15/95-11/10/97	2	18.375	18.375	27.1	9.65	152.251	12.339	**	**	**	**
01053 MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	02/15/95-11/10/97	2	211.85	211.85	285.7	138.	10907.645	104.44	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	03/24/70-11/20/78	4	85.	112.475	209.9	70.	4418.503	66.472	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	01/23/73-11/20/78	10##	50.	41.	50.	5.	360.	18.974	5.	38.75	50.	50.
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	02/15/95-11/10/97	2	8.955	8.955	12.6	5.31	26.572	5.155	**	**	**	**
01078 SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	02/15/95-11/10/97	2##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-11/20/78	23	20.	24.565	60.	5.	195.257	13.973	5.	20.	30.	46.
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	02/15/95-11/10/97	2	73.87	73.87	117.9	29.84	3877.282	62.268	**	**	**	**
01098 ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	02/15/95-11/10/97	2##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01108 ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	02/15/95-11/10/97	2	7231.5	7231.5	11783.	2680.	41432304.5	6436.793	**	**	**	**
01148 SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	02/15/95-11/10/97	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170 IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	02/15/95-11/10/97	2	7231.	7231.	7942.	6520.	1011042.	1005.506	**	**	**	**
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/20/67-10/28/77	18	1500.	3675.556	23000.	230.	32589873.203	5708.754	230.	587.5	4300.	12200.
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	09/20/67-10/28/77	18	3.176	3.187	4.362	2.362	0.35	0.592	2.362	2.763	3.633	4.073
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	1537.44								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/19/94-12/14/98	53	210.	1187.642	16000.	9.	10104434.619	3178.747	13.4	45.	700.	3060.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/19/94-12/14/98	53	2.322	2.275	4.204	0.954	0.697	0.835	1.093	1.653	2.845	3.479
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	188.237								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	93##	50.	100.538	1500.	50.	26766.012	163.603	50.	50.	100.	200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-06/14/79	93##	1.699	1.861	3.176	1.699	0.075	0.274	1.699	1.699	2.	2.301
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	72.571								
34480 THALLIUM DRY WGTBOTMG/KG	02/15/95-11/10/97	2##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
39061 PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	02/15/95-11/10/97	2##	36.25	36.25	37.5	35.	3.125	1.768	**	**	**	**
39333 ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	02/15/95-11/10/97	2##	15.	15.	25.	5.	200.	14.142	**	**	**	**
39351 CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	02/15/95-11/10/97	2##	35.	35.	40.	30.	50.	7.071	**	**	**	**
39363 DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	02/15/95-11/10/97	2##	13.75	13.75	22.5	5.	153.125	12.374	**	**	**	**
39368 DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	02/15/95-11/10/97	2##	13.75	13.75	22.5	5.	153.125	12.374	**	**	**	**
39373 DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	02/15/95-11/10/97	2##	12.5	12.5	20.	5.	112.5	10.607	**	**	**	**
39383 DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	02/15/95-11/10/97	2##	15.	15.	25.	5.	200.	14.142	**	**	**	**
39393 ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	02/15/95-11/10/97	2##	30.	30.	40.	20.	200.	14.142	**	**	**	**
39403 TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	02/15/95-11/10/97	2##	88.75	88.75	117.5	60.	1653.125	40.659	**	**	**	**
39413 HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	02/15/95-11/10/97	2##	13.75	13.75	22.5	5.	153.125	12.374	**	**	**	**
39526 PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	02/15/95-11/10/97	2##	37.5	37.5	60.	15.	1012.5	31.82	**	**	**	**
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	08/11/74-08/11/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/11/70-06/14/79	99	0.1	0.132	1.3	0.05	0.023	0.153	0.05	0.05	0.2	0.3
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/11/70-12/14/98	153	0.06	0.092	1.299	0.005	0.017	0.129	0.03	0.04	0.1	0.16
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-11/20/78	21##	0.25	0.245	0.25	0.15	0.	0.022	0.25	0.25	0.25	0.25
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	02/15/95-11/10/97	2##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
75045 HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	02/15/95-11/10/97	2##	15.	15.	25.	5.	200.	14.142	**	**	**	**
79799 DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	02/15/95-11/10/97	2##	56.25	56.25	75.	37.5	703.125	26.517	**	**	**	**
82007 PERCENT SAND IN SEDIMENT ON A DRY WEIGHT BASIS	02/15/95-11/10/97	2	84.22	84.22	89.2	79.24	49.601	7.043	**	**	**	**
82008 SEDIMENT PRCTL.SIZE CLASS .0039-.0625 SILT %DRY WT	02/15/95-11/10/97	2	7.405	7.405	9.2	5.61	6.444	2.539	**	**	**	**
82009 SEDIMENT PRCTL.SIZE CLASS <.0039 CLAY %DRY WT	02/15/95-11/10/97	2	7.675	7.675	15.15	0.2	111.751	10.571	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Station Inventory for Station: RICH0130

NPS Station ID: RICH0130 LAT/LON: 37.551948/ -77.271392 Agency: 21VASWCB Date Created: / /
Location: RT. 156 BRIDGE FIPS State/County: 51085 VIRGINIA/HANOVER
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-CHK055.04 /VA2-05-X0056/VA2-4X0056
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206062 RF1 Mile Point: 7.110 Distance from RF1: 0.60 On/Off RF1: OFF
RF3 Index: 02080106003711.55 RF3 Mile Point: 12.25 Distance from RF3: 0.00 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: CHICKAHOMINY RI. SECTION: 05 TOPO MAP #: 0136 TOPO MAP NAME: SEVEN PINES, VA

Parameter Inventory for Station: RICH0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	165	15.6	15.453	29.	0.	58.638	7.658	4.96	8.85	21.7	25.6
00070 TURBIDITY, (JACKSON CANDLE UNITS)	04/28/71-07/09/71	3	5.	5.	7.	3.	4.	2.	**	**	**	**
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/19/94-12/14/98	54	8.8	9.456	24.	3.6	18.607	4.314	4.85	6.7	11.225	14.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/18/94-12/14/98	46	149.5	147.543	247.	81.	1219.631	34.923	101.7	127.75	171.	182.5
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/19/94-12/14/98	54	140.	140.019	227.	69.	1048.471	32.38	99.5	119.5	154.25	177.5
00096 SALINITY AT 25 DEGREES C (MG/ML)	10/18/94-11/02/95	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/19/94-12/14/98	54	6.	6.422	12.7	1.9	8.573	2.928	2.7	3.875	8.6	10.5
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	110	7.5	7.656	14.2	1.9	8.066	2.84	4.4	5.2	10.	11.6
00310 BOD, 5 DAY, 20 DEG C MG/L	10/12/67-12/14/98	77	1.6	1.631	3.5	0.3	0.623	0.79	0.5	1.	2.	3.
00340 COD, .25N K2CR2O7 MG/L	07/19/94-12/14/98	54	24.5	24.593	46.	10.	58.925	7.676	16.	19.	28.25	36.5
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	162	6.5	6.531	7.6	5.3	0.149	0.385	6.009	6.3	6.7	7.
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	162	6.5	6.349	7.6	5.3	0.182	0.426	6.009	6.3	6.7	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	162	0.316	0.447	5.012	0.025	0.317	0.563	0.1	0.2	0.501	0.98
00403 PH, LAB, STANDARD UNITS SU	09/20/67-12/14/98	66	6.7	6.676	7.8	6.	0.098	0.312	6.3	6.4	6.9	7.1
00403 CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/14/98	66	6.7	6.576	7.8	6.	0.108	0.328	6.3	6.4	6.9	7.1
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	66	0.2	0.265	1.	0.016	0.034	0.184	0.079	0.126	0.398	0.501
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	66	20.	22.424	48.	6.	115.663	10.755	10.	14.	29.75	40.3
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	159	101.	105.692	224.	1.	853.506	29.215	77.	89.	116.	141.
00505p RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	160	39.	41.756	133.	12.	320.311	17.897	22.1	29.	51.	65.
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	156	63.	65.417	184.	8.	623.625	24.972	37.	49.5	77.	92.
00515 RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	03/23/73-03/23/73	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	156	5.	8.189	80.	0.	131.391	11.463	0.5	3.	8.	19.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	161	2.	3.624	50.	0.	28.663	5.354	0.5	1.5	4.	8.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/16/69-12/14/98	155	3.	4.639	60.	0.	59.07	7.686	0.5	1.5	5.	10.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	157##	0.05	0.062	0.7	0.005	0.006	0.075	0.02	0.02	0.05	0.102
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	158##	0.005	0.008	0.05	0.005	0.	0.007	0.005	0.005	0.01	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	140	0.11	0.157	1.199	0.01	0.029	0.17	0.02	0.05	0.205	0.309
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	158	0.5	0.604	1.699	0.2	0.066	0.257	0.3	0.4	0.8	0.906
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/17/77-06/14/79	18##	0.025	0.09	0.35	0.025	0.01	0.101	0.025	0.025	0.17	0.26
00660 PHOSPHATE, ORTHO (MG/L AS PO4)	10/07/68-07/16/69	4	0.71	1.283	3.2	0.51	1.651	1.285	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/19/94-12/14/98	54	0.085	0.085	0.17	0.03	0.001	0.03	0.04	0.06	0.103	0.125
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/19/94-08/22/96	26	10.1	9.988	16.9	4.8	6.862	2.62	6.63	8.3	11.825	12.93
00687 CARBON, ORGANIC, IN BED MATERIAL (GM/KG AS C)	02/15/95-11/10/97	2	9.35	9.35	13.6	5.1	36.125	6.01	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0129

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00023 SAMPLE WEIGHT IN POUNDS	10/01/70-10/01/84	34	1.8	1.582	3.6	0.3	0.631	0.794	0.45	0.9	2.	2.5
00024 SAMPLE LENGTH IN INCHES	10/01/70-10/01/84	34	16.05	14.853	21.5	8.6	11.447	3.383	9.6	11.675	16.85	19.05
01004 ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	10/01/77-10/01/86	15	0.06	0.797	11.	0.01	7.969	2.823	0.022	0.04	0.1	4.49
01149 SELENIUM, TOTAL IN FISH OR ANIMALS WET WGT MG/KG	10/01/77-10/01/86	15	0.36	2.351	30.	0.21	58.515	7.65	0.24	0.29	0.49	12.366
34684 DIELDRIN TISMG/KG	10/01/70-10/01/86	37	0.04	0.101	0.47	0.01	0.018	0.133	0.01	0.01	0.12	0.392
34685 ENDRIN WET WGTTISMG/KG	10/01/70-10/01/86	37	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
34687 HEPTACHLOR WET WGTTISMG/KG	10/01/70-10/01/86	37	0.01	0.01	0.02	0.01	0.	0.002	0.01	0.01	0.01	0.01
34688 HEXACHLOROBENZENE WET WGTTISMG/KG	10/01/77-10/01/86	15	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
34691 TOXAPHENE WET WGTTISMG/KG	10/01/71-10/01/86	33	0.1	0.203	1.5	0.1	0.085	0.291	0.1	0.1	0.1	0.56
39063 CHLORDANE-CIS ISOMER,TISSUE WET WGT (UG/G)	10/01/77-10/01/86	15	0.01	0.027	0.1	0.01	0.001	0.027	0.01	0.01	0.04	0.082
39066 CHLORDANE-TRANS ISOMER,TISSUE WET WGT (UG/G)	10/01/77-10/01/86	15	0.01	0.015	0.04	0.01	0.	0.009	0.01	0.01	0.02	0.034
39069 CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	10/01/77-10/01/86	15	0.01	0.016	0.04	0.01	0.	0.011	0.01	0.01	0.02	0.04
39072 CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	10/01/77-10/01/86	15	0.02	0.028	0.09	0.01	0.001	0.023	0.01	0.01	0.04	0.072
39074 BHC-ALPHA ISOMER,TISSUE UG/G WET WGT	10/01/70-10/01/86	19	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
39105 PERCENT FAT HEXANE EXTRACTION	10/01/70-10/01/86	37	6.1	7.259	22.1	0.9	23.419	4.839	1.96	3.45	10.45	12.94
39290 DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	10/01/70-10/01/86	37	0.03	0.094	0.65	0.01	0.023	0.15	0.01	0.01	0.11	0.272
39785 GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	10/01/77-10/01/84	12	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
70320 MOISTURE CONTENT (PERCENT OF TOTAL WET WEIGHT)	10/01/77-10/01/86	15	70.	69.267	75.	59.	16.21	4.026	62.	68.	72.	74.4
71935 MERCURY, TOTAL IN FISH (PPM,WET WEIGHT BASIS)	10/01/77-10/01/86	15	0.1	0.125	0.3	0.07	0.005	0.067	0.07	0.08	0.2	0.24
71936 LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/01/77-10/01/86	15	0.1	0.106	0.32	0.01	0.005	0.074	0.01	0.07	0.14	0.224
71937 COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/01/79-10/01/86	12	0.485	0.599	1.43	0.32	0.096	0.31	0.329	0.423	0.758	1.259
71938 ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/01/79-10/01/86	12	14.35	14.687	17.69	12.79	2.175	1.475	12.982	13.625	15.51	17.495
71940 CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	10/01/77-10/01/86	15	0.06	0.129	0.81	0.01	0.044	0.21	0.01	0.03	0.11	0.54
79179 PCB-1254 TISDRYWTMG/KG	10/01/70-10/01/86	37	0.3	0.519	3.8	0.1	0.466	0.682	0.1	0.1	0.65	1.22
79182 PCB-1248 TISDRYWTMG/KG	10/01/77-10/01/86	15	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
79183 PCB-1260 TISDRYWTMG/KG	10/01/73-10/01/86	23	0.1	0.413	4.2	0.1	0.759	0.871	0.1	0.1	0.4	1.02
81896 DDE TOTAL IN TISSUE WET WEIGHT MG/KG	10/01/70-10/01/86	37	0.12	0.158	0.82	0.01	0.025	0.157	0.02	0.045	0.215	0.33
81987 TOTAL SEDIMENT PARTICLE SIZE %COARSER THAN 9.00PHI	10/01/70-10/01/86	37	0.05	0.1	0.61	0.01	0.017	0.131	0.01	0.01	0.145	0.298
82004 DACTHAL IN TISSUE SAMPLE WET WEIGHT MG/KG	10/01/79-10/01/86	12	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
82029 OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	10/01/79-10/01/86	12	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Parameter Inventory for Station: RICH0129

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
82004 DACTHAL IN TISSUE SAMPLE	WET WEIGHT MG/KG	10/01/79-10/01/86	12	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
82029 OXYCHLORDANE IN TISSUE SAMPLE	WET WEIGHT MG/KG	10/01/79-10/01/86	12	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

********** No EPA Water Quality Criteria exist to compare against the data at this station. **********

Station Inventory for Station: RICH0129

NPS Station ID: RICH0129 LAT/LON: 37.541670/ -77.447226 Agency: 11FWS Date Created: 10/05/77
Location: JAMES RIVER AT RICHMOND FIPS State/County: 51041 VIRGINIA/CHESTERFIELD
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 055
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: JAMES RIVER ECO Region:
RF1 Index: 02080205001 RF1 Mile Point: 0.010 Distance from RF1: 14.50 On/Off RF1: OFF
RF3 Index: 02080207116900.70 RF3 Mile Point: 1.10 Distance from RF3: 0.21 On/Off RF3:
Description:
WHOLE BODY FISH COMPOSITE SAM. RESIDUE DATA. FWS NMP TRENDSTA

Parameter Inventory for Station: RICH0129

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00023 SAMPLE WEIGHT IN POUNDS	10/01/70-10/01/84	34	1.8	1.582	3.6	0.3	0.631	0.794	0.45	0.9	2.	2.5
00024 SAMPLE LENGTH IN INCHES	10/01/70-10/01/84	34	16.05	14.853	21.5	8.6	11.447	3.383	9.6	11.675	16.85	19.05
01004 ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	10/01/77-10/01/86	15	0.06	0.797	11.	0.01	7.969	2.823	0.022	0.04	0.1	4.49
01149 SELENIUM, TOTAL IN FISH OR ANIMALS WET WGT MG/KG	10/01/77-10/01/86	15	0.36	2.351	30.	0.21	58.515	7.65	0.24	0.29	0.49	12.366
34680 ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	10/01/86-10/01/86	3	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
34684 DIELDRIN TISMG/KG	10/01/70-10/01/86	37	0.04	0.101	0.47	0.01	0.018	0.133	0.01	0.01	0.12	0.392
34685 ENDRIN WET WGTTISMG/KG	10/01/70-10/01/86	37	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
34686 HEPTACHLOR EPOXIDE WET WGTTISMG/KG	10/01/86-10/01/86	3	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
34687 HEPTACHLOR WET WGTTISMG/KG	10/01/70-10/01/86	37	0.01	0.01	0.02	0.01	0.	0.002	0.01	0.01	0.01	0.01
34688 HEXACHLOROBENZENE WET WGTTISMG/KG	10/01/77-10/01/86	15	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
34691 TOXAPHENE WET WGTTISMG/KG	10/01/71-10/01/86	33	0.1	0.203	1.5	0.1	0.085	0.291	0.1	0.1	0.1	0.56
39063 CHLORDANE-CIS ISOMER,TISSUE WET WGT (UG/G)	10/01/77-10/01/86	15	0.01	0.027	0.1	0.01	0.001	0.027	0.01	0.01	0.04	0.082
39066 CHLORDANE-TRANS ISOMER,TISSUE WET WGT (UG/G)	10/01/77-10/01/86	15	0.01	0.015	0.04	0.01	0.	0.009	0.01	0.01	0.02	0.034
39069 CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	10/01/77-10/01/86	15	0.01	0.016	0.04	0.01	0.	0.011	0.01	0.01	0.02	0.04
39072 CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	10/01/77-10/01/86	15	0.02	0.028	0.09	0.01	0.001	0.023	0.01	0.01	0.04	0.072
39074 BHC-ALPHA ISOMER,TISSUE UG/G WET WGT	10/01/70-10/01/86	19	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
39105 PERCENT FAT HEXANE EXTRACTION	10/01/70-10/01/86	37	6.1	7.259	22.1	0.9	23.419	4.839	1.96	3.45	10.45	12.94
39290 DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	10/01/70-10/01/86	37	0.03	0.094	0.65	0.01	0.023	0.15	0.01	0.01	0.11	0.272
39781 LINDANE AQUATIC ORGANISMS WT WGT BASIS(UG/G)	10/01/86-10/01/86	3	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39785 GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	10/01/77-10/01/84	12	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
70320 MOISTURE CONTENT (PERCENT OF TOTAL WET WEIGHT)	10/01/77-10/01/86	15	70.	69.267	75.	59.	16.21	4.026	62.	68.	72.	74.4
71935 MERCURY, TOTAL IN FISH (PPM,WET WEIGHT BASIS)	10/01/77-10/01/86	15	0.1	0.125	0.3	0.07	0.005	0.067	0.07	0.08	0.2	0.24
71936 LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/01/77-10/01/86	15	0.1	0.106	0.32	0.01	0.005	0.074	0.01	0.07	0.14	0.224
71937 COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/01/79-10/01/86	12	0.485	0.599	1.43	0.32	0.096	0.31	0.329	0.423	0.758	1.259
71938 ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	10/01/79-10/01/86	12	14.35	14.687	17.69	12.79	2.175	1.475	12.982	13.625	15.51	17.495
71940 CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	10/01/77-10/01/86	15	0.06	0.129	0.81	0.01	0.044	0.21	0.01	0.03	0.11	0.54
79178 PCB-1242 TISDRYWTMG/KG	10/01/73-10/01/77	11	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
79179 PCB-1254 TISDRYWTMG/KG	10/01/70-10/01/86	37	0.3	0.519	3.8	0.1	0.466	0.682	0.1	0.1	0.65	1.22
79182 PCB-1248 TISDRYWTMG/KG	10/01/77-10/01/86	15	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
79183 PCB-1260 TISDRYWTMG/KG	10/01/73-10/01/86	23	0.1	0.413	4.2	0.1	0.759	0.871	0.1	0.1	0.4	1.02
81312 POLYCHLORINATEDBIPHENYLS FISH TISSUE WET WGT MG/KG	10/01/86-10/01/86	3	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
81645 MIREX IN FISH TISSUE WET WEIGHT UG/G	10/01/81-10/01/86	9	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
81823 PENTACHLOROANISOLE(PCA)INFISH TISSUE WET WGT MG/KG	10/01/81-10/01/86	9	0.01	0.01	0.01	0.01	0.	0.	0.01	0.01	0.01	0.01
81896 DDE TOTAL IN TISSUE WET WEIGHT MG/KG	10/01/70-10/01/86	37	0.12	0.158	0.82	0.01	0.025	0.157	0.02	0.045	0.215	0.33
81944 DDT(INCLUDES DDE & DDD) IN TISSUE WET WEIGHT MG/KG	10/01/86-10/01/86	3	0.03	0.023	0.03	0.01	0.	0.012	**	**	**	**
81987 TOTAL SEDIMENT PARTICLE SIZE %COARSER THAN 9.00PHI	10/01/70-10/01/86	37	0.05	0.1	0.61	0.01	0.017	0.131	0.01	0.01	0.145	0.298

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Annual Analysis for 1983 - Station RICH0128

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		08/09/83-09/27/87	15	17.	16.7	17.	16.	0.136	0.368	16.	16.5	17.	17.
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)		08/09/83-09/27/87	15	20.	18.733	35.	-5.	126.674	11.255	6.8	13.5	28.	35.
00059 FLOW, RATE, INSTANTANEOUS	GALLONS/MIN	08/09/83-09/27/87	15	8.	11.959	63.	7.53	200.072	14.145	7.53	7.56	9.5	31.05
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		08/09/83-09/27/87	15	68.	67.467	75.	60.	13.41	3.662	61.8	65.	70.	73.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station RICH0128

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		08/09/83-09/27/87	33	15.5	15.47	17.5	14.	1.108	1.053	14.	14.75	16.5	17.
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)		08/09/83-09/27/87	33	18.	18.636	36.	1.	94.661	9.729	4.1	12.25	26.	31.6
00059 FLOW, RATE, INSTANTANEOUS	GALLONS/MIN	08/09/83-09/27/87	34	10.89	11.269	16.58	4.5	6.826	2.613	8.76	9.303	13.103	15.515
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		08/09/83-09/27/87	34	70.	69.882	85.	65.	13.258	3.641	65.	68.	70.	73.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station RICH0128

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		08/09/83-09/27/87	20	15.5	15.35	17.	13.5	1.424	1.193	13.55	14.125	16.375	17.
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)		08/09/83-09/27/87	20	21.75	19.875	32.5	-1.	84.97	9.218	6.2	15.25	26.75	31.6
00059 FLOW, RATE, INSTANTANEOUS	GALLONS/MIN	08/09/83-09/27/87	21	9.18	9.955	14.83	7.44	4.75	2.179	7.928	8.425	11.115	14.334
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		08/09/83-09/27/87	21	67.	66.714	75.	62.	10.314	3.212	63.	65.	68.	71.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station RICH0128

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		08/09/83-09/27/87	25	16.5	16.232	17.5	15.	0.941	0.97	15.	15.	17.	17.5
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)		08/09/83-09/27/87	25	17.5	17.92	30.	0.	78.722	8.873	5.6	9.25	25.75	28.5
00059 FLOW, RATE, INSTANTANEOUS	GALLONS/MIN	08/09/83-09/27/87	26	9.81	10.241	13.72	8.47	2.081	1.443	8.632	9.155	11.145	12.864
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		08/09/83-09/27/87	26	70.	68.692	72.	63.	6.542	2.558	65.	66.75	70.25	72.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station RICH0128

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		08/09/83-09/27/87	18	15.5	15.694	17.5	14.5	1.063	1.031	14.5	14.875	16.625	17.5
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)		08/09/83-09/27/87	18	24.25	20.444	34.	5.5	94.32	9.712	6.4	7.375	27.125	30.4
00059 FLOW, RATE, INSTANTANEOUS	GALLONS/MIN	08/09/83-09/27/87	18	11.6	11.652	14.51	9.59	2.578	1.606	9.617	10.068	12.875	14.069
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		08/09/83-09/27/87	18	68.	68.444	73.	65.	6.497	2.549	65.	65.75	70.	73.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: RICH0128

NPS Station ID: RICH0128 LAT/LON: 37.540004/ -77.477782 Agency: 112WRD Date Created: 05/28/94
Location: BYRD PARK SPRING AT RICHMOND, VA FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/SPRING STORET Station ID(s): 02037570
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0128

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/09/83-09/27/87	111	16.	15.823	17.5	13.5	1.179	1.086	14.	15.	17.	17.
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	08/09/83-09/27/87	111	20.5	19.005	36.	-5.	90.884	9.533	6.1	12.5	26.	30.
00059 FLOW, RATE, INSTANTANEOUS GALLONS/MIN	08/09/83-09/27/87	114	10.03	10.944	63.	4.5	29.014	5.386	8.12	8.88	11.985	13.83
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/09/83-09/27/87	114	68.	68.482	85.	60.	11.101	3.332	65.	65.75	70.	72.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

********** No EPA Water Quality Criteria exist to compare against the data at this station. **********

Station Inventory for Station: RICH0127

NPS Station ID: RICH0127 LAT/LON: 37.534448/ -77.447781 Agency: 21VASWCB Date Created: 04/13/96
Location: JAMES RIVER, AT TREDEGAR IRON WORKS FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS111.17
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 08 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0127

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/95-10/26/98	37	22.9	23.324	29.5	15.	19.231	4.385	15.86	21.2	27.2	28.58
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/95-10/26/98	36	194.5	208.	359.	111.	3707.029	60.885	142.9	163.75	251.75	297.9
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	09/20/95-10/26/98	37	8.7	8.654	10.8	5.1	1.446	1.203	7.18	7.95	9.45	10.14
00400 PH (STANDARD UNITS)	09/20/95-10/26/98	37	7.96	7.889	8.55	7.06	0.146	0.382	7.37	7.555	8.195	8.394
00400 CONVERTED PH (STANDARD UNITS)	09/20/95-10/26/98	37	7.96	7.726	8.55	7.06	0.173	0.416	7.37	7.555	8.195	8.394
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/95-10/26/98	37	0.011	0.019	0.087	0.003	0.	0.018	0.004	0.006	0.028	0.043
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	39	1800.	5307.769	16000.	20.	41380120.919	6432.738	130.	330.	9200.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	39	3.255	3.185	4.204	1.301	0.698	0.835	2.114	2.519	3.964	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	1530.47								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0127

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	37	0	0.00	21	0	0.00	4	0	0.00	12	0	0.00			
00400 PH	Fresh Chronic	9.	37	0	0.00	21	0	0.00	4	0	0.00	12	0	0.00			
	Other-Lo Lim.	6.5	37	0	0.00	21	0	0.00	4	0	0.00	12	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	39	34	0.87	23	20	0.87	4	3	0.75	12	11	0.92			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1997 - Station RICH0126

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN = 526.912											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station RICH0126

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	12	25.3	24.983	29.1	15.4	17.914	4.233	16.57	23.1	28.55	29.04
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/94-10/26/98	12	223.	220.167	340.	109.	5874.697	76.647	117.7	151.75	287.	332.8
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	12	8.6	8.608	10.6	7.5	0.679	0.824	7.56	7.975	8.9	10.21
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	12	8.185	8.184	8.48	7.89	0.029	0.172	7.902	8.083	8.297	8.447
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	12	8.184	8.153	8.48	7.89	0.031	0.175	7.902	8.083	8.297	8.447
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	12	0.007	0.007	0.013	0.003	0.	0.003	0.004	0.005	0.008	0.013
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	360.	552.417	2200.	9.	379955.538	616.405	45.3	155.	602.5	1930.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	2.555	2.481	3.342	0.954	0.359	0.6	1.302	2.176	2.777	3.274
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN = 302.812											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station RICH0126

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	10	25.25	24.06	29.9	16.8	20.912	4.573	16.82	20.3	27.675	29.7
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/94-10/26/98	6	222.5	223.833	294.	167.	2567.767	50.673	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	10	8.1	8.51	10.4	7.7	0.957	0.978	7.71	7.875	9.	10.38
00400	PH (STANDARD UNITS)	06/27/94-10/26/98	11	7.9	7.94	8.42	7.5	0.087	0.295	7.506	7.71	8.16	8.404
00400	CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	11	7.9	7.853	8.42	7.5	0.096	0.309	7.506	7.71	8.16	8.404
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	11	0.013	0.014	0.032	0.004	0.	0.009	0.004	0.007	0.019	0.031
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	330.	3820.273	16000.	45.	41618058.818	6451.206	51.6	130.	8000.	16000.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	2.519	2.781	4.204	1.653	0.825	0.908	1.701	2.114	3.903	4.204
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		604.194									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station RICH0126

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	10	23.15	23.37	30.4	14.9	25.945	5.094	15.04	20.5	27.8	30.35
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/94-10/26/98	9	222.	208.222	303.	114.	5230.194	72.32	114.	132.5	277.	303.
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	10	8.6	8.63	10.2	7.3	0.802	0.896	7.35	7.8	9.2	10.16
00400	PH (STANDARD UNITS)	06/27/94-10/26/98	10	7.84	7.791	8.32	7.28	0.113	0.336	7.296	7.493	8.035	8.293
00400	CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	10	7.818	7.679	8.32	7.28	0.127	0.356	7.296	7.492	8.035	8.293
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	10	0.015	0.021	0.052	0.005	0.	0.015	0.005	0.009	0.032	0.051
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	700.	3301.	16000.	400.	27119698.889	5207.658	406.	460.	4100.	15320.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	2.845	3.12	4.204	2.602	0.336	0.58	2.608	2.663	3.526	4.18
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		1317.804									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station RICH0126

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	12	21.55	22.242	27.3	15.2	17.939	4.235	15.41	19.175	26.625	27.21
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/94-10/26/98	12	180.	182.417	236.	145.	808.992	28.443	147.1	154.25	206.5	230.3
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	12	9.25	8.7	10.7	4.3	2.695	1.642	5.29	8.125	9.75	10.43
00400	PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.555	7.65	8.52	7.12	0.125	0.354	7.207	7.443	7.78	8.373
00400	CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.555	7.548	8.52	7.12	0.137	0.369	7.207	7.442	7.78	8.373
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	12	0.028	0.028	0.076	0.003	0.	0.018	0.005	0.017	0.036	0.065
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	230.	2796.182	16000.	40.	26808027.364	5177.647	41.	45.	3500.	14640.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	2.362	2.623	4.204	1.602	0.888	0.942	1.612	1.653	3.544	4.156
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		419.538									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0126

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	10	22.25	23.37	29.3	14.8	21.022	4.585	15.25	20.875	27.65	29.18
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/94-10/26/98	10	201.	233.	359.	182.	3440.667	58.657	182.4	189.	274.25	350.9
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	10	8.75	8.87	10.4	7.7	0.907	0.952	7.71	8.1	9.625	10.39
00400	PH (STANDARD UNITS)	06/27/94-10/26/98	10	8.05	8.001	8.4	7.54	0.085	0.292	7.555	7.75	8.247	8.399
00400	CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	10	8.05	7.915	8.4	7.54	0.093	0.306	7.555	7.75	8.247	8.399
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	10	0.009	0.012	0.029	0.004	0.	0.008	0.004	0.006	0.018	0.028
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	410.	2393.	16000.	45.	22791597.	4774.055	51.6	110.	1700.	13880.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	2.613	2.722	4.204	1.653	0.646	0.804	1.701	2.041	3.23	4.11

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

EPA Water Quality Criteria Analysis for Station: RICH0126

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	13	0	0.00	9	0	0.00	1	0	0.00	3	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	54	0	0.00	33	0	0.00	5	0	0.00	16	0	0.00			
00400 PH	Fresh Chronic	9.	55	0	0.00	34	0	0.00	5	0	0.00	16	0	0.00			
	Other-Lo Lim.	6.5	55	0	0.00	34	0	0.00	5	0	0.00	16	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	11	1	0.09	7	1	0.14	1	0	0.00	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	250.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	11	0	0.00	7	0	0.00	1	0	0.00	3	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	55	41	0.75	34	28	0.82	5	1	0.20	16	12	0.75			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0126

NPS Station ID: RICH0126 LAT/LON: 37.533892/ -77.454170 Agency: 21VASWCB Date Created: 07/16/94
Location: JAMES RIVER,UPSTREAM PARKHYDRO CSO, NORTH BANK FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS111.35
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 08 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0126

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		06/27/94-10/26/98	54	24.25	23.606	30.4	14.8	19.879	4.459	16.1	21.3	27.35	29.
00061	FLOW, STREAM, INSTANTANEOUS	CFS	08/01/96-08/01/96	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		07/13/94-06/01/95	13	3.7	5.562	11.4	1.9	11.196	3.346	2.26	3.1	8.35	11.24
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/17/94-10/26/98	49	199.	211.796	359.	109.	3663.457	60.527	138.	166.	260.	300.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/13/94-06/01/95	13	191.	193.769	275.	120.	2591.192	50.904	122.4	142.	238.5	267.
00096	SALINITY AT 25 DEGREES C (MG/ML)		07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	06/27/94-10/26/98	54	8.55	8.663	10.7	4.3	1.167	1.08	7.7	7.975	9.4	10.25
00310	BOD, 5 DAY, 20 DEG C	MG/L	06/27/94-06/01/95	14	1.3	1.543	5.4	0.5	1.653	1.286	0.5	0.5	1.75	4.1
00400	PH (STANDARD UNITS)		06/27/94-10/26/98	55	7.98	7.914	8.52	7.12	0.117	0.342	7.476	7.57	8.16	8.378
00400	CONVERTED PH (STANDARD UNITS)		06/27/94-10/26/98	55	7.98	7.781	8.52	7.12	0.135	0.367	7.476	7.57	8.16	8.378
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		06/27/94-10/26/98	55	0.01	0.017	0.076	0.003	0.	0.014	0.004	0.007	0.027	0.033
00403	PH, LAB, STANDARD UNITS	SU	07/28/94-06/01/95	11	7.4	7.264	7.7	6.4	0.149	0.385	6.48	7.1	7.5	7.7
00403	CONVERTED PH, LAB, STANDARD UNITS		07/28/94-06/01/95	11	7.4	7.068	7.7	6.4	0.191	0.437	6.48	7.1	7.5	7.7
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		07/28/94-06/01/95	11	0.04	0.085	0.398	0.02	0.012	0.111	0.02	0.032	0.079	0.35
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		07/28/94-06/01/95	11	54.	53.091	73.	33.	182.891	13.524	33.4	37.	64.	71.2
00500	RESIDUE, TOTAL (MG/L)		07/28/94-06/01/95	11	127.	129.091	175.	79.	1111.891	33.345	82.	98.	161.	173.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)		07/28/94-06/01/95	11	28.	26.727	44.	12.	81.818	9.045	13.2	19.	33.	42.2
00510	RESIDUE, TOTAL FIXED (MG/L)		07/28/94-06/01/95	11	99.	102.364	145.	60.	1038.655	32.228	61.8	71.	133.	144.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		07/13/94-06/01/95	13	7.	6.846	17.	3.	13.474	3.671	3.	4.	8.	13.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		07/13/94-06/01/95	13##	1.5	1.654	3.	1.	0.266	0.516	1.	1.5	2.	2.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		07/13/94-06/01/95	13	6.	5.5	14.	1.5	9.917	3.149	2.1	3.	7.	11.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		06/27/94-06/01/95	12##	0.02	0.038	0.1	0.02	0.001	0.029	0.02	0.02	0.06	0.094
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		07/28/94-06/01/95	11##	0.005	0.012	0.03	0.005	0.	0.011	0.005	0.005	0.03	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		07/28/94-06/01/95	11	0.09	0.14	0.34	0.02	0.015	0.122	0.02	0.02	0.24	0.334
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		07/28/94-06/01/95	11	0.3	0.336	0.5	0.2	0.007	0.081	0.22	0.3	0.4	0.48
00665	PHOSPHORUS, TOTAL (MG/L AS P)		07/28/94-06/01/95	11	0.09	0.084	0.12	0.05	0.	0.022	0.052	0.06	0.1	0.116
00680	CARBON, TOTAL ORGANIC (MG/L AS C)		07/13/94-07/14/94	2	3.9	3.9	4.4	3.4	0.5	0.707	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER	MG/L	07/28/94-06/01/95	11	14.	13.545	22.	6.	32.473	5.698	6.	7.	18.	21.8
00945	SULFATE, TOTAL (MG/L AS SO4)		07/28/94-06/01/95	11	20.	21.	34.	11.	78.2	8.843	11.	11.	28.	33.8
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/27/94-10/26/98	55	460.	2522.6	16000.	9.	22825995.207	4777.656	45.	130.	1700.	11920.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)		06/27/94-10/26/98	55	2.663	2.734	4.204	0.954	0.611	0.782	1.653	2.114	3.23	4.06
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)				GEOMETRIC MEAN =	541.664								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		07/28/94-06/01/95	11	0.06	0.061	0.09	0.04	0.	0.018	0.04	0.04	0.08	0.088

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Annual Analysis for 1997 - Station RICH0125

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN = 4659.438											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station RICH0125

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	12	24.9	24.45	29.	15.8	15.899	3.987	17.03	21.925	27.85	28.73
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/94-10/26/98	12	245.	247.333	410.	113.	8898.242	94.33	122.	156.75	335.25	392.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	12	4.2	4.067	6.1	2.1	1.859	1.363	2.22	2.625	5.25	6.01
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.005	7.042	7.2	6.83	0.02	0.141	6.845	6.928	7.19	7.197
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.003	7.021	7.2	6.83	0.02	0.142	6.845	6.927	7.19	7.197
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	12	0.099	0.095	0.148	0.063	0.001	0.03	0.064	0.065	0.118	0.143
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	2400.	6873.333	16000.	170.	50774769.697	7125.642	329.	882.5	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	3.38	3.483	4.204	2.23	0.445	0.667	2.415	2.942	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN = 3041.214											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station RICH0125

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	12	24.1	23.908	29.8	15.8	21.621	4.65	16.19	20.925	27.775	29.77
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/94-10/26/98	6	206.5	200.333	279.	110.	3523.067	59.355	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	12	7.65	7.75	9.7	6.4	1.152	1.073	6.43	6.925	8.35	9.67
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.33	7.392	8.25	6.61	0.21	0.458	6.697	7.085	7.773	8.133
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.319	7.191	8.25	6.61	0.254	0.504	6.697	7.085	7.772	8.133
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	12	0.048	0.064	0.245	0.006	0.004	0.067	0.008	0.017	0.082	0.21
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	790.	6128.636	16000.	45.	50476830.455	7104.705	62.	220.	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	2.898	3.168	4.204	1.653	0.908	0.953	1.745	2.342	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		1472.946									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station RICH0125

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	10	22.8	22.96	30.1	14.8	27.465	5.241	14.81	19.925	27.725	30.05
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/94-10/26/98	9	174.	187.222	301.	115.	5152.694	71.782	115.	129.	260.	301.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	10	8.05	7.97	9.8	5.	2.002	1.415	5.2	7.	9.25	9.76
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	10	7.38	7.41	8.42	6.78	0.246	0.496	6.79	6.925	7.72	8.353
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	10	7.378	7.208	8.42	6.78	0.291	0.539	6.79	6.925	7.72	8.353
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	10	0.042	0.062	0.166	0.004	0.003	0.056	0.005	0.019	0.119	0.163
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	3150.	5156.	16000.	260.	36284937.778	6023.698	265.	670.	8050.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	10	3.496	3.371	4.204	2.415	0.412	0.642	2.423	2.796	3.85	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		2349.421									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station RICH0125

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	12	21.4	21.958	27.2	15.8	16.728	4.09	15.86	18.6	26.	27.11
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/94-10/26/98	12	185.5	183.917	222.	150.	541.902	23.279	152.4	163.5	201.	219.6
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	12	5.4	4.583	8.1	0.3	7.12	2.668	0.57	1.55	6.725	7.89
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.12	7.047	7.7	6.58	0.107	0.327	6.601	6.69	7.19	7.598
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	12	7.12	6.942	7.7	6.58	0.119	0.345	6.601	6.69	7.19	7.598
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	12	0.076	0.114	0.263	0.02	0.007	0.081	0.027	0.065	0.207	0.251
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	16000.	11740.	16000.	490.	44121181.818	6642.378	580.	4100.	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	12	4.204	3.88	4.204	2.69	0.316	0.562	2.752	3.526	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		7592.74									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0125

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	10	22.55	23.19	28.8	14.7	21.074	4.591	15.15	20.325	27.4	28.75
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/94-10/26/98	10	207.5	233.	350.	183.	3014.	54.9	183.2	188.75	272.5	342.4
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	10	5.85	5.34	8.7	0.8	6.183	2.486	0.93	3.675	7.	8.65
00400 PH (STANDARD UNITS)	06/27/94-10/26/98	10	7.445	7.238	7.62	6.47	0.158	0.398	6.495	6.848	7.512	7.61
00400 CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	10	7.445	7.045	7.62	6.47	0.2	0.447	6.495	6.847	7.512	7.61
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	10	0.036	0.09	0.339	0.024	0.011	0.103	0.025	0.031	0.144	0.324
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	16000.	11350.	16000.	20.	47185980.	6869.205	42.	3500.	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	11	4.204	3.668	4.204	1.301	1.013	1.007	1.464	3.544	4.204	4.204

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

EPA Water Quality Criteria Analysis for Station: RICH0125

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	14	1	0.07	10	0	0.00	1	0	0.00	3	1	0.33			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	56	12	0.21	35	6	0.17	5	1	0.20	16	5	0.31			
00400 PH	Fresh Chronic	9.	56	0	0.00	35	0	0.00	5	0	0.00	16	0	0.00			
	Other-Lo Lim.	6.5	56	1	0.02	35	0	0.00	5	0	0.00	16	1	0.06			
00403 PH, LAB	Fresh Chronic	9.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	12	2	0.17	8	2	0.25	1	0	0.00	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	250.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	12	0	0.00	8	0	0.00	1	0	0.00	3	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	56	51	0.91	35	30	0.86	5	5	1.00	16	16	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0125

NPS Station ID: RICH0125 LAT/LON: 37.533892/ -77.453615 Agency: 21VASWCB Date Created: 07/16/94
Location: JAMES RIVER,DOWNSTREAM PARKHYDRO CSO, NORTH BANK FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS111.32
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 08 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0125

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/27/94-10/26/98	56	23.65	23.309	30.1	14.7	19.578	4.425	15.8	20.725	27.1	28.86
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/13/94-06/01/95	14	4.	11.993	74.	1.4	375.442	19.376	1.7	2.875	9.85	52.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/17/94-10/26/98	49	197.	212.082	410.	110.	4687.535	68.466	134.	165.	256.5	318.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/13/94-06/01/95	14	175.	177.	266.	104.	2839.385	53.286	112.	129.5	219.5	260.5
00096	SALINITY AT 25 DEGREES C (MG/ML)	07/31/95-07/31/95	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	06/27/94-10/26/98	56	6.3	5.891	9.8	0.3	6.06	2.462	2.07	4.475	7.8	8.85
00310	BOD, 5 DAY, 20 DEG C MG/L	06/27/94-06/01/95	15	1.7	3.02	11.	1.1	9.115	3.019	1.16	1.4	2.6	9.8
00400	PH (STANDARD UNITS)	06/27/94-10/26/98	56	7.19	7.219	8.42	6.47	0.16	0.4	6.699	6.925	7.473	7.722
00400	CONVERTED PH (STANDARD UNITS)	06/27/94-10/26/98	56	7.19	7.066	8.42	6.47	0.184	0.428	6.699	6.925	7.472	7.722
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/27/94-10/26/98	56	0.065	0.086	0.339	0.004	0.005	0.071	0.019	0.034	0.119	0.201
00403	PH, LAB, STANDARD UNITS SU	07/28/94-06/01/95	12	7.	7.058	7.7	6.3	0.206	0.454	6.36	6.725	7.475	7.7
00403	CONVERTED PH, LAB, STANDARD UNITS	07/28/94-06/01/95	12	7.	6.855	7.7	6.3	0.251	0.501	6.36	6.725	7.475	7.7
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/28/94-06/01/95	12	0.1	0.14	0.501	0.02	0.02	0.143	0.02	0.034	0.189	0.446
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/28/94-06/01/95	12	42.5	46.917	71.	24.	262.265	16.195	25.8	33.25	63.	69.5
00500	RESIDUE, TOTAL (MG/L)	07/28/94-06/01/95	12	127.5	128.167	188.	82.	1356.515	36.831	83.2	92.25	156.25	185.3
00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/28/94-06/01/95	12	35.	33.	46.	14.	105.818	10.287	16.1	23.75	41.5	46.
00510	RESIDUE, TOTAL FIXED (MG/L)	07/28/94-06/01/95	12	96.	95.167	148.	47.	1235.97	35.156	47.9	64.75	123.5	145.9
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/13/94-06/01/95	14	5.5	11.643	44.	1.5	219.901	14.829	1.5	3.	13.	43.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/13/94-06/01/95	14##	1.5	3.393	15.	1.	17.353	4.166	1.	1.5	3.	12.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/13/94-06/01/95	14	4.5	8.571	38.	1.5	125.264	11.192	1.5	1.5	9.	32.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/27/94-06/01/95	13	0.06	0.144	0.9	0.02	0.064	0.252	0.02	0.02	0.105	0.712
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	12	0.01	0.017	0.05	0.005	0.	0.014	0.005	0.005	0.028	0.044
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/28/94-06/01/95	12	0.145	0.15	0.37	0.02	0.014	0.12	0.02	0.02	0.228	0.349
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/94-06/01/95	12	0.4	0.55	2.	0.2	0.234	0.483	0.23	0.3	0.575	1.64
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/28/94-06/01/95	12	0.085	0.102	0.29	0.04	0.004	0.067	0.043	0.063	0.13	0.245
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/13/94-07/14/94	2	4.	4.	4.2	3.8	0.08	0.283	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	07/28/94-06/01/95	12	11.	12.417	21.	6.	26.992	5.195	6.3	7.5	16.	21.
00945	SULFATE, TOTAL (MG/L AS SO4)	07/28/94-06/01/95	12	17.5	18.667	32.	9.	77.879	8.825	9.3	10.25	26.75	32.
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	56	8600.	8342.589	16000.	20.	50298400.901	7092.137	205.	790.	16000.	16000.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/27/94-10/26/98	56	3.933	3.523	4.204	1.301	0.631	0.794	2.309	2.898	4.204	4.204
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	3332.164								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/28/94-06/01/95	12	0.05	0.069	0.19	0.04	0.002	0.048	0.04	0.04	0.082	0.175

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Station Inventory for Station: RICH0124

NPS Station ID: RICH0124 LAT/LON: 37.533615/ -77.436392 Agency: 21VASWCB Date Created: 04/13/96
Location: JAMES RIVER AT DOWNSTREAM END OF HAXALL CANAL FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS110.49
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA.

Parameter Inventory for Station: RICH0124

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/95-10/26/98	36	22.9	23.119	29.1	15.	18.535	4.305	15.58	21.1	26.95	28.55
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/05/95-10/26/98	35	200.	215.714	374.	111.	4314.092	65.682	142.6	169.	260.	312.6
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/20/95-10/26/98	36	8.7	8.728	10.8	5.4	1.24	1.114	7.5	8.025	9.55	10.23
00400 PH (STANDARD UNITS)	09/20/95-10/26/98	36	8.035	7.941	8.58	7.24	0.125	0.354	7.448	7.613	8.158	8.453
00400 CONVERTED PH (STANDARD UNITS)	09/20/95-10/26/98	36	8.035	7.803	8.58	7.24	0.145	0.38	7.448	7.613	8.157	8.453
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/95-10/26/98	36	0.009	0.016	0.058	0.003	0.	0.013	0.004	0.007	0.024	0.036
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	38	1800.	5996.605	16000.	40.	50136815.759	7080.736	128.	330.	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	09/11/95-10/26/98	38	3.244	3.221	4.204	1.602	0.705	0.839	2.107	2.519	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	1661.508								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0124

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	36	0	0.00	20	0	0.00	4	0	0.00	12	0	0.00			
00400 PH	Fresh Chronic	9.	36	0	0.00	20	0	0.00	4	0	0.00	12	0	0.00			
	Other-Lo Lim.	6.5	36	0	0.00	20	0	0.00	4	0	0.00	12	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	38	33	0.87	22	21	0.95	4	3	0.75	12	9	0.75			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0123

NPS Station ID: RICH0123 LAT/LON: 37.532503/ -77.435282 Agency: 21VASWCB Date Created: 04/08/89
Location: NORTH BANK JAMES RIVER BELOW FALL ZONE RICHMOND FIPS State/County: 51760 VIRGINIA/RICHMOND (CITY)
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-JMS110.44
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH-ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 3.80 On/Off RF1:
RF3 Index: 02080205000100.08 RF3 Mile Point: 0.07 Distance from RF3: 0.01 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: JAMES RIVER SECTION: 02 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0123

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

******** No Parameter Data Available for this Station ********

Annual Analysis for 1994 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	4	19.2	19.6	27.3	12.7	49.847	7.06	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/14/98	1	122.	122.	122.	122.	0.	0.	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	09/20/67-12/14/98	2	1.8	1.8	2.6	1.	1.28	1.131	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/14/98	2	28.	28.	32.	24.	32.	5.657	**	**	**	**
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	4	6.29	6.295	6.38	6.22	0.004	0.066	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	4	6.29	6.291	6.38	6.22	0.004	0.066	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	4	0.513	0.511	0.603	0.417	0.006	0.076	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	2	109.5	109.5	141.	78.	1984.5	44.548	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	2	35.5	35.5	47.	24.	264.5	16.263	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	2	74.	74.	94.	54.	800.	28.284	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	2	8.	8.	10.	6.	8.	2.828	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	2	3.5	3.5	4.	3.	0.5	0.707	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	2	4.5	4.5	6.	3.	4.5	2.121	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	2##	0.045	0.045	0.07	0.02	0.001	0.035	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	2##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	2##	0.065	0.065	0.11	0.02	0.004	0.064	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	2	0.65	0.65	0.8	0.5	0.045	0.212	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/14/98	2	0.11	0.11	0.18	0.04	0.01	0.099	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-06/08/94	2	9.45	9.45	10.	8.9	0.605	0.778	**	**	**	**
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	2##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	2##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		50.									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/14/98	2	0.045	0.045	0.07	0.02	0.001	0.035	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	5	13.2	14.96	26.7	5.5	78.118	8.838	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/14/98	5	210.	214.2	230.	202.	170.2	13.046	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	09/20/67-12/14/98	6##	1.	3.833	16.	1.	36.167	6.014	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/14/98	6	21.5	23.333	34.	13.	83.867	9.158	**	**	**	**
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	5	6.29	6.32	6.78	5.97	0.116	0.34	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	5	6.29	6.225	6.78	5.97	0.127	0.357	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	5	0.513	0.596	1.072	0.166	0.156	0.394	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	6	148.	146.	185.	111.	657.2	25.636	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	6	37.5	45.167	70.	28.	342.167	18.498	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	6	101.5	100.833	121.	80.	254.967	15.968	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	6	6.	8.167	19.	4.	33.367	5.776	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	6##	1.5	3.833	14.	1.5	25.167	5.017	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	6	3.5	4.	9.	1.5	7.9	2.811	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	6##	0.045	0.083	0.26	0.02	0.009	0.094	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	6##	0.005	0.008	0.02	0.005	0.	0.006	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	6	0.06	0.083	0.18	0.02	0.005	0.07	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	6	0.75	0.95	2.3	0.3	0.519	0.72	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/14/98	6	0.095	0.137	0.41	0.04	0.02	0.14	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/14/98	6	0.065	0.083	0.2	0.04	0.004	0.061	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

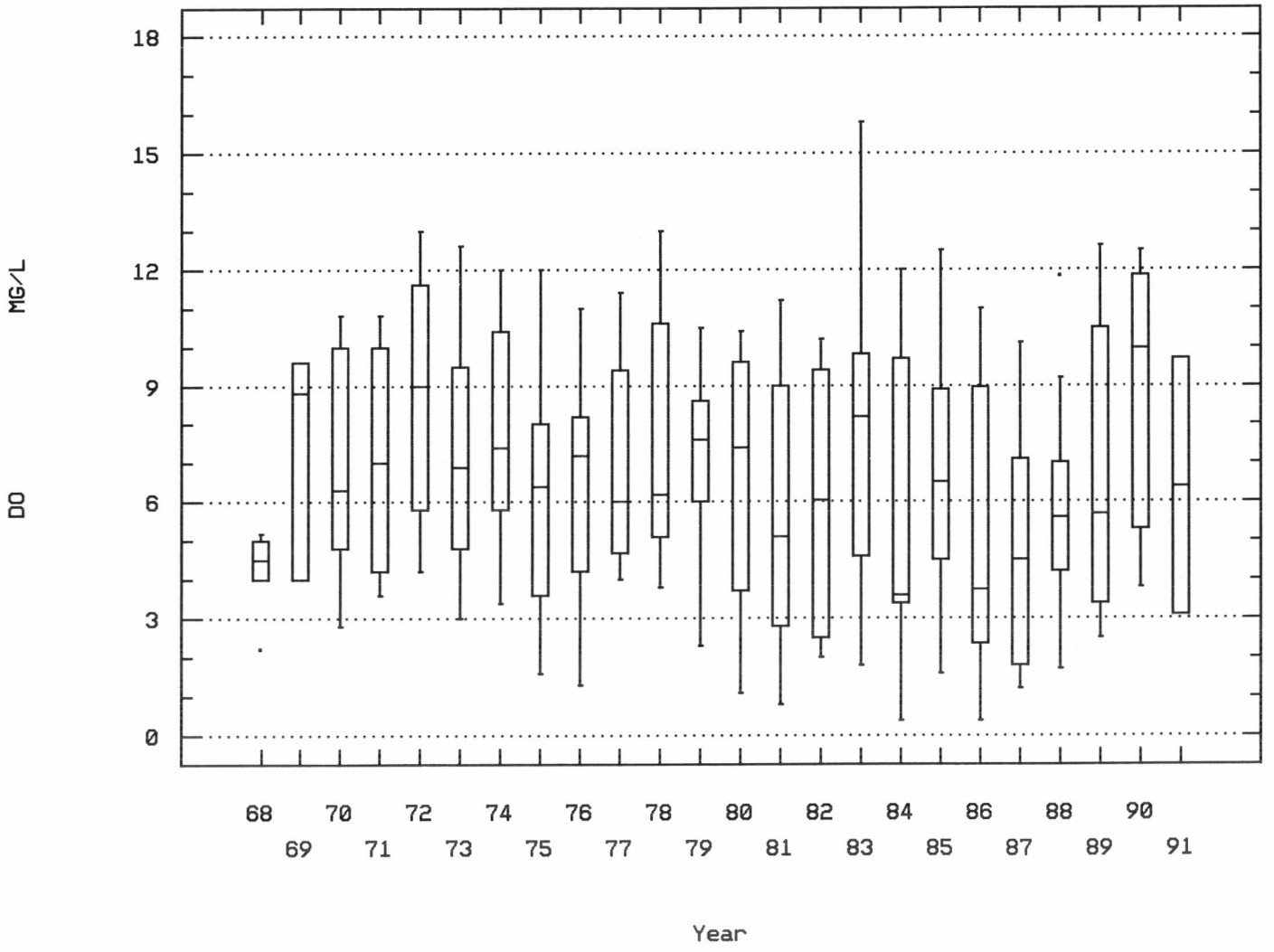
Annual Analysis for 1998 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	12	17.5	16.45	27.4	3.9	65.303	8.081	4.89	8.9	24.575	27.1
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/14/98	12	155.5	153.333	213.	96.	2056.606	45.35	96.6	100.5	199.5	211.5
00310 BOD, 5 DAY, 20 DEG C MG/L	09/20/67-12/14/98	12	2.5	2.417	5.	1.	1.72	1.311	1.	1.	3.	4.7
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/14/98	12	22.5	23.917	34.	16.	30.083	5.485	16.6	21.25	26.	34.
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	12	6.45	6.382	6.71	5.62	0.089	0.299	5.77	6.27	6.56	6.707
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	12	6.446	6.258	6.71	5.62	0.106	0.326	5.77	6.27	6.56	6.707
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	12	0.358	0.553	2.399	0.195	0.365	0.604	0.196	0.275	0.537	1.907
00500 RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	12	124.	122.	170.	88.	694.364	26.351	88.6	97.75	138.75	166.1
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	11	41.	39.727	53.	17.	85.818	9.264	20.4	37.	46.	51.8
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	11	86.	85.364	117.	49.	475.255	21.8	51.	66.	106.	115.8
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	12	7.	8.667	16.	4.	13.515	3.676	4.3	6.25	11.5	15.4
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	12	3.	3.542	8.	1.5	6.703	2.589	1.5	1.5	6.	8.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	12	4.	4.75	8.	3.	3.114	1.765	3.	3.25	6.75	7.7
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.02	0.037	0.09	0.02	0.001	0.025	0.02	0.02	0.048	0.087
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	12	0.095	0.113	0.31	0.02	0.009	0.093	0.02	0.02	0.188	0.283
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	12	0.65	0.692	1.1	0.5	0.037	0.193	0.5	0.525	0.775	1.07
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/14/98	12	0.1	0.092	0.16	0.04	0.001	0.035	0.043	0.063	0.115	0.151
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/14/98	12	0.075	0.074	0.12	0.04	0.001	0.027	0.04	0.05	0.098	0.117

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: RICH0134 Parameter Code: 00300

OXYGEN, DISSOLVED

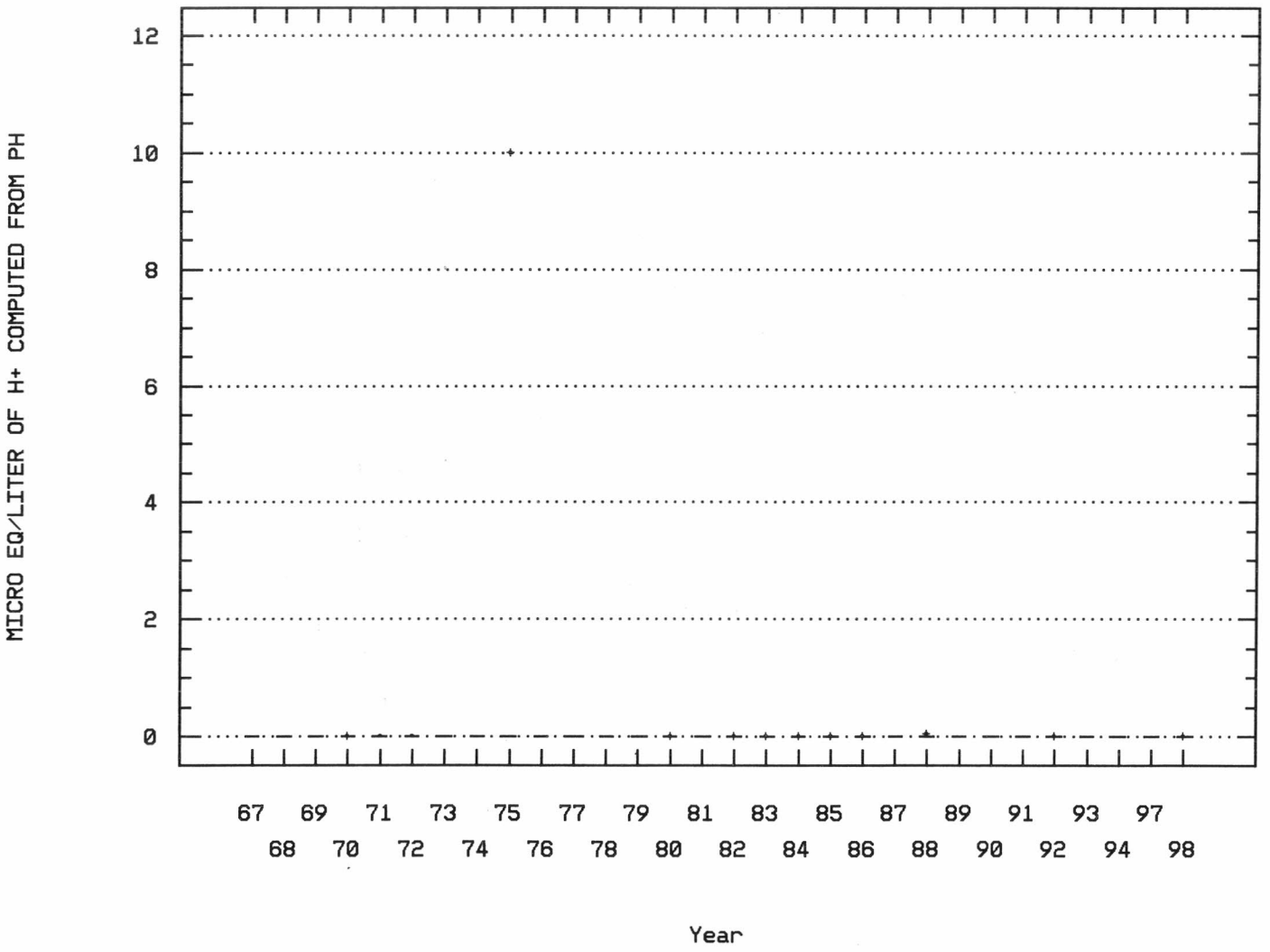


RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00400

MICRO EQ/LITER OF H+ COMPUTED FROM PH

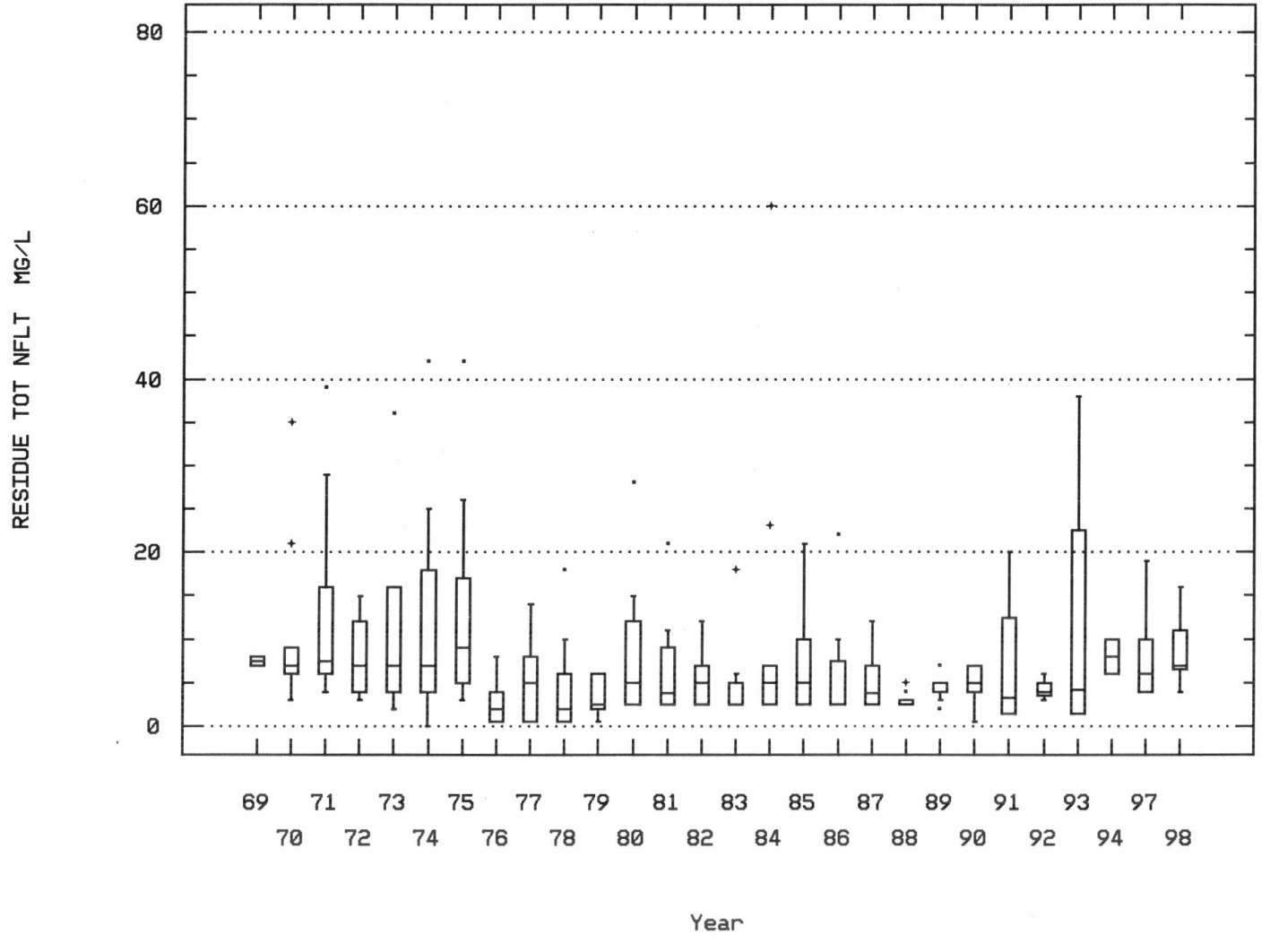
(X 10000)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00530

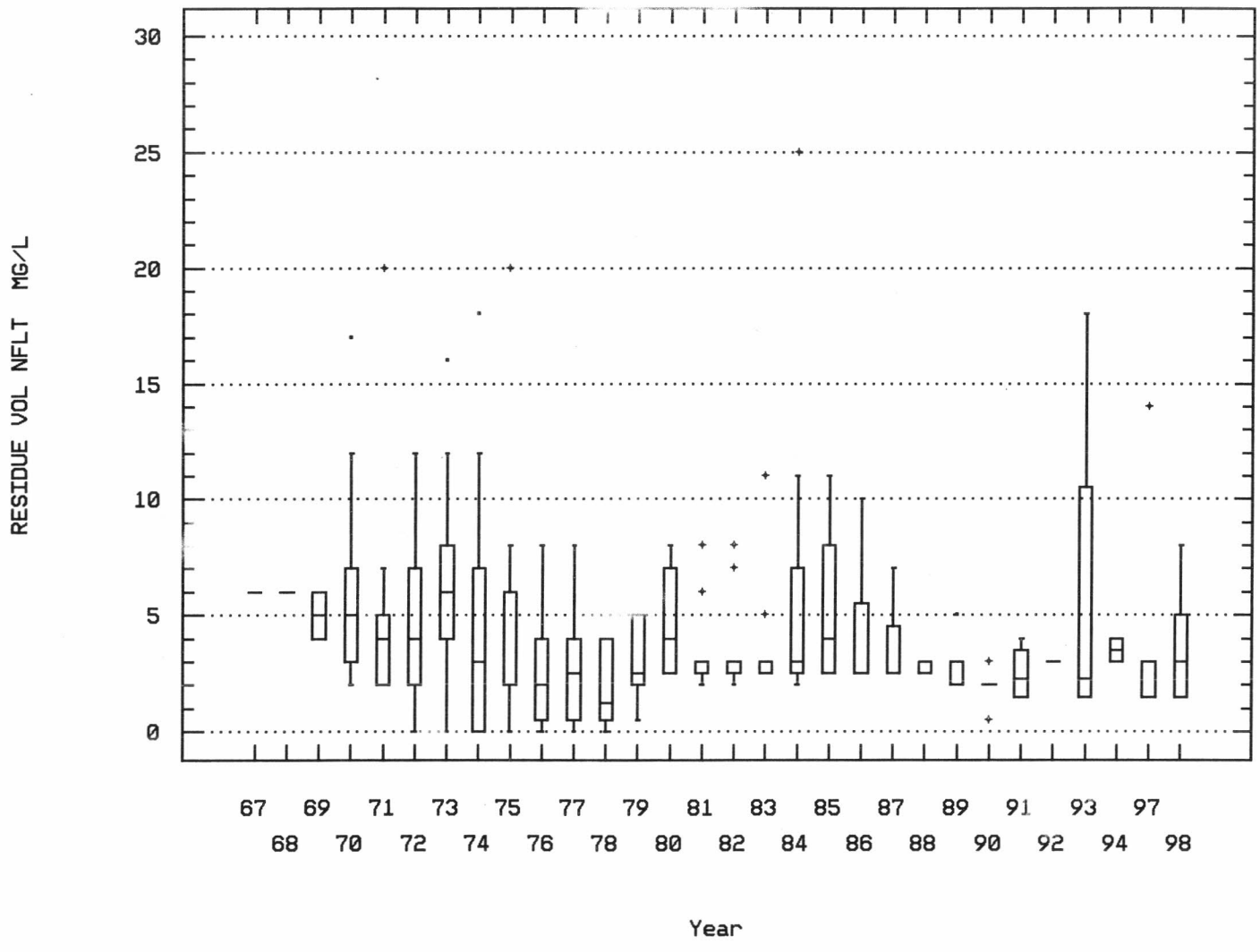
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00535

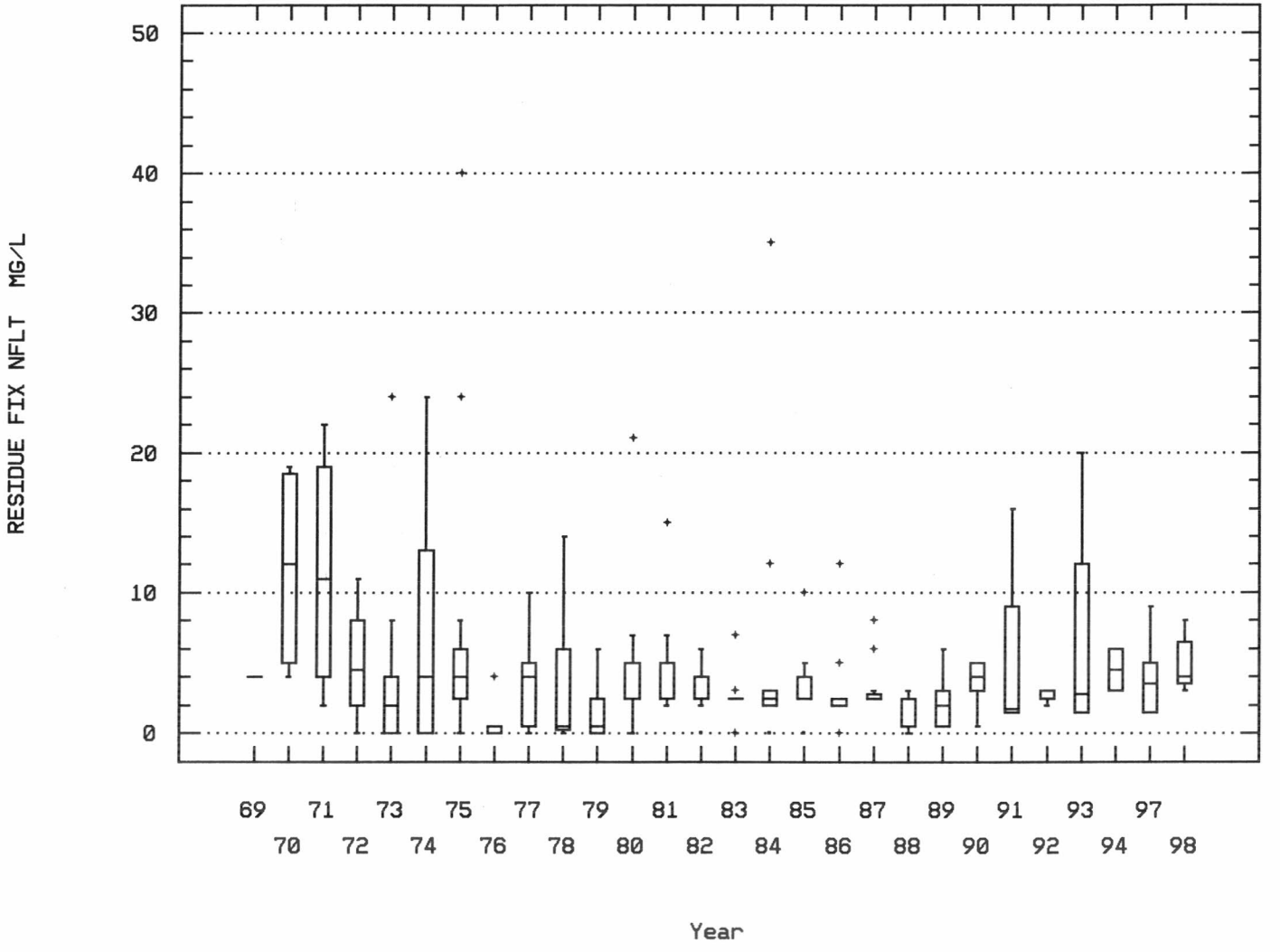
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00540

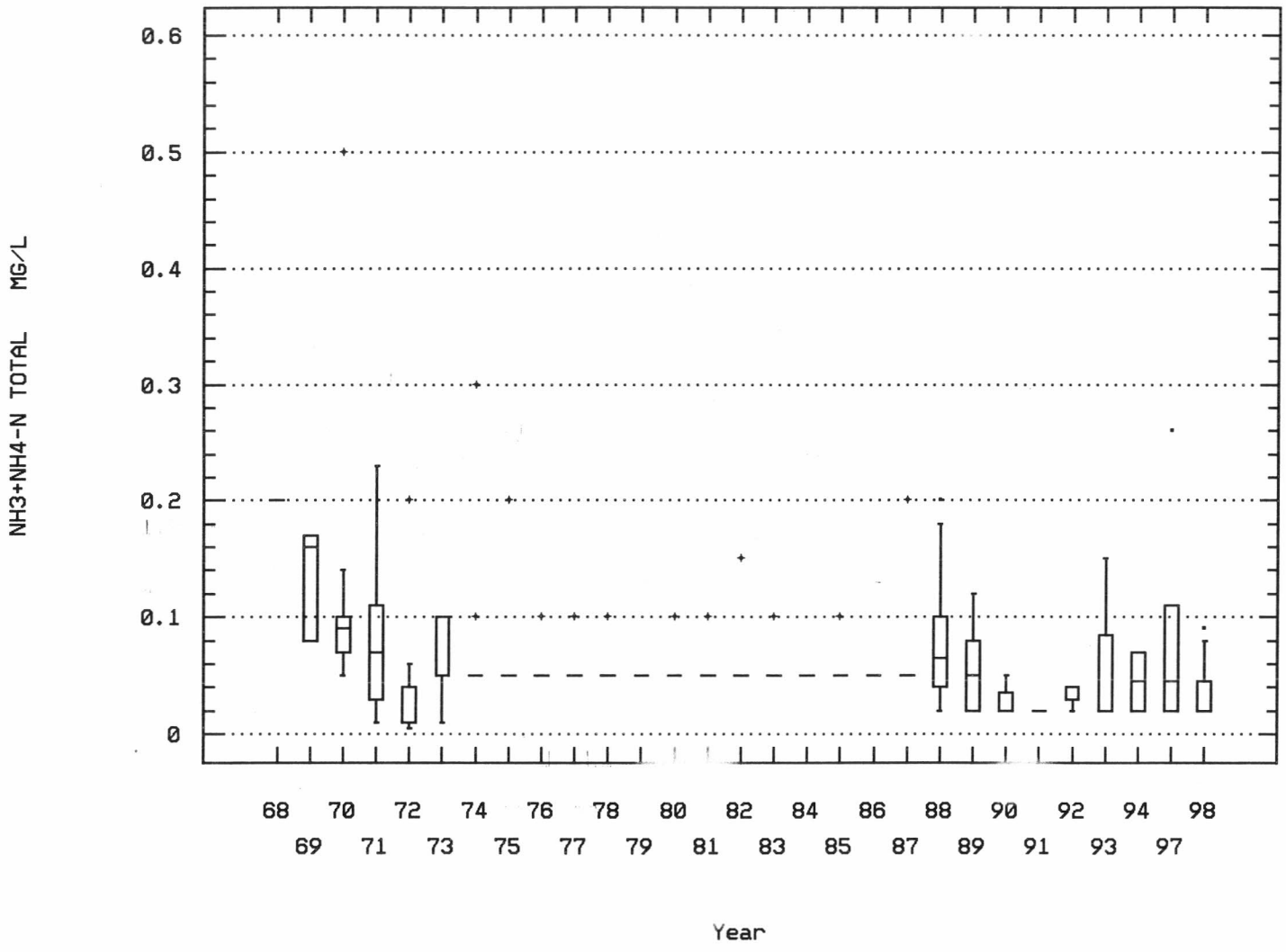
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00610

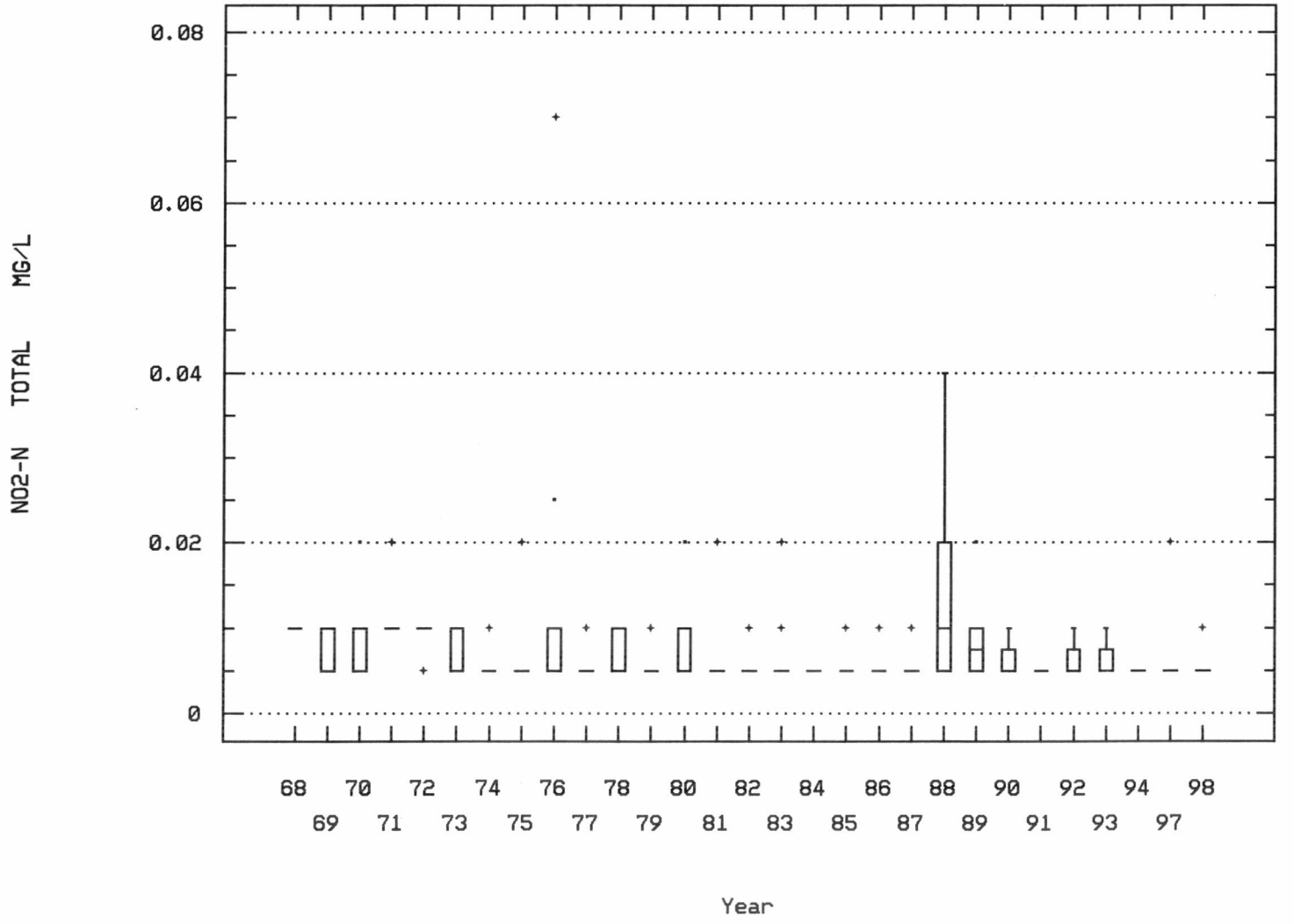
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00615

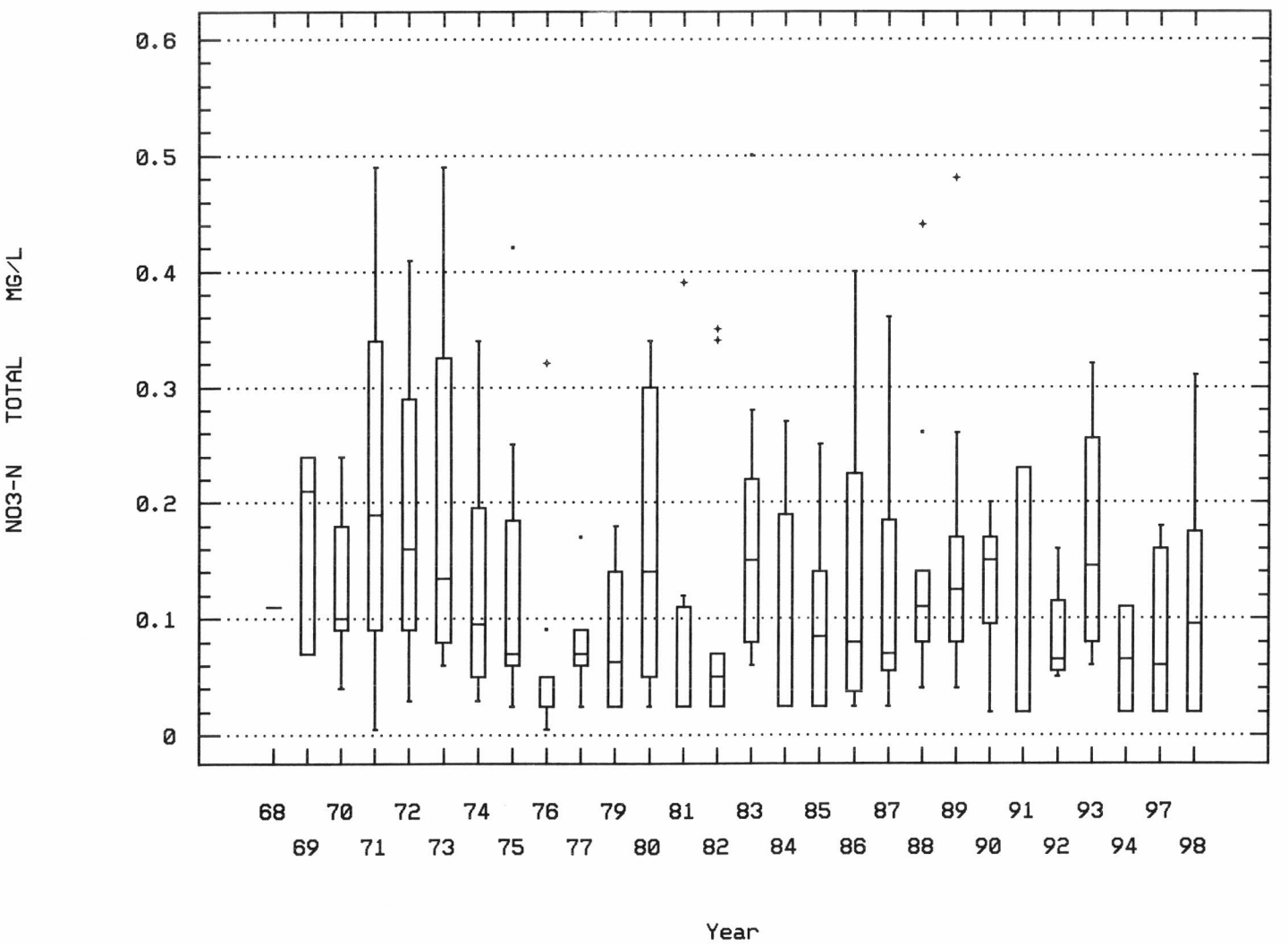
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00620

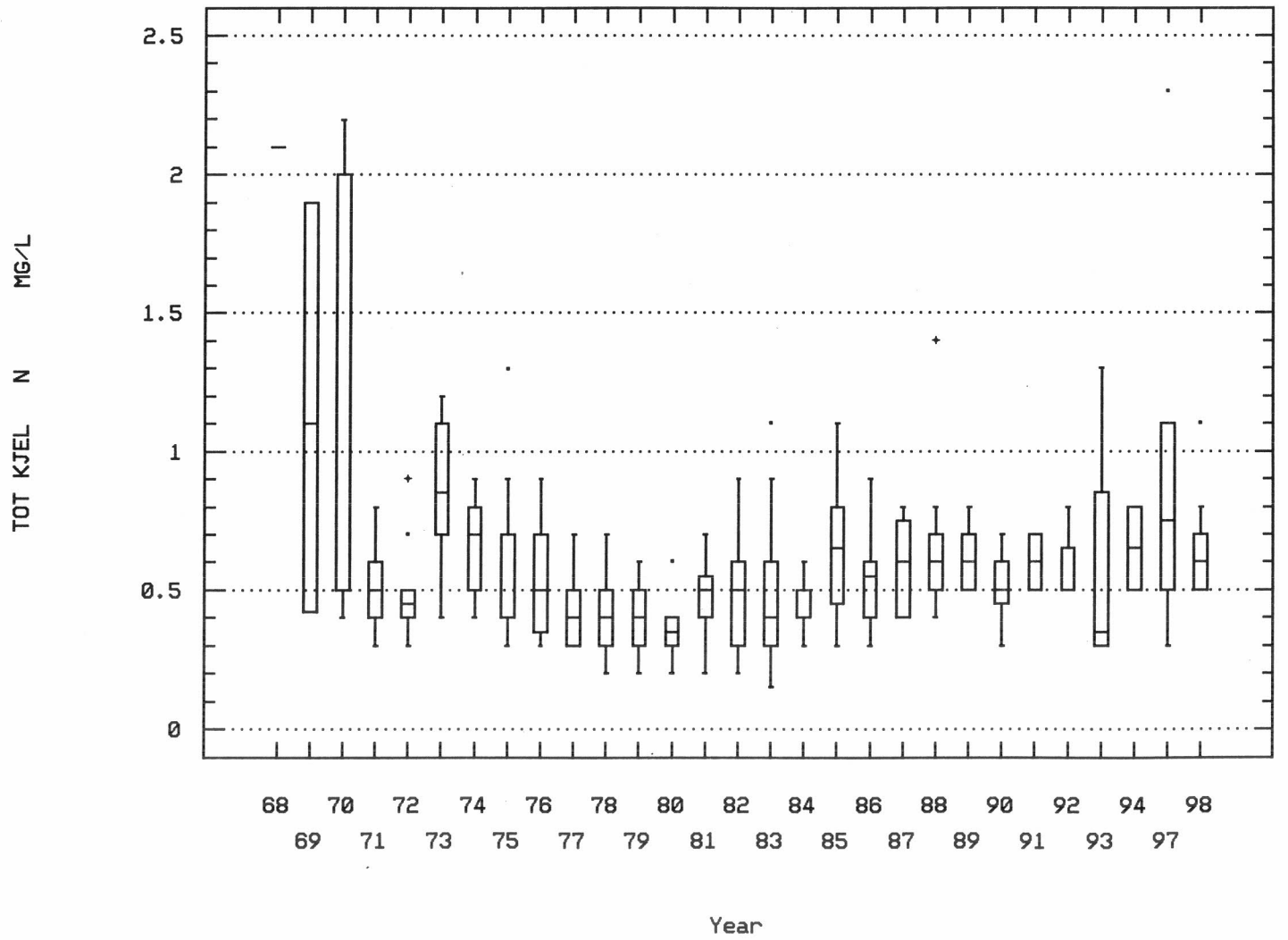
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00625

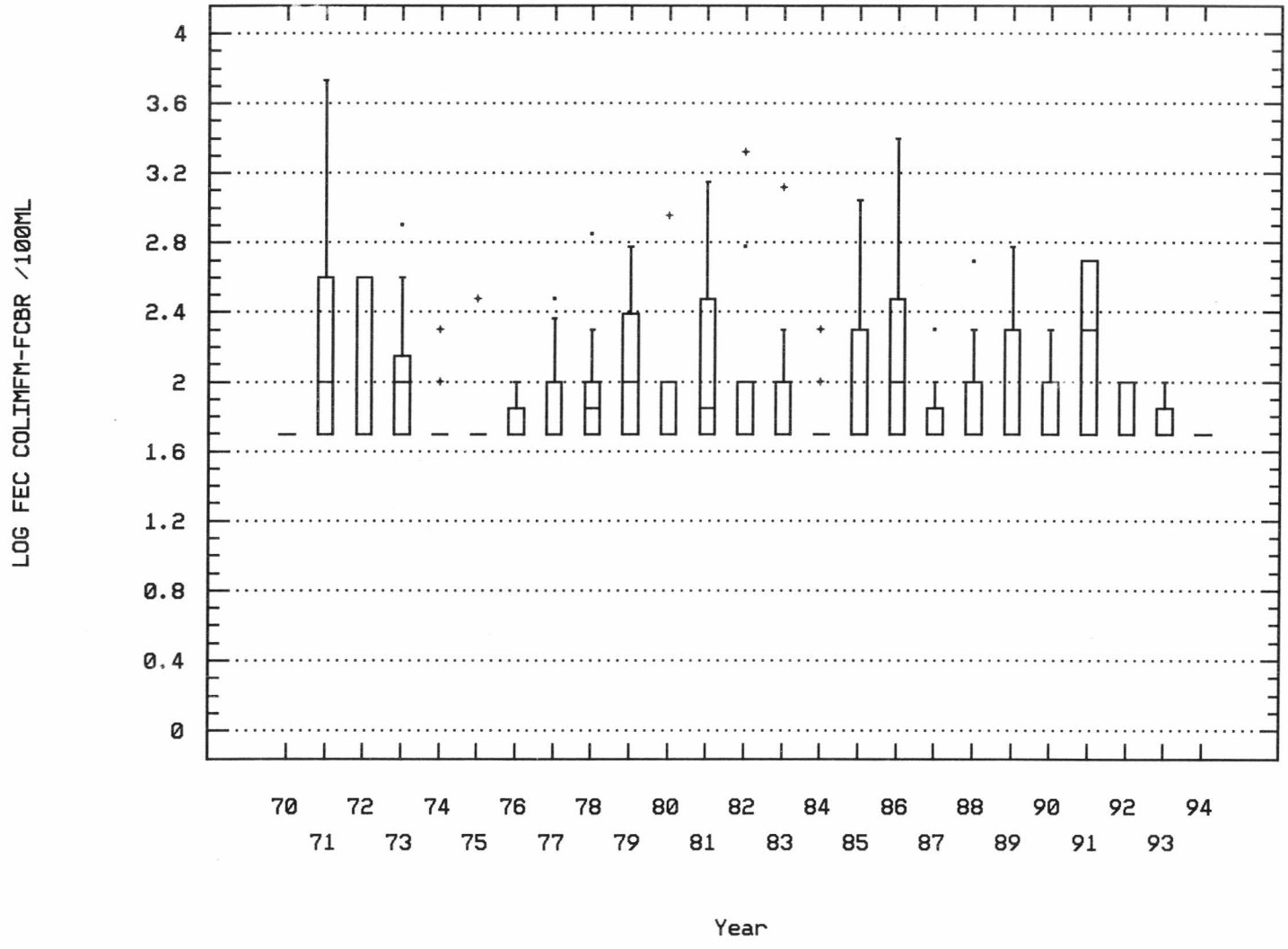
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 31616

LOG FECAL COLIFORM,MEMBR FILTER,M-FC BR



RT. 360 BRIDGE

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	82	23.3	22.866	29.5	12.6	17.797	4.219	16.15	20.875	26.025	27.94
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/14/98	35	195.	194.143	289.	117.	1818.95	42.649	141.	164.	224.	260.2
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/10/89-12/14/98	14	180.5	179.5	241.	132.	1331.654	36.492	134.	149.	205.5	235.5
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/17/90-12/14/98	11	1.7	1.973	4.4	0.4	1.78	1.334	0.4	1.	3.3	4.26
00300 OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	69	3.6	3.626	9.	0.4	3.263	1.806	1.3	2.25	4.6	6.
00310p BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	55	2.	2.355	16.	1.	4.7	2.168	1.	1.	3.	4.
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	43	25.	25.814	42.	5.	53.441	7.31	16.8	22.	32.	34.
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	81	6.5	6.509	8.09	3.3	0.316	0.562	6.	6.33	6.78	7.
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	81	6.5	5.177	8.09	3.3	2.112	1.453	6.	6.33	6.78	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	81	0.316	6.654	501.187	0.008	3095.846	55.64	0.1	0.166	0.469	1.
00403p PH, LAB, STANDARD UNITS	SU	09/20/67-12/14/98	20	6.8	6.85	7.4	6.5	0.051	0.226	6.6	6.7	7.	7.19
00403p CONVERTED PH, LAB, STANDARD UNITS		09/20/67-12/14/98	20	6.8	6.801	7.4	6.5	0.054	0.232	6.6	6.7	7.	7.19
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	20	0.158	0.158	0.316	0.04	0.005	0.071	0.065	0.1	0.2	0.251
00410p ALKALINITY, TOTAL (MG/L AS CACO3)		09/20/67-12/14/98	19	43.	43.474	71.	16.	209.819	14.485	25.	36.	53.	69.
00500p RESIDUE, TOTAL (MG/L)		10/07/68-12/14/98	47	139.	142.66	200.	94.	778.664	27.905	105.8	122.	162.	185.6
00505p RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-12/14/98	49	46.	66.592	800.	11.	12192.33	110.419	27.	34.	66.5	87.
00510p RESIDUE, TOTAL FIXED (MG/L)		04/17/69-12/14/98	46	95.	94.587	143.	34.	462.514	21.506	71.7	84.75	106.25	117.
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-12/14/98	73	6.	9.808	60.	0.5	106.324	10.311	2.	4.	12.	21.6
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-12/14/98	76	3.	5.132	25.	0.	22.169	4.708	1.	2.	7.	10.3
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-12/14/98	73	3.	5.075	35.	0.	40.928	6.398	0.	1.	6.	16.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-12/14/98	73##	0.05	0.074	0.3	0.005	0.003	0.056	0.03	0.05	0.09	0.162
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	73##	0.005	0.007	0.025	0.005	0.	0.005	0.005	0.005	0.01	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-12/14/98	68	0.05	0.069	0.25	0.005	0.003	0.055	0.025	0.025	0.09	0.161
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-12/14/98	73	0.6	0.749	2.3	0.3	0.168	0.41	0.4	0.5	0.9	1.1
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/14/98	42	0.1	0.133	0.41	0.05	0.008	0.088	0.05	0.098	0.2	0.27
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/08/79-03/13/91	32	0.07	0.086	0.32	0.03	0.003	0.058	0.043	0.053	0.09	0.141
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-06/08/94	34	10.95	11.615	18.	6.	11.699	3.42	8.05	9.	14.	18.
00900p HARDNESS, TOTAL (MG/L AS CACO3)		09/20/67-12/14/98	17	54.	53.706	93.	22.	323.471	17.985	28.4	39.	60.5	84.2
00940 CHLORIDE,TOTAL IN WATER	MG/L	07/30/75-12/14/98	16	18.5	20.063	32.	13.	24.063	4.905	15.1	16.25	23.75	27.8
00945 SULFATE, TOTAL (MG/L AS SO4)		11/21/88-12/14/98	15	9.	10.533	19.	4.	23.552	4.853	4.6	7.	17.	18.4
01034 CHROMIUM, TOTAL (UG/L AS CR)		03/24/70-06/01/93	5##	5.	6.	10.	5.	5.	2.236	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)		03/24/70-06/01/93	5##	5.	10.	30.	5.	125.	11.18	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)		06/29/70-06/01/93	5##	5.	7.	10.	5.	7.5	2.739	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)		03/24/70-06/01/93	5	20.	20.8	30.	16.	29.2	5.404	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	63##	50.	191.905	2500.	50.	117418.894	342.664	50.	50.	200.	454.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		12/15/70-06/08/94	63##	1.699	2.022	3.398	1.699	0.171	0.413	1.699	1.699	2.301	2.655
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	105.103								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-06/14/79	28	0.1	0.113	0.3	0.05	0.005	0.07	0.05	0.05	0.2	0.2
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-12/14/98	38	0.07	0.081	0.2	0.02	0.001	0.037	0.04	0.05	0.1	0.13
71900 MERCURY, TOTAL (UG/L AS HG)		09/21/70-06/01/93	6##	0.25	0.217	0.25	0.15	0.003	0.052	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0134

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-12/14/98	108	7.2	7.933	18.3	-3.5	18.381	4.287	3.	5.5	11.225	14.04
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/14/98	53	179.	216.698	1124.	67.	33023.984	181.725	103.8	139.	217.5	292.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		07/10/89-12/14/98	19	158.	157.526	261.	76.	1625.708	40.32	105.	133.	178.	211.
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/17/90-12/14/98	18	8.75	8.483	12.6	2.1	8.254	2.873	3.63	6.9	10.325	12.42
00300 OXYGEN, DISSOLVED	MG/L	06/18/68-06/10/91	93	9.6	9.081	15.8	3.	6.165	2.483	5.88	7.1	10.8	12.
00310p BOD, 5 DAY, 20 DEG C	MG/L	09/20/67-12/14/98	66	1.9	1.865	20.	0.5	5.622	2.371	1.	1.	2.	2.51
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/14/98	66	19.	20.348	39.	12.	31.584	5.62	14.7	16.	23.25	28.3
00400p PH (STANDARD UNITS)		09/20/67-12/14/98	109	6.5	6.59	8.41	5.5	0.242	0.492	6.	6.365	6.8	7.04
00400p CONVERTED PH (STANDARD UNITS)		09/20/67-12/14/98	109	6.5	6.368	8.41	5.5	0.292	0.541	6.	6.365	6.8	7.04
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-12/14/98	109	0.316	0.429	3.162	0.004	0.25	0.5	0.091	0.158	0.432	1.
00403p PH, LAB, STANDARD UNITS	SU	09/20/67-12/14/98	27	6.5	6.519	6.9	6.1	0.044	0.209	6.2	6.4	6.6	6.9

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403p CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/14/98	27	6.5	6.471	6.9	6.1	0.046	0.215	6.2	6.4	6.6	6.9
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	27	0.316	0.338	0.794	0.126	0.026	0.163	0.126	0.251	0.398	0.631
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	27	15.	17.63	46.	7.	73.781	8.59	9.8	12.	21.	27.4
00500p RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	65	111.	123.954	590.	57.	4480.232	66.935	87.2	97.5	126.5	167.
00505p RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	65	39.	40.631	127.	10.	370.612	19.251	20.	28.	47.	62.
00510p RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	64	72.	82.984	570.	11.	4795.	69.246	40.5	55.5	86.75	119.5
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	105	4.	5.381	28.	0.	25.493	5.049	1.	2.5	7.	12.
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	106	2.5	2.915	16.	0.	5.883	2.426	0.5	1.5	3.	5.3
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	104	2.5	3.322	24.	0.	14.81	3.848	0.5	1.	4.	7.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	104##	0.05	0.056	0.5	0.005	0.003	0.054	0.02	0.04	0.05	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	103##	0.005	0.007	0.02	0.005	0.	0.003	0.005	0.005	0.01	0.01
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	95	0.18	0.194	0.5	0.02	0.018	0.136	0.028	0.07	0.29	0.394
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	102	0.4	0.468	2.	0.15	0.05	0.224	0.3	0.3	0.5	0.7
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/14/98	65	0.05	0.084	0.6	0.03	0.006	0.078	0.04	0.05	0.1	0.152
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-03/13/91	50	0.03	0.1	3.	0.01	0.177	0.421	0.011	0.02	0.043	0.06
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-06/08/94	53	8.	8.798	21.	5.2	9.418	3.069	6.	7.	10.	12.2
00900p HARDNESS, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	22	39.	40.773	72.	20.	170.47	13.056	26.6	30.	50.25	60.4
00940 CHLORIDE,TOTAL IN WATER MG/L	07/30/75-12/14/98	24	21.	37.125	317.	7.	3726.201	61.043	13.5	16.25	33.5	57.5
00945 SULFATE, TOTAL (MG/L AS SO4)	11/21/88-12/14/98	23	16.	21.478	105.	8.	407.352	20.183	8.4	14.	18.	39.8
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-06/01/93	13##	5.	5.423	10.	0.5	5.66	2.379	2.3	5.	5.	10.
01042 COPPER, TOTAL (UG/L AS CU)	03/24/70-06/01/93	13##	5.	6.154	10.	5.	4.808	2.193	5.	5.	7.5	10.
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-06/01/93	13##	5.	6.462	20.	1.	23.603	4.858	1.4	5.	7.5	16.4
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-06/01/93	13	17.	16.769	30.	5.	55.359	7.44	7.	10.	20.	30.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	87##	50.	162.989	2100.	50.	122374.686	349.821	50.	50.	100.	400.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	87##	1.699	1.897	3.322	1.699	0.155	0.394	1.699	1.699	2.	2.602
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	78.966								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	38##	0.05	0.093	0.6	0.05	0.009	0.095	0.05	0.05	0.1	0.2
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/14/98	54	0.05	0.046	0.12	0.005	0.001	0.023	0.02	0.03	0.06	0.075
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-06/01/93	13##	0.15	0.196	0.25	0.15	0.003	0.052	0.15	0.15	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/14/98	73	19.	18.441	28.	7.	27.17	5.212	10.76	13.8	22.7	25.5
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/14/98	32	147.5	153.438	275.	69.	2978.706	54.578	82.6	110.5	183.75	247.7
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/14/98	11	137.	136.909	182.	102.	696.291	26.387	102.6	106.	162.	178.2
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	09/17/90-12/14/98	6	3.45	4.283	9.2	1.	7.594	2.756	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/18/68-06/10/91	69	6.	5.997	12.2	0.8	7.19	2.681	2.2	3.85	8.	9.8
00310p BOD, 5 DAY, 20 DEG C MG/L	09/20/67-12/14/98	47	2.	2.074	4.	1.	0.796	0.892	1.	1.	2.8	3.2
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/14/98	38	27.	28.053	40.	17.	39.835	6.311	20.	23.	32.	39.
00400p PH (STANDARD UNITS)	09/20/67-12/14/98	74	6.6	6.57	8.	1.	0.572	0.756	6.21	6.48	6.8	7.05
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/14/98	74	6.6	6.6	8.	1.	14.457	3.802	6.21	6.48	6.8	7.05
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	74	0.251	1351.652	100000.	0.01	135134312.684	11624.728	0.09	0.158	0.332	0.617
00403p PH, LAB, STANDARD UNITS SU	09/20/67-12/14/98	20	6.7	6.68	7.4	5.9	0.13	0.361	6.03	6.6	6.775	7.36
00403p CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/14/98	20	6.7	6.531	7.4	5.9	0.154	0.392	6.03	6.6	6.775	7.36
00403p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/14/98	20	0.2	0.295	1.259	0.04	0.093	0.305	0.046	0.169	0.251	0.95
00410p ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	19	26.	26.526	51.	6.	175.263	13.239	7.	16.	38.	45.
00500p RESIDUE, TOTAL (MG/L)	10/07/68-12/14/98	47	105.	107.298	185.	64.	729.735	27.014	74.6	87.	125.	142.6
00505p RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-12/14/98	46	43.5	44.	74.	7.	201.2	14.184	27.	34.	52.75	64.3
00510p RESIDUE, TOTAL FIXED (MG/L)	04/17/69-12/14/98	46	64.5	66.543	163.	13.	731.231	27.041	34.4	53.25	76.5	101.9
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-12/14/98	73	6.	7.644	42.	0.5	66.906	8.18	2.	2.5	8.	16.4
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-12/14/98	73	2.5	3.973	20.	0.	13.381	3.658	1.	2.	6.	7.
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-12/14/98	72	2.5	4.146	40.	0.	38.468	6.202	0.	1.	5.	8.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-12/14/98	72##	0.05	0.063	0.22	0.01	0.002	0.041	0.02	0.05	0.058	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	71##	0.005	0.008	0.07	0.005	0.	0.009	0.005	0.005	0.01	0.01

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-12/14/98	65	0.09	0.115	0.42	0.005	0.008	0.087	0.025	0.055	0.15	0.222
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-12/14/98	68	0.6	0.663	2.199	0.2	0.087	0.294	0.4	0.5	0.8	1.
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/14/98	36	0.1	0.095	0.2	0.05	0.002	0.047	0.05	0.05	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-03/13/91	32	0.065	0.063	0.12	0.02	0.001	0.028	0.03	0.04	0.09	0.1
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-06/08/94	35	12.	12.146	19.	4.	10.65	3.263	8.42	10.	14.	16.4
00900p HARDNESS, TOTAL (MG/L AS CACO3)	09/20/67-12/14/98	11	34.	34.727	56.	20.	144.018	12.001	20.4	23.	44.	54.8
00940 CHLORIDE,TOTAL IN WATER MG/L	07/30/75-12/14/98	13	17.	15.462	24.	9.	17.103	4.136	9.4	11.5	17.	22.
00945 SULFATE, TOTAL (MG/L AS SO4)	11/21/88-12/14/98	13	7.	6.923	10.	2.	4.244	2.06	3.6	6.	8.	10.
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/24/70-06/01/93	14##	5.	7.536	20.	0.5	21.556	4.643	2.75	5.	10.	15.
01042 COPPER, TOTAL (UG/L AS CU)	03/24/70-06/01/93	13##	5.	6.923	20.	5.	18.91	4.349	5.	5.	7.5	16.
01051 LEAD, TOTAL (UG/L AS PB)	06/29/70-06/01/93	10##	3.5	3.6	10.	0.5	8.767	2.961	0.55	1.	5.	9.5
01092 ZINC, TOTAL (UG/L AS ZN)	03/24/70-06/01/93	14	13.5	26.571	90.	5.	744.571	27.287	5.	8.75	32.5	85.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	61##	50.	236.066	5400.	50.	520177.596	721.233	50.	50.	100.	380.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/15/70-06/08/94	61##	1.699	1.959	3.732	1.699	0.188	0.434	1.699	1.699	2.	2.577
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	90.953								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	32	0.1	0.097	0.2	0.05	0.003	0.052	0.05	0.05	0.1	0.2
70507p PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/14/98	38	0.065	0.074	0.16	0.02	0.001	0.029	0.04	0.05	0.1	0.101
71900 MERCURY, TOTAL (UG/L AS HG)	09/21/70-06/01/93	10##	0.25	0.208	0.25	0.025	0.006	0.076	0.038	0.15	0.25	0.25

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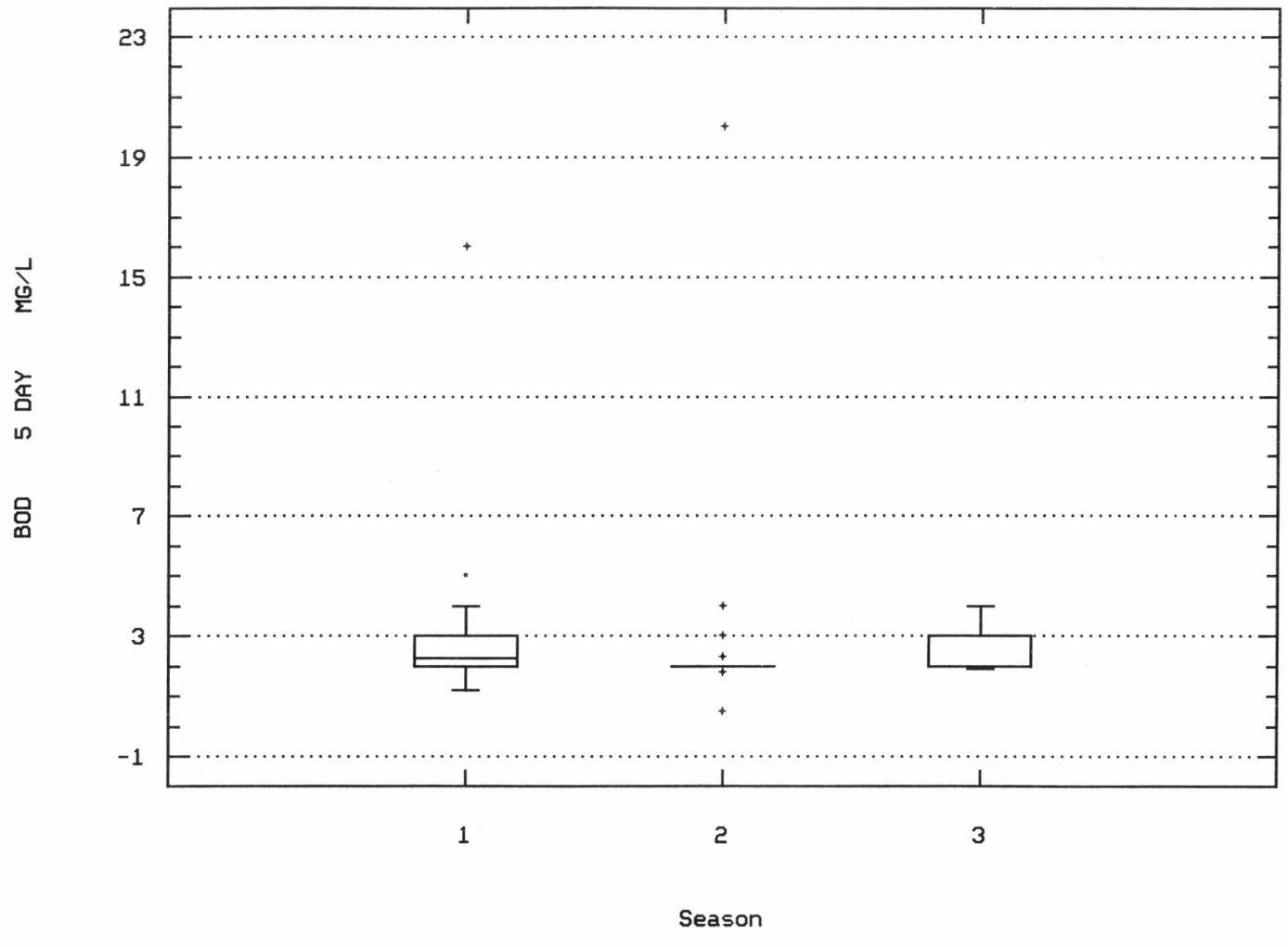
Station: RICH0134 Parameter Code: 00310

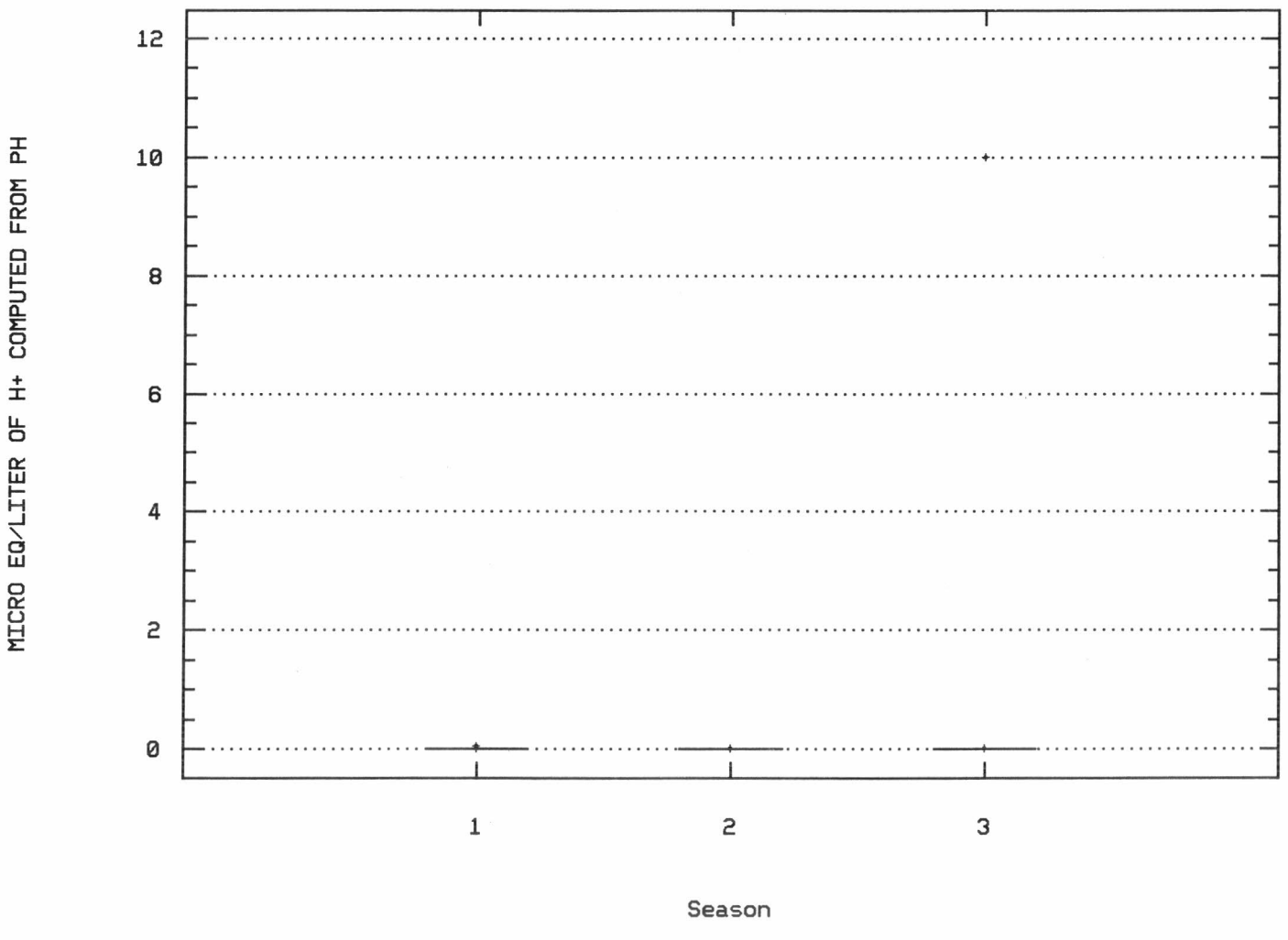
BOD, 5 DAY, 20 DEG C



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00400

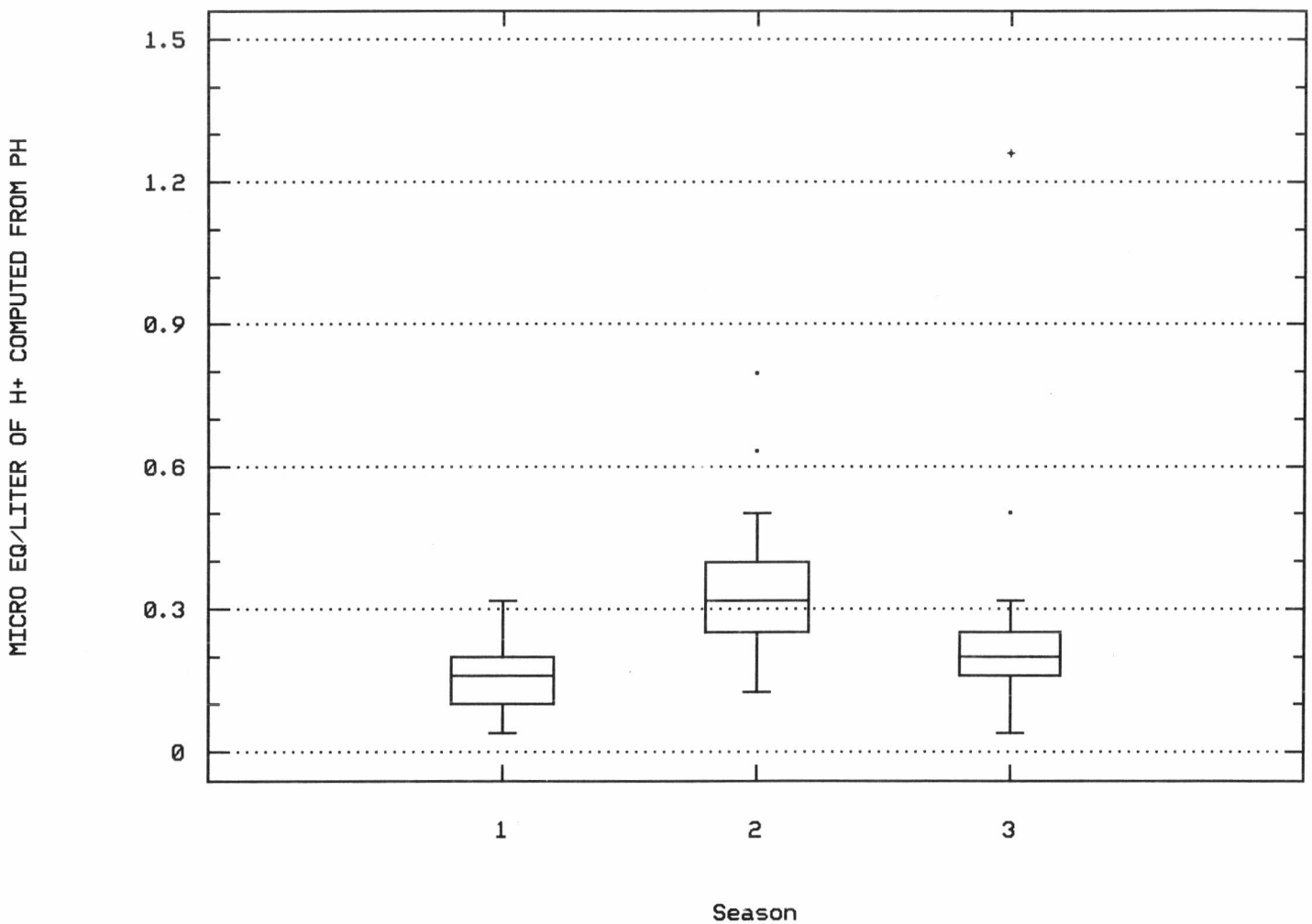
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00403

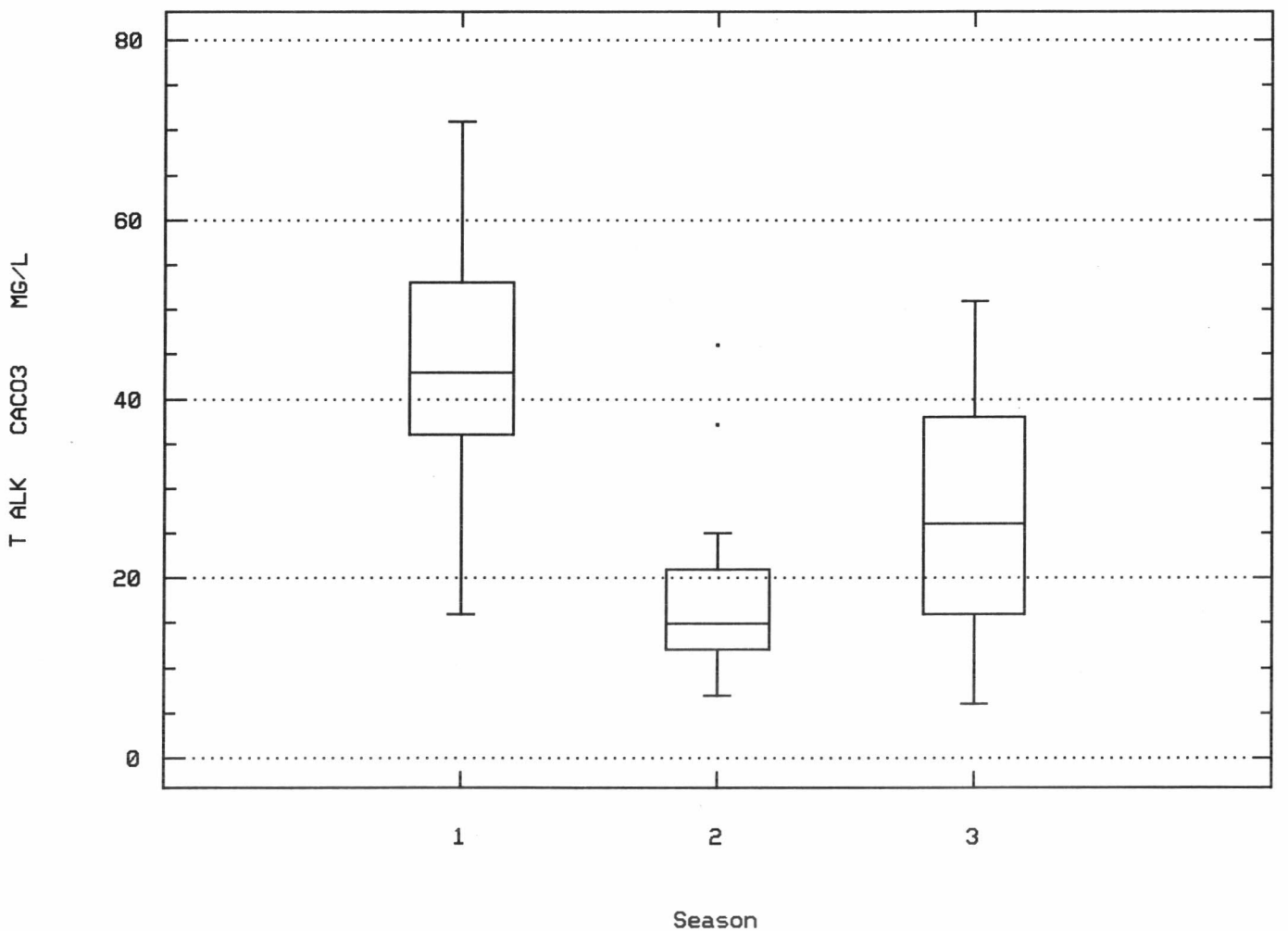
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00410

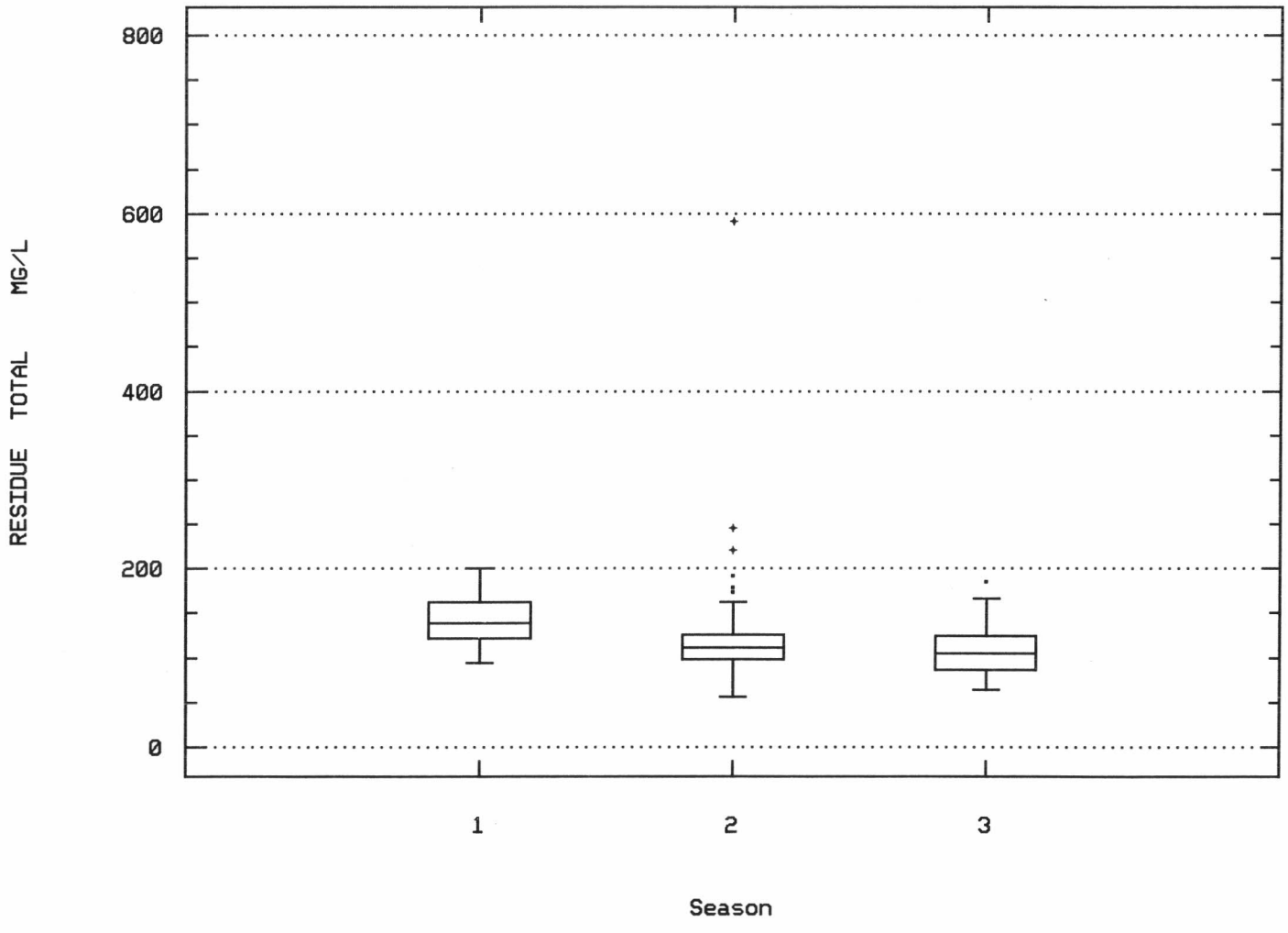
ALKALINITY, TOTAL (MG/L AS CACO3)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00500

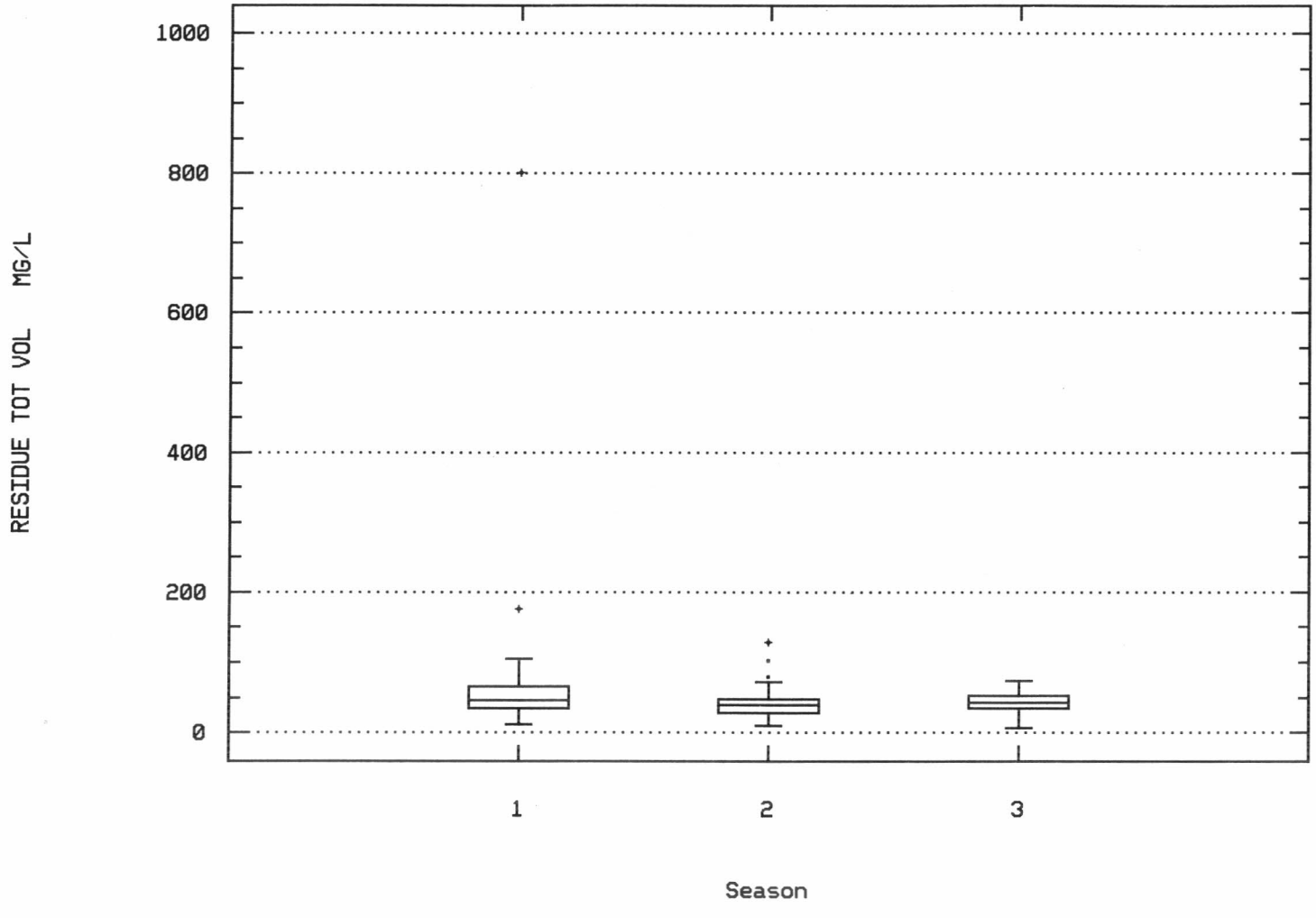
RESIDUE, TOTAL (MG/L)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00505

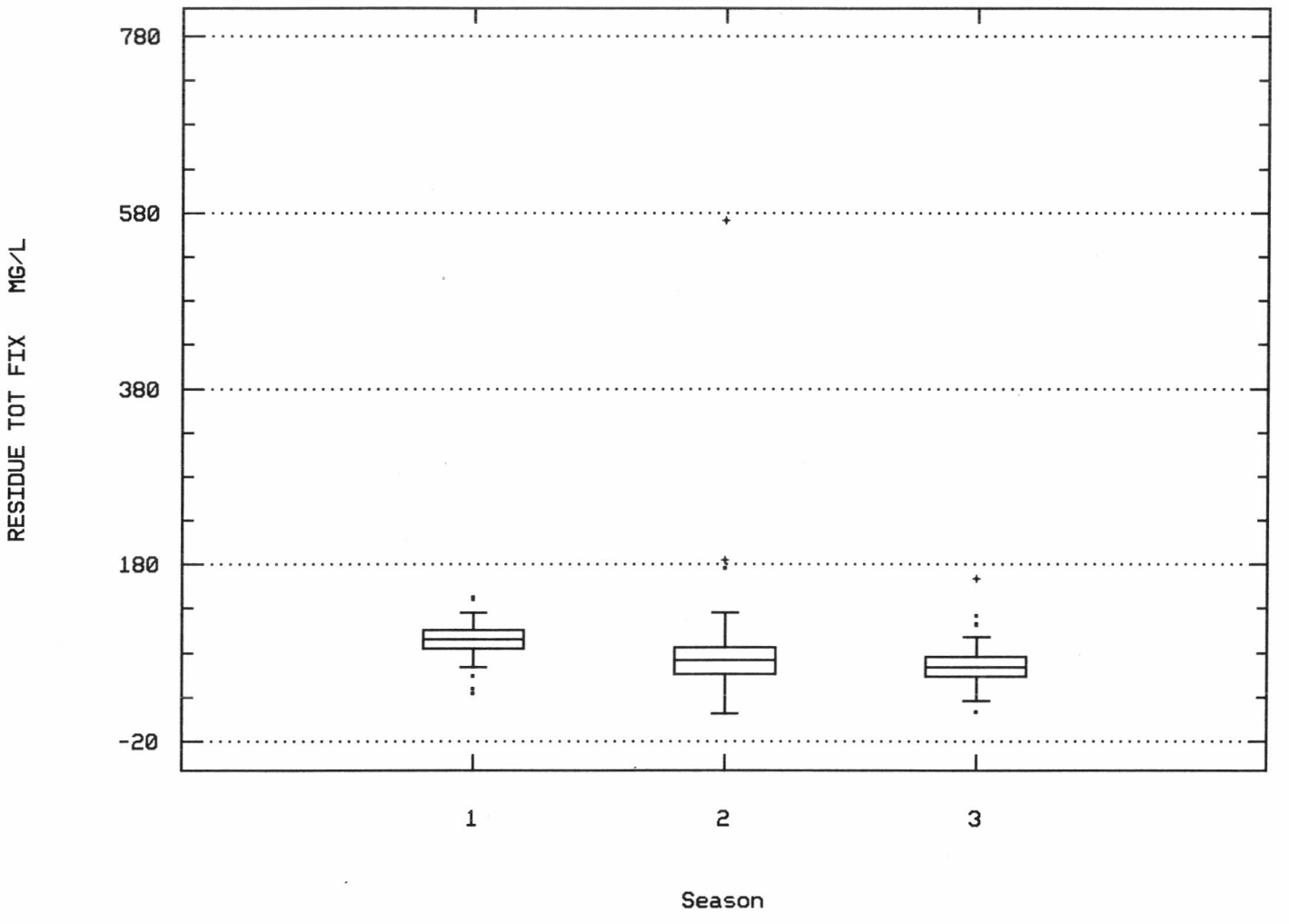
RESIDUE, TOTAL VOLATILE (MG/L)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00510

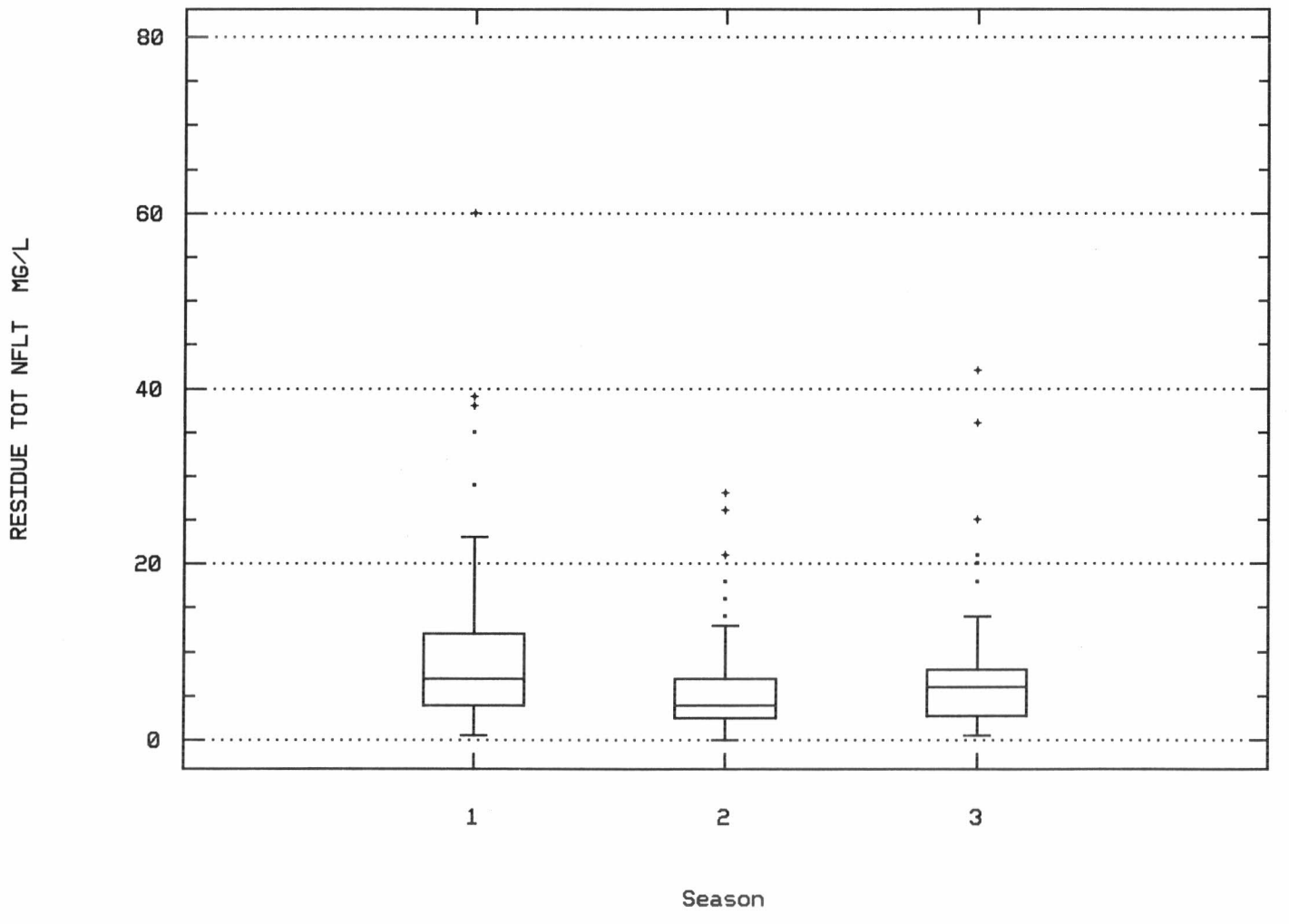
RESIDUE, TOTAL FIXED (MG/L)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00530

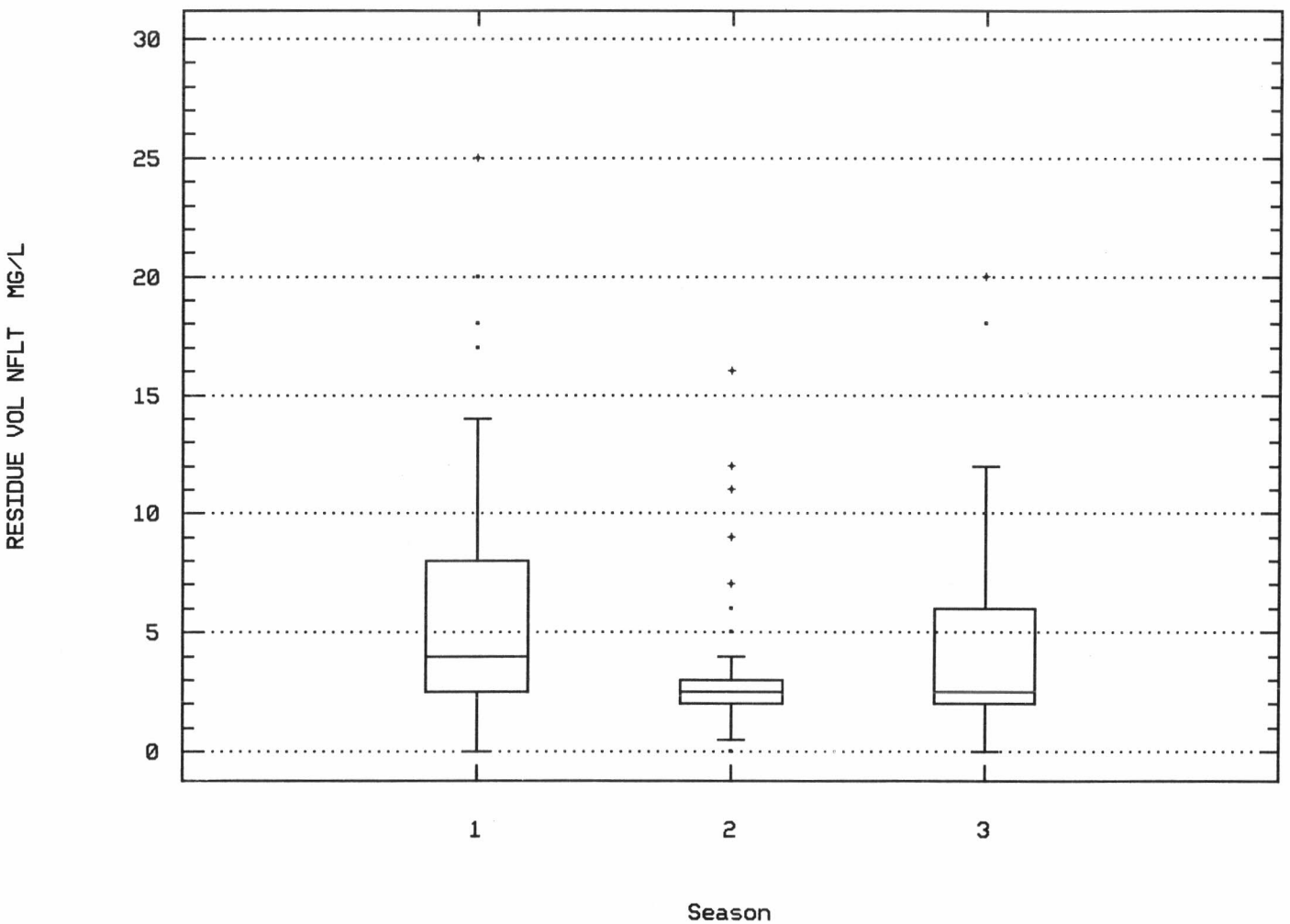
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00535

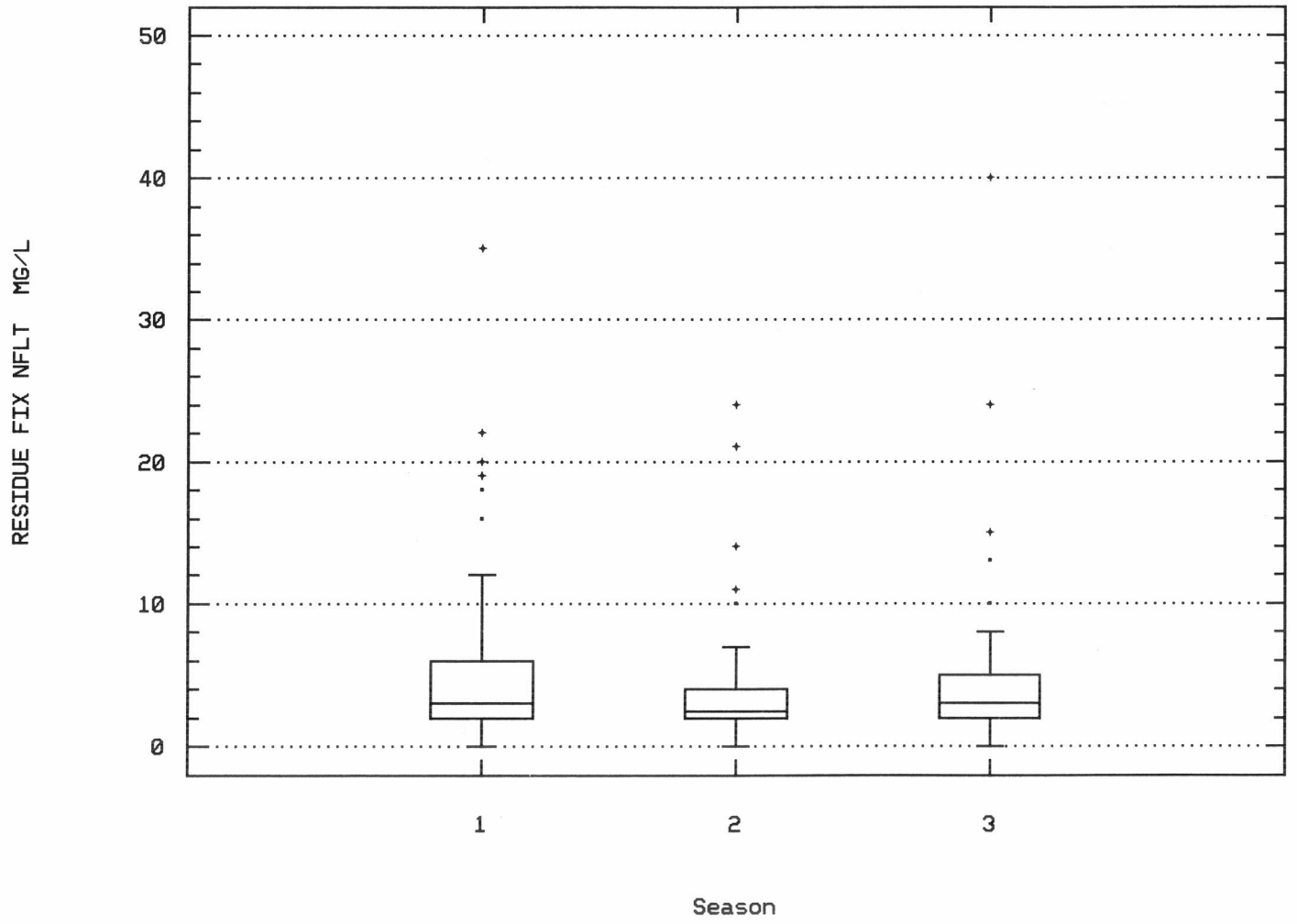
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00540

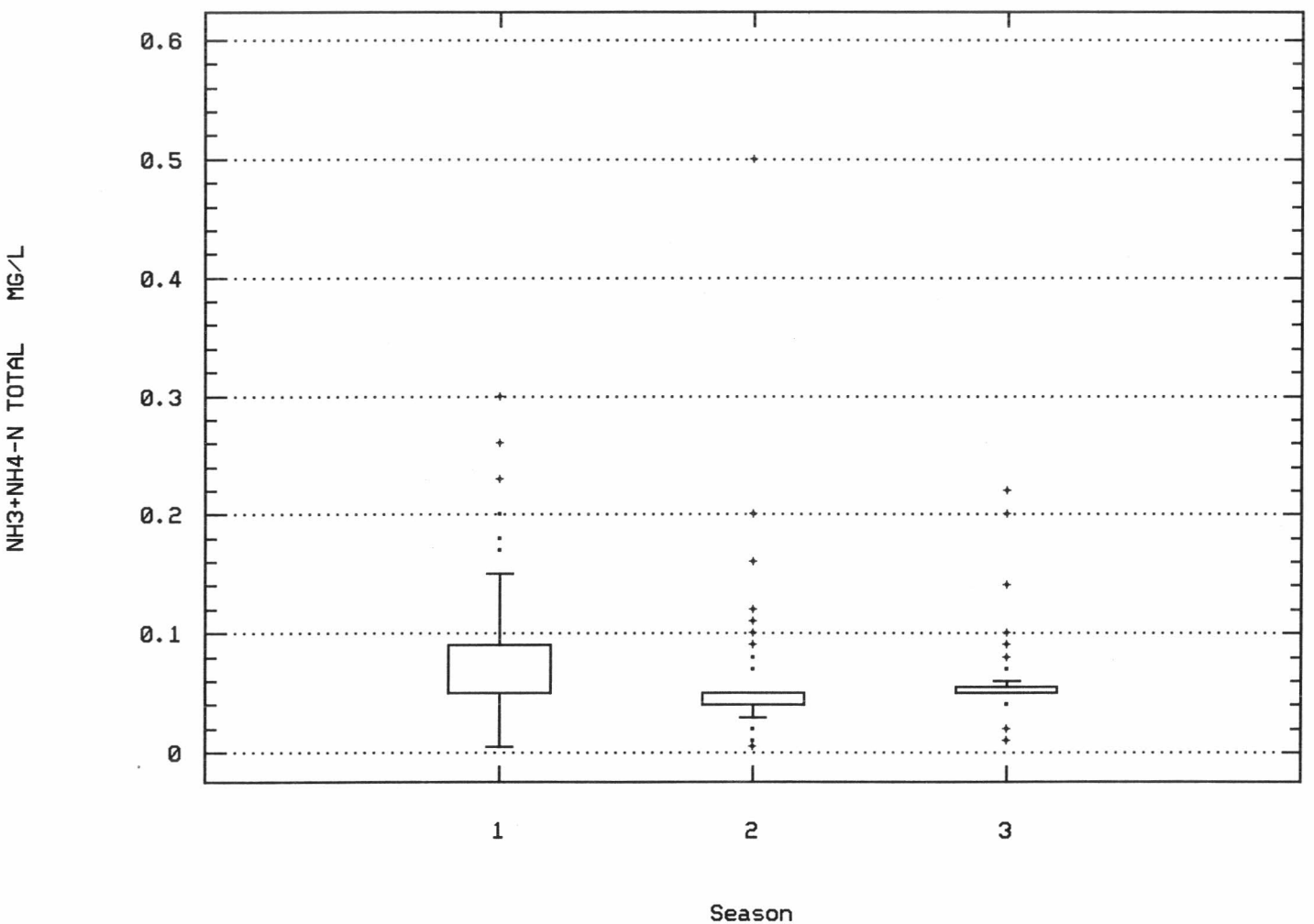
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00610

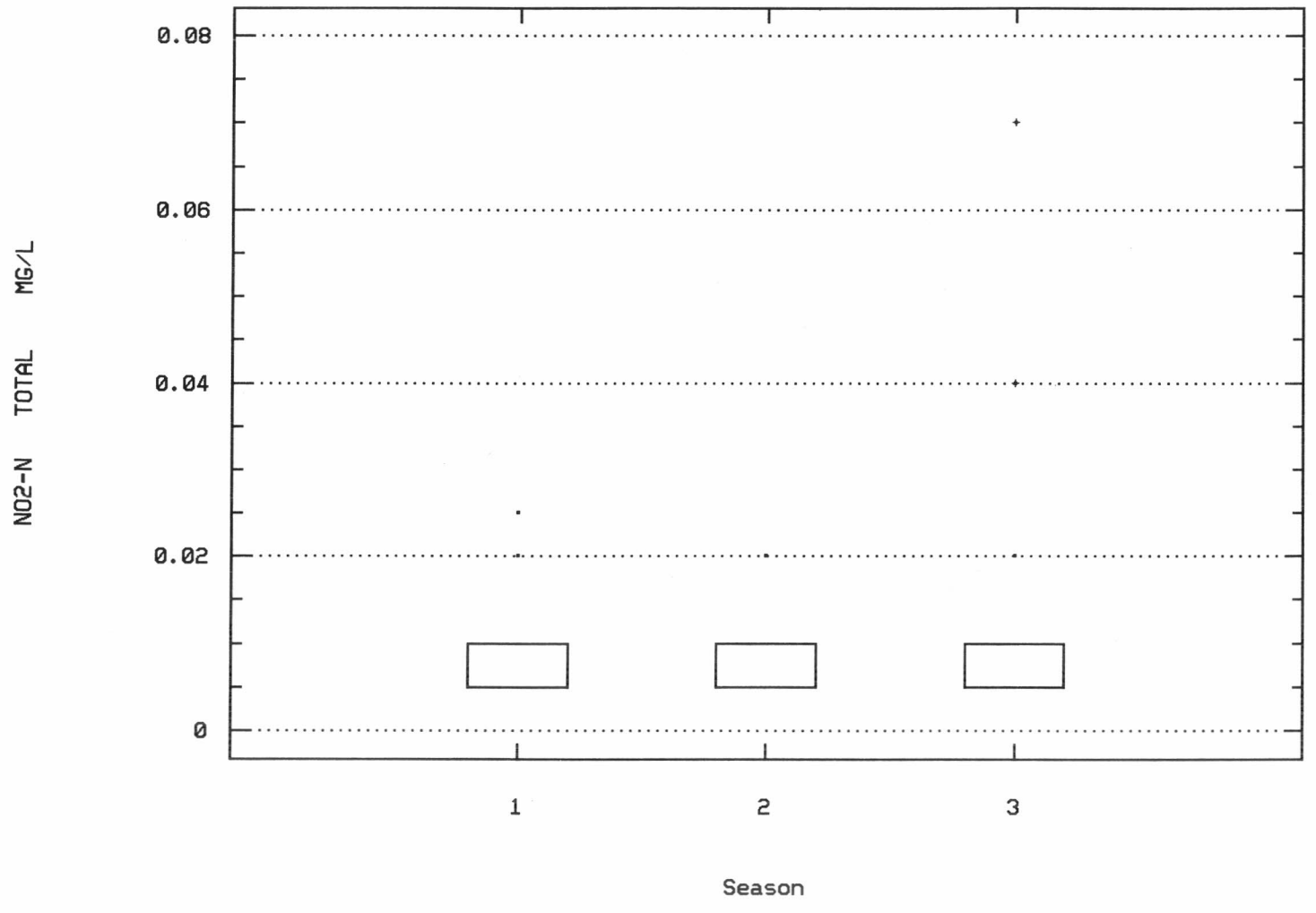
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00615

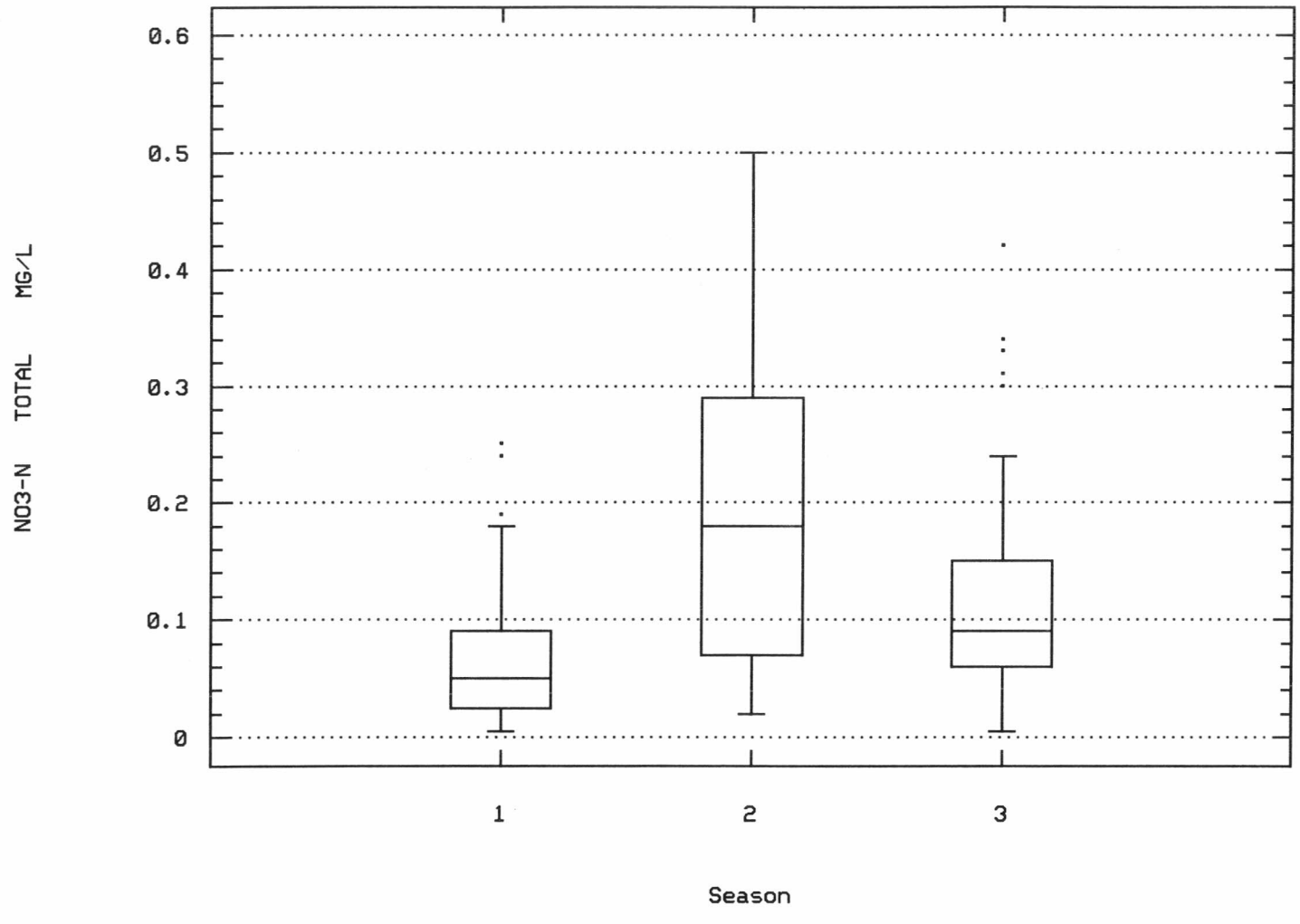
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00620

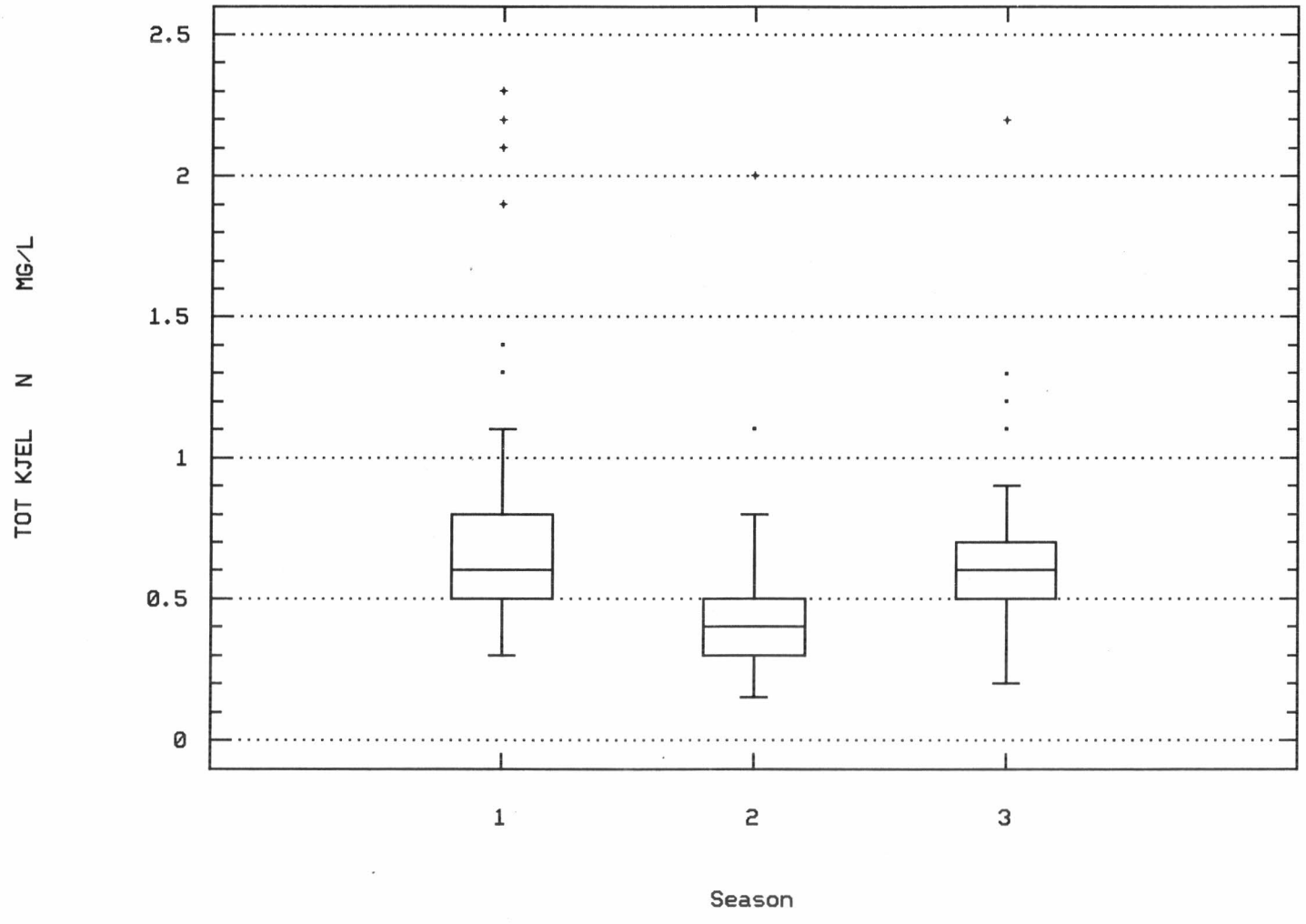
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00625

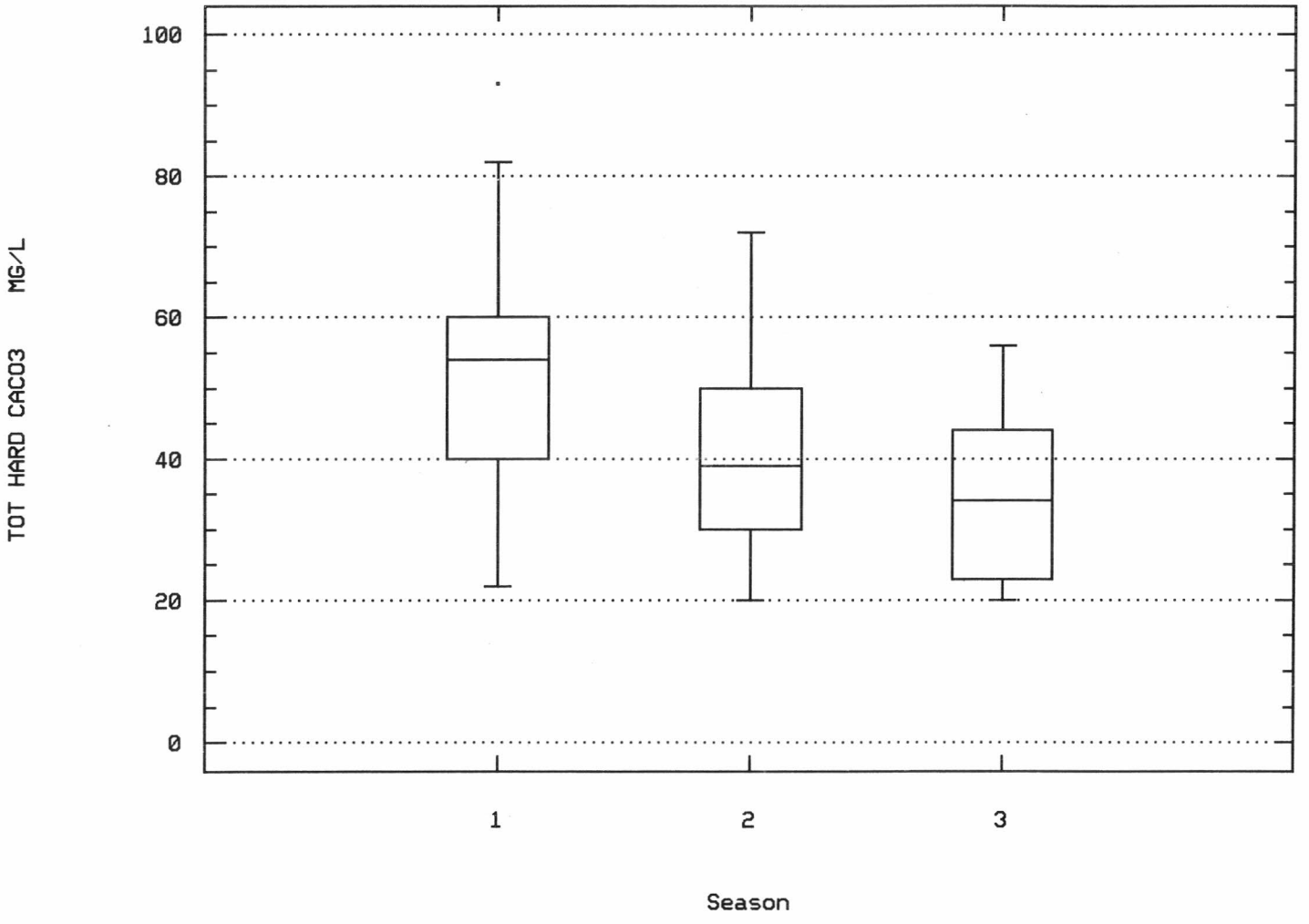
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 00900

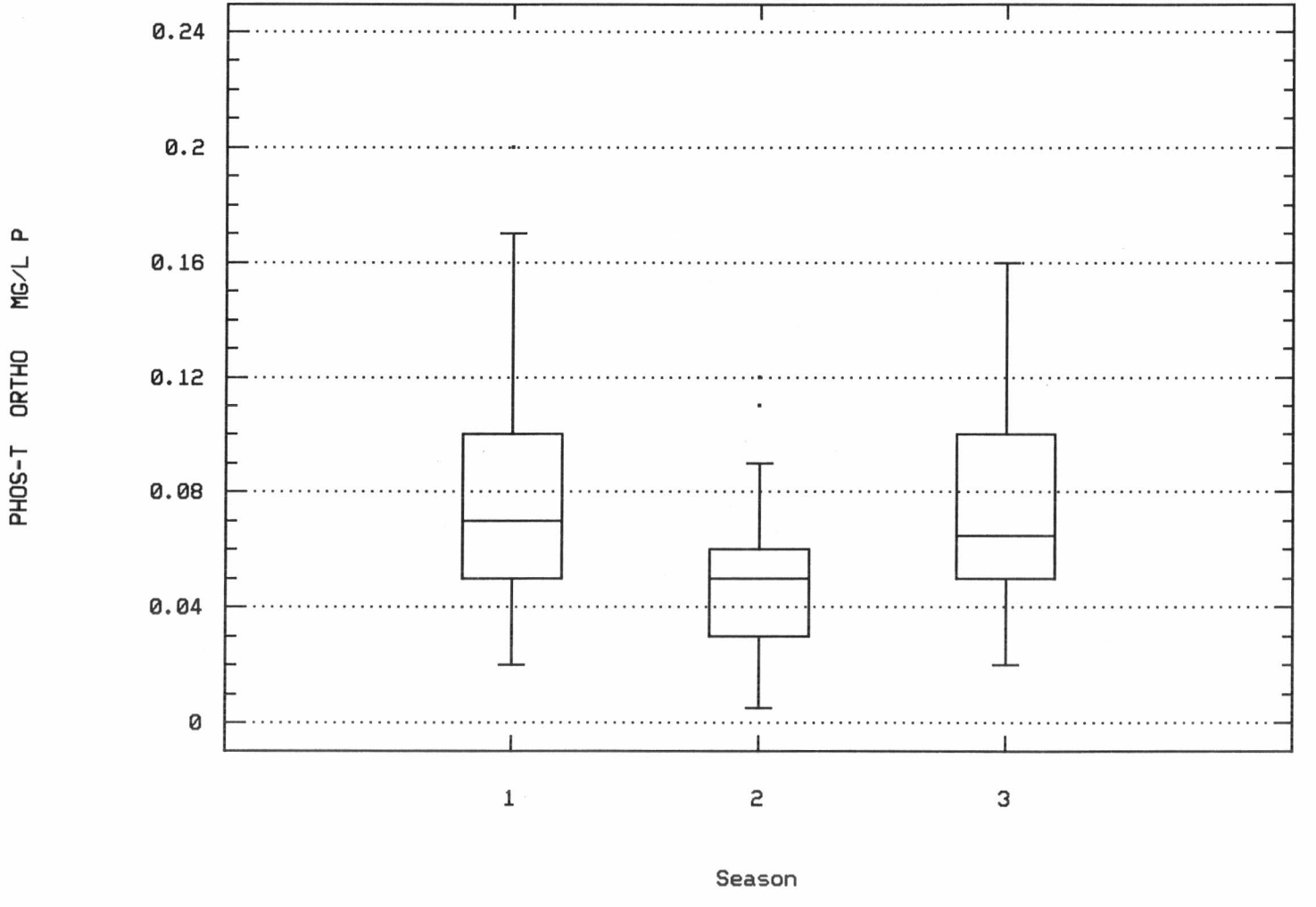
HARDNESS, TOTAL (MG/L AS CACO3)



RT. 360 BRIDGE

Station: RICH0134 Parameter Code: 70507

PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/



RT. 360 BRIDGE

Station Inventory for Station: RICH0135

NPS Station ID: RICH0135 LAT/LON: 37.595281/ -77.382504 Agency: 112WRD Date Created: 02/01/92
Location: CHICKAHOMINY R AT RT 360 NR MECHANICSVILLE, VA FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02042430
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 2.90 On/Off RF1:
RF3 Index: 02080206006215.09 RF3 Mile Point: 15.09 Distance from RF3: 0.03 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0135

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		08/16/85-08/16/85	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)		08/16/85-08/16/85	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00061 FLOW, STREAM, INSTANTANEOUS	CFS	08/16/85-08/16/85	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		08/16/85-08/16/85	1	217.	217.	217.	217.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

********** No EPA Water Quality Criteria exist to compare against the data at this station. **********

Station Inventory for Station: RICH0136

NPS Station ID: RICH0136 LAT/LON: 37.595837/ -77.358892 Agency: 112WRD Date Created: 12/22/84
Location: BEAVERDAM CREEK AT RT 156 AT MECHANICSVILLE, VA FIPS State/County: 51085 VIRGINIA/HANOVER
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02042433
RMI-Indexes: Within Park Boundary: Yes
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.50 On/Off RF1:
RF3 Index: 02080206003200.00 RF3 Mile Point: 0.00 Distance from RF3: 0.02 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0136

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/10/84-09/12/89	10	21.5	19.8	25.	12.	28.456	5.334	12.05	14.75	25.	25.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/10/84-09/12/89	8	24.5	20.875	27.5	10.	41.339	6.43	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	04/08/87-09/12/89	6	754.	756.167	767.	750.	43.367	6.585	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/10/84-09/12/89	10	7.5	8.2	20.	2.	26.622	5.16	2.1	4.5	10.5	19.2
00080	COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/12/89	6	56.	59.167	80.	40.	250.967	15.842	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/10/84-09/12/89	10	106.5	109.7	170.	88.	562.233	23.711	88.5	93.	116.25	165.
00300	OXYGEN, DISSOLVED MG/L	04/08/87-04/05/89	5	7.9	8.3	10.6	5.2	5.07	2.252	**	**	**	**
00400	PH (STANDARD UNITS)	04/08/87-09/12/89	6	6.5	6.483	6.8	6.	0.07	0.264	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/08/87-09/12/89	6	6.5	6.406	6.8	6.	0.077	0.277	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-09/12/89	6	0.316	0.393	1.	0.158	0.092	0.304	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/08/87-09/12/89	6	7.	7.117	7.6	6.7	0.13	0.36	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/08/87-09/12/89	6	6.989	7.009	7.6	6.7	0.144	0.379	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-09/12/89	6	0.103	0.098	0.2	0.025	0.004	0.066	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/10/84-09/12/89	7	0.03	0.041	0.08	0.005	0.001	0.029	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/10/84-09/12/89	7	0.4	0.457	0.6	0.3	0.02	0.14	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/10/84-09/12/89	7	1.	0.957	1.7	0.4	0.223	0.472	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/10/84-09/12/89	7	0.025	0.025	0.057	0.005	0.	0.017	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/12/89	6	0.005	0.007	0.02	0.001	0.	0.007	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/10/84-09/12/89	7	0.004	0.004	0.009	0.001	0.	0.003	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/10/84-09/12/89	7	4.8	4.714	6.	3.3	1.135	1.065	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/08/87-09/12/89	6	3.85	4.083	5.2	3.4	0.43	0.655	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/08/87-09/12/89	6	2.6	2.583	3.	2.1	0.098	0.313	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/08/87-09/12/89	6	9.45	9.717	11.	8.6	1.186	1.089	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/08/87-09/12/89	6	2.2	2.3	3.3	1.5	0.368	0.607	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/08/87-09/12/89	6	12.	12.333	15.	10.	2.667	1.633	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/08/87-09/12/89	6	9.5	9.333	12.	6.	6.267	2.503	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/08/87-09/12/89	6	0.1	0.125	0.3	0.05	0.008	0.088	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/08/87-09/12/89	6	3.95	4.033	6.	2.4	2.667	1.633	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/12/89	4##	0.75	0.75	1.	0.5	0.083	0.289	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	2##	1.25	1.25	2.	0.5	1.125	1.061	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/12/88-09/12/89	4##	0.75	1.75	5.	0.5	4.75	2.179	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-09/12/89	4##	0.5	0.875	2.	0.5	0.563	0.75	**	**	**	**
01037	COBALT, TOTAL (UG/L AS CO)	04/12/88-09/12/89	4##	0.5	0.625	1.	0.5	0.063	0.25	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	2##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/12/88-09/12/89	4	2.5	2.75	4.	2.	0.917	0.957	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/08/87-09/12/89	6	1700.	1866.667	3000.	1300.	390666.667	625.033	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/12/89	6	340.	366.667	610.	150.	23186.667	152.272	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	2##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0136

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01051 LEAD, TOTAL (UG/L AS PB)	04/12/88-09/12/89	4##	2.5	2.625	3.	2.5	0.063	0.25	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/12/89	6	95.	98.333	140.	70.	616.667	24.833	**	**	**	**
01056 MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-09/12/89	6	79.5	91.667	140.	62.	973.867	31.207	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	04/12/88-09/12/89	4##	0.75	1.75	5.	0.5	4.75	2.179	**	**	**	**
01090 ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	2	8.	8.	10.	6.	8.	2.828	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/12/89	4##	5.	8.75	20.	5.	56.25	7.5	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	04/12/88-09/12/89	4##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70331 SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/12/89	4	89.5	89.	94.	83.	24.667	4.967	**	**	**	**
71890 MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
71900 MERCURY, TOTAL (UG/L AS HG)	04/12/88-09/12/89	4##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-09/12/89	4	6.5	10.25	23.	5.	74.25	8.617	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0136

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	2	0	0.00				3	0	0.00			
00400 PH	Fresh Chronic	9.	6	0	0.00	3	0	0.00				3	0	0.00			
	Other-Lo Lim.	6.5	6	4	0.67	3	2	0.67				3	2	0.67			
00403 PH, LAB	Fresh Chronic	9.	6	0	0.00	3	0	0.00				3	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	3	0	0.00				3	0	0.00			
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	7	0	0.00	4	0	0.00				3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	6	0	0.00	3	0	0.00				3	0	0.00			
	Drinking Water	250.	6	0	0.00	3	0	0.00				3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	3	0	0.00				3	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	6	0	0.00	3	0	0.00				3	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	50.	4	0	0.00	2	0	0.00				2	0	0.00			
01025 CADMIUM, DISSOLVED	Fresh Acute	3.9	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	5.	2	0	0.00	1	0	0.00				1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	4	1	0.25	2	0	0.00				2	1	0.50			
	Drinking Water	5.	4	1	0.25	2	0	0.00				2	1	0.50			
01034 CHROMIUM, TOTAL	Drinking Water	100.	4	0	0.00	2	0	0.00				2	0	0.00			
01040 COPPER, DISSOLVED	Fresh Acute	18.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	1300.	2	0	0.00	1	0	0.00				1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	1300.	4	0	0.00	2	0	0.00				2	0	0.00			
01049 LEAD, DISSOLVED	Fresh Acute	82.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	15.	2	0	0.00	1	0	0.00				1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	15.	4	0	0.00	2	0	0.00				2	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	100.	4	0	0.00	2	0	0.00				2	0	0.00			
01090 ZINC, DISSOLVED	Fresh Acute	120.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	5000.	2	0	0.00	1	0	0.00				1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	5000.	4	0	0.00	2	0	0.00				2	0	0.00			
01147 SELENIUM, TOTAL	Fresh Acute	20.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	50.	4	0	0.00	2	0	0.00				2	0	0.00			
71890 MERCURY, DISSOLVED	Fresh Acute	2.4	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	2.	2	0	0.00	1	0	0.00				1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	2.	4	0	0.00	2	0	0.00				2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0137

NPS Station ID: RICH0137 LAT/LON: 37.596670/ -77.471115 Agency: 21VASWCB Date Created: 07/10/93
Location: YOUGS POND CENTER (HENRICO CO) FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/LAKE STORET Station ID(s): 2-UPM005.90
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: UPHAM RUN SECTION: 05 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA
LAKE STATION

Parameter Inventory for Station: RICH0137

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

******** No Parameter Data Available for this Station ********

Station Inventory for Station: RICH0138

NPS Station ID: RICH0138 LAT/LON: 37.597226/ -77.465281 Agency: 21VASWCB Date Created: 06/26/93
Location: YOUNGS POND INFLOW (HENRICO CO) FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/LAKE STORET Station ID(s): 2-UPM006.30
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080205 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080205 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: UPHAM RUN YOUNGS POND SECTION: 05 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA
LAKE STATION

Parameter Inventory for Station: RICH0138

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

******** No Parameter Data Available for this Station ********

Station Inventory for Station: RICH0139

NPS Station ID: RICH0139 LAT/LON: 37.598059/ -77.471948 Agency: 21VASWCB Date Created: 06/26/93
Location: YOUNGS POND OUTFALL FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/LAKE STORET Station ID(s): 2-UPM005.64
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: UPHAM RUN SECTION: 05 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA
LAKE STATION

Parameter Inventory for Station: RICH0139

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th

******** No Parameter Data Available for this Station ********

Station Inventory for Station: RICH0140

NPS Station ID: RICH0140 LAT/LON: 37.598337/ -77.358616 Agency: 21VASWCB Date Created: 05/06/95
Location: BEAVERDAM CREEK, RT 156 BRIDGE
Station Type: /TYPA/AMBNT/STREAM
RMI-Indexes:
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: BEAVERDAM CREEK SECTION: 05 TOPO MAP #: 0039 TOPO MAP NAME: SEVEN PINES, VA

Parameter Inventory for Station: RICH0140

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/19/94-10/19/94	2	20.4	20.4	27.2	13.6	92.48	9.617	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	10/19/94-10/19/94	1	114.	114.	114.	114.	0.	0.	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	07/19/94-10/19/94	2	6.6	6.6	7.6	5.6	2.	1.414	**	**	**	**
00400 PH (STANDARD UNITS)	07/19/94-10/19/94	2	6.265	6.265	6.36	6.17	0.018	0.134	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/19/94-10/19/94	2	6.255	6.255	6.36	6.17	0.018	0.135	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/19/94-10/19/94	2	0.556	0.556	0.676	0.437	0.029	0.169	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0140

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00						
00400 PH	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00						
	Other-Lo Lim.	6.5	2	2	1.00	1	1	1.00	1	1	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0141

NPS Station ID: RICH0141 LAT/LON: 37.608337/ -77.441670 Agency: 21VASWCB Date Created: 06/26/93
Location: THREE LAKES PARK LAKE CENTER (HENRICO CO) FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/LAKE STORET Station ID(s): 2-TLP000.10
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206000501.22 RF3 Mile Point: 1.58 Distance from RF3: 0.29 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 4 PIEDMONT
RIVER: THREE LAKES PARK LAKE SECTION: 05 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA
LAKE STATION

Parameter Inventory for Station: RICH0141

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/11/88-07/11/88	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/11/88-07/11/88	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/11/88-07/11/88	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/11/88-07/11/88	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	07/11/88-07/11/88	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/11/88-07/11/88	1	2400.	2400.	2400.	2400.	0.	0.	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/11/88-07/11/88	1	3.38	3.38	3.38	3.38	0.	0.	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	2400.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0141

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	1	1.00	1	1	1.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0142

NPS Station ID: RICH0142 LAT/LON: 37.610282/ -77.409448 Agency: 112WRD Date Created: 12/22/84
Location: UPHAM BROOK AT RT 627 NEAR RICHMOND, VA FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02042427
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 1.40 On/Off RF1:
RF3 Index: 02080206006213.37 RF3 Mile Point: 13.37 Distance from RF3: 0.02 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0142

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/10/84-08/16/85	4	22.	19.75	24.5	10.5	42.083	6.487	**	**	**	**
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)		09/10/84-08/16/85	4	23.25	21.25	25.	13.5	28.417	5.331	**	**	**	**
00061 FLOW, STREAM, INSTANTANEOUS	CFS	09/10/84-08/16/85	4	1.35	4.	13.	0.3	36.527	6.044	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		09/10/84-08/16/85	4	222.5	225.	235.	220.	50.	7.071	**	**	**	**
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		09/10/84-09/10/84	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		09/10/84-09/10/84	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)		09/10/84-09/10/84	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		09/10/84-09/10/84	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		09/10/84-09/10/84	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		09/10/84-09/10/84	1	6.	6.	6.	6.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0142

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15-3/15 Obs	10/15-3/15 Exceed	10/15-3/15 Prop.	3/16-6/30 Obs	3/16-6/30 Exceed	3/16-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0143

NPS Station ID: RICH0143 LAT/LON: 37.611392/ -77.371726 Agency: 21VASWCB Date Created: / /
Location: RT. 627 BRIDGE FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 2-CHK064.64 /VA2-05-X0058/VA2-4X0058
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206006211.63 RF3 Mile Point: 12.87 Distance from RF3: 0.01 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: CHICKAHOMINY RI. SECTION: 05 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0143

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-06/14/79	108	16.1	15.756	30.	0.	64.502	8.031	5.48	8.45	22.2	25.65
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	107	7.	6.942	13.4	0.8	10.028	3.167	2.96	4.1	9.8	11.04
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/12/67-09/09/75	21	2.6	2.538	5.	1.	0.667	0.817	1.36	2.1	2.8	3.48
00400 PH (STANDARD UNITS)		09/20/67-06/14/79	108	6.5	6.506	8.	2.	0.319	0.565	6.	6.4	6.7	7.
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-06/14/79	108	6.5	4.032	8.	2.	6.497	2.549	6.	6.4	6.7	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-06/14/79	108	0.316	92.978	10000.	0.01	925854.042	962.213	0.1	0.2	0.398	1.
00403 PH, LAB, STANDARD UNITS	SU	09/20/67-10/29/70	12	6.55	6.492	7.2	5.4	0.179	0.423	5.67	6.4	6.6	7.11
00403 CONVERTED PH, LAB, STANDARD UNITS		09/20/67-10/29/70	12	6.547	6.223	7.2	5.4	0.258	0.508	5.67	6.4	6.6	7.11
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-10/29/70	12	0.284	0.599	3.981	0.063	1.149	1.072	0.082	0.251	0.398	2.937
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		09/20/67-10/29/70	12	15.5	20.25	49.	3.	216.386	14.71	4.5	10.	32.5	47.2
00500 RESIDUE, TOTAL (MG/L)		10/07/68-06/14/79	101	107.	120.01	989.	1.	8960.49	94.66	72.	86.5	133.	171.4
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-06/14/79	103	44.	46.816	137.	2.	527.309	22.963	18.2	33.	59.	75.2
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-06/14/79	99	60.	74.697	881.	12.	7568.601	86.998	33.	47.	84.	108.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-06/14/79	99	7.	11.167	102.	0.	258.413	16.075	0.5	3.	11.	24.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-06/14/79	102	3.	4.696	44.	0.	34.451	5.87	0.5	1.75	6.	9.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-06/14/79	96	3.	6.771	74.	0.	157.084	12.533	0.	1.	6.	16.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-06/14/79	100##	0.05	0.092	1.	0.005	0.018	0.135	0.031	0.05	0.07	0.2
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/14/79	100##	0.005	0.01	0.11	0.005	0.	0.016	0.005	0.005	0.01	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/08/77	82	0.12	0.161	1.189	0.005	0.03	0.173	0.022	0.06	0.213	0.361
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-06/14/79	99	0.5	0.765	8.699	0.2	0.875	0.935	0.3	0.4	0.8	1.
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		08/17/77-06/14/79	18##	0.025	0.123	0.48	0.025	0.024	0.156	0.025	0.025	0.208	0.444
00660 PHOSPHATE, ORTHO (MG/L AS PO4)		10/07/68-07/16/69	4	0.195	0.203	0.25	0.17	0.001	0.034	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)		09/20/67-10/12/67	2	32.	32.	36.	28.	32.	5.657	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	07/30/75-07/30/75	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)		04/28/71-11/20/78	8##	2.	1.813	2.5	1.	0.567	0.753	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)		11/23/70-11/20/78	12##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01034 CHROMIUM, TOTAL (UG/L AS CR)		03/24/70-11/20/78	22##	5.	7.5	20.	5.	13.69	3.7	5.	5.	10.	10.
01042 COPPER, TOTAL (UG/L AS CU)		03/24/70-11/20/78	21##	5.	7.381	20.	5.	21.548	4.642	5.	5.	10.	18.
01045 IRON, TOTAL (UG/L AS FE)		06/29/70-11/20/78	4	1769.5	1884.75	3000.	1000.	775396.917	880.566	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)		06/29/70-11/20/78	18##	5.	7.972	26.	1.	41.367	6.432	1.9	4.75	10.	20.6
01055 MANGANESE, TOTAL (UG/L AS MN)		03/24/70-11/20/78	4	164.9	577.45	1900.	80.	779813.337	883.07	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)		01/23/73-11/20/78	9##	50.	40.	50.	5.	393.75	19.843	5.	27.5	50.	50.
01092 ZINC, TOTAL (UG/L AS ZN)		03/24/70-11/20/78	22	10.	28.636	240.	5.	2717.1	52.126	5.	5.	20.	88.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0143

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/20/67-10/28/77	18	4450.	23987.222	110000.	430.	1359253480.065	36868.055	430.	670.	43000.	94700.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	09/20/67-10/28/77	18	3.648	3.737	5.041	2.633	0.733	0.856	2.633	2.815	4.633	4.976
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	5457.039								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	87##	50.	302.299	7100.	50.	900808.607	949.109	50.	50.	200.	300.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	87##	1.699	2.005	3.851	1.699	0.209	0.457	1.699	1.699	2.301	2.477
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	101.27								
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	08/11/74-08/11/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	95	0.1	0.093	0.3	0.05	0.003	0.059	0.05	0.05	0.1	0.2
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/14/79	95	0.05	0.086	2.	0.005	0.041	0.202	0.03	0.04	0.1	0.1
71900	MERCURY, TOTAL (UG/L AS HG)	09/21/70-11/20/78	19##	0.25	0.225	0.25	0.025	0.004	0.063	0.1	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0143

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	107	25	0.23	32	16	0.50	42	4	0.10	33	5	0.15			
00400	PH	Fresh Chronic	9.	108	0	0.00	33	0	0.00	42	0	0.00	33	0	0.00			
		Other-Lo Lim.	6.5	108	67	0.62	33	22	0.67	42	23	0.55	33	22	0.67			
00403	PH, LAB	Fresh Chronic	9.	12	0	0.00	4	0	0.00	3	0	0.00	5	0	0.00			
		Other-Lo Lim.	6.5	12	6	0.50	4	2	0.50	3	2	0.67	5	2	0.40			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	100	0	0.00	28	0	0.00	40	0	0.00	32	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	82	0	0.00	24	0	0.00	32	0	0.00	26	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	18	0	0.00	4	0	0.00	8	0	0.00	6	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	8	0	0.00	1	0	0.00	3	0	0.00	4	0	0.00			
		Drinking Water	50.	8	0	0.00	1	0	0.00	3	0	0.00	4	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	0&	0	0.00												
		Drinking Water	5.	0&	0	0.00												
01034	CHROMIUM, TOTAL	Drinking Water	100.	22	0	0.00	2	0	0.00	8	0	0.00	12	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	21	2	0.10	2	1	0.50	8	0	0.00	11	1	0.09			
		Drinking Water	1300.	21	0	0.00	2	0	0.00	8	0	0.00	11	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	18	0	0.00	2	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	15.	18	2	0.11	2	0	0.00	8	2	0.25	8	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	9	0	0.00				3	0	0.00	6	0	0.00			
		Drinking Water	100.	9	0	0.00				3	0	0.00	6	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	22	1	0.05	2	0	0.00	8	1	0.13	12	0	0.00			
		Drinking Water	5000.	22	0	0.00	2	0	0.00	8	0	0.00	12	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	18	13	0.72	9	7	0.78	4	3	0.75	5	3	0.60			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	87	22	0.25	24	8	0.33	38	9	0.24	25	5	0.20			
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00	1	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	19	0	0.00	3	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	2.	19	0	0.00	3	0	0.00	8	0	0.00	8	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1967 - Station RICH0143

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-06/14/79	2	19.15	19.15	25.	13.3	68.445	8.273	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)		09/20/67-06/14/79	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-06/14/79	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-06/14/79	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-06/14/79	2	105.5	105.5	137.	74.	1984.5	44.548	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-06/14/79	2	4.5	4.5	8.	1.	24.5	4.95	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1968 - Station RICH0143

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-06/14/79	5	23.3	21.54	26.1	13.9	21.388	4.625	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	5	4.5	4.3	5.5	2.5	1.325	1.151	**	**	**	**
00400 PH (STANDARD UNITS)		09/20/67-06/14/79	5	6.5	6.44	7.	6.	0.193	0.439	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-06/14/79	5	6.5	6.281	7.	6.	0.224	0.474	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-06/14/79	5	0.316	0.523	1.	0.1	0.195	0.442	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-06/14/79	1	196.	196.	196.	196.	0.	0.	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-06/14/79	1	55.	55.	55.	55.	0.	0.	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-06/14/79	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-06/14/79	1	0.44	0.44	0.44	0.44	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/14/79	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/08/77	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-06/14/79	1	2.099	2.099	2.099	2.099	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station RICH0143

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-06/14/79	3	20.6	17.6	28.9	3.3	170.59	13.061	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	3	7.8	6.933	10.	3.	12.813	3.58	**	**	**	**
00400 PH (STANDARD UNITS)		09/20/67-06/14/79	3	6.7	6.567	6.9	6.1	0.173	0.416	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-06/14/79	3	6.7	6.428	6.9	6.1	0.202	0.45	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-06/14/79	3	0.2	0.373	0.794	0.126	0.134	0.367	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		10/07/68-06/14/79	3	90.	107.	142.	89.	919.	30.315	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-06/14/79	3	14.	29.	65.	8.	981.	31.321	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-06/14/79	2	79.5	79.5	82.	77.	12.5	3.536	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-06/14/79	2	10.5	10.5	16.	5.	60.5	7.778	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-06/14/79	3	5.	5.667	8.	4.	4.333	2.082	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-06/14/79	2	4.5	4.5	8.	1.	24.5	4.95	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-06/14/79	3	0.05	0.113	0.25	0.04	0.014	0.118	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/14/79	3##	0.005	0.04	0.11	0.005	0.004	0.061	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/08/77	3	0.06	0.073	0.12	0.04	0.002	0.042	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-06/14/79	3	0.59	1.043	2.269	0.27	1.153	1.074	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station RICH0143

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-06/14/79	11	16.1	15.236	23.3	3.9	60.321	7.767	4.	6.1	22.2	23.08
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	11	7.8	7.345	11.2	3.6	5.889	2.427	3.76	5.	9.4	10.92
00400 PH (STANDARD UNITS)		09/20/67-06/14/79	11	6.6	6.6	6.9	6.2	0.046	0.214	6.22	6.5	6.8	6.88
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-06/14/79	11	6.6	6.549	6.9	6.2	0.049	0.221	6.22	6.5	6.8	6.88
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-06/14/79	11	0.251	0.283	0.631	0.126	0.024	0.156	0.132	0.158	0.316	0.605
00500 RESIDUE, TOTAL (MG/L)		10/07/68-06/14/79	11	169.	225.545	989.	86.	66069.673	257.04	88.6	102.	201.	832.4
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-06/14/79	11	51.	56.455	108.	24.	470.073	21.681	27.4	43.	64.	101.
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-06/14/79	11	96.	169.091	881.	45.	57615.491	240.032	46.4	56.	153.	738.4
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-06/14/79	11	8.	17.818	102.	1.	828.364	28.781	1.6	5.	16.	87.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-06/14/79	11	4.	7.636	44.	1.	149.255	12.217	1.2	3.	6.	36.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-06/14/79	10	5.5	11.2	58.	0.	310.178	17.612	0.1	1.75	11.5	54.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-06/14/79	10	0.205	0.27	1.	0.04	0.082	0.287	0.041	0.08	0.338	0.945
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/14/79	10##	0.005	0.011	0.03	0.005	0.	0.009	0.005	0.005	0.02	0.029
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/08/77	10	0.1	0.107	0.28	0.005	0.009	0.094	0.006	0.018	0.19	0.274
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-06/14/79	10	0.725	1.145	3.	0.4	0.993	0.997	0.4	0.475	1.774	2.99
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-04/24/79	2	3600.	3600.	7100.	100.	24500000.	4949.747	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-04/24/79	2	2.926	2.926	3.851	2.	1.714	1.309	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		842.615									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-06/14/79	10	0.125	0.135	0.3	0.05	0.007	0.082	0.05	0.05	0.2	0.29
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-06/14/79	10	0.075	0.1	0.25	0.01	0.007	0.081	0.012	0.03	0.163	0.245

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station RICH0143

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-06/14/79	11	15.6	15.773	28.3	1.7	85.196	9.23	2.48	6.7	23.3	28.2
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	11	8.	7.591	11.	3.	8.893	2.982	3.2	4.6	10.2	10.96
00400 PH (STANDARD UNITS)		09/20/67-06/14/79	11	6.7	6.491	6.8	5.8	0.113	0.336	5.84	6.3	6.7	6.8
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-06/14/79	11	6.7	6.35	6.8	5.8	0.135	0.367	5.84	6.3	6.7	6.8
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-06/14/79	11	0.2	0.447	1.585	0.158	0.203	0.451	0.158	0.2	0.501	1.468
00500 RESIDUE, TOTAL (MG/L)		10/07/68-06/14/79	11	96.	111.091	166.	52.	1414.891	37.615	58.4	85.	153.	166.
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-06/14/79	11	42.	48.727	85.	16.	436.418	20.891	19.4	35.	67.	83.2
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-06/14/79	11	65.	62.364	104.	18.	735.255	27.116	18.2	47.	81.	101.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-06/14/79	11	8.	11.545	30.	3.	79.073	8.892	3.2	4.	18.	28.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-06/14/79	11	4.	5.091	10.	2.	9.091	3.015	2.	2.	8.	9.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-06/14/79	11	5.	6.455	23.	1.	46.873	6.846	1.	1.	10.	21.2
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-06/14/79	11	0.07	0.084	0.22	0.01	0.005	0.069	0.01	0.04	0.11	0.216
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/14/79	11	0.01	0.01	0.02	0.005	0.	0.004	0.006	0.01	0.01	0.018
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/08/77	11	0.14	0.186	0.39	0.005	0.02	0.143	0.012	0.08	0.39	0.39
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-06/14/79	11	0.5	0.564	1.	0.3	0.043	0.206	0.32	0.4	0.7	0.96
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-04/24/79	11##	50.	540.909	4600.	50.	1849909.091	1360.114	50.	50.	200.	3820.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-04/24/79	11##	1.699	2.064	3.663	1.699	0.416	0.645	1.699	1.699	2.301	3.499
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		115.821									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-06/14/79	11	0.1	0.114	0.3	0.05	0.006	0.074	0.05	0.05	0.1	0.28
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-06/14/79	11	0.1	0.257	2.	0.03	0.335	0.579	0.034	0.06	0.1	1.632

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station RICH0143

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-06/14/79	11	12.2	14.045	30.	2.2	74.937	8.657	2.88	7.2	21.7	28.78
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	10	10.	8.98	13.2	4.6	9.133	3.022	4.62	6.15	11.4	13.08
00400 PH (STANDARD UNITS)		09/20/67-06/14/79	11	6.5	6.464	6.8	6.2	0.041	0.201	6.2	6.3	6.5	6.8

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Annual Analysis for 1972 - Station RICH0143

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-06/14/79	11	6.5	6.424	6.8	6.2	0.042	0.206	6.2	6.3	6.5	6.8
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/14/79	11	0.316	0.376	0.631	0.158	0.026	0.16	0.158	0.316	0.501	0.631
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	11	108.	109.636	172.	67.	1253.655	35.407	68.	77.	146.	168.2
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	11	46.	45.455	89.	20.	359.873	18.97	20.8	33.	54.	83.2
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	11	55.	64.182	118.	44.	625.964	25.019	44.	47.	72.	115.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	11	10.	13.818	60.	4.	258.764	16.086	4.	4.	15.	51.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	11	3.	5.091	20.	1.	34.291	5.856	1.	2.	6.	18.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	11	4.	8.727	40.	1.	126.018	11.226	1.4	3.	10.	35.2
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	11	0.02	0.042	0.2	0.005	0.003	0.055	0.005	0.01	0.05	0.172
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	11	0.01	0.01	0.01	0.005	0.	0.002	0.006	0.01	0.01	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	11	0.13	0.155	0.29	0.06	0.008	0.09	0.062	0.09	0.28	0.29
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	11	0.5	0.518	1.	0.3	0.056	0.236	0.3	0.3	0.6	0.98
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	11	100.	140.909	400.	50.	10909.091	104.447	50.	50.	200.	360.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	11	2.	2.055	2.602	1.699	0.087	0.296	1.699	1.699	2.301	2.542
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN = 113.431											
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	11##	0.05	0.073	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/14/79	11	0.06	0.065	0.1	0.03	0.001	0.025	0.032	0.04	0.09	0.1

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Annual Analysis for 1973 - Station RICH0143

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/14/79	11	17.8	14.7	25.6	6.1	51.64	7.186	6.22	7.8	21.1	24.92
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	11	8.	7.627	13.2	2.	10.4	3.225	2.6	5.	10.3	12.76
00400 PH (STANDARD UNITS)	09/20/67-06/14/79	11	6.5	6.145	6.8	2.	1.925	1.387	2.82	6.5	6.7	6.78
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-06/14/79	11	6.5	3.041	6.8	2.	12.524	3.539	2.82	6.5	6.7	6.78
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/14/79	11	0.316	909.37	10000.	0.158	9090351.403	3015.021	0.167	0.2	0.316	8000.159
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	11	100.	90.273	123.	1.	1278.218	35.752	13.6	75.	121.	122.8
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	11	33.	32.727	67.	11.	248.218	15.755	11.2	22.	42.	62.2
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	11	65.	66.727	110.	12.	950.018	30.822	16.2	38.	99.	108.4
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	11	7.	9.273	24.	1.	60.618	7.786	1.2	2.	17.	23.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	11	3.	5.	20.	0.	34.8	5.899	0.2	1.	9.	17.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	10	2.5	4.7	22.	0.	43.122	6.567	0.1	1.	5.75	20.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	11##	0.05	0.135	0.7	0.02	0.038	0.195	0.026	0.05	0.16	0.6
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	11##	0.005	0.007	0.01	0.005	0.	0.003	0.005	0.005	0.01	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	11	0.13	0.265	1.189	0.005	0.112	0.334	0.008	0.06	0.34	1.033
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	11	0.9	0.927	1.399	0.3	0.068	0.261	0.4	0.9	1.	1.339
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	10	100.	110.	300.	50.	6555.556	80.966	50.	50.	125.	290.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	10	2.	1.957	2.477	1.699	0.074	0.271	1.699	1.699	2.075	2.46
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN = 90.657											
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	11	0.1	0.1	0.2	0.05	0.003	0.055	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/14/79	11	0.1	0.088	0.15	0.05	0.001	0.031	0.05	0.05	0.1	0.14

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station RICH0143

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/14/79	10	14.45	16.11	27.2	6.7	65.75	8.109	6.81	9.	24.7	27.04
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	10	7.1	7.92	12.4	4.	7.426	2.725	4.15	5.875	10.975	12.28
00400 PH (STANDARD UNITS)	09/20/67-06/14/79	10	6.5	6.58	7.	6.	0.086	0.294	6.05	6.5	6.85	7.
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-06/14/79	10	6.5	6.487	7.	6.	0.096	0.309	6.05	6.5	6.85	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/14/79	10	0.316	0.326	1.	0.1	0.065	0.255	0.1	0.144	0.316	0.932
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	10	98.	95.	122.	65.	386.222	19.653	66.	77.25	115.	121.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station RICH0143

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	10	28.	32.4	60.	9.	355.822	18.863	9.6	16.5	49.75	59.8
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	10	63.5	62.6	97.	30.	408.933	20.222	31.1	46.25	75.25	95.8
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	10	6.	8.8	32.	0.	97.289	9.864	0.2	2.	12.	30.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	10	1.5	4.6	26.	0.	62.044	7.877	0.	0.	6.	24.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	10	3.	4.	12.	0.	17.556	4.19	0.	0.	6.75	11.7
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	10##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	10##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	10	0.165	0.213	0.7	0.01	0.042	0.204	0.015	0.068	0.333	0.664
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	10	0.7	0.65	1.	0.4	0.032	0.178	0.41	0.5	0.725	0.98
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	10##	75.	95.	200.	50.	3583.333	59.861	50.	50.	125.	200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	10##	1.849	1.91	2.301	1.699	0.061	0.248	1.699	1.699	2.075	2.301
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	81.225										
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	10##	0.075	0.085	0.2	0.05	0.002	0.047	0.05	0.05	0.1	0.19
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/14/79	10##	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.063	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station RICH0143

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/14/79	12	16.1	16.108	27.2	1.1	76.386	8.74	2.09	8.625	25.025	26.72
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	12	5.4	5.867	12.	1.	15.45	3.931	1.18	2.5	8.75	12.
00400 PH (STANDARD UNITS)	09/20/67-06/14/79	12	6.5	6.508	7.	5.5	0.141	0.375	5.77	6.5	6.65	7.
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-06/14/79	12	6.5	6.289	7.	5.5	0.193	0.44	5.77	6.5	6.65	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/14/79	12	0.316	0.514	3.162	0.1	0.704	0.839	0.1	0.229	0.316	2.333
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	11	113.	112.636	175.	70.	1078.055	32.834	70.6	85.	140.	170.4
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	11	54.	55.545	119.	2.	871.873	29.527	8.6	38.	72.	111.
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	11	56.	57.091	108.	27.	720.091	26.835	27.4	35.	68.	106.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	11	8.	24.091	78.	2.	778.891	27.909	2.	6.	38.	77.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	11	2.	4.364	14.	0.	21.455	4.632	0.	0.	8.	13.2
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	11	7.	19.909	74.	0.	667.291	25.832	0.4	2.	38.	71.2
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	11##	0.05	0.059	0.1	0.05	0.	0.02	0.05	0.05	0.05	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	11##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	11	0.12	0.14	0.4	0.025	0.017	0.131	0.025	0.025	0.18	0.394
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	11	0.6	0.654	1.399	0.3	0.115	0.338	0.3	0.4	0.9	1.319
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	12##	50.	220.833	2000.	50.	314299.242	560.624	50.	50.	87.5	1430.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	12##	1.699	1.883	3.301	1.699	0.213	0.462	1.699	1.699	1.925	2.911
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	76.321										
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	11##	0.05	0.109	0.3	0.05	0.007	0.086	0.05	0.05	0.2	0.28
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/14/79	11	0.05	0.053	0.08	0.04	0.	0.012	0.04	0.05	0.05	0.078

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station RICH0143

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/14/79	10	17.8	16.83	24.4	6.1	36.333	6.028	6.43	11.5	21.525	24.24
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	10	5.65	6.	11.	1.1	10.438	3.231	1.23	3.45	8.95	10.84
00400 PH (STANDARD UNITS)	09/20/67-06/14/79	10	6.5	6.58	7.2	6.	0.14	0.374	6.03	6.3	7.	7.18
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-06/14/79	10	6.5	6.452	7.2	6.	0.158	0.397	6.03	6.3	7.	7.18
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/14/79	10	0.316	0.353	1.	0.063	0.076	0.275	0.067	0.1	0.501	0.95
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	10	108.5	118.1	179.	83.	1104.544	33.235	83.5	91.75	140.5	178.3
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	10	58.	61.6	90.	44.	269.156	16.406	44.1	46.5	74.75	89.
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	10	55.5	56.5	99.	20.	694.278	26.349	20.7	33.	82.75	97.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	10	4.	5.4	12.	0.5	20.656	4.545	0.5	1.625	10.25	11.9

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Annual Analysis for 1976 - Station RICH0143

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	9	4.	4.278	10.	0.	11.944	3.456	0.	1.25	7.	10.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	10	1.25	1.6	5.	0.	3.1	1.761	0.	0.	2.5	4.9
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	10##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	10##	0.005	0.013	0.07	0.005	0.	0.02	0.005	0.005	0.01	0.064
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	10	0.12	0.123	0.34	0.025	0.01	0.102	0.025	0.025	0.165	0.33
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	10	0.5	0.54	1.	0.2	0.069	0.263	0.21	0.3	0.8	0.98
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	10	100.	275.	1700.	50.	254583.333	504.563	50.	50.	200.	1550.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	10	2.	2.123	3.23	1.699	0.212	0.46	1.699	1.699	2.301	3.138
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		132.753									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	9	0.1	0.089	0.2	0.05	0.002	0.049	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/14/79	9	0.06	0.051	0.08	0.01	0.	0.021	0.01	0.035	0.065	0.08

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Annual Analysis for 1977 - Station RICH0143

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/14/79	8	14.75	15.35	29.	0.8	62.166	7.885	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	8	4.6	5.65	10.8	0.8	11.791	3.434	**	**	**	**
00400 PH (STANDARD UNITS)	09/20/67-06/14/79	8	6.5	6.738	8.	6.	0.443	0.665	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-06/14/79	8	6.5	6.465	8.	6.	0.528	0.726	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/14/79	8	0.316	0.343	1.	0.01	0.096	0.311	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	8	114.	118.375	163.	85.	592.554	24.342	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	8	46.	48.625	80.	26.	242.839	15.583	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	8	64.5	69.75	116.	41.	517.929	22.758	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	8	5.5	6.313	15.	0.5	25.924	5.092	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	8	3.	3.688	8.	0.5	6.924	2.631	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	8	2.25	2.688	7.	0.	8.21	2.865	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	8##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	8##	0.008	0.019	0.1	0.005	0.001	0.033	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/08/77	4##	0.043	0.065	0.17	0.005	0.005	0.074	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	7	0.5	1.671	8.699	0.3	9.613	3.101	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	8##	50.	362.5	2300.	50.	620535.714	787.741	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	8##	1.699	2.004	3.362	1.699	0.375	0.612	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		100.945									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	8##	0.05	0.069	0.1	0.05	0.001	0.026	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/14/79	8	0.05	0.047	0.1	0.005	0.001	0.03	**	**	**	**

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Annual Analysis for 1978 - Station RICH0143

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/14/79	11	11.5	13.827	29.	0.	103.678	10.182	0.42	6.	25.	28.8
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	11	4.1	6.164	13.4	2.8	12.091	3.477	2.92	3.5	8.7	12.88
00400 PH (STANDARD UNITS)	09/20/67-06/14/79	11	6.4	6.436	7.	6.	0.135	0.367	6.	6.1	6.8	7.
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-06/14/79	11	6.4	6.316	7.	6.	0.151	0.388	6.	6.1	6.8	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/14/79	11	0.398	0.483	1.	0.1	0.112	0.334	0.1	0.158	0.794	1.
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	10	96.	104.9	164.	65.	1040.989	32.264	65.1	81.75	135.75	161.4
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	10	40.	38.	48.	22.	68.222	8.26	22.6	31.75	44.25	47.7
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	10	55.5	66.9	124.	37.	893.433	29.89	37.2	42.75	94.5	122.1
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	10	4.5	4.1	10.	0.5	12.433	3.526	0.5	0.5	7.25	9.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	10	2.	2.5	8.	0.5	5.944	2.438	0.5	0.5	3.5	7.7
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	9	2.	1.944	5.	0.	3.09	1.758	0.	0.5	3.5	5.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	10##	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.063	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station RICH0143

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	10##	0.005	0.007	0.01	0.005	0.	0.003	0.005	0.005	0.01	0.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	10	0.4	0.45	0.7	0.2	0.023	0.151	0.22	0.4	0.55	0.7
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	10	100.	110.	200.	50.	4333.333	65.828	50.	50.	200.	200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	10	2.	1.97	2.301	1.699	0.069	0.264	1.699	1.699	2.301	2.301
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		93.303									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	10##	0.05	0.07	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/14/79	10	0.04	0.043	0.12	0.005	0.001	0.03	0.007	0.028	0.05	0.113

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station RICH0143

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/14/79	3	21.	16.	21.	6.	75.	8.66	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	10/12/67-06/14/79	4	8.7	8.875	10.	8.1	0.703	0.838	**	**	**	**
00400 PH (STANDARD UNITS)	09/20/67-06/14/79	4	6.45	6.5	7.	6.1	0.14	0.374	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-06/14/79	4	6.447	6.396	7.	6.1	0.155	0.393	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/14/79	4	0.357	0.402	0.794	0.1	0.084	0.29	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	10/07/68-06/14/79	4	82.	84.	110.	62.	456.	21.354	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	09/20/67-06/14/79	4	34.5	33.	40.	23.	64.667	8.042	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	04/17/69-06/14/79	4	50.5	51.	71.	32.	255.333	15.979	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/17/69-06/14/79	4##	1.75	2.25	5.	0.5	4.75	2.179	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/20/67-06/14/79	4##	1.75	2.25	5.	0.5	4.75	2.179	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/17/69-06/14/79	4##	0.25	0.25	0.5	0.	0.083	0.289	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/07/68-06/14/79	4##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/07/68-06/14/79	4##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/07/68-06/14/79	4	0.45	0.425	0.5	0.3	0.009	0.096	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	3##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/23/70-04/24/79	3##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		50.									
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	02/09/70-06/14/79	4##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-06/14/79	4	0.04	0.043	0.07	0.02	0.	0.021	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0143

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-06/14/79	34	23.3	23.244	30.	13.3	19.7	4.438	15.3	21.1	27.2	28.95
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	32	4.1	3.975	7.2	0.8	2.73	1.652	1.25	2.85	5.	6.28
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/12/67-09/09/75	14	2.7	2.607	5.	1.	0.97	0.985	1.1	2.	3.	4.3
00400 PH (STANDARD UNITS)		09/20/67-06/14/79	33	6.5	6.388	7.6	2.	0.72	0.849	6.	6.3	6.7	6.86
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-06/14/79	33	6.5	3.518	7.6	2.	9.214	3.035	6.	6.3	6.7	6.86
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-06/14/79	33	0.316	303.393	10000.	0.025	3030076.149	1740.711	0.139	0.2	0.501	1.
00500 RESIDUE, TOTAL (MG/L)		10/07/68-06/14/79	28	138.5	139.571	206.	52.	1331.81	36.494	98.6	112.5	166.	196.5
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-06/14/79	30	51.5	56.5	137.	17.	616.466	24.829	23.2	43.5	73.25	88.6
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-06/14/79	27	81.	84.556	153.	19.	845.026	29.069	50.2	67.	99.	124.4
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-06/14/79	27	10.	16.852	102.	2.	508.054	22.54	3.6	5.	17.	39.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-06/14/79	30	5.5	6.333	44.	0.	59.264	7.698	1.1	3.	8.	9.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-06/14/79	27	5.	10.37	74.	0.	294.396	17.158	0.8	2.	8.	30.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-06/14/79	28##	0.05	0.082	0.44	0.01	0.008	0.088	0.028	0.05	0.093	0.205
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/14/79	28##	0.005	0.012	0.11	0.005	0.	0.02	0.005	0.005	0.01	0.021
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/08/77	24	0.06	0.083	0.34	0.005	0.006	0.079	0.01	0.025	0.11	0.205
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-06/14/79	28	0.65	1.117	8.699	0.2	2.594	1.61	0.39	0.4	1.	2.332
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-04/24/79	24	100.	210.417	1700.	50.	122604.167	350.149	50.	50.	200.	550.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-04/24/79	24	2.	2.069	3.23	1.699	0.169	0.411	1.699	1.699	2.301	2.724
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =		117.147								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-06/14/79	25	0.1	0.124	0.3	0.05	0.005	0.069	0.05	0.1	0.15	0.24
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-06/14/79	25	0.07	0.148	2.	0.02	0.15	0.387	0.03	0.05	0.1	0.124

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0143

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-06/14/79	42	7.5	8.074	17.8	0.	19.904	4.461	1.85	5.6	11.5	15.24
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	42	10.	9.086	13.4	3.2	8.091	2.845	3.89	7.75	11.	12.28
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/12/67-09/09/75	2	2.45	2.45	2.7	2.2	0.125	0.354	**	**	**	**
00400 PH (STANDARD UNITS)		09/20/67-06/14/79	42	6.5	6.555	7.5	5.8	0.127	0.356	6.	6.375	6.8	7.
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-06/14/79	42	6.5	6.414	7.5	5.8	0.147	0.384	6.	6.375	6.8	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-06/14/79	42	0.316	0.385	1.585	0.032	0.115	0.34	0.1	0.158	0.424	1.
00500 RESIDUE, TOTAL (MG/L)		10/07/68-06/14/79	41	100.	121.244	989.	1.	20139.039	141.912	73.8	83.5	114.5	148.8
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-06/14/79	41	41.	43.951	108.	2.	470.048	21.681	15.2	33.	60.	73.
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-06/14/79	40	57.5	79.875	881.	12.	17468.112	132.167	27.8	44.75	72.75	104.1
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-06/14/79	40	4.5	6.975	38.	0.	53.884	7.341	0.5	2.	9.75	17.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-06/14/79	40	2.	3.288	20.	0.	14.409	3.796	0.	0.625	4.75	8.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-06/14/79	39	2.	3.962	38.	0.	44.821	6.695	0.	0.5	5.	9.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-06/14/79	40##	0.05	0.093	1.	0.005	0.028	0.166	0.02	0.05	0.058	0.155
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/14/79	40	0.01	0.01	0.1	0.005	0.	0.015	0.005	0.005	0.01	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/08/77	32	0.17	0.231	1.189	0.005	0.053	0.231	0.02	0.113	0.32	0.404
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-06/14/79	40	0.5	0.513	1.399	0.2	0.055	0.235	0.3	0.3	0.675	0.795
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-04/24/79	38##	50.	496.053	7100.	50.	1941673.186	1393.439	50.	50.	125.	2030.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-04/24/79	38##	1.699	2.036	3.851	1.699	0.326	0.571	1.699	1.699	2.075	3.307
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =		108.592								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-06/14/79	39##	0.05	0.083	0.3	0.05	0.003	0.057	0.05	0.05	0.1	0.2
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-06/14/79	39	0.05	0.057	0.25	0.005	0.002	0.049	0.01	0.03	0.06	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0143

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/20/67-06/14/79	32	18.9	17.884	25.6	2.1	29.208	5.404	10.18	14.7	21.1	24.49
00300 OXYGEN, DISSOLVED	MG/L	10/12/67-06/14/79	33	7.2	7.091	11.2	2.4	5.348	2.313	3.56	5.65	9.	10.
00310 BOD, 5 DAY, 20 DEG C	MG/L	10/12/67-09/09/75	5	2.3	2.38	2.8	2.	0.102	0.319	**	**	**	**
00400 PH (STANDARD UNITS)		09/20/67-06/14/79	33	6.5	6.561	8.	5.5	0.164	0.405	6.14	6.45	6.7	7.
00400 CONVERTED PH (STANDARD UNITS)		09/20/67-06/14/79	33	6.5	6.39	8.	5.5	0.195	0.441	6.14	6.45	6.7	7.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		09/20/67-06/14/79	33	0.316	0.408	3.162	0.01	0.28	0.53	0.1	0.2	0.357	0.729
00500 RESIDUE, TOTAL (MG/L)		10/07/68-06/14/79	32	94.5	101.313	192.	62.	1050.48	32.411	65.3	75.	113.	162.4
00505 RESIDUE, TOTAL VOLATILE (MG/L)		09/20/67-06/14/79	32	41.5	41.406	119.	8.	419.991	20.494	15.	28.5	48.75	59.7
00510 RESIDUE, TOTAL FIXED (MG/L)		04/17/69-06/14/79	32	54.	59.906	168.	27.	896.733	29.945	30.6	41.	67.25	107.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		04/17/69-06/14/79	32	7.	11.609	74.	0.5	271.996	16.492	0.65	2.	11.75	29.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		09/20/67-06/14/79	32	3.	4.922	26.	0.	33.47	5.785	0.5	1.25	6.	12.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		04/17/69-06/14/79	30	2.5	7.183	60.	0.	169.06	13.002	0.	0.5	6.5	21.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		10/07/68-06/14/79	32##	0.05	0.1	0.7	0.02	0.016	0.128	0.043	0.05	0.098	0.241
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/14/79	32##	0.005	0.009	0.07	0.005	0.	0.012	0.005	0.005	0.01	0.01
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		10/07/68-06/08/77	26	0.11	0.145	0.4	0.005	0.012	0.112	0.025	0.06	0.203	0.349
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		10/07/68-06/14/79	31	0.7	0.773	3.	0.27	0.251	0.501	0.4	0.5	0.9	1.319
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-04/24/79	25##	50.	96.	300.	50.	4775.	69.101	50.	50.	100.	200.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		11/23/70-04/24/79	25##	1.699	1.899	2.477	1.699	0.067	0.258	1.699	1.699	2.	2.301
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	79.19								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)		02/09/70-06/14/79	31##	0.05	0.079	0.2	0.05	0.002	0.042	0.05	0.05	0.1	0.14
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		02/09/70-06/14/79	31	0.06	0.072	0.15	0.02	0.001	0.031	0.042	0.05	0.1	0.116

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: RICH0144

NPS Station ID: RICH0144 LAT/LON: 37.611392/ -77.406670 Agency: 112WRD Date Created: 12/22/84
Location: CHICKAHOMINY RIVER AT RT 627 NEAR RICHMOND, VA FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02042288
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 5.70 On/Off RF1:
RF3 Index: 02080206003300.00 RF3 Mile Point: 0.68 Distance from RF3: 0.03 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0144

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/10/84-09/12/89	10	21.	19.33	25.	10.	29.833	5.462	10.2	13.5	23.7	24.93
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/10/84-09/12/89	8	23.5	21.375	27.5	10.	49.554	7.039	**	**	**	**
00025 BAROMETRIC PRESSURE (MM OF HG)	04/08/87-09/12/89	6	753.	753.667	762.	749.	21.467	4.633	**	**	**	**
00061 FLOW, STREAM, INSTANTANEOUS CFS	09/10/84-09/12/89	10	9.	18.703	59.	0.	468.574	21.647	0.003	1.506	43.	57.4
00080 COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/12/89	6	90.5	91.	140.	55.	1156.	34.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/10/84-09/12/89	10	161.5	160.8	200.	120.	822.4	28.678	121.2	138.	185.	198.5
00300 OXYGEN, DISSOLVED MG/L	04/08/87-09/12/89	6	3.7	4.733	9.4	1.5	10.615	3.258	**	**	**	**
00400 PH (STANDARD UNITS)	04/08/87-09/12/89	6	6.5	6.5	6.8	6.2	0.052	0.228	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/08/87-09/12/89	6	6.5	6.451	6.8	6.2	0.055	0.234	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-09/12/89	6	0.316	0.354	0.631	0.158	0.033	0.181	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	04/08/87-09/12/89	6	6.85	6.95	7.6	6.6	0.119	0.345	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	04/08/87-09/12/89	6	6.847	6.865	7.6	6.6	0.128	0.357	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-09/12/89	6	0.142	0.137	0.251	0.025	0.006	0.075	**	**	**	**
00608 NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/10/84-09/12/89	7	0.05	0.061	0.2	0.005	0.004	0.064	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/10/84-09/12/89	7	0.7	0.657	0.8	0.5	0.01	0.098	**	**	**	**
00631 NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/10/84-09/12/89	7	0.05	0.052	0.1	0.005	0.001	0.033	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	09/10/84-09/12/89	7	0.07	0.067	0.11	0.037	0.001	0.025	**	**	**	**
00666 PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/12/89	6	0.026	0.035	0.076	0.014	0.001	0.024	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/10/84-09/12/89	7	0.014	0.019	0.04	0.01	0.	0.011	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	09/10/84-09/12/89	7	11.	11.414	17.	7.5	9.268	3.044	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	04/08/87-09/12/89	6	8.55	8.8	12.	6.3	6.284	2.507	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/08/87-09/12/89	6	2.	2.05	2.5	1.6	0.163	0.404	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	04/08/87-09/12/89	6	14.	13.667	15.	10.	3.467	1.862	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/08/87-09/12/89	6	2.5	2.467	3.4	1.6	0.343	0.585	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	04/08/87-09/12/89	6	18.	17.5	20.	13.	5.9	2.429	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	04/08/87-09/12/89	6	12.5	13.333	20.	6.	33.467	5.785	**	**	**	**
00950 FLUORIDE, DISSOLVED (MG/L AS F)	04/08/87-09/12/89	6	0.15	0.15	0.2	0.1	0.003	0.055	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	04/08/87-09/12/89	6	7.55	7.65	14.	2.2	27.655	5.259	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/12/89	4	1.	0.875	1.	0.5	0.063	0.25	**	**	**	**
01025 CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	04/12/88-09/12/89	4##	0.5	0.625	1.	0.5	0.063	0.25	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-09/12/89	4##	0.75	1.	2.	0.5	0.5	0.707	**	**	**	**
01037 COBALT, TOTAL (UG/L AS CO)	04/12/88-09/12/89	4##	0.5	1.125	3.	0.5	1.563	1.25	**	**	**	**
01040 COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	2	1.	1.	1.	1.	0.	0.	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	04/12/88-09/12/89	4	3.	4.25	9.	2.	10.25	3.202	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	04/08/87-09/12/89	6	2200.	2265.	4000.	890.	1356150.	1164.539	**	**	**	**
01046 IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/12/89	6	1045.	1190.	2300.	470.	412560.	642.308	**	**	**	**
01049 LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	2##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0144

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01051 LEAD, TOTAL (UG/L AS PB)	04/12/88-09/12/89	4##	2.5	2.125	2.5	1.	0.563	0.75	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/12/89	6	400.	628.333	1500.	60.	412736.667	642.446	**	**	**	**
01056 MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-04/04/89	4	115.	445.5	1500.	52.	495107.667	703.639	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	04/12/88-09/12/89	4	3.	2.875	5.	0.5	6.063	2.462	**	**	**	**
01090 ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	2	48.	48.	62.	34.	392.	19.799	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/12/89	4	30.	31.25	60.	5.	506.25	22.5	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	04/12/88-09/12/89	4##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
70331 SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/12/89	4	88.5	84.75	97.	65.	189.583	13.769	**	**	**	**
71890 MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
71900 MERCURY, TOTAL (UG/L AS HG)	04/12/88-09/12/89	4##	0.05	0.063	0.1	0.05	0.001	0.025	**	**	**	**
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-09/12/89	4	10.	9.5	11.	7.	3.	1.732	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0144

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	3	0.50	3	3	1.00				3	0	0.00			
00400 PH	Fresh Chronic	9.	6	0	0.00	3	0	0.00				3	0	0.00			
	Other-Lo Lim.	6.5	6	4	0.67	3	3	1.00				3	1	0.33			
00403 PH, LAB	Fresh Chronic	9.	6	0	0.00	3	0	0.00				3	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	3	0	0.00				3	0	0.00			
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	7	0	0.00	4	0	0.00				3	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	6	0	0.00	3	0	0.00				3	0	0.00			
	Drinking Water	250.	6	0	0.00	3	0	0.00				3	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	3	0	0.00				3	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	6	0	0.00	3	0	0.00				3	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	50.	4	0	0.00	2	0	0.00				2	0	0.00			
01025 CADMIUM, DISSOLVED	Fresh Acute	3.9	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	5.	2	0	0.00	1	0	0.00				1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	5.	4	0	0.00	2	0	0.00				2	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	4	0	0.00	2	0	0.00				2	0	0.00			
01040 COPPER, DISSOLVED	Fresh Acute	18.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	1300.	2	0	0.00	1	0	0.00				1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	1300.	4	0	0.00	2	0	0.00				2	0	0.00			
01049 LEAD, DISSOLVED	Fresh Acute	82.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	15.	2	0	0.00	1	0	0.00				1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	15.	4	0	0.00	2	0	0.00				2	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	100.	4	0	0.00	2	0	0.00				2	0	0.00			
01090 ZINC, DISSOLVED	Fresh Acute	120.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	5000.	2	0	0.00	1	0	0.00				1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	5000.	4	0	0.00	2	0	0.00				2	0	0.00			
01147 SELENIUM, TOTAL	Fresh Acute	20.	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	50.	4	0	0.00	2	0	0.00				2	0	0.00			
71890 MERCURY, DISSOLVED	Fresh Acute	2.4	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	2.	2	0	0.00	1	0	0.00				1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	4	0	0.00	2	0	0.00				2	0	0.00			
	Drinking Water	2.	4	0	0.00	2	0	0.00				2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0145

NPS Station ID: RICH0145 LAT/LON: 37.613059/ -77.424448 Agency: 112WRD Date Created: 01/09/88
Location: UPHAM BROOK NEAR RICHMOND, VA FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02042426
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 3.90 On/Off RF1:
RF3 Index: 02080206161800.00 RF3 Mile Point: 0.00 Distance from RF3: 0.07 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0145

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/08/87-09/04/91	20	17.3	17.91	26.5	8.7	27.015	5.198	9.97	12.8	22.125	24.13
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	04/12/88-09/04/91	21	21.5	21.1	30.	7.	43.296	6.58	8.9	17.3	25.25	29.8
00025	BAROMETRIC PRESSURE (MM OF HG)	04/08/87-09/04/91	23	755.	756.	764.	747.	18.545	4.306	750.4	754.	760.	761.6
00061	FLOW, STREAM, INSTANTANEOUS CFS	04/08/87-09/04/91	27	23.	168.737	1260.	0.4	110912.975	333.036	1.4	8.	76.	841.4
00065	STAGE, STREAM (FEET)	06/11/91-06/11/91	1	4.53	4.53	4.53	4.53	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	04/08/87-09/04/91	26	58.5	63.385	150.	12.	1183.766	34.406	19.9	30.	85.5	110.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/08/87-09/04/91	28	180.	163.143	255.	55.	3848.868	62.039	78.	102.75	219.5	226.5
00300	OXYGEN, DISSOLVED MG/L	04/08/87-09/04/91	20	6.6	6.535	10.7	3.	5.114	2.261	3.62	4.175	8.6	9.56
00400	PH (STANDARD UNITS)	04/08/87-09/04/91	26	6.7	6.848	8.7	6.2	0.343	0.586	6.27	6.575	6.925	7.733
00400	CONVERTED PH (STANDARD UNITS)	04/08/87-09/04/91	26	6.7	6.639	8.7	6.2	0.388	0.623	6.27	6.575	6.925	7.733
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-09/04/91	26	0.2	0.23	0.631	0.002	0.031	0.176	0.024	0.119	0.267	0.54
00403	PH, LAB, STANDARD UNITS SU	04/08/87-10/31/89	7	7.3	7.343	7.8	6.9	0.083	0.288	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/08/87-10/31/89	7	7.3	7.265	7.8	6.9	0.09	0.3	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/87-10/31/89	7	0.05	0.054	0.126	0.016	0.001	0.036	**	**	**	**
00452	CARBONATE,WATER,DISS,INCR TIT, FIELD, AS CO3, MG/L	06/11/91-06/11/91	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	06/11/91-06/11/91	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00556	OIL & GREASE (FREON EXTR.-GRAV METH) TOT,REC,MG/L	10/31/89-09/04/91	16##	0.5	0.5	0.5	0.5	0.	0.	0.5	0.5	0.5	0.5
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	04/08/87-09/12/89	6	0.09	0.098	0.17	0.05	0.002	0.045	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/31/89-09/04/91	20	0.121	0.143	0.605	0.001	0.017	0.13	0.009	0.069	0.17	0.288
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/08/87-09/04/91	26	0.75	0.777	1.4	0.4	0.074	0.272	0.47	0.5	0.925	1.19
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/31/89-09/04/91	20	0.425	0.598	2.4	0.25	0.228	0.478	0.262	0.348	0.68	1.08
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	04/08/87-09/12/89	6	0.55	0.484	0.7	0.005	0.061	0.246	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/08/87-09/04/91	26	0.099	0.098	0.193	0.036	0.002	0.04	0.051	0.062	0.116	0.161
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/08/87-09/12/89	6	0.035	0.034	0.067	0.001	0.001	0.024	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/08/87-09/12/89	6	0.024	0.024	0.05	0.001	0.	0.017	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/08/87-09/04/91	26	8.7	9.019	19.	4.5	10.43	3.23	4.84	7.375	9.725	13.6
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	10/31/89-09/15/90	13##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/08/87-09/12/89	6	11.5	12.333	16.	10.	6.667	2.582	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/08/87-09/12/89	6	2.5	2.517	3.3	1.9	0.282	0.531	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/08/87-09/12/89	6	21.	19.667	28.	11.	50.667	7.118	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/08/87-09/12/89	6	2.7	2.917	4.3	2.3	0.502	0.708	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	04/08/87-09/04/91	26	25.	23.5	41.	7.	125.94	11.222	7.7	13.	34.25	38.2
00945	SULFATE, TOTAL (MG/L AS SO4)	04/08/87-09/04/91	26	12.	12.5	22.	6.	15.22	3.901	8.	9.	15.	17.3
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/08/87-02/05/91	7	0.2	0.171	0.2	0.1	0.002	0.049	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/08/87-09/12/89	6	8.7	8.783	11.	6.	4.534	2.129	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/12/88-09/04/91	24	2.	1.979	5.	0.5	0.902	0.95	0.5	2.	2.	3.
01025	CADMIUM, DISSOLVED (UG/L AS CD)	04/08/87-09/14/87	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/12/88-09/04/91	24##	0.5	1.354	10.	0.5	4.532	2.129	0.5	0.5	1.	4.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0145

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01030 CHROMIUM, DISSOLVED (UG/L AS CR)	04/08/87-04/08/87	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	04/12/88-09/04/91	24	2.	2.771	19.	0.5	14.108	3.756	0.5	0.5	3.75	5.
01037 COBALT, TOTAL (UG/L AS CO)	04/12/88-10/31/89	5##	0.5	1.3	4.	0.5	2.325	1.525	**	**	**	**
01040 COPPER, DISSOLVED (UG/L AS CU)	04/08/87-09/14/87	2	4.	4.	4.	4.	0.	0.	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	04/12/88-09/04/91	24	6.	6.25	12.	2.	6.022	2.454	3.	5.	7.75	10.
01045 IRON, TOTAL (UG/L AS FE)	04/08/87-09/04/91	26	2100.	2419.615	8500.	750.	2607443.846	1614.758	1058.	1300.	2775.	4310.
01046 IRON, DISSOLVED (UG/L AS FE)	04/08/87-09/04/91	26	585.	995.	8300.	120.	2353442.	1534.093	338.	435.	1075.	1360.
01049 LEAD, DISSOLVED (UG/L AS PB)	04/08/87-09/14/87	2##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	04/12/88-09/04/91	24	9.	9.938	27.	2.5	43.724	6.612	2.5	4.	13.75	19.5
01055 MANGANESE, TOTAL (UG/L AS MN)	04/08/87-09/04/91	26	110.	156.538	640.	50.	18407.538	135.674	64.	80.	172.5	360.
01056 MANGANESE, DISSOLVED (UG/L AS MN)	04/08/87-09/04/91	22	86.5	85.727	170.	5.	1776.017	42.143	40.	50.	120.	148.
01067 NICKEL, TOTAL (UG/L AS NI)	04/12/88-09/04/91	23	2.	2.5	6.	0.5	1.341	1.158	1.	2.	3.	4.
01090 ZINC, DISSOLVED (UG/L AS ZN)	04/08/87-09/14/87	2	22.5	22.5	28.	17.	60.5	7.778	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	04/12/88-09/04/91	24	30.	34.792	90.	5.	487.998	22.091	5.	20.	47.5	70.
01147 SELENIUM, TOTAL (UG/L AS SE)	04/12/88-01/25/90	6##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
32209 CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	10/31/89-01/25/90	2	4.7	4.7	8.8	0.6	33.62	5.798	**	**	**	**
32213 PHEOPHYTIN-A,FLUORIMETRIC METHOD (UG/L)	10/31/89-01/25/90	2	3.7	3.7	6.4	1.	14.58	3.818	**	**	**	**
32730 PHENOLICS, TOTAL, RECOVERABLE (UG/L)	10/31/89-07/26/91	17##	0.5	1.118	5.	0.5	1.548	1.244	0.5	0.5	1.5	3.4
39086 ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CACO3,MG/L	06/11/91-06/11/91	1	30.	30.	30.	30.	0.	0.	**	**	**	**
70331 SUSPENDED SED SIEVE DIAMETER,% FINER THAN .062MM	04/12/88-09/12/89	4	80.5	74.5	98.	39.	809.667	28.455	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/31/89-09/04/91	22	0.064	0.07	0.129	0.033	0.001	0.032	0.033	0.043	0.103	0.121
71890 MERCURY, DISSOLVED (UG/L AS HG)	04/08/87-09/14/87	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
71900 MERCURY, TOTAL (UG/L AS HG)	04/12/88-09/04/91	24##	0.05	0.075	0.5	0.05	0.008	0.092	0.05	0.05	0.05	0.1
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	04/12/88-09/04/91	25	43.	89.76	871.	7.	29263.273	171.065	8.2	16.	101.	187.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0145

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15-3/15 Obs	10/15-3/15 Exceed	10/15-3/15 Prop.	3/16-6/30 Obs	3/16-6/30 Exceed	3/16-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	20	5	0.25	7	4	0.57	3	0	0.00	10	1	0.10			
00400 PH	Fresh Chronic	9.	26	0	0.00	10	0	0.00	3	0	0.00	13	0	0.00			
	Other-Lo Lim.	6.5	26	6	0.23	10	1	0.10	3	0	0.00	13	5	0.38			
00403 PH, LAB	Fresh Chronic	9.	7	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	7	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	20	0	0.00	7	0	0.00	3	0	0.00	10	0	0.00			
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	6	0	0.00	3	0	0.00				3	0	0.00			
00720 CYANIDE, TOTAL	Fresh Acute	0.022	13	0	0.00	3	0	0.00	2	0	0.00	8	0	0.00			
	Drinking Water	0.2	13	0	0.00	3	0	0.00	2	0	0.00	8	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	26	0	0.00	8	0	0.00	3	0	0.00	15	0	0.00			
	Drinking Water	250.	26	0	0.00	8	0	0.00	3	0	0.00	15	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	26	0	0.00	8	0	0.00	3	0	0.00	15	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	7	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	24	0	0.00	7	0	0.00	3	0	0.00	14	0	0.00			
	Drinking Water	50.	24	0	0.00	7	0	0.00	3	0	0.00	14	0	0.00			
01025 CADMIUM, DISSOLVED	Fresh Acute	3.9	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	5.	2	0	0.00	1	0	0.00				1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	24	2	0.08	7	2	0.29	3	0	0.00	14	0	0.00			
	Drinking Water	5.	24	2	0.08	7	2	0.29	3	0	0.00	14	0	0.00			
01030 CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00							1	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	24	0	0.00	7	0	0.00	3	0	0.00	14	0	0.00			
01040 COPPER, DISSOLVED	Fresh Acute	18.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	1300.	2	0	0.00	1	0	0.00				1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	24	0	0.00	7	0	0.00	3	0	0.00	14	0	0.00			
	Drinking Water	1300.	24	0	0.00	7	0	0.00	3	0	0.00	14	0	0.00			
01049 LEAD, DISSOLVED	Fresh Acute	82.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	15.	2	0	0.00	1	0	0.00				1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	24	0	0.00	7	0	0.00	3	0	0.00	14	0	0.00			
	Drinking Water	15.	24	5	0.21	7	1	0.14	3	0	0.00	14	4	0.29			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: RICH0145

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01067 NICKEL, TOTAL	Fresh Acute	1400.	23	0	0.00	6	0	0.00	3	0	0.00	14	0	0.00			
	Drinking Water	100.	23	0	0.00	6	0	0.00	3	0	0.00	14	0	0.00			
01090 ZINC, DISSOLVED	Fresh Acute	120.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	5000.	2	0	0.00	1	0	0.00				1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	24	0	0.00	7	0	0.00	3	0	0.00	14	0	0.00			
	Drinking Water	5000.	24	0	0.00	7	0	0.00	3	0	0.00	14	0	0.00			
01147 SELENIUM, TOTAL	Fresh Acute	20.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Drinking Water	50.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
71890 MERCURY, DISSOLVED	Fresh Acute	2.4	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	2.	2	0	0.00	1	0	0.00				1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	24	0	0.00	7	0	0.00	3	0	0.00	14	0	0.00			
	Drinking Water	2.	24	0	0.00	7	0	0.00	3	0	0.00	14	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0146

NPS Station ID: RICH0146 LAT/LON: 37.615281/ -77.440560 Agency: 21VASWCB Date Created: / /
Location: RT. 1 BRIDGE (BROOK ROAD)
FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 2-UPM003.53 /VA2-05-X0245/VA2-4X0245
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: 02-NORTH ATLANTIC Elevation: 0 Water Body Id:
Minor Basin: 2-JAMES ECO Region:
RF1 Index: 02080206033 RF1 Mile Point: 1.980 Distance from RF1: 0.00 On/Off RF1: OFF
RF3 Index: 02080205000107.44 RF3 Mile Point: 8.67 Distance from RF3: 0.06 On/Off RF3:
Description:
VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 4 PIEDMONT
RIVER: UPHAM BROOK SECTION: 05 TOPO MAP #: 0131 TOPO MAP NAME: RICHMOND, VA

Parameter Inventory for Station: RICH0146

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/10/75-12/07/98	231	15.5	15.197	28.	0.	54.799	7.403	5.42	8.5	22.	25.
00061	FLOW, STREAM, INSTANTANEOUS	CFS	05/19/82-04/03/85	6	10.5	12.667	25.	3.	64.267	8.017	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)		01/25/89-06/05/91	22	11.55	20.236	110.	4.7	587.289	24.234	5.06	6.875	17.85	52.9
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)		07/11/94-12/07/98	54	8.3	11.587	52.	1.7	104.895	10.242	3.45	4.7	16.	23.5
00080	COLOR (PLATINUM-COBALT UNITS)		03/13/91-03/03/93	8	66.	84.5	243.	43.	4255.429	65.234	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/07/98	148	216.	239.236	2055.	80.	29812.957	172.664	136.8	171.25	258.75	318.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		11/15/89-12/07/98	75	200.	214.813	1138.	75.	15722.83	125.391	116.6	164.	234.	281.8
00096	SALINITY AT 25 DEGREES C (MG/ML)		07/26/95-08/31/95	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/17/90-12/07/98	69	7.9	8.346	13.1	4.	6.275	2.505	5.1	6.25	10.8	12.
00300	OXYGEN, DISSOLVED	MG/L	02/10/75-06/05/91	165	8.6	8.553	14.	3.2	5.808	2.41	5.52	6.55	10.6	11.8
00310	BOD, 5 DAY, 20 DEG C	MG/L	08/08/79-12/07/98	176	2.	2.298	9.	0.5	2.009	1.417	1.	1.	3.	4.
00340	COD, .25N K2CR2O7	MG/L	08/08/79-12/07/98	181	19.	20.42	87.	3.	78.556	8.863	12.	15.	24.	30.
00400	PH (STANDARD UNITS)		02/10/75-12/07/98	233	6.81	6.922	9.23	5.45	0.287	0.536	6.358	6.6	7.2	7.6
00400	CONVERTED PH (STANDARD UNITS)		02/10/75-12/07/98	233	6.81	6.634	9.23	5.45	0.371	0.609	6.358	6.6	7.2	7.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/10/75-12/07/98	233	0.155	0.232	3.548	0.001	0.158	0.397	0.025	0.063	0.251	0.44
00403	PH, LAB, STANDARD UNITS	SU	02/17/81-12/07/98	90	6.8	6.788	7.8	1.	0.455	0.674	6.5	6.6	7.	7.2
00403	CONVERTED PH, LAB, STANDARD UNITS		02/17/81-12/07/98	90	6.8	2.954	7.8	1.	15.316	3.914	6.5	6.6	7.	7.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/17/81-12/07/98	90	0.158	1111.275	100000.	0.016	111110741.716	10540.908	0.063	0.1	0.251	0.316
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		02/17/81-12/07/98	89	29.	29.551	54.	13.	86.909	9.323	19.	22.5	36.5	41.
00500	RESIDUE, TOTAL (MG/L)		03/20/75-12/07/98	107	143.	159.037	1090.	64.	11367.753	106.62	106.6	126.	157.	197.
00505	RESIDUE, TOTAL VOLATILE (MG/L)		03/20/75-12/07/98	107	37.	44.879	900.	14.	7119.693	84.378	22.8	28.	43.	52.
00510	RESIDUE, TOTAL FIXED (MG/L)		03/20/75-12/07/98	107	109.	122.299	1070.	44.	11509.815	107.284	68.	88.	126.	147.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/75-12/07/98	186	6.	12.753	344.	0.5	887.433	29.79	2.35	3.	10.25	26.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/75-12/07/98	186	2.5	3.68	46.	0.	20.461	4.523	1.	1.5	5.	7.3
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/75-12/07/98	185	3.	9.454	298.	0.	665.722	25.802	1.	2.	8.	18.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/20/75-12/07/98	222	0.1	0.119	1.	0.02	0.013	0.115	0.043	0.05	0.14	0.237
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)		03/20/75-12/07/98	223	0.02	0.027	0.98	0.005	0.005	0.067	0.005	0.01	0.03	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)		03/20/75-12/07/98	206	0.71	1.106	43.	0.02	16.954	4.118	0.34	0.49	0.88	1.086
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/75-12/07/98	220	0.6	0.631	1.7	0.1	0.062	0.249	0.4	0.5	0.7	0.99
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)		08/17/77-06/14/79	17	0.5	0.532	0.9	0.21	0.042	0.204	0.266	0.365	0.65	0.892
00665	PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/07/98	178	0.09	0.091	0.3	0.02	0.002	0.05	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/08/79-06/05/91	113	0.04	0.051	0.26	0.01	0.001	0.035	0.02	0.03	0.055	0.092
00680	CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-08/26/96	149	8.	8.602	27.	0.	14.712	3.836	4.8	6.25	10.	12.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900 HARDNESS, TOTAL (MG/L AS CACO3)	01/25/89-12/07/98	87	50.	49.172	94.	4.	223.865	14.962	30.	41.	58.	67.2
00927 MAGNESIUM, TOTAL (MG/L AS MG)	09/02/92-03/03/93	3	3110.	3010.	3220.	2700.	75100.	274.044	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	10/06/88-12/07/98	87	27.	37.414	418.	8.	3112.501	55.79	12.	19.	35.	52.4
00945 SULFATE, TOTAL (MG/L AS SO4)	01/25/89-12/07/98	86	15.	14.953	24.	7.	14.304	3.782	10.	12.	17.	21.
00951 FLUORIDE, TOTAL (MG/L AS F)	01/25/89-03/03/93	26	0.185	0.195	0.51	0.05	0.012	0.111	0.05	0.11	0.235	0.368
00955 SILICA, DISSOLVED (MG/L AS SI02)	03/15/89-12/02/92	23	12.2	12.509	20.4	8.5	6.498	2.549	9.48	10.8	13.7	15.76
01002 ARSENIC, TOTAL (UG/L AS AS)	11/13/75-06/01/93	14##	5.	3.643	5.	1.	3.016	1.737	1.	1.75	5.	5.
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	05/12/81-07/21/92	1	5.2	5.2	5.2	5.2	0.	0.	**	**	**	**
01012 BERYLLIUM, TOTAL (UG/L AS BE)	09/02/92-03/03/93	3##	5.	5.	5.	5.	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	11/13/75-06/01/93	15##	5.	4.4	5.	0.5	2.507	1.583	0.5	5.	5.	5.
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/12/81-07/21/92	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/12/81-07/21/92	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	03/20/75-06/01/93	17##	5.	4.559	5.	0.5	1.621	1.273	1.7	5.	5.	5.
01042 COPPER, TOTAL (UG/L AS CU)	03/20/75-06/01/93	16##	5.	6.25	20.	5.	15.	3.873	5.	5.	5.	13.
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	05/12/81-07/21/92	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	11/20/78-06/01/93	9	932.	914.778	1150.	699.	27457.194	165.702	699.	736.	1074.	1150.
01051 LEAD, TOTAL (UG/L AS PB)	03/20/75-06/01/93	17	5.	11.412	30.	4.	72.007	8.486	4.8	5.	19.5	23.6
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	05/12/81-07/21/92	1	41.6	41.6	41.6	41.6	0.	0.	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	11/20/78-06/01/93	9	56.9	61.233	110.	37.8	511.295	22.612	37.8	44.4	74.45	110.
01059 THALLIUM, TOTAL (UG/L AS TL)	09/02/92-03/03/93	3##	10.	10.	10.	10.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	03/20/75-11/20/78	7##	50.	43.571	50.	5.	289.286	17.008	**	**	**	**
01067 NICKEL, TOTAL (UG/L AS NI)	06/29/82-06/01/93	10##	5.	5.5	10.	5.	2.5	1.581	5.	5.	5.	9.5
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/12/81-07/21/92	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	03/20/75-06/01/93	17	23.	31.765	70.	5.	432.816	20.804	5.	19.5	51.	70.
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	05/12/81-07/21/92	1	46.8	46.8	46.8	46.8	0.	0.	**	**	**	**
01147 SELENIUM, TOTAL (UG/L AS SE)	03/13/91-06/01/93	8##	10.	9.375	10.	5.	3.125	1.768	**	**	**	**
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	10/28/77-10/28/77	1	240000.	240000.	240000.	240000.	0.	0.	**	**	**	**
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	10/28/77-10/28/77	1	5.38	5.38	5.38	5.38	0.	0.	**	**	**	**
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506			GEOMETRIC MEAN =	240000.								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/11/94-12/07/98	54	1075.	4043.519	16000.	9.	33455318.594	5784.057	120.	267.5	5400.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/11/94-12/07/98	54	3.028	3.041	4.204	0.954	0.644	0.803	2.078	2.427	3.732	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			GEOMETRIC MEAN =	1099.603								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	164	300.	1886.89	110000.	50.	76772664.503	8762.001	50.	100.	1000.	5250.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	164	2.477	2.588	5.041	1.699	0.469	0.685	1.699	2.	3.	3.72
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	387.092								
32240 TANNIN AND LIGNIN (MG/L)	12/03/91-03/03/93	6	1.	1.233	2.5	0.5	0.611	0.781	**	**	**	**
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39061 PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	03/06/85-07/21/92	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39062 CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39065 CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39068 CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39071 CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39300 P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39305 O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39310 P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39315 O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320 P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39327 ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39330 ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/16/79-06/29/82	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39333 ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/12/81-07/21/92	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39350 CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39351 CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	03/06/85-07/21/92	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39363 DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/06/85-07/21/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39368 DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/06/85-07/21/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39373 DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/06/85-07/21/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39380 DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39383 DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/06/85-07/21/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39390 ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39393 ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/06/85-07/21/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39403 TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/06/85-07/21/92	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39413 HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	03/06/85-07/21/92	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39516 PCBS IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39526 PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	03/06/85-07/21/92	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	06/29/82-06/29/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39631 ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	05/12/81-05/12/81	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	10/16/79-09/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
46570 HARDNESS, CA MG CALCULATED (MG/L AS CACO3)	03/13/91-06/01/93	7	49.	46.714	54.	32.	64.238	8.015	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/20/75-06/14/79	41##	0.05	0.073	0.2	0.05	0.001	0.037	0.05	0.05	0.1	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	110	0.05	0.047	0.13	0.005	0.	0.022	0.02	0.03	0.06	0.07
71900 MERCURY, TOTAL (UG/L AS HG)	03/20/75-06/01/93	17##	0.15	0.185	0.25	0.15	0.002	0.049	0.15	0.15	0.25	0.25
71921 MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	05/12/81-07/21/92	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82032 CALCIUM - TOTAL UG/L (AS CA)	09/02/92-03/03/93	3	14760.	15203.333	16470.	14380.	1239433.333	1113.298	**	**	**	**
82078 TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	09/04/91-06/08/94	12	5.95	8.917	29.	1.	68.454	8.274	1.48	3.375	14.	26.03

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0146

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	22	2	0.09	5	1	0.20	10	0	0.00	7	1	0.14			
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	54	1	0.02	18	0	0.00	20	0	0.00	16	1	0.06			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	69	1	0.01	22	0	0.00	28	0	0.00	19	1	0.05			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	165	4	0.02	48	4	0.08	63	0	0.00	54	0	0.00			
00400 PH	Fresh Chronic	9.	233	2	0.01	70	0	0.00	90	1	0.01	73	1	0.01			
	Other-Lo Lim.	6.5	233	44	0.19	70	12	0.17	90	17	0.19	73	15	0.21			
00403 PH, LAB	Fresh Chronic	9.	90	0	0.00	27	0	0.00	37	0	0.00	26	0	0.00			
	Other-Lo Lim.	6.5	90	11	0.12	27	6	0.22	37	3	0.08	26	2	0.08			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	223	0	0.00	64	0	0.00	90	0	0.00	69	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	206	2	0.01	60	0	0.00	82	2	0.02	64	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	17	0	0.00	4	0	0.00	8	0	0.00	5	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	87	0	0.00	25	0	0.00	36	0	0.00	26	0	0.00			
	Drinking Water	250.	87	2	0.02	25	0	0.00	36	2	0.06	26	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	86	0	0.00	24	0	0.00	36	0	0.00	26	0	0.00			
00951 FLUORIDE, TOTAL AS F	Drinking Water	4.	26	0	0.00	6	0	0.00	12	0	0.00	8	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	14	0	0.00	1	0	0.00	8	0	0.00	5	0	0.00			
	Drinking Water	50.	14	0	0.00	1	0	0.00	8	0	0.00	5	0	0.00			
01012 BERYLLIUM, TOTAL	Fresh Acute	130.	3	0	0.00	1	0	0.00	2	0	0.00						
	Drinking Water	4.	0&	0	0.00												
01027 CADMIUM, TOTAL	Fresh Acute	3.9	2&	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	5.	2&	0	0.00				1	0	0.00	1	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	17	0	0.00	1	0	0.00	8	0	0.00	8	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	16	1	0.06	1	0	0.00	8	0	0.00	7	1	0.14			
	Drinking Water	1300.	16	0	0.00	1	0	0.00	8	0	0.00	7	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	17	0	0.00	1	0	0.00	8	0	0.00	8	0	0.00			
	Drinking Water	15.	17	7	0.41	1	0	0.00	8	2	0.25	8	5	0.63			
01059 THALLIUM, TOTAL	Fresh Acute	1400.	3	0	0.00	1	0	0.00	2	0	0.00						
	Drinking Water	2.	0&	0	0.00												
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	7	0	0.00				2	0	0.00	5	0	0.00			
	Drinking Water	100.	7	0	0.00				2	0	0.00	5	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	10	0	0.00	1	0	0.00	6	0	0.00	3	0	0.00			
	Drinking Water	100.	10	0	0.00	1	0	0.00	6	0	0.00	3	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	17	0	0.00	1	0	0.00	8	0	0.00	8	0	0.00			
	Drinking Water	5000.	17	0	0.00	1	0	0.00	8	0	0.00	8	0	0.00			
01147 SELENIUM, TOTAL	Fresh Acute	20.	8	0	0.00	1	0	0.00	5	0	0.00	2	0	0.00			
	Drinking Water	50.	8	0	0.00	1	0	0.00	5	0	0.00	2	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	1	1	1.00				1	1	1.00						
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	54	44	0.81	18	17	0.94	20	14	0.70	16	13	0.81			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	164	112	0.68	46	34	0.74	65	37	0.57	53	41	0.77			
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	1.	2	0	0.00	1	0	0.00	1	0	0.00						
39300 P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	2	0	0.00	1	0	0.00	1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: RICH0146

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
39310	P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	2	0	0.00	1	0	0.00	1	0	0.00						
39320	P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	2	0	0.00	1	0	0.00	1	0	0.00						
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	2.	2	0	0.00	1	0	0.00	1	0	0.00						
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	2	0	0.00	1	0	0.00	1	0	0.00						
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	2.	2	0	0.00	1	0	0.00	1	0	0.00						
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	2	0	0.00	1	0	0.00	1	0	0.00						
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	1	0	0.00							1	0	0.00			
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	2	0	0.00	1	0	0.00	1	0	0.00						
		Drinking Water	1.	2	0	0.00	1	0	0.00	1	0	0.00						
71900	MERCURY, TOTAL	Fresh Acute	2.4	17	0	0.00	1	0	0.00	8	0	0.00	8	0	0.00			
		Drinking Water	2.	17	0	0.00	1	0	0.00	8	0	0.00	8	0	0.00			
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	12	0	0.00	3	0	0.00	6	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1975 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	11	20.	17.909	25.	4.4	43.645	6.606	5.74	12.2	23.3	24.88
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	11	8.2	7.964	12.2	4.6	4.071	2.018	4.96	6.4	9.	11.68
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	12	6.95	6.892	7.3	6.5	0.05	0.223	6.5	6.8	7.	7.21
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	12	6.947	6.836	7.3	6.5	0.053	0.231	6.5	6.8	7.	7.21
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	12	0.113	0.146	0.316	0.05	0.007	0.085	0.065	0.1	0.158	0.316
00500 RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	1	150.	150.	150.	150.	0.	0.	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	1	96.	96.	96.	96.	0.	0.	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	1	54.	54.	54.	54.	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	11	0.1	0.141	0.3	0.05	0.009	0.094	0.05	0.05	0.2	0.3
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	11	0.02	0.024	0.07	0.005	0.	0.019	0.005	0.005	0.03	0.064
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	11	0.68	0.694	1.229	0.3	0.068	0.26	0.31	0.58	0.86	1.163
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	11	0.5	0.654	1.599	0.3	0.145	0.38	0.32	0.4	0.8	1.479
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	12	400.	1833.333	6000.	50.	5950606.061	2439.386	50.	50.	4675.	5910.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	12	2.602	2.667	3.778	1.699	0.741	0.861	1.699	1.699	3.655	3.771
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		464.737									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	11	0.05	0.05	0.1	0.01	0.001	0.027	0.012	0.02	0.07	0.096

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	12	17.5	17.267	24.4	6.7	34.421	5.867	7.03	13.175	22.65	24.07
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	12	7.7	8.45	12.6	5.8	4.832	2.198	5.89	6.65	10.5	12.06
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	12	7.15	7.225	7.6	6.8	0.08	0.283	6.86	7.	7.5	7.57
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	12	7.125	7.145	7.6	6.8	0.087	0.295	6.86	7.	7.5	7.57
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	12	0.075	0.072	0.158	0.025	0.002	0.043	0.027	0.032	0.1	0.141
00500 RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	2	169.5	169.5	197.	142.	1512.5	38.891	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	2	64.5	64.5	77.	52.	312.5	17.678	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	2	105.	105.	120.	90.	450.	21.213	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	2##	1.75	1.75	3.	0.5	3.125	1.768	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	2##	1.25	1.25	2.	0.5	1.125	1.061	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	2##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	11##	0.05	0.1	0.4	0.05	0.011	0.102	0.05	0.05	0.1	0.34
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	11	0.02	0.027	0.07	0.005	0.	0.02	0.005	0.01	0.04	0.066
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	11	0.58	0.581	0.88	0.3	0.044	0.209	0.304	0.4	0.76	0.88
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	11	0.6	0.663	1.099	0.3	0.06	0.246	0.34	0.5	0.8	1.099
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	11	300.	854.545	6000.	50.	3038227.273	1743.051	50.	100.	800.	5040.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	11	2.477	2.445	3.778	1.699	0.392	0.626	1.699	2.	2.903	3.638
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		278.365									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	10	0.04	0.035	0.05	0.02	0.	0.01	0.02	0.028	0.04	0.049

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	8	13.5	11.963	19.	0.8	45.106	6.716	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	8	8.7	8.313	11.6	5.3	3.833	1.958	**	**	**	**
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	8	7.1	7.15	7.5	6.5	0.123	0.351	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	8	7.089	7.014	7.5	6.5	0.144	0.379	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	8	0.082	0.097	0.316	0.032	0.009	0.094	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	7	0.3	0.214	0.3	0.1	0.011	0.107	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	8	0.025	0.039	0.12	0.01	0.001	0.036	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	4	0.66	10.895	42.	0.26	430.045	20.738	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	7	0.6	0.643	0.9	0.5	0.02	0.14	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	8	300.	14025.	110000.	100.	1503933571.429	38780.582	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	8	2.477	2.716	5.041	2.	0.976	0.988	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		520.									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	8	0.03	0.035	0.06	0.02	0.	0.017	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	11	11.5	13.236	28.	0.	83.745	9.151	0.42	6.5	21.	27.4
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	11	8.7	9.3	14.	7.	4.498	2.121	7.	7.6	11.2	13.44
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	11	7.	7.	7.5	6.5	0.064	0.253	6.54	7.	7.1	7.44
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	11	7.	6.931	7.5	6.5	0.069	0.263	6.54	7.	7.1	7.44
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	11	0.1	0.117	0.316	0.032	0.006	0.077	0.038	0.079	0.1	0.293
00500 RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	2	167.5	167.5	200.	135.	2112.5	45.962	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	2	41.	41.	52.	30.	242.	15.556	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	2	126.5	126.5	148.	105.	924.5	30.406	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	2	32.5	32.5	58.	7.	1300.5	36.062	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	2	5.5	5.5	8.	3.	12.5	3.536	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	2	27.	27.	50.	4.	1058.	32.527	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	9	0.2	0.156	0.3	0.05	0.007	0.085	0.05	0.075	0.2	0.3
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	9	0.02	0.018	0.03	0.01	0.	0.007	0.01	0.01	0.02	0.03
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	9	0.5	0.533	0.7	0.4	0.015	0.122	0.4	0.4	0.65	0.7
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	10	850.	1295.	3300.	50.	1384694.444	1176.73	85.	400.	2450.	3290.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	10	2.929	2.897	3.519	1.699	0.287	0.535	1.789	2.602	3.383	3.517
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		789.152									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	9	0.05	0.042	0.07	0.005	0.001	0.023	0.005	0.02	0.06	0.07

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Annual Analysis for 1979 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	8	16.	15.625	26.	6.5	55.768	7.468	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	5	204.	224.6	286.	179.	2583.8	50.831	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	9	9.9	9.244	11.8	6.	4.21	2.052	6.	7.35	10.8	11.8
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	4	2.	2.25	3.	2.	0.25	0.5	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	5	19.	19.2	34.	3.	125.2	11.189	**	**	**	**
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	9	7.	6.944	7.4	6.5	0.08	0.283	6.5	6.75	7.15	7.4
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	9	7.	6.867	7.4	6.5	0.087	0.295	6.5	6.75	7.15	7.4
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	9	0.1	0.136	0.316	0.04	0.007	0.085	0.04	0.075	0.179	0.316
00500 RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	4	167.5	163.	175.	142.	208.667	14.445	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	4	47.5	254.5	900.	23.	185320.333	430.488	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	4	133.	126.25	145.	94.	510.917	22.603	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	5	8.	11.4	26.	3.	79.3	8.905	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	5	2.	4.	14.	0.	34.	5.831	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	5	8.	7.4	12.	3.	18.3	4.278	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	9	0.1	0.089	0.2	0.05	0.002	0.049	0.05	0.05	0.1	0.2
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	9	0.02	0.017	0.03	0.005	0.	0.009	0.005	0.01	0.025	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	5	0.7	0.59	0.7	0.35	0.025	0.16	**	**	**	**

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Annual Analysis for 1979 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	9	0.5	0.444	0.6	0.2	0.018	0.133	0.2	0.35	0.55	0.6
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	5##	0.05	0.06	0.1	0.05	0.001	0.022	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	5	0.04	0.036	0.05	0.02	0.	0.011	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	5	12.	10.2	17.	0.	43.2	6.573	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	8	850.	987.5	2800.	100.	769821.429	877.395	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	8	2.923	2.807	3.447	2.	0.23	0.479	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	641.102										
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	4	0.02	0.033	0.08	0.01	0.001	0.032	**	**	**	**

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Annual Analysis for 1980 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	11	13.5	15.018	27.	5.5	72.004	8.485	5.5	6.	25.	26.64
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	10	254.	262.9	418.	172.	4581.656	67.688	175.6	210.25	285.75	407.7
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	11	8.6	8.673	11.6	5.1	4.764	2.183	5.28	6.6	10.8	11.52
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	11	2.	2.273	4.	1.	1.018	1.009	1.	1.	3.	3.8
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	11	19.	19.455	27.	14.	13.873	3.725	14.	17.	22.	26.
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	12	7.05	7.125	7.5	6.7	0.078	0.28	6.7	7.	7.4	7.5
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	12	7.047	7.044	7.5	6.7	0.086	0.293	6.7	7.	7.4	7.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	12	0.09	0.09	0.2	0.032	0.003	0.058	0.032	0.04	0.1	0.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	11	7.	14.182	61.	2.5	305.514	17.479	2.5	5.	14.	55.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	11	3.	3.909	11.	1.	8.441	2.905	1.	2.5	5.	10.2
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	11	4.	10.727	56.	2.5	251.768	15.867	2.5	3.	10.	48.8
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	11##	0.05	0.073	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	11	0.02	0.022	0.08	0.005	0.	0.022	0.005	0.01	0.02	0.072
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	11	0.7	4.446	43.	0.22	163.533	12.788	0.262	0.5	0.8	34.56
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	11	0.4	0.391	0.8	0.1	0.029	0.17	0.14	0.3	0.4	0.74
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	11	0.1	0.095	0.2	0.05	0.003	0.057	0.05	0.05	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	11	0.03	0.033	0.08	0.02	0.	0.018	0.02	0.02	0.04	0.074
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	11	12.	12.091	19.	10.	6.491	2.548	10.	10.	13.	17.8
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	11	400.	1281.818	8000.	50.	5665136.364	2380.155	50.	100.	1700.	6940.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	11	2.602	2.552	3.903	1.699	0.519	0.721	1.699	2.	3.23	3.809
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =	356.306										

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Annual Analysis for 1981 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	11	16.	14.909	27.	3.	75.941	8.714	3.7	7.	25.	26.8
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	11	282.	299.636	509.	150.	8554.455	92.49	162.6	253.	320.	484.2
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	10	7.3	8.	13.	5.3	6.616	2.572	5.36	5.975	10.4	12.8
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	11	3.	2.364	4.	1.	1.455	1.206	1.	1.	3.	4.
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	11	16.	18.636	42.	13.	69.855	8.358	13.	14.	19.	38.4
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	10	7.	7.02	7.6	6.	0.204	0.452	6.07	6.85	7.35	7.59
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	10	7.	6.746	7.6	6.	0.288	0.536	6.07	6.85	7.35	7.59
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	10	0.1	0.18	1.	0.025	0.086	0.293	0.026	0.045	0.144	0.92
00403 PH, LAB, STANDARD UNITS SU	02/17/81-12/07/98	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/17/81-12/07/98	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/17/81-12/07/98	1	0.126	0.126	0.126	0.126	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/17/81-12/07/98	1	31.	31.	31.	31.	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	11	8.	13.818	57.	2.5	244.914	15.65	2.5	5.	17.	50.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	11	3.	4.364	10.	2.	6.005	2.45	2.1	2.5	6.	9.4

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Annual Analysis for 1981 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	11	4.	10.136	47.	1.	185.655	13.626	1.3	2.5	14.	41.6
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	11	0.1	0.114	0.3	0.05	0.007	0.084	0.05	0.05	0.2	0.28
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	11	0.02	0.023	0.04	0.01	0.	0.009	0.01	0.02	0.03	0.038
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	11	0.6	0.564	0.9	0.05	0.061	0.248	0.098	0.47	0.8	0.88
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	11	0.4	0.509	0.9	0.3	0.031	0.176	0.32	0.4	0.6	0.86
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	11	0.1	0.082	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	11	0.05	0.055	0.13	0.02	0.001	0.035	0.022	0.03	0.06	0.126
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	11	10.	12.	25.	6.	33.4	5.779	6.2	9.	12.	24.2
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	11	200.	750.	5200.	50.	2373000.	1540.454	50.	50.	300.	4480.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	11	2.301	2.352	3.716	1.699	0.403	0.635	1.699	1.699	2.477	3.614
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		225.017									

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Annual Analysis for 1982 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	11	15.	15.909	26.5	5.	56.941	7.546	5.6	10.	24.	26.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	10	226.5	237.6	364.	156.	3969.822	63.007	157.1	195.5	268.25	359.3
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	11	7.7	7.782	11.5	4.3	6.756	2.599	4.3	5.2	10.6	11.4
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	10	2.	2.9	9.	1.	5.433	2.331	1.	1.75	3.25	8.5
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	10	18.5	26.7	87.	9.	533.344	23.094	9.1	12.25	31.5	81.9
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	11	6.8	6.8	7.	6.5	0.026	0.161	6.52	6.7	7.	7.
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	11	6.8	6.772	7.	6.5	0.027	0.164	6.52	6.7	7.	7.
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	11	0.158	0.169	0.316	0.1	0.004	0.066	0.1	0.1	0.2	0.303
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	10	12.	49.75	344.	2.5	10917.403	104.486	3.05	8.75	36.75	315.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	10	4.5	8.35	46.	2.	176.892	13.3	2.05	2.875	6.	42.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	10	8.5	41.65	298.	2.5	8308.558	91.151	2.55	4.5	30.75	273.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	10	0.125	0.175	0.5	0.05	0.019	0.138	0.05	0.088	0.225	0.48
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	10	0.025	0.027	0.05	0.01	0.	0.013	0.01	0.018	0.04	0.049
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	10	0.515	0.619	1.1	0.32	0.081	0.284	0.325	0.378	0.872	1.09
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	10	0.6	0.615	1.	0.35	0.038	0.194	0.355	0.475	0.725	0.98
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	10	0.1	0.12	0.3	0.05	0.007	0.086	0.05	0.05	0.2	0.29
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	10	0.04	0.059	0.17	0.01	0.002	0.045	0.013	0.04	0.07	0.163
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	10	10.5	10.9	27.	3.	42.767	6.54	3.3	6.	12.25	25.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	10	850.	2180.	8000.	50.	9827888.889	3134.946	50.	237.5	3575.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	10	2.889	2.837	3.903	1.699	0.612	0.783	1.699	2.283	3.467	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		687.492									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	8	9.	11.625	25.	4.	65.625	8.101	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	8	208.5	218.75	408.	115.	7591.071	87.127	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	8	10.05	10.188	12.4	7.8	2.987	1.728	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	7	2.	2.429	4.	2.	0.619	0.787	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	8	19.5	20.125	30.	14.	30.696	5.54	**	**	**	**
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	8	6.8	6.75	7.	6.5	0.029	0.169	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	8	6.8	6.72	7.	6.5	0.03	0.172	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	8	0.158	0.191	0.316	0.1	0.006	0.08	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	8	6.	11.063	48.	2.5	226.174	15.039	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	8	4.5	4.438	9.	2.	5.674	2.382	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	8	2.25	6.938	39.	0.	172.317	13.127	**	**	**	**

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Annual Analysis for 1983 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	8	0.2	0.263	0.9	0.1	0.071	0.267	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	8	0.015	0.016	0.03	0.005	0.	0.008	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	8	0.74	0.645	0.88	0.26	0.062	0.249	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	8	0.575	0.756	1.6	0.3	0.239	0.489	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	8##	0.075	0.087	0.2	0.05	0.003	0.052	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	8	0.04	0.058	0.2	0.02	0.003	0.058	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	8	8.5	9.625	17.	6.	13.125	3.623	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	7	700.	1764.286	8000.	50.	8173928.571	2859.008	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	7	2.845	2.73	3.903	1.699	0.607	0.779	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		537.017									

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Annual Analysis for 1984 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	8	20.15	16.85	24.5	3.	65.194	8.074	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	8	206.5	255.5	658.	153.	27607.429	166.155	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	8	8.7	8.8	12.8	5.8	7.334	2.708	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	8	1.	1.5	3.	1.	0.571	0.756	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	8	19.	17.875	29.	8.	46.125	6.792	**	**	**	**
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	8	6.465	6.405	6.81	5.7	0.151	0.388	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	8	6.46	6.238	6.81	5.7	0.183	0.427	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	8	0.347	0.578	1.995	0.155	0.381	0.617	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	8	7.5	7.563	14.	2.5	23.746	4.873	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	8	3.25	3.813	6.	2.	2.781	1.668	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	8	3.25	4.688	10.	1.	10.996	3.316	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	8	0.1	0.106	0.2	0.05	0.004	0.062	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	8	0.015	0.017	0.03	0.005	0.	0.01	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	8	0.7	0.68	0.98	0.47	0.033	0.181	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	8	0.65	0.631	1.	0.25	0.068	0.26	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	8##	0.075	0.1	0.3	0.05	0.007	0.085	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	8	0.04	0.071	0.26	0.02	0.006	0.079	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	8	7.5	7.5	12.	4.	8.	2.828	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	7	100.	271.429	600.	100.	49047.619	221.467	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	7	2.	2.297	2.778	2.	0.14	0.374	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		198.165									

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Annual Analysis for 1985 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	11	16.3	14.155	23.	4.	53.443	7.31	4.1	6.5	21.	22.76
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	11	205.	186.727	251.	96.	3868.418	62.197	96.6	135.	248.	250.6
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	11	9.6	9.073	11.8	5.4	6.282	2.506	5.54	6.4	11.6	11.8
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	9	2.	1.667	2.	1.	0.25	0.5	1.	1.	2.	2.
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	11	23.	24.	43.	11.	102.2	10.109	11.8	15.	30.	42.
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	11	6.5	6.368	6.7	5.75	0.084	0.29	5.82	6.2	6.6	6.7
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	11	6.5	6.268	6.7	5.75	0.095	0.309	5.82	6.2	6.6	6.7
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	11	0.316	0.54	1.778	0.2	0.208	0.456	0.2	0.251	0.631	1.581
00500 RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	4	141.	140.75	154.	127.	188.25	13.72	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	4	38.	37.	42.	30.	28.	5.292	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	4	103.	103.75	118.	91.	146.25	12.093	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	11	8.	13.727	57.	2.5	274.168	16.558	2.5	5.	10.	52.2

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Annual Analysis for 1985 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	11	4.	5.455	11.	2.5	9.423	3.07	2.5	3.	9.	10.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	11	3.	8.727	46.	0.	195.568	13.985	0.2	2.5	6.	41.6
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	10##	0.075	0.095	0.2	0.05	0.004	0.06	0.05	0.05	0.125	0.2
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	10	0.02	0.024	0.07	0.005	0.	0.019	0.006	0.01	0.033	0.067
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	10	0.53	0.55	1.	0.14	0.078	0.279	0.153	0.323	0.83	0.989
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	8	0.5	0.525	1.	0.3	0.054	0.231	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	8##	0.05	0.075	0.2	0.05	0.003	0.053	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	10	0.05	0.057	0.11	0.02	0.001	0.029	0.021	0.038	0.078	0.109
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	11	9.	9.182	15.	3.	10.564	3.25	3.6	8.	11.	14.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	11	300.	781.818	3800.	50.	1191136.364	1091.392	50.	100.	1100.	3300.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	11	2.477	2.549	3.58	1.699	0.363	0.602	1.699	2.	3.041	3.487
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		354.186									

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Annual Analysis for 1986 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	11	15.5	13.864	26.	4.	63.555	7.972	4.2	6.	22.	25.3
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	11	240.	255.455	558.	130.	12426.473	111.474	140.	189.	266.	509.2
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	11	8.	8.782	11.8	5.6	5.31	2.304	5.7	7.1	11.4	11.72
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	11	2.	2.364	4.	1.	0.855	0.924	1.	2.	3.	3.8
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	11	16.	19.	32.	14.	38.	6.164	14.	14.	25.	31.
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	11	7.33	7.221	7.81	6.6	0.179	0.424	6.62	6.7	7.6	7.77
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	11	7.33	7.036	7.81	6.6	0.217	0.466	6.62	6.7	7.6	7.77
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	11	0.047	0.092	0.251	0.015	0.007	0.086	0.017	0.025	0.2	0.241
00500 RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	2	151.	151.	155.	147.	32.	5.657	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	2	31.	31.	34.	28.	18.	4.243	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	2	120.	120.	127.	113.	98.	9.899	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	11	6.	14.318	51.	2.5	254.764	15.961	2.5	2.5	25.	47.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	11	5.	5.136	11.	0.	10.955	3.31	0.5	2.5	7.	10.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	10	4.75	10.85	41.	1.	177.614	13.327	1.	2.125	17.25	39.6
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	11	0.1	0.155	0.3	0.05	0.008	0.091	0.05	0.1	0.2	0.3
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	11	0.03	0.023	0.05	0.01	0.	0.013	0.01	0.01	0.03	0.046
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	11	0.59	0.675	1.2	0.3	0.085	0.291	0.31	0.47	0.99	1.158
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	11	0.6	0.7	1.1	0.5	0.048	0.219	0.5	0.5	0.8	1.1
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	11	0.1	0.118	0.2	0.05	0.005	0.068	0.05	0.05	0.2	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	11	0.05	0.053	0.1	0.03	0.	0.021	0.03	0.04	0.06	0.096
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	11	7.	7.818	11.	5.	2.964	1.722	5.2	7.	9.	10.6
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	11	600.	2086.364	8000.	50.	9089045.455	3014.804	60.	100.	2200.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	11	2.778	2.831	3.903	1.699	0.563	0.751	1.759	2.	3.342	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		678.101									

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Annual Analysis for 1987 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	14	16.25	16.793	26.	3.	71.002	8.426	5.	10.	25.8	26.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	12	209.5	222.083	429.	134.	6305.902	79.41	139.4	155.25	261.25	379.8
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	14	7.75	7.45	12.1	3.2	10.549	3.248	3.2	3.9	10.45	11.5
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	12	2.	2.917	8.	1.	5.356	2.314	1.	1.25	3.75	7.7
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	12	21.	21.167	39.	9.	64.697	8.043	9.6	16.25	25.75	35.4
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	14	7.665	7.341	9.17	5.45	1.304	1.142	5.45	6.08	8.172	8.705
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	14	7.665	6.195	9.17	5.45	2.718	1.649	5.45	6.08	8.172	8.705

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	14	0.022	0.639	3.548	0.001	1.605	1.267	0.003	0.007	0.832	3.548
00500 RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	5	128.	153.6	249.	120.	2976.3	54.555	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	5	21.	28.2	57.	16.	283.7	16.843	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	5	107.	125.4	192.	104.	1429.8	37.813	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	12	5.	7.958	26.	2.5	56.566	7.521	2.5	2.5	10.	23.9
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	12##	2.5	3.667	10.	1.	7.561	2.75	1.	2.5	4.75	9.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	12	4.	5.292	18.	2.5	20.203	4.495	2.5	2.5	6.5	15.3
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.1	0.108	0.2	0.05	0.004	0.06	0.05	0.05	0.175	0.2
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.02	0.026	0.07	0.005	0.	0.019	0.007	0.01	0.038	0.064
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.785	0.712	0.98	0.2	0.046	0.213	0.305	0.583	0.825	0.977
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	12	0.55	0.658	1.2	0.4	0.07	0.264	0.4	0.5	0.8	1.17
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	12	0.1	0.1	0.2	0.05	0.001	0.037	0.05	0.1	0.1	0.17
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	12	0.04	0.045	0.08	0.03	0.	0.014	0.03	0.04	0.05	0.074
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	8	7.5	7.75	10.	6.	1.643	1.282	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	11	200.	1681.818	8000.	50.	9821136.364	3133.869	50.	100.	800.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	11	2.301	2.548	3.903	1.699	0.606	0.778	1.699	2.	2.903	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		353.441									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	8	18.5	17.588	22.1	10.2	16.393	4.049	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	6	177.	188.667	270.	143.	2462.267	49.621	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	8	7.25	7.15	10.8	5.3	3.271	1.809	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	5	3.	2.4	4.	1.	1.8	1.342	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	6	21.5	21.	25.	18.	7.2	2.683	**	**	**	**
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	8	7.5	7.643	9.23	6.63	0.571	0.756	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	8	7.496	7.266	9.23	6.63	0.733	0.856	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	8	0.032	0.054	0.234	0.001	0.006	0.075	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	02/17/81-12/07/98	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/17/81-12/07/98	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/17/81-12/07/98	1	100000.	100000.	100000.	100000.	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	6##	2.25	2.25	5.	0.5	2.875	1.696	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	6##	1.75	1.75	3.	0.5	1.475	1.214	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	6##	0.75	1.167	2.5	0.5	0.767	0.876	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	6	0.085	0.123	0.24	0.08	0.005	0.067	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	6	0.025	0.063	0.22	0.005	0.007	0.083	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	6	0.515	0.587	1.1	0.27	0.087	0.295	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	6	0.75	0.717	0.9	0.4	0.038	0.194	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	6	0.15	0.15	0.2	0.1	0.003	0.055	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	5	0.05	0.05	0.07	0.03	0.	0.016	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	6	6.1	6.067	7.5	4.3	1.143	1.069	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	10/06/88-12/07/98	1	24.	24.	24.	24.	0.	0.	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	9	200.	188.889	400.	50.	17986.111	134.112	50.	75.	300.	400.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	9	2.301	2.167	2.602	1.699	0.116	0.34	1.699	1.849	2.452	2.602
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		146.973									

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Annual Analysis for 1989 - Station RICH0146

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/10/75-12/07/98	12	16.25	16.5	26.6	1.5	68.32	8.266	2.52	10.95	24.675	26.12
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/07/98	12	210.5	360.5	2055.	80.	292234.636	540.587	93.8	133.	297.25	1556.1
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		11/15/89-12/07/98	1	207.	207.	207.	207.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	02/10/75-06/05/91	12	8.7	8.625	14.	6.	6.446	2.539	6.	6.1	9.775	13.31
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/08/79-12/07/98	13	3.	3.	7.	1.	3.167	1.78	1.	2.	3.5	6.6
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/07/98	13	21.	21.538	37.	13.	58.603	7.655	13.	15.5	24.	36.6
00400p PH (STANDARD UNITS)		02/10/75-12/07/98	12	7.02	7.208	8.14	6.15	0.436	0.66	6.276	6.67	7.94	8.122
00400p CONVERTED PH (STANDARD UNITS)		02/10/75-12/07/98	12	7.006	6.831	8.14	6.15	0.591	0.768	6.276	6.67	7.94	8.122
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/10/75-12/07/98	12	0.099	0.148	0.708	0.007	0.039	0.198	0.008	0.012	0.218	0.576
00403 PH, LAB, STANDARD UNITS	SU	02/17/81-12/07/98	13	6.9	6.908	7.2	6.7	0.024	0.155	6.7	6.75	7.	7.16
00403 CONVERTED PH, LAB, STANDARD UNITS		02/17/81-12/07/98	13	6.9	6.883	7.2	6.7	0.025	0.157	6.7	6.75	7.	7.16
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/17/81-12/07/98	13	0.126	0.131	0.2	0.063	0.002	0.046	0.07	0.1	0.179	0.2
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/17/81-12/07/98	13	23.	27.846	42.	13.	91.974	9.59	14.6	22.	39.	41.2
00500 RESIDUE, TOTAL (MG/L)		03/20/75-12/07/98	12	157.	245.417	1090.	124.	72618.265	269.478	124.6	131.25	223.25	842.5
00505 RESIDUE, TOTAL VOLATILE (MG/L)		03/20/75-12/07/98	12	36.	34.083	54.	16.	124.447	11.156	17.2	24.75	43.	50.7
00510 RESIDUE, TOTAL FIXED (MG/L)		03/20/75-12/07/98	12	135.5	211.333	1070.	83.	74869.879	273.624	83.	92.75	187.5	812.3
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/75-12/07/98	13	5.	21.038	178.	0.5	2384.436	48.831	0.7	2.	8.5	126.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/75-12/07/98	13	2.	4.231	26.	0.5	47.484	6.891	0.5	1.	3.	19.2
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/75-12/07/98	13	3.	17.	152.	0.5	1755.917	41.904	0.5	0.5	6.	107.2
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/20/75-12/07/98	12	0.11	0.158	0.38	0.05	0.014	0.117	0.053	0.073	0.223	0.38
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		03/20/75-12/07/98	12	0.025	0.104	0.98	0.01	0.076	0.276	0.01	0.02	0.038	0.698
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		03/20/75-12/07/98	12	0.81	0.783	1.28	0.02	0.112	0.334	0.149	0.643	0.943	1.265
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/75-12/07/98	12	0.8	0.883	1.7	0.5	0.118	0.343	0.53	0.6	1.05	1.58
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/07/98	12	0.1	0.1	0.1	0.1	0.	0.	0.1	0.1	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/08/79-06/05/91	12	0.045	0.054	0.13	0.02	0.001	0.031	0.023	0.04	0.058	0.121
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-08/26/96	13	6.3	6.569	9.6	4.6	1.659	1.288	4.8	5.95	7.	9.08
00900 HARDNESS, TOTAL (MG/L AS CACO3)		01/25/89-12/07/98	12	47.	46.5	92.	4.	476.455	21.828	8.8	36.	57.5	82.4
00940 CHLORIDE,TOTAL IN WATER	MG/L	10/06/88-12/07/98	11	31.	69.909	418.	10.	13985.491	118.26	11.	15.	67.	353.8
00945 SULFATE, TOTAL (MG/L AS SO4)		01/25/89-12/07/98	11	17.	16.455	24.	7.	31.273	5.592	7.8	11.	22.	23.8
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		02/10/75-06/08/94	9	300.	1977.778	8000.	50.	11688819.444	3418.892	50.	75.	4300.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		02/10/75-06/08/94	9	2.477	2.615	3.903	1.699	0.68	0.825	1.699	1.849	3.341	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		412.474									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station RICH0146

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/10/75-12/07/98	8	9.	11.888	19.6	6.5	33.833	5.817	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/07/98	1	238.	238.	238.	238.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		11/15/89-12/07/98	6	192.5	190.5	233.	140.	1207.5	34.749	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/17/90-12/07/98	2	9.6	9.6	12.	7.2	11.52	3.394	**	**	**	**
00300 OXYGEN, DISSOLVED	MG/L	02/10/75-06/05/91	8	11.05	10.013	12.3	6.7	6.127	2.475	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/08/79-12/07/98	7	2.	1.714	3.	1.	0.571	0.756	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/07/98	7	21.	20.857	27.	14.	21.143	4.598	**	**	**	**
00400p PH (STANDARD UNITS)		02/10/75-12/07/98	8	7.6	7.494	7.97	6.74	0.211	0.46	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		02/10/75-12/07/98	8	7.6	7.256	7.97	6.74	0.276	0.526	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/10/75-12/07/98	8	0.025	0.056	0.182	0.011	0.004	0.067	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	02/17/81-12/07/98	7	6.8	6.757	6.9	6.5	0.02	0.14	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/17/81-12/07/98	7	6.8	6.737	6.9	6.5	0.02	0.141	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/17/81-12/07/98	7	0.158	0.183	0.316	0.126	0.004	0.066	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/17/81-12/07/98	7	24.	25.	37.	20.	31.333	5.598	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		03/20/75-12/07/98	7	140.	137.714	160.	93.	568.238	23.838	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		03/20/75-12/07/98	7	34.	31.286	43.	14.	105.238	10.259	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		03/20/75-12/07/98	7	107.	106.429	136.	79.	463.952	21.54	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/75-12/07/98	7	5.	5.714	13.	1.	20.571	4.536	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/75-12/07/98	7	1.	1.571	4.	0.5	1.536	1.239	**	**	**	**

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Annual Analysis for 1990 - Station RICH0146

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	7	3.	4.286	12.	1.	17.238	4.152	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	8	0.095	0.195	1.	0.02	0.107	0.328	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	8	0.02	0.02	0.04	0.01	0.	0.009	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	8	0.87	0.879	1.26	0.47	0.058	0.241	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	8	0.6	0.65	0.9	0.5	0.031	0.177	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	8	0.1	0.094	0.1	0.05	0.	0.018	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	8	0.05	0.044	0.06	0.02	0.	0.013	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	7	6.9	7.029	11.2	4.6	4.976	2.231	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/25/89-12/07/98	7	47.	47.143	58.	42.	32.81	5.728	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/06/88-12/07/98	7	30.	30.	45.	15.	117.333	10.832	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	01/25/89-12/07/98	7	14.	14.857	18.	13.	3.476	1.864	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	5	200.	260.	700.	100.	63000.	250.998	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	5	2.301	2.289	2.845	2.	0.119	0.345	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		194.729									
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station RICH0146

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	4	17.	16.05	22.3	7.9	45.39	6.737	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/15/89-12/07/98	4	174.	175.75	234.	121.	3482.25	59.011	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	09/17/90-12/07/98	3	8.4	8.133	10.7	5.3	7.343	2.71	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	2	7.9	7.9	10.7	5.1	15.68	3.96	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	4	2.	2.	3.	1.	0.667	0.816	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	4	16.	17.	26.	10.	54.667	7.394	**	**	**	**
00400p	PH (STANDARD UNITS)	02/10/75-12/07/98	4	6.54	6.578	7.04	6.19	0.152	0.389	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	4	6.491	6.461	7.04	6.19	0.17	0.412	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	4	0.323	0.346	0.646	0.091	0.066	0.257	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	02/17/81-12/07/98	4	6.9	6.9	7.2	6.6	0.067	0.258	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	02/17/81-12/07/98	4	6.889	6.844	7.2	6.6	0.071	0.266	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/17/81-12/07/98	4	0.129	0.143	0.251	0.063	0.007	0.082	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/17/81-12/07/98	4	27.5	28.75	41.	19.	96.25	9.811	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	4	121.5	120.75	151.	89.	1182.917	34.394	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	4	37.	35.25	43.	24.	70.25	8.382	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	4	83.	85.5	127.	49.	1406.333	37.501	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	4	6.	5.375	8.	1.5	10.229	3.198	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	4	1.75	1.625	2.	1.	0.229	0.479	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	4	4.5	4.125	6.	1.5	5.063	2.25	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	4##	0.045	0.053	0.1	0.02	0.002	0.039	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	4	0.015	0.016	0.03	0.005	0.	0.011	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	4	0.585	0.595	0.87	0.34	0.05	0.223	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	4	0.55	0.525	0.6	0.4	0.009	0.096	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	4	0.1	0.113	0.2	0.05	0.004	0.063	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	2	0.045	0.045	0.07	0.02	0.001	0.035	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	4	6.35	6.625	9.1	4.7	4.063	2.016	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/25/89-12/07/98	4	49.	50.5	72.	32.	302.333	17.388	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/06/88-12/07/98	4	21.5	21.5	32.	11.	133.667	11.561	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	01/25/89-12/07/98	4	15.	14.75	17.	12.	4.25	2.062	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	4	200.	312.5	800.	50.	117291.667	342.479	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	4	2.239	2.27	2.903	1.699	0.281	0.53	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		186.121									
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	3	0.06	0.05	0.07	0.02	0.001	0.026	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station RICH0146

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/10/75-12/07/98	4	16.	15.2	21.9	6.9	54.36	7.373	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		11/15/89-12/07/98	4	190.	171.5	203.	103.	2147.	46.336	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/17/90-12/07/98	4	8.2	8.1	10.3	5.7	3.647	1.91	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/08/79-12/07/98	4	1.	1.75	4.	1.	2.25	1.5	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/07/98	4	15.	20.25	45.	6.	296.25	17.212	**	**	**	**
00400p PH (STANDARD UNITS)		02/10/75-12/07/98	4	6.47	6.475	6.89	6.07	0.127	0.357	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		02/10/75-12/07/98	4	6.445	6.372	6.89	6.07	0.141	0.376	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/10/75-12/07/98	4	0.359	0.425	0.851	0.129	0.102	0.32	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	02/17/81-12/07/98	4	7.1	7.175	7.8	6.7	0.269	0.519	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/17/81-12/07/98	4	7.004	6.985	7.8	6.7	0.317	0.563	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/17/81-12/07/98	4	0.099	0.103	0.2	0.016	0.008	0.089	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/17/81-12/07/98	4	32.5	28.25	35.	13.	108.917	10.436	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		03/20/75-12/07/98	4	130.	128.75	140.	115.	172.917	13.15	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		03/20/75-12/07/98	4	32.	35.75	55.	24.	195.583	13.985	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		03/20/75-12/07/98	4	95.5	93.	116.	65.	479.333	21.894	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/75-12/07/98	4	3.	6.	16.	2.	44.667	6.683	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/75-12/07/98	4	1.	1.25	3.	0.	1.583	1.258	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/75-12/07/98	4	2.5	4.75	13.	1.	30.917	5.56	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/20/75-12/07/98	4	0.07	0.07	0.08	0.06	0.	0.012	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		03/20/75-12/07/98	4	0.02	0.02	0.03	0.01	0.	0.008	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		03/20/75-12/07/98	4	0.725	0.688	1.	0.3	0.084	0.289	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/75-12/07/98	4	0.6	0.675	1.	0.5	0.056	0.236	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/07/98	4	0.075	0.075	0.1	0.05	0.	0.021	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-08/26/96	4	5.25	8.45	20.5	2.8	66.15	8.133	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)		01/25/89-12/07/98	4	57.5	61.25	94.	36.	580.917	24.102	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER	MG/L	10/06/88-12/07/98	4	21.5	18.75	23.	9.	44.25	6.652	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)		01/25/89-12/07/98	4	17.5	16.75	21.	11.	17.583	4.193	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		02/10/75-06/08/94	3	400.	700.	1600.	100.	630000.	793.725	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		02/10/75-06/08/94	3	2.602	2.602	3.204	2.	0.362	0.602	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		GEOMETRIC MEAN =		400.									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		03/20/75-12/07/98	4	0.05	0.045	0.06	0.02	0.	0.017	**	**	**	**

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Annual Analysis for 1993 - Station RICH0146

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/10/75-12/07/98	4	14.4	14.95	25.	6.	85.377	9.24	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		11/15/89-12/07/98	4	243.	265.	414.	160.	13064.667	114.301	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/17/90-12/07/98	4	9.45	9.025	11.8	5.4	10.149	3.186	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/08/79-12/07/98	4	2.	2.5	4.	2.	1.	1.	**	**	**	**
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/07/98	4	16.	16.	19.	13.	12.	3.464	**	**	**	**
00400p PH (STANDARD UNITS)		02/10/75-12/07/98	4	6.545	6.578	6.81	6.41	0.029	0.172	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)		02/10/75-12/07/98	4	6.543	6.554	6.81	6.41	0.03	0.174	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/10/75-12/07/98	4	0.287	0.279	0.389	0.155	0.01	0.099	**	**	**	**
00403 PH, LAB, STANDARD UNITS	SU	02/17/81-12/07/98	4	7.1	7.075	7.5	6.6	0.136	0.369	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS		02/17/81-12/07/98	4	7.1	6.957	7.5	6.6	0.154	0.393	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/17/81-12/07/98	4	0.079	0.11	0.251	0.032	0.009	0.097	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/17/81-12/07/98	4	28.5	33.25	54.	22.	220.917	14.863	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)		03/20/75-12/07/98	4	160.5	167.25	239.	109.	3245.583	56.97	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)		03/20/75-12/07/98	4	40.	44.75	62.	37.	134.917	11.615	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)		03/20/75-12/07/98	4	110.	122.5	202.	68.	3297.	57.42	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/75-12/07/98	4	4.5	8.5	22.	3.	83.	9.11	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/75-12/07/98	4	2.	3.75	10.	1.	17.583	4.193	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/75-12/07/98	4	3.	4.75	12.	1.	24.917	4.992	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/20/75-12/07/98	4	0.085	0.093	0.18	0.02	0.005	0.069	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)		03/20/75-12/07/98	4	0.02	0.021	0.04	0.005	0.	0.014	**	**	**	**

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Annual Analysis for 1993 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	4	0.875	0.775	1.05	0.3	0.114	0.338	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	4	0.65	0.625	0.7	0.5	0.009	0.096	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	4	0.065	0.058	0.07	0.03	0.	0.019	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	4	6.9	6.7	7.4	5.6	0.6	0.775	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)	01/25/89-12/07/98	4	62.	61.	70.	50.	92.	9.592	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	10/06/88-12/07/98	4	33.5	45.	96.	17.	1264.667	35.562	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	01/25/89-12/07/98	4	19.	18.	21.	13.	12.	3.464	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	4	250.	1075.	3700.	100.	3069166.667	1751.904	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	4	2.389	2.587	3.568	2.	0.467	0.683	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		386.001									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	4	0.03	0.03	0.04	0.02	0.	0.008	**	**	**	**

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Annual Analysis for 1994 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	8	17.7	18.063	25.4	9.6	37.36	6.112	**	**	**	**
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/11/94-12/07/98	6	16.1	17.5	42.	4.1	171.932	13.112	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/15/89-12/07/98	8	214.5	200.	275.	110.	3566.286	59.718	**	**	**	**
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	09/17/90-12/07/98	8	6.6	6.763	10.8	4.	5.637	2.374	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	8	2.7	2.975	6.3	1.6	2.188	1.479	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	8	19.5	23.375	40.	13.	101.696	10.084	**	**	**	**
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	8	6.605	6.645	7.07	6.26	0.061	0.247	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	8	6.603	6.587	7.07	6.26	0.065	0.255	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	8	0.25	0.259	0.55	0.085	0.02	0.142	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	02/17/81-12/07/98	8	6.5	6.563	6.9	6.4	0.023	0.151	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/17/81-12/07/98	8	6.5	6.543	6.9	6.4	0.023	0.152	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/17/81-12/07/98	8	0.316	0.286	0.398	0.126	0.006	0.08	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/17/81-12/07/98	8	38.	32.5	46.	18.	125.714	11.212	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	8	146.	143.875	181.	100.	549.554	23.443	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	8	37.5	36.5	55.	17.	152.857	12.364	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	8	111.	107.375	139.	65.	692.268	26.311	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	8	7.5	12.25	32.	3.	101.071	10.053	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	8	2.5	3.438	8.	1.5	6.746	2.597	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	8	5.5	8.813	24.	1.5	58.853	7.672	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	8	0.11	0.106	0.24	0.02	0.005	0.071	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	8	0.025	0.026	0.04	0.01	0.	0.011	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	8	1.055	1.014	1.35	0.75	0.054	0.232	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	8	0.7	0.713	1.	0.4	0.036	0.189	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	8	0.06	0.07	0.13	0.04	0.001	0.032	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	8	6.25	7.163	10.8	4.3	6.486	2.547	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)	01/25/89-12/07/98	8	55.	51.25	71.	30.	215.929	14.695	**	**	**	**
00940 CHLORIDE,TOTAL IN WATER MG/L	10/06/88-12/07/98	8	28.5	27.5	40.	8.	141.714	11.904	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	01/25/89-12/07/98	8	18.5	16.375	22.	7.	29.696	5.449	**	**	**	**
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/11/94-12/07/98	6	12600.	11333.333	16000.	5400.	28058666.667	5297.043	**	**	**	**
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/11/94-12/07/98	6	4.084	4.007	4.204	3.732	0.054	0.232	**	**	**	**
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		10158.335									
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	2	4050.	4050.	8000.	100.	31205000.	5586.144	**	**	**	**
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	2	2.952	2.952	3.903	2.	1.811	1.346	**	**	**	**
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		894.427									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	8	0.03	0.034	0.06	0.02	0.	0.015	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	12	14.95	14.367	26.5	1.2	73.255	8.559	1.74	5.3	22.675	25.66
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/11/94-12/07/98	12	8.45	12.458	36.	3.3	109.177	10.449	3.42	4.125	19.3	33.
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	7	189.	188.857	283.	111.	3816.81	61.78	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/15/89-12/07/98	12	206.	269.333	1138.	75.	78168.606	279.586	94.8	143.	236.75	884.2
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	09/17/90-12/07/98	12	7.9	8.483	12.8	4.8	8.385	2.896	4.83	5.925	11.675	12.71
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	12	2.2	2.258	4.7	0.5	1.519	1.232	0.5	1.225	3.	4.34
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	12	15.	19.167	34.	11.	63.061	7.941	11.	12.5	25.75	32.5
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	12	6.715	6.743	7.02	6.45	0.033	0.181	6.471	6.62	6.93	7.011
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	12	6.714	6.71	7.02	6.45	0.034	0.185	6.471	6.62	6.93	7.011
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	12	0.193	0.195	0.355	0.095	0.006	0.079	0.098	0.118	0.241	0.339
00403 PH, LAB, STANDARD UNITS SU	02/17/81-12/07/98	12	6.8	6.842	7.5	6.6	0.063	0.25	6.6	6.7	6.9	7.38
00403 CONVERTED PH, LAB, STANDARD UNITS	02/17/81-12/07/98	12	6.8	6.792	7.5	6.6	0.065	0.256	6.6	6.7	6.9	7.38
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/17/81-12/07/98	12	0.158	0.162	0.251	0.032	0.004	0.065	0.046	0.126	0.2	0.251
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/17/81-12/07/98	12	30.	28.667	46.	17.	75.333	8.679	17.9	21.	34.	43.6
00500 RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	12	134.5	171.417	602.	88.	18783.356	137.052	97.3	121.75	149.25	472.1
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	12	31.	34.167	52.	20.	91.424	9.562	21.2	26.75	42.75	49.6
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	12	105.	137.25	559.	67.	18056.205	134.373	67.3	80.75	120.75	428.8
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	12	6.	8.833	20.	3.	43.97	6.631	3.	3.25	16.25	19.7
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	12##	1.5	2.208	5.	1.5	1.884	1.373	1.5	1.5	2.625	5.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	12	4.	6.625	15.	1.5	29.733	5.453	1.5	1.875	13.	15.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.085	0.105	0.27	0.02	0.007	0.086	0.02	0.043	0.143	0.27
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.02	0.02	0.05	0.005	0.	0.014	0.005	0.006	0.028	0.047
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.74	0.779	1.26	0.43	0.063	0.251	0.451	0.563	0.96	1.215
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	12	0.6	0.658	1.1	0.4	0.074	0.271	0.4	0.4	0.9	1.1
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	12	0.07	0.073	0.11	0.04	0.001	0.023	0.043	0.053	0.095	0.11
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	12	7.75	8.283	12.4	4.3	5.725	2.393	4.9	6.675	10.275	12.19
00900 HARDNESS, TOTAL (MG/L AS CACO3)	01/25/89-12/07/98	12	51.	51.667	78.	28.	264.242	16.256	29.2	38.75	66.75	75.9
00940 CHLORIDE,TOTAL IN WATER MG/L	10/06/88-12/07/98	12	25.	50.833	339.	12.	8299.97	91.104	13.2	18.25	32.5	249.3
00945 SULFATE, TOTAL (MG/L AS SO4)	01/25/89-12/07/98	12	15.	15.	22.	9.	15.455	3.931	9.3	12.25	18.25	21.4
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/11/94-12/07/98	12	1450.	6160.75	16000.	9.	54805326.75	7403.062	57.3	317.5	16000.	16000.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/11/94-12/07/98	12	3.155	3.166	4.204	0.954	1.028	1.014	1.337	2.484	4.204	4.204
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		1465.959									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	12	0.05	0.054	0.1	0.03	0.	0.02	0.033	0.04	0.06	0.094

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Annual Analysis for 1996 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	12	14.2	14.417	25.2	5.5	49.058	7.004	5.56	9.025	22.05	24.72
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/11/94-12/07/98	12	7.6	9.358	21.	3.4	38.01	6.165	3.4	4.1	15.525	20.1
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	12	239.	242.667	395.	138.	5142.606	71.712	147.9	178.75	284.	373.1
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/15/89-12/07/98	12	226.	229.417	396.	139.	4777.356	69.118	147.1	170.75	258.75	364.8
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	09/17/90-12/07/98	12	9.	8.65	12.	4.7	6.197	2.489	4.82	6.275	10.95	11.7
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	12	1.	1.333	3.	0.5	0.742	0.862	0.5	1.	1.75	3.
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	12	19.	19.417	26.	15.	11.538	3.397	15.3	17.	21.5	25.7
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	12	6.56	6.525	6.85	5.87	0.063	0.25	6.005	6.473	6.693	6.82
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	12	6.559	6.439	6.85	5.87	0.071	0.266	6.005	6.472	6.692	6.82
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	12	0.276	0.364	1.349	0.141	0.104	0.323	0.152	0.204	0.337	1.088
00403 PH, LAB, STANDARD UNITS SU	02/17/81-12/07/98	12	7.	6.992	7.4	6.7	0.037	0.193	6.73	6.825	7.1	7.34
00403 CONVERTED PH, LAB, STANDARD UNITS	02/17/81-12/07/98	12	7.	6.955	7.4	6.7	0.039	0.197	6.73	6.825	7.1	7.34
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/17/81-12/07/98	12	0.1	0.111	0.2	0.04	0.002	0.045	0.047	0.079	0.15	0.187
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/17/81-12/07/98	12	27.	28.833	41.	19.	43.061	6.562	19.6	26.	34.5	40.1
00500 RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	12	153.5	152.667	256.	103.	1716.424	41.43	103.6	118.75	166.75	234.4
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	12	34.5	34.333	45.	22.	64.606	8.038	22.6	25.75	42.25	44.7
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	12	114.5	118.333	212.	81.	1282.242	35.808	81.	86.5	130.75	190.7
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	12	3.5	6.625	23.	1.5	48.824	6.987	1.5	1.875	10.5	21.2

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Annual Analysis for 1996 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	12##	1.5	1.792	5.	1.5	1.021	1.01	1.5	1.5	1.5	3.95
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	12##	1.5	5.125	18.	1.5	34.869	5.905	1.5	1.5	8.75	17.1
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.05	0.068	0.14	0.02	0.002	0.044	0.02	0.028	0.115	0.137
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.02	0.019	0.05	0.01	0.	0.012	0.01	0.01	0.02	0.044
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.915	0.859	1.1	0.53	0.041	0.202	0.563	0.67	1.068	1.1
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	12	0.6	0.55	0.7	0.4	0.01	0.1	0.4	0.425	0.6	0.67
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	12	0.07	0.063	0.08	0.04	0.	0.012	0.043	0.05	0.07	0.077
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	8	7.1	6.988	8.8	5.3	1.496	1.223	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CACO3)	01/25/89-12/07/98	12	54.5	50.167	64.	35.	96.152	9.806	35.3	40.	57.5	62.2
00940 CHLORIDE,TOTAL IN WATER MG/L	10/06/88-12/07/98	12	32.5	37.583	83.	17.	360.083	18.976	18.2	23.	42.75	76.7
00945 SULFATE, TOTAL (MG/L AS SO4)	01/25/89-12/07/98	12	13.	13.25	18.	10.	7.841	2.8	10.	10.25	15.75	17.7
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/11/94-12/07/98	12	595.	1727.333	9200.	68.	7658314.424	2767.366	98.6	280.	1600.	8060.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/11/94-12/07/98	12	2.768	2.831	3.964	1.833	0.372	0.61	1.952	2.446	3.201	3.894
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		678.382									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	12	0.045	0.047	0.07	0.03	0.	0.012	0.03	0.04	0.058	0.067

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Annual Analysis for 1997 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	12	13.75	13.75	27.6	3.7	62.821	7.926	3.82	6.125	20.8	26.22
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/11/94-12/07/98	12	9.35	12.567	52.	3.	165.121	12.85	3.33	7.	12.65	40.39
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	12	200.5	209.917	356.	106.	4962.811	70.447	106.	183.25	258.5	335.6
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/15/89-12/07/98	12	191.5	207.75	372.	95.	5633.295	75.055	95.9	184.25	255.	341.1
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	09/17/90-12/07/98	12	8.3	8.942	13.1	5.3	6.214	2.493	5.63	6.675	11.1	12.8
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	12	1.	1.458	3.	0.5	0.521	0.722	0.65	1.	2.	2.7
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	12	19.	18.75	36.	9.	55.477	7.448	9.6	12.25	22.75	32.7
00400p PH (STANDARD UNITS)	02/10/75-12/07/98	12	6.695	6.608	6.81	6.05	0.051	0.226	6.122	6.54	6.75	6.801
00400p CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	12	6.694	6.54	6.81	6.05	0.056	0.237	6.122	6.54	6.75	6.801
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	12	0.202	0.289	0.891	0.155	0.045	0.213	0.158	0.178	0.289	0.778
00403 PH, LAB, STANDARD UNITS SU	02/17/81-12/07/98	12	6.95	6.942	7.4	6.6	0.066	0.257	6.6	6.725	7.1	7.37
00403 CONVERTED PH, LAB, STANDARD UNITS	02/17/81-12/07/98	12	6.947	6.877	7.4	6.6	0.071	0.266	6.6	6.725	7.1	7.37
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/17/81-12/07/98	12	0.113	0.133	0.251	0.04	0.005	0.072	0.043	0.079	0.189	0.251
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/17/81-12/07/98	12	29.5	29.167	46.	15.	78.879	8.881	15.3	23.75	34.	43.6
00500 RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	12	142.	144.333	226.	64.	1419.879	37.681	82.6	127.	154.5	212.8
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	12	38.	39.917	55.	20.	102.629	10.131	23.3	32.75	48.	54.1
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	12	94.5	104.417	189.	44.	1325.174	36.403	54.2	89.25	121.5	176.4
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	12	5.5	7.208	28.	1.5	48.703	6.979	1.95	3.25	8.75	22.3
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	12##	1.5	2.167	5.	1.5	1.242	1.115	1.5	1.5	3.	4.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	12	4.	5.292	23.	1.5	33.975	5.829	1.5	1.875	5.75	17.9
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.055	0.062	0.15	0.02	0.002	0.039	0.02	0.025	0.093	0.135
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.02	0.018	0.04	0.005	0.	0.01	0.005	0.01	0.02	0.037
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.795	0.78	1.18	0.35	0.073	0.27	0.377	0.493	1.033	1.15
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	12	0.6	0.625	1.	0.3	0.038	0.196	0.36	0.5	0.775	0.97
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	12	0.06	0.08	0.24	0.02	0.003	0.059	0.023	0.045	0.095	0.207
00900 HARDNESS, TOTAL (MG/L AS CACO3)	01/25/89-12/07/98	12	46.	45.583	60.	24.	136.265	11.673	24.	44.	54.75	60.
00940 CHLORIDE,TOTAL IN WATER MG/L	10/06/88-12/07/98	12	28.	31.083	84.	8.	423.902	20.589	8.3	19.25	38.25	73.8
00945 SULFATE, TOTAL (MG/L AS SO4)	01/25/89-12/07/98	12	13.5	13.417	19.	8.	9.538	3.088	8.9	11.	15.	18.4
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/11/94-12/07/98	12	870.	2134.167	16000.	110.	19608571.97	4428.157	116.	185.	1775.	11860.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/11/94-12/07/98	12	2.938	2.844	4.204	2.041	0.412	0.642	2.063	2.263	3.249	3.946
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		698.607									
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	12	0.05	0.057	0.13	0.02	0.001	0.029	0.023	0.04	0.068	0.118

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station RICH0146

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	12	16.85	15.942	27.4	5.9	45.764	6.765	6.47	8.825	20.975	26.26
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/11/94-12/07/98	12	6.55	9.008	35.	1.7	81.328	9.018	2.24	3.975	9.	29.45
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	12	183.	184.25	244.	97.	2240.205	47.331	107.2	147.5	233.	243.1
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/15/89-12/07/98	12	197.	186.167	256.	92.	2210.333	47.014	104.9	147.25	218.25	251.5
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	09/17/90-12/07/98	12	7.35	8.067	11.7	5.3	5.361	2.315	5.45	5.9	10.55	11.67
00310	BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	12	3.5	3.167	5.	1.	3.061	1.749	1.	1.	5.	5.
00340	COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	12	20.5	20.25	31.	11.	27.659	5.259	12.2	17.	24.25	29.2
00400p	PH (STANDARD UNITS)	02/10/75-12/07/98	12	6.755	6.757	7.26	6.4	0.05	0.224	6.43	6.615	6.815	7.185
00400p	CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	12	6.755	6.709	7.26	6.4	0.053	0.23	6.43	6.615	6.815	7.185
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	12	0.176	0.196	0.398	0.055	0.009	0.092	0.068	0.153	0.243	0.374
00403	PH, LAB, STANDARD UNITS SU	02/17/81-12/07/98	12	6.6	6.625	7.	6.4	0.038	0.196	6.4	6.425	6.775	6.97
00403	CONVERTED PH, LAB, STANDARD UNITS	02/17/81-12/07/98	12	6.6	6.588	7.	6.4	0.04	0.2	6.4	6.425	6.775	6.97
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/17/81-12/07/98	12	0.251	0.258	0.398	0.1	0.011	0.104	0.108	0.169	0.378	0.398
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/17/81-12/07/98	12	30.5	33.417	53.	14.	137.538	11.728	16.7	25.5	45.	52.1
00500	RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	12	134.	130.	158.	93.	520.909	22.823	94.8	109.5	152.75	156.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	12	38.5	36.833	49.	23.	79.424	8.912	23.9	28.25	45.25	48.7
00510	RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	12	94.5	93.167	129.	61.	511.061	22.607	62.8	72.5	110.25	128.1
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	12	5.5	6.792	21.	1.5	26.794	5.176	1.95	4.	7.	18.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	12##	1.5	2.125	6.	1.5	1.824	1.351	1.5	1.5	2.625	5.1
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	12	3.	4.333	15.	1.5	15.788	3.973	1.5	1.5	4.75	13.2
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.05	0.052	0.14	0.02	0.001	0.037	0.02	0.02	0.075	0.125
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.015	0.017	0.04	0.005	0.	0.012	0.005	0.006	0.028	0.037
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	12	0.78	0.709	1.08	0.25	0.086	0.293	0.28	0.44	0.993	1.071
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	12	0.75	0.75	1.	0.5	0.023	0.151	0.5	0.7	0.875	0.97
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	12	0.085	0.099	0.23	0.07	0.002	0.046	0.07	0.073	0.09	0.206
00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/25/89-12/07/98	12	43.	43.333	66.	23.	178.606	13.364	24.2	32.25	55.	64.2
00940	CHLORIDE,TOTAL IN WATER MG/L	10/06/88-12/07/98	12	22.	21.417	33.	9.	50.629	7.115	9.9	15.5	26.75	31.8
00945	SULFATE, TOTAL (MG/L AS SO4)	01/25/89-12/07/98	12	14.5	14.333	17.	10.	4.788	2.188	10.3	13.25	16.	17.
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/11/94-12/07/98	12	490.	2506.917	16000.	45.	20085997.72	4481.74	51.9	180.	3500.	12250.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	07/11/94-12/07/98	12	2.69	2.84	4.204	1.653	0.609	0.781	1.707	2.215	3.544	4.006
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =		692.343									
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	12	0.07	0.068	0.1	0.05	0.	0.015	0.05	0.053	0.07	0.097

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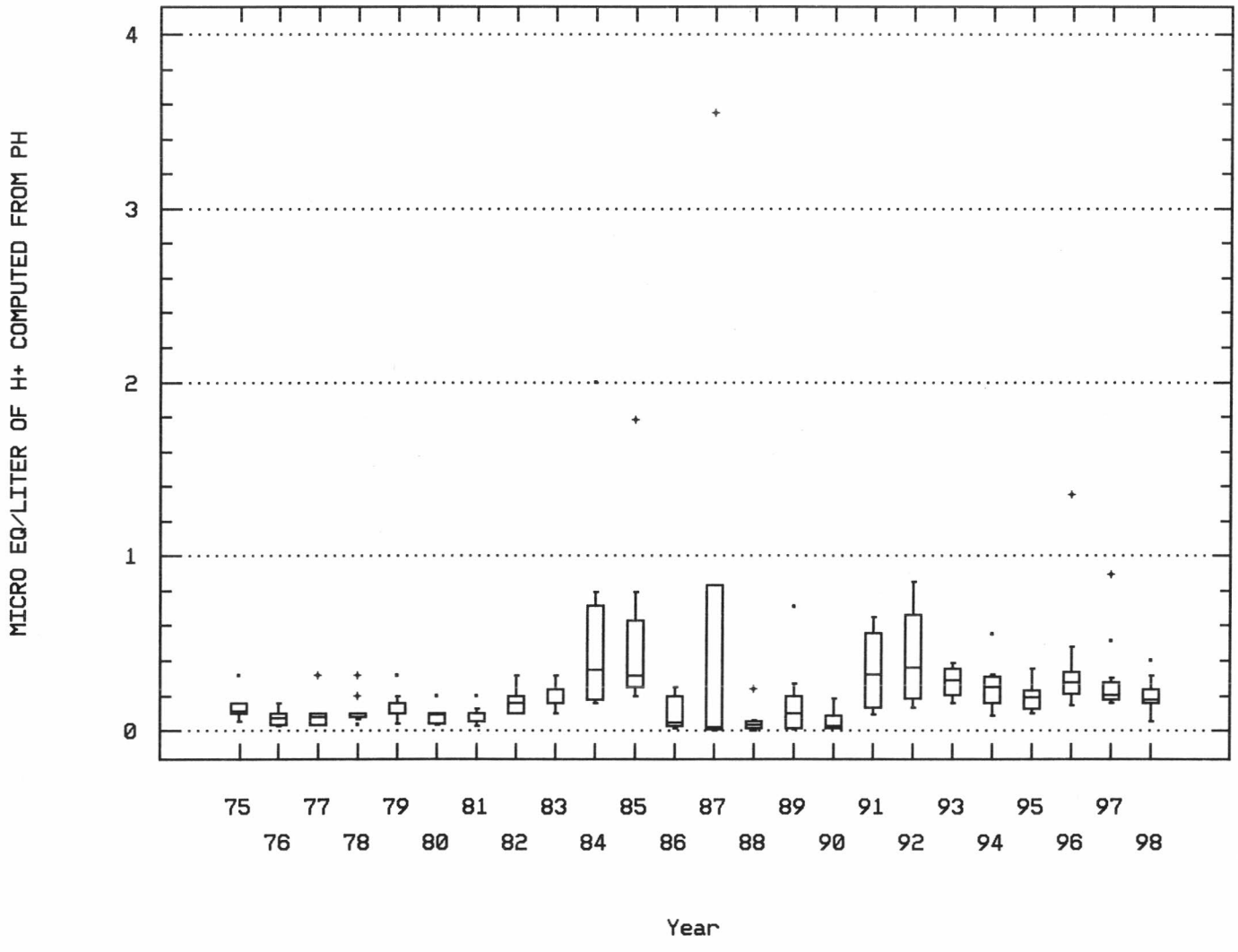
Station: RICH0146 Parameter Code: 00400

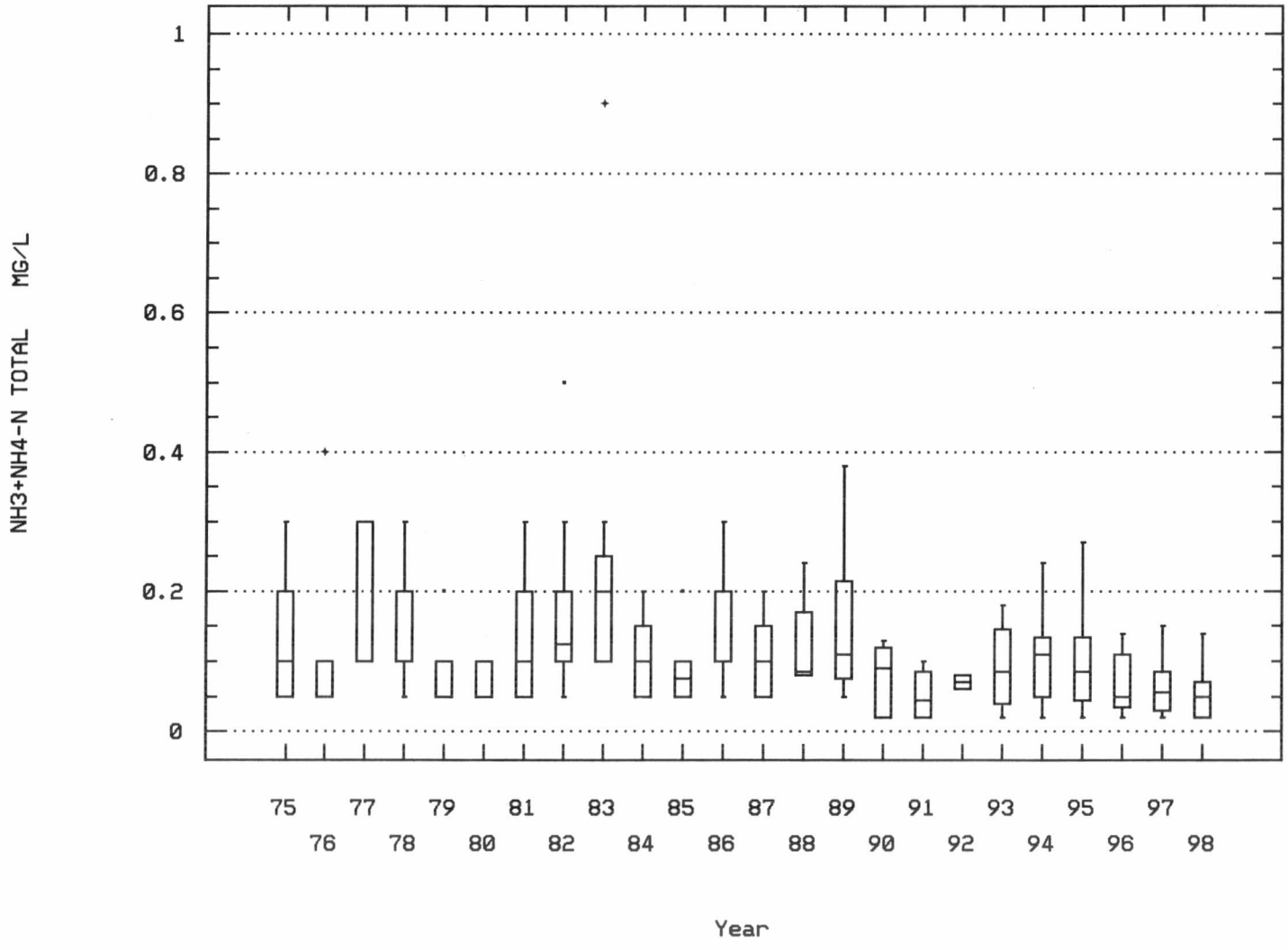
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 1 BRIDGE (BROOK ROAD)

Station: RICH0146 Parameter Code: 00610

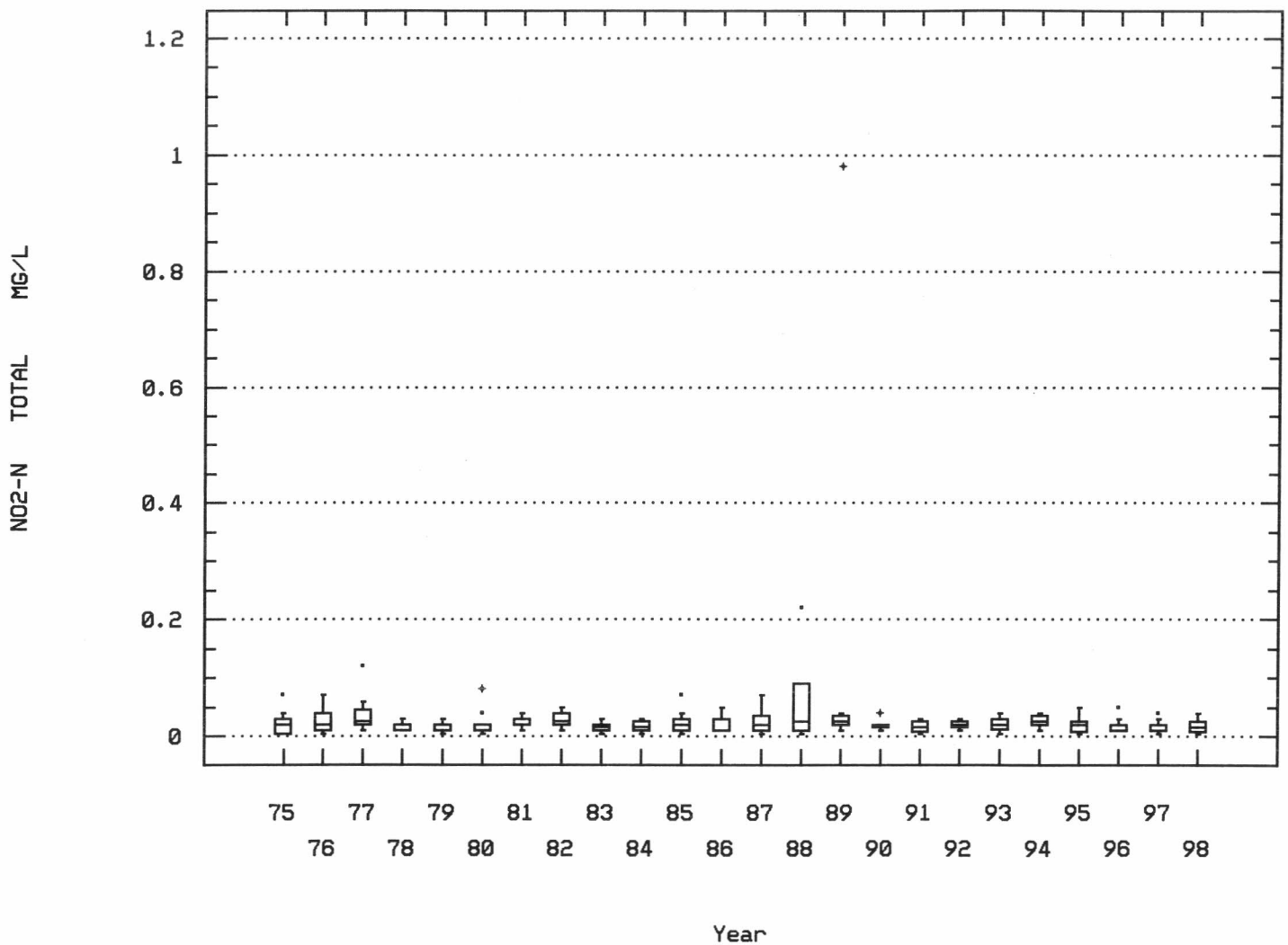
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 1 BRIDGE (BROOK ROAD)

Station: RICH0146 Parameter Code: 00615

NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 1 BRIDGE (BROOK ROAD)

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station RICH0146

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/10/75-12/07/98	69	22.5	21.865	28.	2.9	19.81	4.451	16.5	19.55	25.	26.5
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/07/98	46	207.5	202.37	286.	99.	2534.994	50.349	133.1	160.5	242.5	272.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		11/15/89-12/07/98	22	192.	199.091	293.	75.	3517.229	59.306	110.	165.5	249.75	286.9
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/17/90-12/07/98	22	5.8	6.036	8.1	4.6	1.024	1.012	4.83	5.25	6.975	7.61
00300 OXYGEN, DISSOLVED	MG/L	02/10/75-06/05/91	48	6.4	6.523	9.7	3.2	2.255	1.502	4.53	5.825	7.4	9.
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/08/79-12/07/98	53	2.	2.075	8.	0.5	2.31	1.52	1.	1.	3.	4.
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/07/98	54	18.	19.315	43.	3.	63.05	7.94	11.	14.	22.25	31.
00400 PH (STANDARD UNITS)		02/10/75-12/07/98	70	6.815	6.876	8.15	5.45	0.245	0.495	6.206	6.615	7.238	7.494
00400 CONVERTED PH (STANDARD UNITS)		02/10/75-12/07/98	70	6.815	6.548	8.15	5.45	0.354	0.595	6.206	6.615	7.238	7.494
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/10/75-12/07/98	70	0.153	0.283	3.548	0.007	0.351	0.593	0.032	0.058	0.243	0.623
00403 PH, LAB, STANDARD UNITS	SU	02/17/81-12/07/98	27	6.9	6.678	7.4	1.	1.369	1.17	6.48	6.6	7.1	7.24
00403 CONVERTED PH, LAB, STANDARD UNITS		02/17/81-12/07/98	27	6.9	2.431	7.4	1.	20.095	4.483	6.48	6.6	7.1	7.24
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/17/81-12/07/98	27	0.126	3703.855	100000.	0.04	370369205.922	19244.979	0.058	0.079	0.251	0.333
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/17/81-12/07/98	26	34.	33.923	54.	18.	95.194	9.757	20.	25.	41.	46.3
00500 RESIDUE, TOTAL (MG/L)		03/20/75-12/07/98	31	150.	142.935	200.	88.	748.796	27.364	100.6	124.	157.	178.6
00505 RESIDUE, TOTAL VOLATILE (MG/L)		03/20/75-12/07/98	31	29.	60.452	900.	16.	24431.189	156.305	17.6	24.	44.	55.
00510 RESIDUE, TOTAL FIXED (MG/L)		03/20/75-12/07/98	31	120.	110.581	148.	65.	629.652	25.093	69.	88.	129.	140.6
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)		03/20/75-12/07/98	55	4.	11.491	61.	0.5	276.227	16.62	1.5	2.5	12.	49.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)		03/20/75-12/07/98	55	2.	3.173	11.	0.	7.021	2.65	1.	1.5	4.	8.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)		03/20/75-12/07/98	55	2.5	8.864	56.	0.5	202.773	14.24	0.8	1.5	8.	40.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)		03/20/75-12/07/98	64	0.06	0.082	0.38	0.02	0.004	0.062	0.02	0.05	0.1	0.135
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)		03/20/75-12/07/98	64	0.02	0.016	0.05	0.005	0.	0.011	0.005	0.01	0.02	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)		03/20/75-12/07/98	60	0.545	0.603	1.35	0.14	0.074	0.273	0.273	0.415	0.78	0.947
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)		03/20/75-12/07/98	64	0.5	0.587	1.3	0.25	0.049	0.221	0.4	0.4	0.7	0.9
00665 PHOSPHORUS, TOTAL (MG/L AS P)		08/08/79-12/07/98	52	0.09	0.093	0.24	0.04	0.002	0.047	0.05	0.05	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)		08/08/79-06/05/91	31	0.05	0.05	0.13	0.02	0.001	0.024	0.02	0.03	0.06	0.078
00680 CARBON, TOTAL ORGANIC (MG/L AS C)		08/08/79-08/26/96	44	7.1	7.8	15.	0.	8.579	2.929	4.3	5.925	10.	12.
00900 HARDNESS, TOTAL (MG/L AS CACO3)		01/25/89-12/07/98	25	54.	52.8	94.	30.	240.417	15.505	31.2	40.	63.5	71.
00940 CHLORIDE,TOTAL IN WATER	MG/L	10/06/88-12/07/98	25	23.	25.08	42.	8.	89.827	9.478	12.	20.5	32.	40.
00945 SULFATE, TOTAL (MG/L AS SO4)		01/25/89-12/07/98	24	15.	15.375	22.	7.	12.592	3.549	10.	14.	18.	20.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		02/10/75-06/08/94	46	300.	1385.87	8000.	50.	5958407.005	2440.985	50.	100.	1075.	8000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C		02/10/75-06/08/94	46	2.477	2.623	3.903	1.699	0.447	0.669	1.699	2.	3.028	3.903
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				GEOMETRIC MEAN =	419.63								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)		03/20/75-12/07/98	32	0.05	0.052	0.1	0.005	0.001	0.023	0.023	0.04	0.07	0.084

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0146

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		02/10/75-12/07/98	90	7.45	8.461	25.	0.	20.228	4.498	3.52	5.5	11.5	14.94
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		08/08/79-12/07/98	59	243.	291.034	2055.	96.	66463.309	257.805	138.	201.	314.	418.
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		11/15/89-12/07/98	30	216.5	246.9	1138.	92.	34042.024	184.505	122.8	174.25	244.5	393.6
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	09/17/90-12/07/98	28	10.8	10.343	13.1	5.3	3.909	1.977	7.02	8.875	11.95	12.53
00300 OXYGEN, DISSOLVED	MG/L	02/10/75-06/05/91	63	10.9	10.635	14.	6.	2.818	1.679	8.	9.6	11.8	12.36
00310 BOD, 5 DAY, 20 DEG C	MG/L	08/08/79-12/07/98	71	2.	2.28	9.	0.5	1.704	1.305	1.	1.	3.	3.
00340 COD, .25N K2CR2O7	MG/L	08/08/79-12/07/98	74	18.5	19.838	87.	6.	105.48	10.27	11.5	14.75	22.25	30.
00400 PH (STANDARD UNITS)		02/10/75-12/07/98	90	6.8	6.922	9.17	5.75	0.289	0.538	6.4	6.615	7.033	7.609
00400 CONVERTED PH (STANDARD UNITS)		02/10/75-12/07/98	90	6.8	6.672	9.17	5.75	0.353	0.594	6.4	6.615	7.033	7.609
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/10/75-12/07/98	90	0.158	0.213	1.778	0.001	0.071	0.267	0.025	0.093	0.243	0.398
00403 PH, LAB, STANDARD UNITS	SU	02/17/81-12/07/98	37	6.8	6.819	7.8	6.4	0.071	0.266	6.58	6.6	6.9	7.1
00403 CONVERTED PH, LAB, STANDARD UNITS		02/17/81-12/07/98	37	6.8	6.756	7.8	6.4	0.075	0.274	6.58	6.6	6.9	7.1
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		02/17/81-12/07/98	37	0.158	0.176	0.398	0.016	0.008	0.087	0.079	0.126	0.251	0.264
00410 ALKALINITY, TOTAL (MG/L AS CACO3)		02/17/81-12/07/98	37	26.	28.378	53.	14.	90.408	9.508	17.	21.5	36.5	41.2
00500 RESIDUE, TOTAL (MG/L)		03/20/75-12/07/98	46	145.	180.783	1090.	64.	24859.996	157.671	106.	127.5	169.75	242.
00505 RESIDUE, TOTAL VOLATILE (MG/L)		03/20/75-12/07/98	46	37.5	36.935	77.	14.	117.618	10.845	23.1	29.75	43.	48.3
00510 RESIDUE, TOTAL FIXED (MG/L)		03/20/75-12/07/98	46	111.5	143.848	1070.	44.	25244.887	158.886	75.7	89.5	128.5	196.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/15 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	76	7.	13.263	344.	0.5	1529.45	39.108	2.5	4.	10.	22.3
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	76	2.5	3.796	46.	0.	30.841	5.553	1.	1.5	4.	7.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	75	4.	9.847	298.	0.	1168.696	34.186	1.	2.5	8.	14.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	90	0.1	0.142	0.9	0.02	0.017	0.129	0.02	0.05	0.2	0.3
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	90	0.02	0.03	0.98	0.005	0.01	0.102	0.01	0.01	0.02	0.03
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	82	0.8	1.799	43.	0.02	42.004	6.481	0.373	0.663	0.99	1.117
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	90	0.6	0.601	1.7	0.3	0.055	0.236	0.35	0.488	0.7	0.9
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	75	0.07	0.082	0.3	0.02	0.002	0.046	0.05	0.05	0.1	0.1
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	49	0.04	0.045	0.17	0.02	0.001	0.026	0.02	0.03	0.05	0.08
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	60	7.	8.277	27.	2.8	17.085	4.133	4.62	6.	9.	13.
00900 HARDNESS, TOTAL (MG/L AS CACO3)	01/25/89-12/07/98	36	55.	52.972	92.	24.	170.199	13.046	38.5	44.	59.75	69.2
00940 CHLORIDE,TOTAL IN WATER MG/L	10/06/88-12/07/98	36	30.	54.417	418.	8.	6977.393	83.531	13.8	19.25	44.5	96.3
00945 SULFATE, TOTAL (MG/L AS SO4)	01/25/89-12/07/98	36	16.	16.611	24.	10.	14.244	3.774	11.	14.	19.	22.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	65	200.	2616.154	110000.	50.	186015555.288	13638.752	50.	100.	1000.	3440.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	65	2.301	2.501	5.041	1.699	0.52	0.721	1.699	2.	3.	3.535
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	317.142								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	43	0.04	0.042	0.1	0.01	0.	0.022	0.02	0.02	0.05	0.076

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/16 to 6/30 - Station RICH0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/10/75-12/07/98	72	17.2	17.228	26.	2.1	28.279	5.318	10.06	13.275	21.725	24.7
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/08/79-12/07/98	43	204.	207.605	322.	80.	3564.673	59.705	133.2	162.	252.	300.6
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/15/89-12/07/98	23	194.	188.	292.	95.	2252.182	47.457	113.4	145.	211.	250.2
00299 OXYGEN ,DISSOLVED, ANALYSIS BY PROBE MG/L	09/17/90-12/07/98	19	7.8	8.079	11.7	4.	3.851	1.962	4.7	7.2	9.5	11.
00300 OXYGEN, DISSOLVED MG/L	02/10/75-06/05/91	54	7.9	7.928	11.1	4.3	3.392	1.842	5.35	6.575	9.525	10.45
00310 BOD, 5 DAY, 20 DEG C MG/L	08/08/79-12/07/98	52	2.	2.548	7.	1.	2.085	1.444	1.	2.	3.3	4.49
00340 COD, .25N K2CR2O7 MG/L	08/08/79-12/07/98	53	22.	22.358	45.	9.	54.004	7.349	14.4	17.	25.	33.6
00400 PH (STANDARD UNITS)	02/10/75-12/07/98	73	6.82	6.967	9.23	5.7	0.328	0.573	6.372	6.59	7.39	7.702
00400 CONVERTED PH (STANDARD UNITS)	02/10/75-12/07/98	73	6.82	6.683	9.23	5.7	0.41	0.64	6.372	6.59	7.39	7.702
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/10/75-12/07/98	73	0.151	0.207	1.995	0.001	0.079	0.282	0.02	0.041	0.257	0.429
00403 PH, LAB, STANDARD UNITS SU	02/17/81-12/07/98	26	6.8	6.858	7.5	6.4	0.072	0.269	6.57	6.7	7.	7.36
00403 CONVERTED PH, LAB, STANDARD UNITS	02/17/81-12/07/98	26	6.8	6.79	7.5	6.4	0.077	0.277	6.57	6.7	7.	7.36
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/17/81-12/07/98	26	0.158	0.162	0.398	0.032	0.007	0.085	0.045	0.1	0.2	0.271
00410 ALKALINITY, TOTAL (MG/L AS CACO3)	02/17/81-12/07/98	26	27.	26.846	39.	13.	51.015	7.143	14.4	22.5	32.25	37.3
00500 RESIDUE, TOTAL (MG/L)	03/20/75-12/07/98	30	140.5	142.333	265.	93.	884.782	29.745	118.1	125.5	153.25	162.7
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/20/75-12/07/98	30	41.5	40.967	96.	18.	192.378	13.87	26.1	32.	46.5	53.8
00510 RESIDUE, TOTAL FIXED (MG/L)	03/20/75-12/07/98	30	100.5	101.367	211.	54.	909.275	30.154	65.2	81.75	112.25	135.5
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/20/75-12/07/98	55	7.	13.309	178.	0.5	637.514	25.249	2.3	4.	13.	30.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/20/75-12/07/98	55	2.5	4.027	26.	0.5	19.837	4.454	1.3	1.5	5.	9.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/20/75-12/07/98	55	3.	9.509	152.	0.5	463.495	21.529	1.3	2.5	9.	21.2
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/20/75-12/07/98	68	0.1	0.123	1.	0.02	0.016	0.127	0.05	0.05	0.15	0.203
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	69	0.03	0.035	0.22	0.005	0.001	0.031	0.01	0.02	0.04	0.07
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/20/75-12/07/98	64	0.685	0.688	1.229	0.26	0.05	0.223	0.38	0.523	0.827	1.01
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/20/75-12/07/98	66	0.675	0.716	1.6	0.1	0.075	0.274	0.4	0.5	0.9	1.03
00665 PHOSPHORUS, TOTAL (MG/L AS P)	08/08/79-12/07/98	51	0.1	0.103	0.3	0.04	0.003	0.055	0.05	0.06	0.1	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/08/79-06/05/91	33	0.04	0.062	0.26	0.01	0.003	0.052	0.02	0.03	0.07	0.122
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	08/08/79-08/26/96	45	9.	9.82	25.	4.6	15.887	3.986	6.22	7.05	11.1	14.24
00900 HARDNESS, TOTAL (MG/L AS CACO3)	01/25/89-12/07/98	26	42.	40.423	64.	4.	187.454	13.691	22.1	31.	50.25	56.6
00940 CHLORIDE,TOTAL IN WATER MG/L	10/06/88-12/07/98	26	26.	25.731	62.	9.	142.045	11.918	9.7	15.75	31.	42.
00945 SULFATE, TOTAL (MG/L AS SO4)	01/25/89-12/07/98	26	12.	12.269	17.	7.	5.485	2.342	8.7	11.	13.25	16.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	53	300.	1427.358	8000.	50.	5452169.811	2334.988	70.	200.	1300.	5720.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/10/75-06/08/94	53	2.477	2.664	3.903	1.699	0.426	0.653	1.819	2.301	3.113	3.757
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	460.838								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/20/75-12/07/98	35	0.05	0.049	0.13	0.01	0.	0.021	0.02	0.04	0.06	0.07

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: RICH0147

NPS Station ID: RICH0147 LAT/LON: 37.641670/ -77.421949 Agency: 112WRD Date Created: 06/02/90
Location: CHICKAHOMINY RIVER NEAR ATLEE, VA FIPS State/County: 51085 VIRGINIA/HANOVER
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02042287
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 15.70 On/Off RF1:
RF3 Index: 02080106101700.00 RF3 Mile Point: 0.00 Distance from RF3: 0.29 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0147

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/31/89-09/04/91	19	17.5	17.805	27.1	6.4	32.554	5.706	8.8	15.	22.2	25.5
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	10/31/89-09/04/91	19	22.	21.774	31.5	12.	38.561	6.21	12.	14.2	26.	30.5
00025	BAROMETRIC PRESSURE (MM OF HG)	10/31/89-09/04/91	21	756.	756.667	766.	746.	19.633	4.431	752.4	754.	760.	763.6
00061	FLOW, STREAM, INSTANTANEOUS CFS	10/31/89-09/04/91	23	55.	210.396	2180.	0.3	221791.233	470.947	0.88	18.	104.	685.
00065	STAGE, STREAM (FEET)	06/11/91-06/11/91	1	1.55	1.55	1.55	1.55	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	10/31/89-09/04/91	25	90.	86.	170.	25.	1585.75	39.821	37.8	52.5	110.	152.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/31/89-09/04/91	25	138.	139.	370.	41.	4481.25	66.942	63.8	90.	161.5	222.
00300	OXYGEN, DISSOLVED MG/L	10/31/89-09/04/91	19	6.1	6.211	10.2	3.4	3.287	1.813	3.4	4.8	7.8	8.7
00400	PH (STANDARD UNITS)	10/31/89-09/04/91	24	6.6	6.645	8.3	5.6	0.385	0.621	5.8	6.4	6.815	7.725
00400	CONVERTED PH (STANDARD UNITS)	10/31/89-09/04/91	24	6.6	6.328	8.3	5.6	0.49	0.7	5.8	6.4	6.815	7.725
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/31/89-09/04/91	24	0.251	0.47	2.512	0.005	0.391	0.625	0.026	0.153	0.398	1.627
00403	PH, LAB, STANDARD UNITS SU	10/31/89-10/31/89	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	10/31/89-10/31/89	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/31/89-10/31/89	1	0.126	0.126	0.126	0.126	0.	0.	**	**	**	**
00452	CARBONATE,WATER,DISS,INCR TIT, FIELD, AS CO3, MG/L	06/11/91-06/11/91	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	06/11/91-06/11/91	1	60.	60.	60.	60.	0.	0.	**	**	**	**
00556	OIL & GREASE (FREON EXTR.-GRAV METH) TOT,REC,MG/L	10/31/89-09/04/91	21##	0.5	0.619	3.	0.5	0.298	0.546	0.5	0.5	0.5	0.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/31/89-09/04/91	25	0.07	0.076	0.229	0.008	0.002	0.041	0.041	0.053	0.092	0.113
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/31/89-09/04/91	25	0.7	0.768	1.6	0.5	0.08	0.282	0.5	0.6	0.85	1.24
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/31/89-09/04/91	25	0.18	0.229	0.83	0.04	0.027	0.164	0.104	0.145	0.26	0.446
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/31/89-09/04/91	25	0.088	0.088	0.135	0.029	0.001	0.03	0.044	0.061	0.121	0.124
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/31/89-09/04/91	25	12.	11.76	15.	5.9	6.253	2.501	8.1	9.8	14.	15.
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	10/31/89-09/15/90	16##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00940	CHLORIDE,TOTAL IN WATER MG/L	10/31/89-09/04/91	25	15.	15.356	27.	0.9	32.777	5.725	7.8	11.	18.	23.
00945	SULFATE, TOTAL (MG/L AS SO4)	10/31/89-09/04/91	25	10.	12.86	32.	0.5	64.698	8.044	7.	8.	18.	27.6
00950	FLUORIDE, DISSOLVED (MG/L AS F)	02/05/91-02/05/91	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	10/31/89-09/04/91	25##	0.5	4.06	45.	0.5	151.819	12.321	0.5	0.5	0.5	18.3
01027	CADMIUM, TOTAL (UG/L AS CD)	10/31/89-09/04/91	25##	0.5	0.8	4.	0.5	0.625	0.791	0.5	0.5	0.5	2.
01034	CHROMIUM, TOTAL (UG/L AS CR)	10/31/89-09/04/91	25	1.	2.	7.	0.5	3.729	1.931	0.5	0.5	3.5	5.
01037	COBALT, TOTAL (UG/L AS CO)	10/31/89-10/31/89	1	1.	1.	1.	1.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	10/31/89-09/04/91	25	3.	5.	27.	1.	29.167	5.401	1.6	2.	6.	12.
01045	IRON, TOTAL (UG/L AS FE)	10/31/89-09/04/91	25	2400.	2419.2	4100.	980.	837382.667	915.086	1320.	1650.	3200.	3600.
01046	IRON, DISSOLVED (UG/L AS FE)	10/31/89-09/04/91	25	740.	938.4	1900.	250.	321164.	566.713	288.	455.	1550.	1740.
01051	LEAD, TOTAL (UG/L AS PB)	10/31/89-09/04/91	25	3.	3.22	7.	0.5	2.21	1.487	1.6	2.	4.	5.4
01055	MANGANESE, TOTAL (UG/L AS MN)	10/31/89-09/04/91	25	330.	516.	2600.	50.	298125.	546.008	94.	170.	775.	1096.
01056	MANGANESE, DISSOLVED (UG/L AS MN)	10/31/89-07/28/91	11	110.	118.182	190.	50.	2696.364	51.927	50.	60.	180.	188.
01067	NICKEL, TOTAL (UG/L AS NI)	10/31/89-09/04/91	22	2.	2.591	7.	1.	3.11	1.764	1.	1.	3.25	5.7
01092	ZINC, TOTAL (UG/L AS ZN)	10/31/89-09/04/91	25	20.	31.	90.	5.	395.833	19.896	16.	20.	40.	68.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0147

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01147 SELENIUM, TOTAL (UG/L AS SE)	10/31/89-10/31/89	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
32209 CHLOROPHYLL A UG/L FLUOROMETRIC CORRECTED	10/31/89-01/25/90	2	1.85	1.85	2.8	0.9	1.805	1.344	**	**	**	**
32213 PHEOPHYTIN-A,FLUORIMETRIC METHOD (UG/L)	10/31/89-01/25/90	2	1.8	1.8	2.9	0.7	2.42	1.556	**	**	**	**
32730 PHENOLICS, TOTAL, RECOVERABLE (UG/L)	10/31/89-09/04/91	25##	0.5	1.18	5.	0.5	1.685	1.298	0.5	0.5	1.5	4.
39086 ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CACO3,MG/L	06/11/91-06/11/91	1	49.	49.	49.	49.	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/31/89-09/04/91	25	0.044	0.045	0.087	0.019	0.	0.017	0.021	0.034	0.061	0.068
71900 MERCURY, TOTAL (UG/L AS HG)	10/31/89-09/04/91	25##	0.05	0.14	1.	0.05	0.068	0.26	0.05	0.05	0.05	0.66
80154 SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	10/31/89-07/29/91	23	18.	25.391	94.	7.	441.067	21.002	7.8	12.	37.	58.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0147

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15-3/15 Obs	10/15-3/15 Exceed	10/15-3/15 Prop.	3/16-6/30 Obs	3/16-6/30 Exceed	3/16-6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	19	2	0.11	6	2	0.33	3	0	0.00	10	0	0.00			
00400 PH	Fresh Chronic	9.	24	0	0.00	8	0	0.00	3	0	0.00	13	0	0.00			
	Other-Lo Lim.	6.5	24	9	0.38	8	1	0.13	3	2	0.67	13	6	0.46			
00403 PH, LAB	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
00720 CYANIDE, TOTAL	Fresh Acute	0.022	16	0	0.00	4	0	0.00	2	0	0.00	10	0	0.00			
	Drinking Water	0.2	16	0	0.00	4	0	0.00	2	0	0.00	10	0	0.00			
00940 CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
	Drinking Water	250.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00				1	0	0.00						
01002 ARSENIC, TOTAL	Fresh Acute	360.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
	Drinking Water	50.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	25	1	0.04	8	0	0.00	3	1	0.33	14	0	0.00			
	Drinking Water	5.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	25	1	0.04	8	0	0.00	3	0	0.00	14	1	0.07			
	Drinking Water	1300.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
	Drinking Water	15.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	22	0	0.00	5	0	0.00	3	0	0.00	14	0	0.00			
	Drinking Water	100.	22	0	0.00	5	0	0.00	3	0	0.00	14	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
	Drinking Water	5000.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
01147 SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00				1	0	0.00						
	Drinking Water	50.	1	0	0.00				1	0	0.00						
71900 MERCURY, TOTAL	Fresh Acute	2.4	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			
	Drinking Water	2.	25	0	0.00	8	0	0.00	3	0	0.00	14	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: RICH0148

NPS Station ID: RICH0148 LAT/LON: 37.652505/ -77.431115 Agency: 112WRD Date Created: 02/01/92
Location: CHICKAHOMINY RIVER AT I-295 NEAR ATLEE, VA FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM STORET Station ID(s): 02042286
RMI-Indexes: Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 0 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 0.00 On/Off RF1:
RF3 Index: 02080206160300.20 RF3 Mile Point: 6.60 Distance from RF3: 0.07 On/Off RF3:
Description:

Parameter Inventory for Station: RICH0148

Parameter		Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)		09/10/84-08/16/85	5	14.	16.5	25.	9.	56.75	7.533	**	**	**	**
00020 TEMPERATURE, AIR (DEGREES CENTIGRADE)		09/10/84-08/16/85	5	20.	17.3	26.	3.	92.45	9.615	**	**	**	**
00061 FLOW, STREAM, INSTANTANEOUS	CFS	09/10/84-08/16/85	5	4.	8.2	18.	2.	53.2	7.294	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		03/14/85-08/16/85	4	165.	165.	195.	135.	1200.	34.641	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

********** No EPA Water Quality Criteria exist to compare against the data at this station. **********

Station Inventory for Station: RICH0149

NPS Station ID: RICH0149 LAT/LON: 37.656115/ -77.439727 Agency: 12NSS Date Created: 10/22/88
Location: TURNER RUN
FIPS State/County: 51087 VIRGINIA/HENRICO
Station Type: /TYPA/AMBNT/STREAM
STORET Station ID(s): 3B059034L /3B03B059034L
RMI-Indexes:
Within Park Boundary: No
RMI-Miles:
HUC: 02080206 Depth of Water: 0 Aquifer:
Major Basin: Elevation: 34 Water Body Id:
Minor Basin: ECO Region:
RF1 Index: 02080206 RF1 Mile Point: 0.000 Distance from RF1: 1.40 On/Off RF1:
RF3 Index: 02080206006201.93 RF3 Mile Point: 2.58 Distance from RF3: 0.02 On/Off RF3:
Description:

THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID AND DATA LIMITAITONS ARE DESCRIBED IN: IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL.I: EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED. SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS, KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988) PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN;

Parameter Inventory for Station: RICH0149

Parameter			Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		04/03/86-04/03/86	1	17.9	17.9	17.9	17.9	0.	0.	**	**	**	**
00064	DEPTH OF STREAM, MEAN (FT)		04/03/86-04/03/86	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)		04/03/86-04/03/86	1	60.	60.	60.	60.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		04/03/86-04/03/86	1	268.	268.	268.	268.	0.	0.	**	**	**	**
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE	MG/L	04/03/86-04/03/86	1	10.8	10.8	10.8	10.8	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS	SU	04/03/86-04/03/86	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS		04/03/86-04/03/86	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH		04/03/86-04/03/86	1	0.126	0.126	0.126	0.126	0.	0.	**	**	**	**
00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS	UEQ/L	04/03/86-04/03/86	1	497.4	497.4	497.4	497.4	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)		04/03/86-04/03/86	1	27.	27.	27.	27.	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)		04/03/86-04/03/86	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)		04/03/86-04/03/86	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)		04/03/86-04/03/86	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)		04/03/86-04/03/86	1	16.2	16.2	16.2	16.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		04/03/86-04/03/86	1	4.1	4.1	4.1	4.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)		04/03/86-04/03/86	1	26.01	26.01	26.01	26.01	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)		04/03/86-04/03/86	1	2.63	2.63	2.63	2.63	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER	MG/L	04/03/86-04/03/86	1	48.	48.	48.	48.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)		04/03/86-04/03/86	1	21.4	21.4	21.4	21.4	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: RICH0149

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00950 FLUORIDE, DISSOLVED (MG/L AS F)	04/03/86-04/03/86	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	04/03/86-04/03/86	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
01056 MANGANESE, DISSOLVED (UG/L AS MN)	04/03/86-04/03/86	1	422.7	422.7	422.7	422.7	0.	0.	**	**	**	**
01105 ALUMINUM, TOTAL (UG/L AS AL)	04/03/86-04/03/86	1	51.	51.	51.	51.	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/03/86-04/03/86	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
71885 IRON (UG/L AS FE)	04/03/86-04/03/86	1	500.64	500.64	500.64	500.64	0.	0.	**	**	**	**
72020 ELEVATION IN FEET ABOVE MEAN SEA LEVEL	04/03/86-04/03/86	1	113.	113.	113.	113.	0.	0.	**	**	**	**
82079 TURBIDITY,LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	04/03/86-04/03/86	1	11.1	11.1	11.1	11.1	0.	0.	**	**	**	**
83509 STREAM, WIDTH METER	04/03/86-04/03/86	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: RICH0149

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			
82079 TURBIDITY, LAB	Other-Hi Lim.	50.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Entire RICH Study Area

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	476	30	0.06	138	7	0.05	169	20	0.12	169	3	0.02			
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	698	14	0.02	273	0	0.00	220	11	0.05	205	3	0.01			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	3405	106	0.03	1428	76	0.05	889	10	0.01	1088	20	0.02			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	8519	246	0.03	5093	185	0.04	1845	15	0.01	1581	46	0.03			
00400	PH	Fresh Chronic	9.	6158	148	0.02	2348	62	0.03	1819	26	0.01	1991	60	0.03			
		Marine Chronic	8.5	121	2	0.02	35	1	0.03	50	0	0.00	36	1	0.03			
		Other-Lo Lim.	6.5	6276&	1170	0.19	2381	308	0.13	1869	476	0.25	2026	386	0.19			
00403	PH, LAB	Fresh Chronic	9.	1253	12	0.01	390	5	0.01	424	5	0.01	439	2	0.00			
		Other-Lo Lim.	6.5	1253	253	0.20	390	61	0.16	424	120	0.28	439	72	0.16			
00406	PH, FIELD	Fresh Chronic	9.	6	0	0.00							6	0	0.00			
		Other-Lo Lim.	6.5	6	6	1.00							6	6	1.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	0	0.00							1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	567	0	0.00	191	0	0.00	188	0	0.00	188	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	3962	7	0.00	1279	2	0.00	1401	3	0.00	1282	2	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	560	0	0.00	186	0	0.00	186	0	0.00	188	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	3606	4	0.00	1197	0	0.00	1284	3	0.00	1125	1	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	502	2	0.00	133	0	0.00	153	0	0.00	216	2	0.01			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	177	0	0.00	77	0	0.00	42	0	0.00	58	0	0.00			
00720	CYANIDE, TOTAL	Fresh Acute	0.022	68	0	0.00	20	0	0.00	16	0	0.00	32	0	0.00			
		Drinking Water	0.2	68	0	0.00	20	0	0.00	16	0	0.00	32	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1543	4	0.00	534	0	0.00	477	1	0.00	532	3	0.01			
		Drinking Water	250.	1543	7	0.00	534	0	0.00	477	4	0.01	532	3	0.01			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
		Drinking Water	250.	1	0	0.00							1	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1081	0	0.00	352	0	0.00	366	0	0.00	363	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	93	0	0.00	37	0	0.00	21	0	0.00	35	0	0.00			
00951	FLUORIDE, TOTAL AS F	Drinking Water	4.	268	0	0.00	54	0	0.00	112	0	0.00	102	0	0.00			
00997	ARSENIC, INORGANIC TOT	Fresh Acute	360.	4	0	0.00							4	0	0.00			
		Drinking Water	50.	4	0	0.00							4	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00				2	0	0.00						
		Drinking Water	50.	2	0	0.00				2	0	0.00						
01002	ARSENIC, TOTAL	Fresh Acute	360.	372	0	0.00	76	0	0.00	102	0	0.00	194	0	0.00			
		Drinking Water	50.	372	0	0.00	76	0	0.00	102	0	0.00	194	0	0.00			
01005	BARIUM, DISSOLVED	Drinking Water	2000.	8	0	0.00	6	0	0.00	2	0	0.00						
01007	BARIUM, TOTAL	Drinking Water	2000.	6	1	0.17				2	0	0.00	4	1	0.25			
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	14	0	0.00	4	0	0.00	6	0	0.00	4	0	0.00			
		Drinking Water	4.	4&	1	0.25							4	1	0.25			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	15&	1	0.07	8	1	0.13				7	0	0.00			
		Drinking Water	5.	15&	1	0.07	8	1	0.13				7	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	178&	16	0.09	57	4	0.07	29	1	0.03	92	11	0.12			
		Drinking Water	5.	178&	15	0.08	57	4	0.07	29	0	0.00	92	11	0.12			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	9	0	0.00	6	0	0.00	2	0	0.00	1	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	616&	1	0.00	114	0	0.00	179	0	0.00	323	1	0.00			
01040	COPPER, DISSOLVED	Fresh Acute	18.	22	1	0.05	13	1	0.08	2	0	0.00	7	0	0.00			
		Drinking Water	1300.	22	0	0.00	13	0	0.00	2	0	0.00	7	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	603&	49	0.08	113	5	0.04	180	11	0.06	310	33	0.11			
		Drinking Water	1300.	604	0	0.00	114	0	0.00	180	0	0.00	310	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	22	0	0.00	13	0	0.00	2	0	0.00	7	0	0.00			
		Drinking Water	15.	14&	0	0.00	7	0	0.00				7	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	562	3	0.01	113	0	0.00	184	0	0.00	265	3	0.01			
		Drinking Water	15.	560&	74	0.13	113	10	0.09	182	24	0.13	265	40	0.15			
01059	THALLIUM, TOTAL	Fresh Acute	1400.	14	0	0.00	4	0	0.00	6	0	0.00	4	0	0.00			
		Drinking Water	2.	4&	0	0.00							4	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	224	0	0.00	18	0	0.00	68	0	0.00	138	0	0.00			
		Drinking Water	100.	224	0	0.00	18	0	0.00	68	0	0.00	138	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute	1400.	230	0	0.00	51	0	0.00	65	0	0.00	114	0	0.00			
		Drinking Water	100.	230	1	0.00	51	0	0.00	65	0	0.00	114	1	0.01			
01077	SILVER, TOTAL	Fresh Acute	4.1	24&	0	0.00	7	0	0.00	10	0	0.00	7	0	0.00			
		Drinking Water	100.	28	0	0.00	7	0	0.00	10	0	0.00	11	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	22	2	0.09	13	2	0.15	2	0	0.00	7	0	0.00			
		Drinking Water	5000.	22	0	0.00	13	0	0.00	2	0	0.00	7	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Entire RICH Study Area

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
01092	ZINC, TOTAL	Fresh Acute	120.	613	9	0.01	114	4	0.04	181	3	0.02	318	2	0.01			
		Drinking Water	5000.	613	0	0.00	114	0	0.00	181	0	0.00	318	0	0.00			
01097	ANTIMONY, TOTAL	Fresh Acute	88.	4	0	0.00							4	0	0.00			
		Drinking Water	6.	4	0	0.00							4	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	2	0	0.00				2	0	0.00						
		Drinking Water	50.	2	0	0.00				2	0	0.00						
01147	SELENIUM, TOTAL	Fresh Acute	20.	90	1	0.01	26	1	0.04	31	0	0.00	33	0	0.00			
		Drinking Water	50.	90	0	0.00	26	0	0.00	31	0	0.00	33	0	0.00			
31501	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	Other-Hi Lim.	1000.	59	11	0.19	19	0	0.00	23	4	0.17	17	7	0.41			
31503	COLIFORM,TOT,MEMBRANE FILTR,DELAY. M-END	Other-Hi Lim.	1000.	1	1	1.00							1	1	1.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	290	171	0.59	143	85	0.59	54	39	0.72	93	47	0.51			
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	73	23	0.32	37	10	0.27	16	7	0.44	20	6	0.30			
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	12	4	0.33							12	4	0.33			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	1816	1101	0.61	963	595	0.62	330	185	0.56	523	321	0.61			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	3573&	1525	0.43	1096	517	0.47	1320	491	0.37	1157	517	0.45			
31625	FECAL COLIFORM, MF	Other-Hi Lim.	200.	52	27	0.52	12	2	0.17	27	17	0.63	13	8	0.62			
32101	BROMODICHLOROMETHANE, WHOLE WATER	Drinking Water	100.	4	0	0.00							4	0	0.00			
32102	CARBON TETRACHLORIDE, WHOLE WATER	Fresh Acute	35200.	4	0	0.00							4	0	0.00			
		Drinking Water	5.	4	0	0.00							4	0	0.00			
32103	1,2-DICHLOROETHANE,WHOLE WATER	Fresh Acute	118000.	4	0	0.00							4	0	0.00			
		Drinking Water	5.	4	0	0.00							4	0	0.00			
32104	BROMOFORM, WHOLE WATER	Drinking Water	100.	4	0	0.00							4	0	0.00			
32105	DIBROMOCHLOROMETHANE, WHOLE WATER	Drinking Water	100.	4	0	0.00							4	0	0.00			
32106	CHLOROFORM, WHOLE WATER	Fresh Acute	28900.	4	0	0.00							4	0	0.00			
		Drinking Water	100.	4	0	0.00							4	0	0.00			
34205	ACENAPHTHENE	Fresh Acute	1700.	4	0	0.00							4	0	0.00			
34210	ACROLEIN	Fresh Acute	68.	4	0	0.00							4	0	0.00			
34215	ACRYLONITRILE	Fresh Acute	7550.	4	0	0.00							4	0	0.00			
34301	CHLOROBENZENE	Drinking Water	100.	4	0	0.00							4	0	0.00			
34356	ENDOSULFAN, BETA	Fresh Acute	0.22	11&	0	0.00	1	0	0.00	2	0	0.00	8	0	0.00			
34361	ENDOSULFAN, ALPHA	Fresh Acute	0.22	11&	0	0.00	1	0	0.00	2	0	0.00	8	0	0.00			
34371	ETHYLBENZENE	Fresh Acute	32000.	4	0	0.00							4	0	0.00			
		Drinking Water	700.	4	0	0.00							4	0	0.00			
34376	FLUORANTHENE	Fresh Acute	3980.	4	0	0.00							4	0	0.00			
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL	Fresh Acute	7.	4	0	0.00							4	0	0.00			
		Drinking Water	50.	4	0	0.00							4	0	0.00			
34396	HEXACHLOROETHANE	Fresh Acute	980.	4	0	0.00							4	0	0.00			
34408	ISOPHORONE	Fresh Acute	117000.	4	0	0.00							4	0	0.00			
34423	METHYLENE CHLORIDE, TOTAL	Drinking Water	5.	4	0	0.00							4	0	0.00			
34447	NITROBENZENE	Fresh Acute	27000.	4	0	0.00							4	0	0.00			
34452	PARACHLOROMETA CRESOL	Fresh Acute	30.	4	0	0.00							4	0	0.00			
34461	PHENANTHRENE	Fresh Acute	30.	4	0	0.00							4	0	0.00			
34475	TETRACHLOROETHYLENE	Fresh Acute	5280.	4	0	0.00							4	0	0.00			
		Drinking Water	5.	4	0	0.00							4	0	0.00			
34501	1,1-DICHLOROETHYLENE	Drinking Water	7.	4	0	0.00							4	0	0.00			
34506	1,1,1-TRICHLOROETHANE	Drinking Water	200.	4	0	0.00							4	0	0.00			
34511	1,1,2-TRICHLOROETHANE, TOTAL	Drinking Water	5.	4	0	0.00							4	0	0.00			
34536	1,2-DICHLOROBENZENE	Drinking Water	600.	4	0	0.00							4	0	0.00			
34541	1,2-DICHLOROPROPANE	Drinking Water	5.	4	0	0.00							4	0	0.00			
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATE	Drinking Water	100.	4	0	0.00							4	0	0.00			
34551	1,2,4-TRICHLOROBENZENE, TOTAL	Drinking Water	70.	4	0	0.00							4	0	0.00			
34566	1,3-DICHLOROBENZENE	Drinking Water	600.	4	0	0.00							4	0	0.00			
34571	1,4-DICHLOROBENZENE	Drinking Water	75.	4	0	0.00							4	0	0.00			
34586	2-CHLOROPHENOL	Fresh Acute	4380.	4	0	0.00							4	0	0.00			
34601	2,4-DICHLOROPHENOL	Fresh Acute	2020.	4	0	0.00							4	0	0.00			
34606	2,4-DIMETHYLPHENOL	Fresh Acute	2120.	4	0	0.00							4	0	0.00			
34611	2,4-DINITROTOLUENE	Fresh Acute	330.	4	0	0.00							4	0	0.00			
34694	PHENOL (C6H5OH) - SINGLE COMPOUND	Fresh Acute	10200.	4	0	0.00							4	0	0.00			
34696	NAPHTHALENE	Fresh Acute	2300.	4	0	0.00							4	0	0.00			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	34&	0	0.00	12	0	0.00	12	0	0.00	10	0	0.00			
		Drinking Water	1.	33&	0	0.00	11	0	0.00	12	0	0.00	10	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Entire RICH Study Area

Parameter		Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14 Obs	7/01-10/14 Exceed	7/01-10/14 Prop.	10/15- 3/15 Obs	10/15- 3/15 Exceed	10/15- 3/15 Prop.	3/16- 6/30 Obs	3/16- 6/30 Exceed	3/16- 6/30 Prop.	n/a Obs	n/a Exceed	n/a Prop.
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	Fresh Acute	2000.	6	0	0.00				2	0	0.00	4	0	0.00			
		Drinking Water	6.	6	5	0.83				2	2	1.00	4	3	0.75			
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE	Drinking Water	2.	4	0	0.00							4	0	0.00			
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE	Fresh Acute	45000.	4	0	0.00							4	0	0.00			
		Drinking Water	5.	4	0	0.00							4	0	0.00			
39300	P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	33&	0	0.00	11	0	0.00	12	0	0.00	10	0	0.00			
39310	P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	33&	0	0.00	11	0	0.00	12	0	0.00	10	0	0.00			
39320	P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	34	0	0.00	12	0	0.00	12	0	0.00	10	0	0.00			
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	56&	0	0.00	12	0	0.00	19	0	0.00	25	0	0.00			
39340	GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	11&	0	0.00	1	0	0.00	2	0	0.00	8	0	0.00			
		Drinking Water	0.2	11&	0	0.00	1	0	0.00	2	0	0.00	8	0	0.00			
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	23	0	0.00	11	0	0.00	10	0	0.00	2	0	0.00			
		Drinking Water	2.	23	0	0.00	11	0	0.00	10	0	0.00	2	0	0.00			
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	40&	0	0.00	11	0	0.00	12	0	0.00	17	0	0.00			
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	33&	0	0.00	11	0	0.00	12	0	0.00	10	0	0.00			
		Drinking Water	2.	33&	0	0.00	11	0	0.00	12	0	0.00	10	0	0.00			
39400	TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	11&	0	0.00	1	0	0.00	2	0	0.00	8	0	0.00			
		Drinking Water	3.	11&	0	0.00	1	0	0.00	2	0	0.00	8	0	0.00			
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	11&	0	0.00	1	0	0.00	2	0	0.00	8	0	0.00			
		Drinking Water	0.4	11&	0	0.00	1	0	0.00	2	0	0.00	8	0	0.00			
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	11&	0	0.00	1	0	0.00	2	0	0.00	8	0	0.00			
		Drinking Water	0.2	11&	0	0.00	1	0	0.00	2	0	0.00	8	0	0.00			
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	22	0	0.00	10	0	0.00	10	0	0.00	2	0	0.00			
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	25	0	0.00	1	0	0.00	7	0	0.00	17	0	0.00			
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	22	0	0.00	10	0	0.00	10	0	0.00	2	0	0.00			
		Drinking Water	1.	22	0	0.00	10	0	0.00	10	0	0.00	2	0	0.00			
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPL	Fresh Acute	90.	4	0	0.00							4	0	0.00			
39730	2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	10	0	0.00				2	0	0.00	8	0	0.00			
39760	SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	10	0	0.00				2	0	0.00	8	0	0.00			
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	54	19	0.35	42	15	0.36	5	4	0.80	7	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	48	0	0.00	16	0	0.00	18	0	0.00	14	0	0.00			
71856	NITRITE NITROGEN, DISSOLVED (AS NO2)	Drinking Water	3.3	2	0	0.00	1	0	0.00	1	0	0.00						
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	22	4	0.18	13	4	0.31	2	0	0.00	7	0	0.00			
		Drinking Water	2.	22	5	0.23	13	5	0.38	2	0	0.00	7	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	578&	2	0.00	121	2	0.02	178	0	0.00	279	0	0.00			
		Drinking Water	2.	578&	3	0.01	121	3	0.02	178	0	0.00	279	0	0.00			
77093	CIS-1,2-DICHLOROETHYLENE, WHOLE WATER	Drinking Water	70.	4	0	0.00							4	0	0.00			
77128	STYRENE, WHOLE WATER	Drinking Water	100.	4	0	0.00							4	0	0.00			
77687	2,4,5-TRICHLOROPHENOL, WHOLE WATER	Fresh Acute	100.	4	0	0.00							4	0	0.00			
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	41	1	0.02	12	1	0.08	17	0	0.00	12	0	0.00			
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

NPS Servicewide Inventory and Monitoring Program Level I

Water Quality Parameter Inventory Data Evaluation and Analysis:

Missing Level I Groups

There is STORET Data for Every Level I I&M Parameter Group Within the RICH Study Area

NPS Servicewide Inventory and Monitoring Program Level I

Water Quality Parameter Inventory Data Evaluation and Analysis:

Present Level I Groups

STORET Data Within the RICH Study Area Exist for These Groups:

Alkalinity		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS (UEQ/L)	1	1	0	0	1
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	1253	965	131	157	47
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	27	0	24	3	12
00435	ACIDITY, TOTAL (MG/L AS CACO3)	4	0	3	1	1
00440	BICARBONATE ION (MG/L AS HCO3)	68	1	19	48	4
00445	CARBONATE ION (MG/L AS CO3)	21	0	17	4	3
		1374	967	194	213	68 (48)

pH		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00400	PH (STANDARD UNITS)	6610	3408	2023	1179	97
00403	PH, LAB (STANDARD UNITS)	1259	1012	95	152	53
00406	PH, FIELD (STANDARD UNITS)	6	6	0	0	6
		7875	4426	2118	1331	156 (106)

Conductivity		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	4784	4036	748	0	65
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	1716	1372	318	26	58
00096	SALINITY AT 25 DEGREES C (MG/ML)	1932	1904	28	0	24
00480	SALINITY - PARTS PER THOUSAND	12	0	12	0	8
		8444	7312	1106	26	155 (92)

Dissolved Oxygen		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE (MG/L)	3749	3702	47	0	62
00300	OXYGEN, DISSOLVED (MG/L)	8565	969	5948	1648	57
		12314	4671	5995	1648	119 (104)

Water Temperature		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12618	4782	6162	1674	114
		12618	4782	6162	1674	114 (114)

Flow		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00059	FLOW RATE, INSTANTANEOUS, GALLONS/MINUTE	367	196	171	0	3
00060	FLOW, STREAM, MEAN DAILY CFS	113	0	46	67	2
00061	FLOW, STREAM, INSTANTANEOUS CFS	301	153	148	0	29
00065	STAGE, STREAM (FEET)	3	3	0	0	3
00067	TIDE STAGE CODE	1932	1467	230	235	35
		2716	1819	595	302	72 (62)

Clarity/Turbidity		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00070	TURBIDITY, (JACKSON CANDLE UNITS)	490	309	131	50	26
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	838	838	0	0	25
00077	TRANSPARENCY, SECCHI DISC (INCHES)	14	0	0	14	4
00078	TRANSPARENCY, SECCHI DISC (METERS)	415	331	84	0	12
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	3928	1979	1417	532	47
82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS NTU	41	41	0	0	4
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	1	1	0	0	1
		5727	3499	1632	596	119 (54)

Nitrate/Nitrogen		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00600	NITROGEN, TOTAL (MG/L AS N)	143	0	123	20	2
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	114	0	100	14	1
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	943	906	37	0	11
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	4226	1303	1966	957	64
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	908	884	24	0	4
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	3613	1221	1502	890	55
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	24	0	24	0	9
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	4862	1895	2003	964	69
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	622	70	478	74	35
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	245	211	34	0	20
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	48	1	2	45	3
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	2	0	2	0	1
		15750	6491	6295	2964	274 (75)

Phosphate/Phosphorus		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	51	0	0	51	5
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	76	0	2	74	10
00665	PHOSPHORUS, TOTAL (MG/L AS P)	2802	1905	877	20	49
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	756	723	33	0	11
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	2378	1626	752	0	33
70505	PHOSPHORUS, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	2001	0	1130	871	37
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	2589	593	1123	873	57
		10653	4847	3917	1889	202 (73)

Chlorophyll		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
32209	CHLOROPHYLL A (UG/L) FLUOROMETRIC CORRECTED	70	6	64	0	12
32210	CHLOROPHYLL A (UG/L) TRICHROMATIC UNCORRECTED	21	2	7	12	5
32211	CHLOROPHYLL A (UG/L) SPECTROPHOTOMETRIC ACID METH.	1	1	0	0	1
32228	CHLOROPHYLL A (MG/M2) PERIPHYTON SPECTRO.	1	0	0	1	1
32230	CHLOROPHYLL A (MG/L)	95	0	79	16	1
		188	9	150	29	20 (18)

Sulfates/Total Dissolved Solids/Hardness		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00900	HARDNESS, TOTAL (MG/L AS CACO3)	890	834	4	52	26
00945	SULFATE, TOTAL (MG/L AS SO4)	1102	1029	23	50	44
00946	SULFATE, DISSOLVED (MG/L AS SO4)	1	1	0	0	1
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), (MG/L)	160	0	97	63	3
		2153	1864	124	165	74 (50)

Bacteria		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
31501	COLIFORM, TOT, MEMBRANE FILTER,IMMED.M-ENDOMED,35C	60	0	46	14	1
31503	COLIFORM, TOT, MEMBRANE FILTER,DELAY,M-ENDOMED,35C	1	0	0	1	1
31505	COLIFORM, TOT, MPN, CONFIRMED TEST,35C(TUBE 31506)	290	0	6	284	20
31506	COLIFORM, TOT, MPN, CONFIRMED TEST, TUBE CONFIG.	100	75	25	0	9
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	13	13	0	0	3
31615	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	1816	1786	0	30	40
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5C	3612	888	1864	860	47
31625	FECAL COLIFORM, MF, M-FC, 0.7 UM	55	0	55	0	2
31673	FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	143	0	124	19	2
		6090	2762	2120	1208	125 (71)

Toxic Elements		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
01097	ANTIMONY, TOTAL (UG/L AS SB)	4	4	0	0	4
00997	ARSENIC, INORGANIC TOTAL (UG/L AS AS)	4	4	0	0	4
01000	ARSENIC, DISSOLVED (UG/L AS AS)	2	2	0	0	2
01002	ARSENIC, TOTAL (UG/L AS AS)	372	164	148	60	46
01012	BERYLLIUM, TOTAL (UG/L AS BE)	14	14	0	0	8
01025	CADMIUM, DISSOLVED (UG/L AS CD)	22	22	0	0	12
01027	CADMIUM, TOTAL (UG/L AS CD)	426	171	161	94	52
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	9	9	0	0	6
01034	CHROMIUM, TOTAL (UG/L AS CR)	617	172	234	211	53
01040	COPPER, DISSOLVED (UG/L AS CU)	22	22	0	0	12
01042	COPPER, TOTAL (UG/L AS CU)	604	168	232	204	53
01049	LEAD, DISSOLVED (UG/L AS PB)	22	22	0	0	12
01051	LEAD, TOTAL (UG/L AS PB)	562	168	230	164	53
71890	MERCURY, DISSOLVED (UG/L AS HG)	22	22	0	0	12
71900	MERCURY, TOTAL (UG/L AS HG)	581	167	222	192	53
01065	NICKEL, DISSOLVED (UG/L AS NI)	224	8	167	49	41
01067	NICKEL, TOTAL (UG/L AS NI)	230	167	63	0	35
01145	SELENIUM, DISSOLVED (UG/L AS SE)	2	2	0	0	2
01147	SELENIUM, TOTAL (UG/L AS SE)	90	90	0	0	21
01077	SILVER, TOTAL (UG/L AS AG)	28	4	24	0	5
01059	THALLIUM, TOTAL (UG/L AS TL)	14	14	0	0	8
01090	ZINC, DISSOLVED (UG/L AS ZN)	22	22	0	0	12
01092	ZINC, TOTAL (UG/L AS ZN)	613	168	234	211	53
00720	CYANIDE, TOTAL (MG/L AS CN)	68	44	24	0	4
34210	ACROLEIN, TOTAL (UG/L)	4	4	0	0	4
34215	ACRYLONITRILE, TOTAL (UG/L)	4	4	0	0	4
32104	BROMOFORM, WHOLE WATER, (UG/L)	4	4	0	0	4
32102	CARBON TETRACHLORIDE, WHOLE WATER, (UG/L)	4	4	0	0	4
34301	CHLOROBENZENE, TOTAL (UG/L)	4	4	0	0	4
32105	DIBROMOCHLOROMETHANE, WHOLE WATER, (UG/L)	4	4	0	0	4
34311	CHLOROETHANE, TOTAL (UG/L)	4	4	0	0	4
32106	CHLOROFORM, WHOLE WATER (UG/L)	4	4	0	0	4
32101	BROMODICHLOROMETHANE, WHOLE WATER (UG/L)	4	4	0	0	4
34496	1,1-DICHLOROETHANE, TOTAL (UG/L)	4	4	0	0	4
32103	1,2-DICHLOROETHANE, WHOLE WATER (UG/L)	4	4	0	0	4
34501	1,1-DICHLOROETHYLENE, TOTAL (UG/L)	4	4	0	0	4
34541	1,2-DICHLOROPROPANE, TOTAL (UG/L)	4	4	0	0	4
34371	ETHYLBENZENE, TOTAL (UG/L)	4	4	0	0	4
34413	METHYL BROMIDE, TOTAL (UG/L)	4	4	0	0	4
34418	METHYL CHLORIDE, TOTAL (UG/L)	4	4	0	0	4
34423	METHYLENE CHLORIDE, TOTAL (UG/L)	4	4	0	0	4
34506	1,1,1-TRICHLOROETHANE, TOTAL (UG/L)	4	4	0	0	4
34475	TETRACHLOROETHYLENE, TOTAL (UG/L)	4	4	0	0	4
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER (UG/L)	4	4	0	0	4
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (UG/L)	4	4	0	0	4
34511	1,1,2-TRICHLOROETHANE, TOTAL (UG/L)	4	4	0	0	4
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE (UG/L)	4	4	0	0	4
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE (UG/L)	4	4	0	0	4
34586	2-CHLOROPHENOL, TOTAL (UG/L)	4	4	0	0	4
34601	2,4-DICHLOROPHENOL, TOTAL (UG/L)	4	4	0	0	4
34606	2,4-DIMETHYLPHENOL, TOTAL (UG/L)	4	4	0	0	4
39920	DNOC IN WHOLE WATER SAMPLE (UG/L)	4	4	0	0	4
34616	2,4-DINITROPHENOL, TOTAL (UG/L)	4	4	0	0	4
34591	2-NITROPHENOL, TOTAL (UG/L)	4	4	0	0	4
34646	4-NITROPHENOL, TOTAL (UG/L)	4	4	0	0	4

Toxic Elements - Continued ...		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
34452	PARACHLOROMETA CRESOL, TOTAL (UG/L)	4	4	0	0	4
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE (UG/L)	38	16	22	0	16
34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTAL (UG/L)	4	4	0	0	4
34621	2,4,6-TRICHLOROPHENOL, TOTAL (UG/L)	4	4	0	0	4
34205	ACENAPHTHENE, TOTAL (UG/L)	4	4	0	0	4
34200	ACENAPHTHYLENE, TOTAL (UG/L)	4	4	0	0	4
34220	ANTHRACENE, TOTAL (UG/L)	4	4	0	0	4
34273	BIS (2-CHLOROETHYL) ETHER, TOTAL (UG/L)	4	4	0	0	4
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER (UG/L)	6	6	0	0	5
34636	4-BROMOPHENYL PHENYL ETHER, TOTAL (UG/L)	4	4	0	0	4
34292	N-BUTYL BENZYL PHTHALATE, WHOLE WATER (UG/L)	4	4	0	0	4
34581	2-CHLORONAPHTHALENE, TOTAL (UG/L)	4	4	0	0	4
34641	4-CHLOROPHENYL PHENYL ETHER, TOTAL (UG/L)	4	4	0	0	4
34320	CHRYSENE, TOTAL (UG/L)	4	4	0	0	4
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (UG/L)	4	4	0	0	4
34536	1,2-DICHLOROBENZENE, TOTAL (UG/L)	4	4	0	0	4
34566	1,3-DICHLOROBENZENE, TOTAL (UG/L)	4	4	0	0	4
34571	1,4-DICHLOROBENZENE, TOTAL (UG/L)	4	4	0	0	4
34631	3,3'-DICHLOROBENZIDINE, TOTAL (UG/L)	4	4	0	0	4
34336	DIETHYL PHTHALATE, TOTAL (UG/L)	4	4	0	0	4
34341	DIMETHYL PHTHALATE, TOTAL (UG/L)	4	4	0	0	4
39110	DI-N-BUTYL PHTHALATE, WHOLE WATER (UG/L)	4	4	0	0	4
34611	2,4-DINITROTOLUENE, TOTAL (UG/L)	4	4	0	0	4
34626	2,6-DINITROTOLUENE, TOTAL (UG/L)	4	4	0	0	4
34596	DI-N-OCTYL PHTHALATE, TOTAL (UG/L)	4	4	0	0	4
34376	FLUORANTHENE, TOTAL (UG/L)	4	4	0	0	4
34381	FLUORENE, TOTAL (UG/L)	4	4	0	0	4
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	22	0	22	0	10
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE (UG/L)	4	4	0	0	4
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (UG/L)	4	4	0	0	4
34396	HEXACHLOROETHANE, TOTAL (UG/L)	4	4	0	0	4
34408	ISOPHORONE, TOTAL (UG/L)	4	4	0	0	4
34696	NAPHTHALENE, TOTAL (UG/L)	4	4	0	0	4
34447	NITROBENZENE, TOTAL (UG/L)	4	4	0	0	4
34438	N-NITROSODIMETHYLAMINE, TOTAL (UG/L)	4	4	0	0	4
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (UG/L)	4	4	0	0	4
34433	N-NITROSODIPHENYLAMINE, TOTAL (UG/L)	4	4	0	0	4
34461	PHENANTHRENE, TOTAL (UG/L)	4	4	0	0	4
34469	PYRENE, TOTAL (UG/L)	4	4	0	0	4
34551	1,2,4-TRICHLOROBENZENE, TOTAL (UG/L)	4	4	0	0	4
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	57	12	45	0	19
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	12	12	0	0	11
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	12	12	0	0	11
39340	GAMMA-BHC(LINDANE), WHOLE WATER (UG/L)	12	12	0	0	11
34259	DELTA BENZENE HEXACHLORIDE, TOTAL (UG/L)	12	12	0	0	11
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATER (UG/L)	23	1	22	0	11
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	34	12	22	0	12
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	34	12	22	0	12
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	34	12	22	0	12
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	41	12	22	7	16
34361	ENDOSULFAN, ALPHA, TOTAL (UG/L)	12	12	0	0	11
34356	ENDOSULFAN, BETA, TOTAL (UG/L)	12	12	0	0	11
34351	ENDOSULFAN SULFATE, TOTAL (UG/L)	12	12	0	0	11
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	34	12	22	0	12
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	12	12	0	0	11

Toxic Elements - Continued ...		Total Obs.	01/01/85 to 12/15/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	12	12	0	0	11
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE (UG/L)	12	12	0	0	11
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE (UG/L)	12	12	0	0	11
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE (UG/L)	12	12	0	0	11
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE (UG/L)	12	12	0	0	11
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE (UG/L)	12	12	0	0	11
34671	PCB - 1016, TOTAL (UG/L)	12	12	0	0	11
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	12	12	0	0	11
		5361	2209	1960	1192	1136 (56)

NPS Servicewide Inventory and Monitoring Program Level I

Water Quality Parameter Inventory Data Evaluation and Analysis:

Park Summary: Level I Group Currentness and Distribution

Parameter Group	Total Obs.	Obs. Since 1985	% Obs. Since 1985	Stations Measuring This Group	% of Total Stations Measuring This Group	Obs. Per Station Measuring This Group	Period of Record For This Group	Observations Per Year of Period of Record
Alkalinity	1374	967	70.4	48	35.6	28.6	07/30/45-12/15/98	25.7
pH	7875	4426	56.2	106	78.5	74.3	07/30/45-12/15/98	147.5
Conductivity	8444	7312	86.6	92	68.1	91.8	10/06/52-12/15/98	182.8
Dissolved Oxygen	12314	4671	37.9	104	77.0	118.4	10/12/67-12/15/98	394.9
Water Temperature	12618	4782	37.9	114	84.4	110.7	08/19/64-12/15/98	367.6
Flow	2716	1819	67.0	62	45.9	43.8	07/30/45-12/15/98	50.9
Clarity/Turbidity	5727	3499	61.1	54	40.0	106.1	08/20/64-12/15/98	166.9
Nitrate/Nitrogen	15750	6491	41.2	75	55.6	210.0	07/30/45-12/15/98	295.1
Phosphate/Phosphorus	10653	4847	45.5	73	54.1	145.9	10/07/68-12/15/98	352.9
Chlorophyll	188	9	4.8	18	13.3	10.4	10/19/71-08/08/94	8.2
Sulfates/Total Dissolved Solids/Hardness	2153	1864	86.6	50	37.0	43.1	07/30/45-12/15/98	40.3
Bacteria	6090	2762	45.4	71	52.6	85.8	09/20/67-12/15/98	194.9
Toxic Elements	5361	2209	41.2	56	41.5	95.7	07/15/69-10/21/97	189.6

Water Quality Observations
Outside STORET Edit Criteria for RICH

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter			Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
RICH0001	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		740529	1330	26.0000000	21VASWCB	2-XHF000.38	
RICH0005	00300	OXYGEN, DISSOLVED	MG/L	870608	1105	45.7000000	21VASWCB	2-ASH001.26	X
RICH0006	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		790109	1445	40.0000000	21VASWCB	2-ASH003.50	X
RICH0018	32230	CHLOROPHYLL A (MG/L)		711019	1315	8.3000000	1113JAWQ	JAMES J06	X
RICH0018	32230	CHLOROPHYLL A (MG/L)		711102	1100	2.3000000	1113JAWQ	JAMES J06	X
RICH0018	32230	CHLOROPHYLL A (MG/L)		711102	1148	8.3000000	1113JAWQ	JAMES J06	X
RICH0019	00300	OXYGEN, DISSOLVED	MG/L	870609	1355	52.4000000	21VASWCB	2-PCT002.46	X
RICH0027	00405	CARBON DIOXIDE (MG/L AS CO2)		740626	0915	137.0000000	112WRD	02038700	
RICH0027	00405	CARBON DIOXIDE (MG/L AS CO2)		760603	1000	243.0000000	112WRD	02038700	
RICH0027	00405	CARBON DIOXIDE (MG/L AS CO2)		780907	1030	124.0000000	112WRD	02038700	
RICH0032	00400	PH (STANDARD UNITS)		851002	1420	737.0000000	21VASWCB	2-JMS099.30	X
RICH0032	00665	PHOSPHORUS, TOTAL (MG/L AS P)		931202	1505	12.0000000	21VASWCB	2-JMS099.30	
RICH0036	00300	OXYGEN, DISSOLVED	MG/L	870609	1410	43.6000000	21VASWCB	2-KSL000.18	X
RICH0039	01007	BARIUM, TOTAL (UG/L AS BA)		960503	0945	4540.0000000	11NPSWRD	RICH_DAA_LCP-01	
RICH0050	00405	CARBON DIOXIDE (MG/L AS CO2)		761130	1030	149.0000000	112WRD	3725I6077253101	
RICH0061	00927	MAGNESIUM, TOTAL (MG/L AS MG)		920715	0913	1270.0000000	21VASWCB	2-FOM003.60	
RICH0061	00927	MAGNESIUM, TOTAL (MG/L AS MG)		930121	0904	1170.0000000	21VASWCB	2-FOM003.60	
RICH0065	00300	OXYGEN, DISSOLVED	MG/L	870609	1445	46.8000000	21VASWCB	2-FAC000.85	X
RICH0065	00927	MAGNESIUM, TOTAL (MG/L AS MG)		920715	1403	1610.0000000	21VASWCB	2-FAC000.85	
RICH0065	00927	MAGNESIUM, TOTAL (MG/L AS MG)		930121	1612	1740.0000000	21VASWCB	2-FAC000.85	
RICH0066	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		750622	1035	143.0000000	21VASWCB	2-GRK000.05	
RICH0067	00300	OXYGEN, DISSOLVED	MG/L	820112	1530	84.0000000	21VASWCB	2-GRK000.57	X
RICH0067	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		820922	1650	200.0000000	21VASWCB	2-GRK000.57	
RICH0069	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		961022	1500	0.0000000	21VASWCB	2-JMS104.16	X
RICH0070	32230	CHLOROPHYLL A (MG/L)		711019	1250	3.0000000	1113JAWQ	JAMES J04	X
RICH0070	32230	CHLOROPHYLL A (MG/L)		711102	1030	9.8000000	1113JAWQ	JAMES J04	X
RICH0070	32230	CHLOROPHYLL A (MG/L)		711102	1217	9.0000000	1113JAWQ	JAMES J04	X
RICH0080	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		760615	1430	37.2000000	21VASWCB	2-GRK001.73	
RICH0092	32230	CHLOROPHYLL A (MG/L)		711019	1235	3.0000000	1113JAWQ	JAMES J03	X
RICH0092	32230	CHLOROPHYLL A (MG/L)		711102	1015	6.0000000	1113JAWQ	JAMES J03	X
RICH0092	32230	CHLOROPHYLL A (MG/L)		711102	1230	9.0000000	1113JAWQ	JAMES J03	X
RICH0094	00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)		940201	1700	4.6000000	21VASWCB	2-ALM000.42	X
RICH0094	00300	OXYGEN, DISSOLVED	MG/L	870609	1635	51.7000000	21VASWCB	2-ALM000.42	X
RICH0094	00400	PH (STANDARD UNITS)		831222	1400	17.0000000	21VASWCB	2-ALM000.42	X
RICH0094	00403	PH, LAB, STANDARD UNITS	SU	720926	1545	12.3000000	21VASWCB	2-ALM000.42	
RICH0094	00403	PH, LAB, STANDARD UNITS	SU	721026	1115	12.2000000	21VASWCB	2-ALM000.42	
RICH0094	00403	PH, LAB, STANDARD UNITS	SU	731019	1510	12.2000000	21VASWCB	2-ALM000.42	
RICH0094	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		720926	1545	1695.0000000	21VASWCB	2-ALM000.42	
RICH0094	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		721026	1115	1252.0000000	21VASWCB	2-ALM000.42	
RICH0094	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		731019	1510	1320.0000000	21VASWCB	2-ALM000.42	
RICH0101	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)		890221	1100	0.1000000	21VASWCB	2-RDD000.76	X

Water Quality Observations
Outside STORET Edit Criteria for RICH

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter			Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
RICH0101	00300	OXYGEN, DISSOLVED	MG/L	870609	1135	55.7000000	21VASWCB	2-RDD000.76	X
RICH0102	00300	OXYGEN, DISSOLVED	MG/L	810908	1430	70.1000000	21VASWCB	2-GIL000.42	X
RICH0102	00300	OXYGEN, DISSOLVED	MG/L	870609	1415	57.3000000	21VASWCB	2-GIL000.42	X
RICH0102	00400	PH (STANDARD UNITS)		870609	1415	0.7400000	21VASWCB	2-GIL000.42	X
RICH0116	00080	COLOR (PLATINUM-COBALT UNITS)		920423	1530	630.0000000	21VASWCB	2-JMS110.30	
RICH0116	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		920421	0900	0.2000000	21VASWCB	2-JMS110.30	X
RICH0116	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)		920901	0845	0.3000000	21VASWCB	2-JMS110.30	X
RICH0116	00403	PH, LAB, STANDARD UNITS	SU	951019	1745	75.1000000	21VASWCB	2-JMS110.30	X
RICH0116	00927	MAGNESIUM, TOTAL (MG/L AS MG)		921102	0840	5000.0000000	21VASWCB	2-JMS110.30	
RICH0122	32230	CHLOROPHYLL A (MG/L)		711019		3.8000000	1113JAWQ	JAMES J02	X
RICH0122	32230	CHLOROPHYLL A (MG/L)		711102	1050	5.3000000	1113JAWQ	JAMES J02	X
RICH0122	32230	CHLOROPHYLL A (MG/L)		711102		3.8000000	1113JAWQ	JAMES J02	X
RICH0134	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		830127	1100	-3.5000000	21VASWCB	2-CHK062.57	
RICH0134	00927	MAGNESIUM, TOTAL (MG/L AS MG)		920902	1339	2640.0000000	21VASWCB	2-CHK062.57	
RICH0134	00927	MAGNESIUM, TOTAL (MG/L AS MG)		921228	1056	2070.0000000	21VASWCB	2-CHK062.57	
RICH0134	00927	MAGNESIUM, TOTAL (MG/L AS MG)		930303	1422	2320.0000000	21VASWCB	2-CHK062.57	
RICH0146	00927	MAGNESIUM, TOTAL (MG/L AS MG)		920902	0929	3110.0000000	21VASWCB	2-UPM003.53	
RICH0146	00927	MAGNESIUM, TOTAL (MG/L AS MG)		921202	0935	2700.0000000	21VASWCB	2-UPM003.53	
RICH0146	00927	MAGNESIUM, TOTAL (MG/L AS MG)		930303	1010	3220.0000000	21VASWCB	2-UPM003.53	

APPENDICES

Appendix A

Computer Files Transmitted With

Park Baseline Water Quality Data Inventory and Analysis

Computer disk(s) accompanying this report include up to six (depending on the presence or absence of certain data elements) compressed (ZIP) files containing digital copies of nearly all the tables, figures, and other materials used to produce this report. To decompress these files, you must use the commonly available shareware program PKUNZIP. The command to type at the DOS prompt is:

PKUNZIP -E *COMPRESS.ZIP FILENAME.EXT*

where COMPRESS.ZIP is the name of one of the six compressed (ZIP) files listed below and FILENAME.EXT is the name of the file you wish to extract. If you want to decompress all of the files in COMPRESS.ZIP, simply omit the FILENAME.EXT. To obtain a listing of all the files compressed into a particular ZIP file, type the following:

PKUNZIP -V *COMPRESS.ZIP* |MORE

where COMPRESS.ZIP is the name of one of the six compressed ZIP files listed below. If a ZIP file spans multiple disks, use the last disk of the series (span) when obtaining a listing of all the files compressed into a particular ZIP file. Once you see the file you wish to obtain, substitute this file name for FILENAME.EXT in the first command line above to extract and decompress this particular file.

Included on one of the disk(s) accompanying this report is a program named PRINTZIP. This program will decompress ZIP files which don't span multiple disks and print certain files to a Hewlett-Packard (or compatible) Laser Printer. To use PRINTZIP, however, you must still have a copy of PKUNZIP in a directory listed in your path or in the same directory as the PRINTZIP program. PRINTZIP provides an easy, menu-driven interface for using PKUNZIP to decompress files and then send them to the printer. PRINTZIP allows you to send individual files, groups of files, or all files to the printer. PRINTZIP will not work with ZIP files that span multiple disks.

The following compressed (ZIP) files are included on the disk(s) accompanying this report:

(1) RICHTABS.ZIP

This compressed file contains all the tables presented in the report. The files compressed into this file include:

(a) RICHSITE.DOC - Descriptive listing of select fields from the industrial facilities discharges, drinking water intakes, and EPA-USGS stream gages databases.

(b) RICHAGNC.DOC - Contacts for agencies whose data were retrieved within the study area.

(c) RICHAGNQ.DOC - Number of stations, observations, and parameters retrieved by agency code within the study area and park.

(d) RICHOV0.DOC - Overview of park and retrieved data.

(e) RICHOV1.DOC - Station period of record table.

(f) RICHOV2.DOC - Parameter period of record table.

(g) RICHOV3.DOC - Station/parameter period of record table.

(h) RICHINV.DOC - Station by station descriptive statistics over the entire period of record and comparison against EPA Water Quality Criteria for each station.

(i) RICHSEAN.DOC - Seasonal and annual water quality descriptive statistics at stations with water quality data meeting the default seasonal and annual criteria.

(j) RICHEPAS.DOC - EPA Water Quality Criteria comparison for data at all stations combined within the study area.

(k) RICHIDEA.DOC - Comparison of downloaded STORET data with NPS Servicewide Inventory and Monitoring Program "Level I" water quality parameters.

(l) RICHBAD.DOC - Water quality observation values that were outside the range of one of 190 STORET edit criteria and were either discarded or retained.

All these compressed document files are in ASCII format and contain printer codes appropriate to Hewlett-Packard (or compatible) Laser Printers. While at the DOS prompt, any of these document files may be printed directly to a Hewlett-Packard (or compatible) Laser Printer by using the PRINT command. For example, if the document RICHOV1.DOC is in the subdirectory C:\WATER, you could type: PRINT C:\WATER\RICHOV1.DOC. This will print the file to your local or networked Hewlett-Packard (or compatible) Laser Printer attached to parallel port one (LPT1:). Alternatively, you can use the PRINTZIP program to decompress and print any of these files provided the ZIP file doesn't span multiple disks. These ASCII files can also be imported into word-processed documents, but the printer codes will then have to be removed.

(2) RICHFIGS.ZIP

This compressed file contains graphics files for all the statistical figures (time series plots; annual box and whiskers plots; seasonal box and whiskers plots) in the report in two different formats: Computer Graphic Metafile (CGM) and Hewlett-Packard Printer Control Language (PCL). The files are named with the last three digits of the Station Name followed by the five digit STORET code. The file name extension begins with either a 1 (time series), 2 (annual), or 3 (seasonal) and then either GM for CGM or CL for PCL. For example, 00100300.2GM would denote the file contains an annual box and whiskers plot in CGM format for parameter 00300 (dissolved oxygen) at station RICH0001. While at the DOS prompt, any PCL file can be printed directly to a Hewlett-Packard (or compatible) Laser Printer by using the COPY command. For example, if the graphic 00100300.2CL (an annual box and whiskers plot of parameter 00300, dissolved oxygen, at station RICH0001) is in the subirectory C:\WATER, you would type: COPY C:\WATER\00100300.2CL LPT1: /B. This will print the file to your local or networked Hewlett-Packard (or compatible) Laser Printer attached to parallel port one (LPT1:). The /B is necessary because the PCL file is in a binary format. Alternatively, you can use the PRINTZIP program to decompress and print any of the PCL files provided the ZIP file doesn't span multiple disks. The CGM files can be imported and/or edited in most graphics packages, including WordPerfect.

(3) RICHPARM.ZIP

This file compresses RICHPARM.DBF which contains all the actual values (raw data) of all the water quality data downloaded from STORET and summarized in the report. The detailed database structure for this file is contained in Appendix B.

(4) RICHSITE.ZIP

This compressed file contains up to five geo-referenced, DBASE III+ compatible site (point location) files documenting the location in the study area of water quality monitoring stations, industrial facilities discharges, drinking water intakes, water gages, and water impoundments. These files include:

(a) RICHWQ.DBF - All water quality monitoring station locations within the project's study area downloaded from STORET.

(b) RICHIFD.DBF - All municipal and industrial facility discharges within the project's study area downloaded from the IFD database.

(c) RICHDRIN.DBF - All drinking water intakes within the project's study area downloaded from the DRINKS database.

(d) RICHGAGE.DBF - All water gages within the project's study area downloaded from the GAGES database.

(e) RICHDAMS.DBF - All water impoundments within the project's study area downloaded from the DAMS database.

The absence of any of these files indicates that none of the particular sites were found within the study area. Detailed database structures for each of these files are contained in Appendix B.

(5) RICHMISC.ZIP

This compressed file contains a variety of graphic and document files that are contained in the report. They are grouped into this miscellaneous compressed (ZIP) file because they don't fit neatly into any of the other compressed files. The files contained in this compressed file include:

(a) RICHEXEC.DOC - WordPerfect Ver. 5.1 copy of the Executive Summary in the report.

(b) RICHTOC.DOC - WordPerfect Ver. 5.1 copy of the report's Table of Contents.

(c) INTRO.DOC - WordPerfect Ver. 5.1 copy of all the text in the report from the Introduction through the Interpretive Guide to Water Quality Results.

(d) APPENDIX.DOC - WordPerfect Ver. 5.1 copy of all the Appendices in the report.

(e) RICHREGI - PCL and CLP (Windows Clipboard) copies of map displaying the regional location of the park and study area.

(f) RICHWQ - PCL and CLP (Windows Clipboard) copies of park maps displaying water quality station locations within the park's study area. If, due to scaling and aesthetic concerns, multiple maps were needed, these files will have alphabetically ordered suffixes (RICHWQA, RICHWQB,

RICHWQC, etc.) and the index map name will end with an ampersand (&).

(g) RICHIDG - PCL and CLP (Windows Clipboard) copies of park maps displaying locations of industrial facilities discharges, drinking water intakes, and stream gages within the park's study area. If, due to scaling and aesthetic concerns, multiple maps were needed, these files will have alphabetically ordered suffixes (RICHIDGA, RICHIDGB, RICHIDGC, etc.) and the index map name will end with an ampersand (&). If no industrial facilities discharges, drinking water intakes, water gages, or water impoundments exist within the park's study area, these files will not be in the compressed (ZIP) file.

(h) RICHSEHY - PCL and CLP (Windows Clipboard) copies of the hydrographs or other materials used by WRD staff as the basis for a first attempt at a seasonal analysis of the park's water quality data.

Other materials may also be included in this miscellaneous compressed (ZIP) file as warranted by conditions at the park. As with RICHFIGS.ZIP and RICHTABS.ZIP, you can use the PRINTZIP program to print any of the PCL files in RICHMISC.ZIP provided the ZIP file doesn't span multiple disks. You should not, however, use PRINTZIP to print the WordPerfect document files. The CLP (Windows Clipboard) files can be imported (pasted) and/or edited in most Windows-based word processors and graphics packages.

(6) RICHRF3.ZIP

This compressed file contains the Environmental Protection Agency's River Reach File Ver. 3.0 provisional data for the USGS catalog unit(s) encompassing the study area. The attribute data exist in both ASCII and DBASE III+ format, while the geographic traces exist in ASCII format. This compressed file contains four files for each catalog unit that touches the study area. Catalog units are identified by unique 8-character numeric names which identify the region, subregion, accounting unit, and catalog unit. Examples (your 8-character numeric names will be different) of the file types included in this compressed file are:

(a) 12345678.RF3 - ASCII formatted attribute file from the River Reach File for all hydrographic traces within the catalog unit.

(b) 12345678.DBF - DBASE III+ formatted attribute file from the River Reach File for all hydrographic traces within the catalog unit.

(c) 12345678.TRC - ASCII formatted geographic file from the River Reach File containing digital, geo-referenced descriptions of all hydrographic traces within the catalog unit at a scale of 1:100,000 suitable for import into a geographic information system.

(d) 12345678.CUB - ASCII formatted geographic file from the River Reach File containing a digital, geo-referenced description of the catalog unit boundary suitable for import into a geographic information system.

Detailed database structures for RF3-related files are contained in Appendix B.

Appendix B

Water Quality Database File Structures

The following table provides the DBASE III+ database field structure for all the water quality parameter data downloaded from STORET. This data will allow parks or other interested parties to replicate the statistical analyses and graphics contained in this report; perform more sophisticated analyses; or to establish a baseline park water quality database.

Parameter Data File: RICHPARM.DBF in RICHPARM.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
NPSSTATID	1	8	8	NPS Station ID (NPS park code + 4 digit sequence number)
BEGDATE	9	14	6	Measurement Start Date [yymmdd]
BEGTIME	15	18	4	Measurement Start Time [hhmm]
PARMCODE	19	23	5	STORET Parameter Code
PARMVALU	24	39	16.7	Parameter Value
REMARK	40	40	1	Parameter Remark Value
				A=Value is Mean of 2 or More Determinations
				B=Results Based Upon Colony Counts Outside Acceptable Range
				C=Value Calculated
				D=Field Measurement
				E=Extra Sample Taken in Compositing Process
				F=Female Species
				G=Maximum of 2 or More Determinations
				H=Based on Field Kit Determination
				I=Value is Less Than Practical Quantitation Limit and Greater Than or Equal to the Method Detection Limit
				J=Estimated, Not the Result of Analytic Measurement
				K=Off-scale Low, Actual Value Not Known, But Known to be Less Than Value Shown
				L=Off-scale High, Actual Value Not Known, But Known to be Greater Than Value Shown

Parameter Data File: RICHPARM.DBF in RICHPARM.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
				M=Presence Verified, But Not Quantified, Below Quantification Limit; For Species, Male; For Oxygen Reduction Potential, Indicates a Negative Value
				N=Presumptive Evidence of Presence
				O=Analysis Lost
				P=Too Numerous to Count
				Q=Exceeded Normal Holding Time
				R=Significant Rain in Last 48 Hours
				S=Laboratory test
				T=Less Than Detection Criteria
				U=Analyzed For But Not Detected, Value is Detection Limit For Process Used; If Species, Undetermined
				V=Analyte was Detected in Sample and Method Blank
				W=Less Than Lowest Value Reportable Under Remark "T"
				X=Quasi Vertically-Integrated Sample
				Y=Analysis of Unpreserved Sample
				Z=Too Many Colonies Were Present to Count (TNTC), Value Represents Filtration Value
				$=Calculated By Retrieval Software
MEDIA	41	46	6	Sample Media
DEPTH	47	55	9.3	Depth of Sample [in feet]
ENDDATE	56	61	6	Measurement End Date [yymmdd] [all composite samples]
ENDTIME	62	65	4	Measurement End Time [hhmm] [all composite samples]
SAMPTYPE	66	69	4	Type of Sample ["sophisticated" composite samples]
				C=Continuous Collection
				G=Collection of Individual Grab Samples
				GNxx=xx is the Number of Individual Grab Samples
				B=N/A

Parameter Data File: RICHPARM.DBF in RICHPARM.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
COMPTYPE	70	70	1	Composite Value Type ["sophisticated" composite samples]
				A=Average
				H=Maximum
				L=Minimum
				N=Number of Observations
				#=Number of Observations
				S=Standard Deviation
				U=Sum of Squares
				V=Variance
				C=Coefficient of Error
				X=Coefficient of Variance
				E=Skewness
				F=Kurtosis
				Z=Number of Observations That Exceed an Established Limit
				%=Precision
				$=Accuracy
				B=N/A
				D=Indicates Replicate Sample
COMPST	71	71	1	Composite Space/Time Indicator
				S=Space
				T=Time
				B=Space and Time
				F=Flow Proportional
				1-9=Replicate Number

Note: DBASE III+ record lengths will be one greater than the last stop column displayed (71 here) because DBASE III+ reserves the first space/column of every record for a deletion flag. Hence, DBASE III+ will display a record length of 72 for this database.

The following table provides the DBASE III+ database field structure for all the water quality station locations downloaded from STORET. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Water Quality Station Data File: RICHWQ.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
NPSSTATID	1	8	8	PS Station ID (NPS park code + 4 digit sequence number)
AGENCY	9	16	8	Agency Code of Station Owner
STORIDP	17	31	15	STORET Primary Station Code
STORIDS1	32	43	12	STORET First Secondary Station Code
STORIDS2	44	55	12	STORET Second Secondary Station Code
STORIDS3	56	65	10	STORET Third Secondary Station Code
LATITUDE	66	73	8	Station Latitude [degrees:minutes:seconds]
LONGITUDE	74	82	9	Station Longitude [degrees:minutes:seconds]
LAT	83	93	11.6	Station Latitude [decimal degrees, (-) below equator]
LON	94	104	11.6	Station Longitude [decimal degrees, (-) western hemisphere]
LLPREC	105	105	1	Latitude/Longitude Precision Code
RMI	106	329	224	River Mile Index
STATLOC	330	377	48	Station Location Description
CNTYCODE	378	382	5	FIPS State/County Code
STNAME	383	398	16	State Name
CNTYNAME	399	418	20	County Name
HYDUNIT	419	426	8	Hydrologic Unit Code (MAJ/MIN/SUB = Catalog Unit)
MAJBASN	427	450	24	Major Basin Name
MINBASN	451	490	40	Minor Basin Name
STATTYPE	491	550	60	Station Type
STORDATE	551	556	6	Date Station was Stored in STORET
RF1INDEX	557	567	11	F1 Reach Number Location [2]
RF1MILE	568	575	8.3	Mile Point on RF1 Reach [2]
RF1LOC	576	578	3	Indicates the Location as ON or OFF RF1 Reach [2]
RF1DIST	579	584	6.2	Distance From RF1 Reach

Water Quality Station Data File: RICHWQ.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
RF3INDEX	585	601	17	RF3 Reach Number Location [3]
RF3MILE	602	607	6.2	Mile point on RF3 Reach [3]
RF3LOC	608	610	3	Indicates the Location as ON or OFF RF3 Reach [2]
RF3DIST	611	616	6.2	Distance From RF3 Reach
DEPH2O	617	620	4	Depth of Water at Station Location [in feet]
ELEV	621	625	5	Station Elevation
ECOREG	626	628	3	ECO Region
H2OBODY	629	678	50	Waterbody ID
AQUIFERS	679	718	40	Aquifer Description
STATDESC1	719	790	72	Station Sentence Description
STATDESC2	791	862	72	Station Sentence Description
STATDESC3	863	934	72	Station Sentence Description
STATDESC4	935	1006	72	Station Sentence Description
STATDESC5	1007	1078	72	Station Sentence Description
STATDESC6	1079	1150	72	Station Sentence Description
STATDESC7	1151	1222	72	Station Sentence Description
STATDESC8	1223	1294	72	Station Sentence Description
STATDESC9	1295	1366	72	Station Sentence Description
STATDESC10	1367	1438	72	Station Sentence Description
STATDESC11	1439	1510	72	Station Sentence Description
STATDESC12	1511	1582	72	Station Sentence Description
STATDESC13	1583	1654	72	Station Sentence Description
STATDESC14	1655	1726	72	Station Sentence Description
STATDESC15	1727	1798	72	Station Sentence Description

The following table provides the DBASE III+ database field structures for the EPA Industrial Facilities Discharge database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Industrial Facilities Discharges File: RICHIFD.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
SITEID	1	9	9	Site Identifier (NPDES Number)
LATITUDE	10	17	8	Facility Latitude (Degrees:Minutes:Seconds)
LONGITUDE	18	26	9	Facility Longitude (Degrees:Minutes:Seconds)
LAT	27	37	11.6	Facility Latitude (decimal degrees, (-) below equator)
LON	38	48	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
RF1INDEX	49	59	11	RF1 Reach Number Location
RF1MILE	60	65	6.2	Mile Point on RF1 Reach
RF1DIST	66	71	6.2	Distance From RF1 Reach
RF3INDEX	72	88	17	RF3 Reach Number Location
RF3MILE	89	94	6.2	Mile Point on RF3 Reach
RF3DIST	95	100	6.2	Distance From RF3 Reach
ADR	101	125	25	Address
BFL	126	132	7.2	Total Direct Combined C&P Flow (1000 GPD)
CCFLG	133	133	1	Coastal County Flag "Y"/"N"/"E"=Estuary
CC1	134	138	5	City Code #1 (EPA Code)
CFL	139	145	7.2	Total Direct Cooling Flow (1000 GPD)
CNC	146	148	3	County Code (FIPS)
CTY	149	168	20	City Name
CZIP	169	177	9	Canadian Zip Code
DNB	178	186	9	Dunn & Bradstreet Number
DNBFLG	187	187	1	Dunn & Bradstreet PCS Source Flag
EGF	188	202	15.4	Flow From Effluent Guidelines (1000 GPD)
EGS	203	208	6	Effluent Guidelines Subcategory
EXPDT	209	216	8	Expiration Date (mm/dd/yy)
E308SN	217	220	4	Effluent Guidelines Survey Number

Industrial Facilities Discharges File: RICHIFD.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
FAC	221	229	9	SCS Facility Identifier (Cross-Reference)
FDS	230	232	3	Facility Data Source
FFL	233	239	7.2	Total Facility Flow (1000 GPD)
FHF	240	240	1	Fac. Hit Flag (Reach File) V=Versar Assumed
FLOTYP	241	243	3	I=Blow Down, R=Bottom Ash, S=Fly Ash
FLR	244	250	7.2	Flow Recvd-Industrial (1000 GPD) Permit Data
FRDS	251	259	9	FRDS ID# - XREF To Water Supply
FRW	260	289	30	Facility Receiving Water Name
FS1	290	293	4	Facility SIC Code (From PCS)
FS2	294	297	4	Facility SIC Code #1
FS3	298	301	4	Facility SIC Code #2
FS4	302	305	4	Facility SIC Code #3
FS5	306	309	4	Facility SIC Code #4
FUD	310	317	8	Facility Level Last Date Updated (mm/dd/yy)
IACC	318	318	1	Inactive/Active Indicator ("I" or "A")
ICAT	319	320	2	WQAB Industrial Category
ICAT2	321	322	2	WQAB Industrial Category 2
ICAT3	323	324	2	WQAB Industrial Category 3
IFL	325	331	7	Total Indirect Flow (1000 GPD)
IFT	332	332	1	Illinois Facility Type (A thru Z)
IG1	333	334	2	Facility Industrial Group #1
IG2	335	336	2	Facility Industrial Group #2
IJCN	337	346	10	Canadian Record Identifier
INACT	347	353	7	Inactive/Rescinded P=Based on Permit;A=Actual
INDCNT	354	357	4	Computed Number of Indirect Dischargers
LATLON	358	372	15	Polygon Retrieval Lat/Long.
MAJ	373	373	1	Major-Minor Flag (From PCS)
MAPID	374	377	4	Map Identifier

Industrial Facilities Discharges File: RICHIFD.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
MJMN	378	381	4	Major/Minor Basin (EPA-STORET)
NAM	382	441	60	Facility Name
NDC	442	444	3	Number of Discharges (Pipes)
NDSFLO	445	451	7.2	NEEDS Flow (1000 GPD)
NDSIFLO	452	458	7.2	NEEDS Industrial Flow (1000 GPD)
NID	459	462	4	Number of Indirect Dischargers
NPC	463	463	1	NEEDS Pre-Treatment Code "Y"=Yes, "N"=No
NPS	464	464	1	NPDES Facility Source/Status
NSN	465	473	9	NEEDS Survey Number
NTC	474	474	1	NEEDS Treatment Code
OCP	475	480	6	Organic Chemical Producers ID Number
ODESCC	481	481	1	ODES Coastal County "Y"=Yes; "N"=No
OFL	482	488	7.2	Total Non-Direct Other Flow (1000 GPD)
OWN	489	491	3	Ownership Code
PFL	492	498	7.2	Total Direct Process Flow (1000 GPD)
REG	499	500	2	EPA Region
REGKEY	501	504	4	Region Key
RSLOFLO	505	511	7.2	Receiving Stream Low Flow
RSMNFLO	512	518	7.2	Receiving Stream Mean Flow
STA	519	520	2	State Postal Abbreviation
STAID	521	535	15	State Identifier
STC	536	537	2	State Code (FIPS)
STCITY	538	544	7	State/City Code
TFLOW	545	551	7.2	Type Flow (1000 GPD)
UFL	552	558	7.2	Total Direct Undefined Flow (1000 GPD)
XEGS	559	561	3	Effluent Guidelines Subcat Index
XKEY	562	562	1	"1","2","3","4","5","6","7","8","9"
XNME	563	565	3	GLP,DIR,F2C,ENF,CET,LAG,PPB,M85,M86

Industrial Facilities Discharges File: RICHIFD.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
ZIP	566	570	5	Zip Code

The following table provides the DBASE III+ database field structures for drinking water intakes from the EPA DRINKS database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Drinking Water Intakes File: RICHDRIN.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
SITEID	1	20	20	Site Identifier
LATITUDE	21	28	8	Facility Latitude (Degrees:Minutes:Seconds)
LONGITUDE	29	37	9	Facility Longitude (Degrees:Minutes:Seconds)
LAT	38	48	11.6	Facility Latitude (decimal degrees, (-) below equator)
LON	49	59	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
RF1INDEX	60	70	11	RF1 Reach Number Location
RF1MILE	71	76	6.2	Mile Point on RF1 Reach
RF1DIST	77	82	6.2	Distance From RF1 Reach
RF3INDEX	83	99	17	RF3 Reach Number Location
RF3MILE	100	105	6.2	Mile Point on RF3 Reach
RF3DIST	106	111	6.2	Distance From RF3 Reach
AQCD	112	115	4	Aquifer Code
ASC	116	138	23	STORET Agency/Station Code
AVGD	139	142	4	Average Depth
BUY	143	143	1	Purchase Code
CC1	144	148	5	City Code #1 (EPA Code)
CNC	149	151	3	County Code (FIPS)
CNME	152	166	15	Contact Name
CNN	167	186	20	County Name
CTITLE	187	201	15	Contact Title
CTY	202	221	20	City Name
DUD	222	229	8	Date of Update
FRDS	230	238	9	FRDS ID# - Cross-Reference
GEOAG	239	258	20	Geologic Age
GEOCDE	259	261	3	Geologic Age Code

Drinking Water Intakes File: RICHDRIN.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
IDAT	262	269	8	Date (mm/dd/yy)
INTAKET	270	270	1	Type Source G/S/B
INTRVWR	271	285	15	Interviewer
MAXD	286	289	4	Maximum Depth
MILES	290	296	7.2	Miles
MIND	297	300	4	Minimum Depth
NAME	301	320	20	Name
NPD	321	329	9	NPDES# XREF to IFD Database
NWLS	330	332	3	Number of Wells
OWN	333	335	3	Ownership
PAVGF	336	342	7.2	Production Avg. Daily (Gal/Day)
PCTSUP	343	345	3	%Surface / %Ground
PHONE	346	355	10	Telephone Number
PMAXF	356	362	7.2	Production Max. Daily (Gal/Day)
POPSV	363	371	9	Population Served
REG	372	373	2	EPA Region
SHLAT	374	379	6	Sitehelp Latitude (DDMMSS)
SHLNG	380	386	7	Sitehelp Longitude (DDDMMSS)
SHMILES	387	393	7.2	Sitehelp Miles
SHNME	394	403	10	Sitehelp Source Name
SHPCT	404	410	7.2	Sitehelp Percent of Reach Miles
SRC	411	413	3	Sitehelp Source Code
STA	414	415	2	State Abbreviation
STC	416	417	2	State Code (FIPS)
TUF	418	424	7.2	Total Utility Flow
TYPCDE	425	425	1	Type Code
UHF	426	426	1	Utility Hit Flag (Reach File)
VCDE	427	427	1	Versar Code='V'=>25K; '*'=<25K POPSVD

Drinking Water Intakes File: RICHDRIN.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
WFPC	428	428	1	Wellfield Precision Code
WFTYP	429	429	1	Well Type (Cassing,Artesian,Infiltration,etc.)
WUN	430	449	20	Water Utility Name

The following table provides the DBASE III+ database field structures for the Water Gage database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Water Gage File: RICHGAGE.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
SITEID	1	20	20	Site Identifier
LATITUDE	21	28	8	Facility Latitude (DDMMSS)
LONGITUDE	29	37	9	Facility Longitude (DDDMMSS)
LAT	38	48	11.6	Facility Latitude (decimal degrees, (-) below equator)
LON	49	59	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
RF1INDEX	60	70	11	RF1 Reach Number Location
RF1MILE	71	76	6.2	Mile Point on RF1 Reach
RF1DIST	77	82	6.2	Distance From RF1 Reach
RF3INDEX	83	99	17	RF3 Reach Number Location
RF3MILE	100	105	6.2	Mile Point on RF3 Reach
RF3DIST	106	111	6.2	Distance From RF3 Reach
JAN	112	118	7.2	Monthly Flow - January
FEB	119	125	7.2	Monthly Flow - February
MAR	126	132	7.2	Monthly Flow - March
APR	133	139	7.2	Monthly Flow - April
MAY	140	146	7.2	Monthly Flow - May
JUN	147	153	7.2	Monthly Flow - June
JUL	154	160	7.2	Monthly Flow - July
AUG	161	167	7.2	Monthly Flow - August
SEP	168	174	7.2	Monthly Flow - September
OCT	175	181	7.2	Monthly Flow - October
NOV	182	188	7.2	Monthly Flow - November
DEC	189	195	7.2	Monthly Flow - December
RGN	196	197	2	Region Code
AREA	198	204	7.2	Drainage Area (SQ.MI.)

Water Gage File: RICHGAGE.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
DUD	205	212	8	Date of Update
FBCF	213	213	1	Flag - Basic Characteristic File ('Y')
FDFF	214	214	1	Flag - Daily Flows File ('Y')
FQMINV	215	224	10	IHS Pt. Files Index
GHF	225	225	1	Hit Flag (Reach File)
ICDE	226	226	1	Integrity Code
LFVEL	227	233	7.2	Low Flow Velocity
METHOD	234	236	3	Calculation Method Code
MFVEL	237	243	7.2	Mean Flow Velocity
MNFLO	244	250	7.2	USGS Mean Annual Flow
NME	251	298	48	Station Name
SHLAT	299	304	6	Sitehelp Latitude (DDMMSS)
SHLNG	305	311	7	Sitehelp Longitude (DDDMMSS)
SHMILES	312	318	7.2	Sitehelp Miles
SHNME	319	328	10	Sitehelp Source Name
SHPCT	329	335	7.2	Sitehelp Percent of Reach Miles
SITE	336	337	2	Site Location
SRC	338	340	3	Sitehelp Source Code
STCTY	341	345	5	State/County Numeric Code
SVTEN	346	352	7.2	USGS 7-10 Year Flow
BEG_WYR	353	356	4	Beginning Water Year
END_WYR	357	359	4	Ending Water Year
ELEV	361	368	8.2	Elevation (Feet)
WELL_DP	369	376	8.2	Well Depth (Feet)

The following table provides the DBASE III+ database field structures for the Water Impoundment database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Water Impoundment File: RICHDAMS.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
SITEID	1	7	7	Site Identifier
SOURCE	8	10	3	Source of Data
ST1	11	12	2	Primary State Code Abbreviation
STCTY1	13	17	5	State/County Numeric Code
NAME	18	47	30	Official Name of Dam
LATITUDE	48	53	6	Facility Latitude (DDMMSS)
LONGITUDE	54	60	7	Facility Longitude (DDDMMSS)
LAT	61	70	10.6	Facility Latitude (decimal degrees, (-) below equator)
LON	71	81	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
INME	82	111	30	Impoundment Name
RNME	112	139	28	River, Stream, or Tributary Name on Which Dam Built
CUSEGMI	140	149	10	Catalog Unit, Segment, and Segment Length
REGN	150	151	2	Water Resources Council Region Code
RGBSN	152	155	4	Water Resources Region/Basin Code
CU	156	163	8	Catalog Unit
SEG	164	166	3	Reach Segment of Dam
SEGL	167	171	5.2	Reach Segment Length
PURP	172	172	1	Major Purpose of Dam
				I=Irrigation
				H=Hydroelectric
				N=Navigation
				S=Water Supply
				R=Recreation
				P=Stock/Farm Pond
				D=Debris Control

Water Impoundment File: RICHDAMS.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
				F=Flood Control
				O=Other
FRF3	173	189	17	RF3 Reach Number Location
FRF3MI	190	194	5	Mile Point on RF3 Reach
PURPKEY	195	195	1	Purpose Key
PUR2	196	196	1	Purpose of Dam 2 (See Above)
PUR3	197	197	1	Purpose of Dam 3 (See Above)
PUR4	198	198	1	Purpose of Dam 4 (See Above)
PUR5	199	199	1	Purpose of Dam 5 (See Above)
PUR6	200	200	1	Purpose of Dam 6 (See Above)
PUR7	201	201	1	Purpose of Dam 7 (See Above)
PUR8	202	202	1	Purpose of Dam 8 (See Above)
PUR9	203	203	1	Purpose of Dam 9 (See Above)
PUR10	204	204	1	Purpose of Dam 10 (See Above)
TYPDAM	205	206	2	Major Dam Portion Type
				RE=Earth
				VA=Vaulted Arch
				CD=Buttress
				PG=Gravity
				ER=Rockfill
				MV=Multi-Arch
				OT=Other
YRCMP	207	210	4	Year Dam Completed
SHGT	211	214	4	Structural Height (Feet)
HHGT	215	218	4	Hydraulic Height (Feet)
VNORM	219	236	8	Normal Storage of Impoundment (Acre-Feet)
VMAX	227	234	8	Maximum Storage of Impoundment (Acre-Feet)
LCRST	235	239	5	Crest Length of Dam (Feet)

Water Impoundment File: RICHDAMS.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
TSPL	240	240	1	Spillway Type
				C=Controlled
				U=Uncontrolled
				N=None
				X=Unknown
WSPL	241	244	4	Dam Spillway Width (Feet)
QMAX	245	251	7	Maximum Spillway Discharge (CFS)
PINS	252	258	7.2	Quantity of Installed Power (Megawatts)
PPRO	259	265	7.2	Quantity of Proposed Power (Megawatts)
LOCK	266	266	1	Number of Navigational Locks
OWNR	267	290	24	Name of Impoundment Owner
PFOWN	291	291	1	Ownership Code
				N=Non-Federal
				G=Federal Government Agency
				C=Corps of Engineers
				X=Unknown
FEDR	292	292	1	Federally Regulated (Y=Yes, N=No, X=Unknown)
FLND	293	293	1	Private Dam on Federal Land (Y=Yes, N=No, X=Unknown)
SCSA	294	294	1	Type of Soil Conservation Service Assistance
				N=No Assistance
				T=Technical Assistance
				F=Financial Assistance
				B=Both Technical and Financial Assistance
				X=Unknown
DHAZ	295	295	1	Degree of Downstream Hazard
				1=High (More than a Few Lives Lost; Excessive Economic Loss)
				2=Significant (A Few Lives Lost; Appreciable Economic Loss)

Water Impoundment File: RICHDAMS.DBF in RICHSITE.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
				3=Low (No Lives Expected Lost; Minimal Economic Loss)
DCITY	296	319	24	Nearest Downstream City
POP	320	326	7	Population of Downstream City
DMILE	327	331	5.2	Distance of Downstream City From Dam (Miles)
RET	332	342	11.2	Retention Coefficient (Dimensionless)
MIX	343	353	11.2	Mixing Coefficient (Dimensionless)
SAREA	354	361	8	Surface Area of Impoundment (Acres)
SAFLG	362	362	1	Surface Area Flag (C=Calc., M=Measured, O=Other)
ILNTH	363	367	5	Length of Impoundment (Feet)
ILFLG	368	368	1	Impoundment Length Flag (C=Calc., M=Measured, O=Other)
UPKEY	369	374	6	Update Key (YYMMDD)

The following table provides the ASCII and DBASE III+ database field structures for the EPA River Reach File Ver. 3.0 (1:100,000 scale hydrography) attributes. The actual numeric file names will vary depending on the catalog unit(s). This information can be readily incorporated into the park's Geographic Information System.

RF3 Structure File: 12345678.RF3 and 12345678.DBF in RICHRF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
CATUNIT	1	8	8	Cataloging Unit (CU)
SEGM	9	12	4	Segment Number (SEG)
MI	13	17	5.2	Mile Point (MI)
UPMI	18	22	5.2	Upstream Mile Pt.
SEQNO	23	33	11.6	Hydro Sequence No.
RFLAG	34	34	1	Reach Flag (0,1)
OWFLAG	35	35	1	Open Water Flag (0,1)
TFLAG	36	36	1	Terminal Flag (0,1)
SFLAG	37	37	1	Start Flag (0,1)
RCHTYPE	38	38	1	Reach Type Code
LEV	39	40	2	Stream Level
JUNC	41	42	2	Level of Downstream Reach
DIVERGENCE	43	43	1	Divergence Code
STARTCU	44	51	8	Start CU
STRTSG	52	55	4	Start SEG
STOPCU	56	63	8	Stop CU
STOPSG	64	67	4	Stop SEG
USDIR	68	68	1	Upstream Direction
TERMID	69	73	5	Terminal Stream ID
TRMBLV	74	74	1	Terminal Base Level
PNAME	75	104	30	Primary Name
PNMCD	105	115	11	Primary Name Code
CNAME	116	145	30	Complement Name
CNMCD	146	156	11	Complement Name Code

RF3 Structure File: 12345678.RF3 and 12345678.DBF in RICHRF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
OWNAME	157	186	30	Open Water Name
OWNMCD	187	197	11	Open Water Name Code
DSCU	198	205	8	Downstream CU
DSSEG	206	209	4	Downstream SEG
DSMI	210	214	5.2	Downstream MI
CCU	215	222	8	Complement CU
CSEG	223	226	4	Complement SEG
CMILE	227	231	5.2	Complement MI
CDIR	232	232	1	Complement Direction
ULCU	233	240	8	Upstream Left CU
ULSEG	241	244	4	Upstream Left SEG
ULMI	245	249	5.2	Upstream Left MI
URCU	250	257	8	Upstream Right CU
URSEG	258	261	4	Upstream Right SEG
URMI	262	266	5.2	Upstream Right MI
SEGL	267	272	6.2	Reach Length (Miles)
RFORGFLAG	273	273	1	RF Orgin flag(1,2,3)
ALTPNMCD	274	281	8	Alt. Primary Name Code
ALTOWNMC	282	289	8	Alt. OW Name Code
DLAT	290	297	8.4	Downstream Latitude
DLONG	298	305	8.4	Downstream Longitude
ULAT	306	313	8.4	Upstream Latitude
ULONG	314	321	8.4	Upstream Longitude
MINLAT	322	329	8.4	Minimum Latitude
MINLONG	330	337	8.4	Minimum Longitude
MAXLAT	338	345	8.4	Maximum Latitude
MAXLONG	346	353	8.4	Maximum Longitude
NDLGREC	354	357	4	No. of DLG Records

RF3 Structure File: 12345678.RF3 and 12345678.DBF in RICHRF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
LL1KEY1	358	367	10	Starting DLG LL Key1
LL2KEY1	368	377	10	Ending DLG LL Key1
LL1KEY2	378	387	10	Starting DLG LL Key2
LL2KEY2	388	497	10	Ending DLG LL Key2
LL1KEY3	398	407	10	Starting DLG LL Key3
LL2KEY3	408	417	10	Ending DLG LL Key3
LL1KEY4	418	427	10	Starting DLG LL Key4
LL2KEY4	428	437	10	Ending DLG LL Key4
LL1KEY5	438	447	10	Starting DLG LL Key5
LL2KEY5	448	457	10	Ending DLG LL Key5
LL1KEY6	458	467	10	Starting DLG LL Key6
LL2KEY6	468	477	10	Ending DLG LL Key6
LL1KEY7	478	487	10	Starting DLG LL Key7
LL2KEY7	488	597	10	Ending DLG LL Key7
LL1KEY8	498	507	10	Starting DLG LL Key8
LL2KEY8	508	517	10	Ending DLG LL Key8
LL1KEY9	518	527	10	Starting DLG LL Key9
LL2KEY9	528	537	10	Ending DLG LL Key9
LL1KEY10	538	547	10	Start DLG LL Key 10
LL2KEY10	548	557	10	Ending DLG LL Key10
LN1AT2	558	561	4	DLG Line Attr. 1
LN2AT2	562	565	4	DLG Line Attr. 2
AREA1	566	569	4	DLG Area ID 1
AREA2	570	573	4	DLG Area ID 2
AR1AT2	574	577	4	DLG Area Attribute
AR1AT4	578	581	4	DLG Area Attribute
AR2AT2	582	585	4	DLG Area Attribute
AR2AT4	586	589	4	DLG Area Attribute

RF3 Structure File: 12345678.RF3 and 12345678.DBF in RICHRF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
UPDATE1	590	595	6	Update Date #1 (mmddyy)
UPDTCD1	596	603	8	Update Type Code #1
UPDTSRC1	604	611	8	Update Source #1
UPDATE2	612	617	6	Update Date #2 (mmddyy)
UPDTCD2	618	625	8	Update Type Code#2
UPDTSRC2	626	633	8	Update Source #2
UPDATE3	634	639	6	Update Date #3 (mmddyy)
UPDTCD3	640	647	8	Update Type Code #3
UPDTSRC3	648	655	8	Update Source #3
DIVCU	656	663	8	Divergent CU
DIVSEG	664	667	4	Divergent SEG
DIVMILE	668	672	5.2	Divergent MI
DLGID	673	678	6	DLG Number Special Use For Internal State Codes
FILLER	678	685	7	Filler: Future Use

Note: The structure for the .DBF file varies slightly from the RF3 structure displayed here in that the fields UPDATE1, UPDATE2, and UPDATE3 have a width of 8 and the last two fields, DLGID and FILLER, have been replaced with a field named ID of length 17. This ID field combines the CATUNIT, SEGM, and MI fields.

The following table provides the ASCII database field structures for the EPA River Reach File Ver. 3.0 (1:100,000 scale hydrography) traces. The actual numeric file names will vary depending on the catalog unit(s). This file contains the actual hydrographic network and is suitable for conversion into a variety of Geographic Information System formats.

RF3 Trace File: 12345678.TRC in RICHRF3.ZIP				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
(Header Record)				
CATUNIT	1	8	8	Cataloging Unit
SEGM	9	12	4	Segment Number
MI	13	17	5.2	Mile Point
NPTS	18	21	4	Number of Lat/Lon Coordinates
(Coordinate Record)				
LATITUDE	1	8	8.4	Latitude in Decimal
LONGITUDE	9	16	8.4	Longitude in Decimal
FILLER	17	21	5	

The following table provides the ASCII database field structures for the EPA River Reach File Ver. 3.0 (1:100,000 scale hydrography) catalog unit boundary file. The actual numeric file names will vary depending on the catalog unit(s). This file contains the actual catalog unit boundary and is suitable for conversion into a variety of Geographic Information System formats.

Catalog Unit Boundary File: 12345678.CUB in RICHRF3.ZIP
First Line = Catalog Unit Number (8 Characters)
Subsequent Lines:
L=DDMMSS,L=DDDMMSS,L=DDMMSS,L=DDDMMSS,L=DDMMSS,L=DDDMMSS, ...
Example:
02070010
L=391259,L=0770809,L=391220,L=0770749,L=391147,L=0770715,L=391120,L=0770633,
L=391058,L=0770535,L=391042,L=0770520,L=391016,L=0770427,L=390948,L=0770416,
L=390526,L=0765331,L=390500,L=0765149,L=390456,L=0765139,L=390357,L=0765123,
...
L=390744,L=0771007,L=390826,L=0771022,L=390910,L=0771022,L=390950,L=0771003,
L=391107,L=0770922,
There can be as many as four latitude/longitude pairs per line.

The following table provides the DBASE III+ database field structure of the Water Resources Division's "encyclopedia" file that documents the minimum and maximum parameter values found and the park(s) where they occurred. This file is intended for Water Resources Division internal use, but will be available to anyone upon request after Baseline Water Quality Data Inventory and Analysis reports have been completed for all parks.

Encyclopedia File: WRD File For Internal Use Only				
Field Name	**Start**	**Stop**	**Length**	**Field Description**
PARM	1	5	5	STORET Parameter Code
PARMNAME	6	45	40	Parameter Name
MINVAL	46	61	16.7	Minimum Value
MINVALPARK	62	65	4	Park Unit with Minimum Value
MAXVAL	66	71	16.7	Maximum Value
MAXVALPARK	72	75	4	Park Unit with Maximum Value

Appendix C

STORET Water Quality Control/Edit Checking

The following table provides the high and low values used by STORET since November 1983 for 190 common water quality parameters to screen or error check data. Data entered into STORET prior to November 1983, however, were not subjected to this edit/bounds check. Additionally, data from the USGS WATSTORE system that is loaded into STORET is never subjected to these edit criteria and agencies entering data in STORET can override these edit criteria to enter data values that fall outside a range. As a consequence, all data downloaded from STORET for the purposes of this project were filtered through these edit criteria to document values outside the generally accepted ranges. Decisions were then made on a case-by-case basis to retain or discard obviously incorrect data. Refer to the Water Quality Observations Outside STORET Edit Criteria section of the Interpretive Guide To Water Quality Results chapter for more information on this subject.

STORET Code	STORET Parameter Description	High Value	Low Value
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	37.0	-2.0
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	98.0	31.0
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	52.0	-40.0
00021	TEMPERATURE, AIR (DEGREES FAHRENHEIT)	125.0	-40.0
00026	TOXICS-IDENTIFY DATA COLLECTION BY EPA DIRECTIVE	1990.9	1977.0
00032	CLOUD COVER (PERCENT)	101.0	0.0
00035	WIND VELOCITY (MILES PER HOUR)	85.0	0.0
00036	WIND DIRECTION IN DEGREES FROM TRUE N (CLOCKWISE)	361.0	0.0
00045	PRECIPITATION, TOTAL (INCHES PER DAY)	15.0	0.0
00070	TURBIDITY, (JACKSON CANDLE UNITS)	1500.0	0.0
00074	TURBIDITY, TRANSMISSOMETER, PERCENT TRANSMISSION	101.0	0.0
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	500.0	0.0
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	1000.0	0.0
00077	TRANSPARENCY, SECCHI DISC (INCHES)	600.0	0.0
00080	COLOR (PLATINUM-COBALT UNITS)	500.0	0.0
00081	COLOR,APPARENT(UNFILTERED SAMPLE) PLAT-COB UNITS	500.0	0.0
00085	ODOR (THRESHOLD NUMBER AT ROOM TEMPERATURE)	250.0	0.0
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	60000.0	1.0
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	60000.0	1.0

STORET Code	STORET Parameter Description	High Value	Low Value
00299	OXYGEN ,DISSOLVED, ANALYSIS BY PROBE (MG/L)	30.0	0.0
00300	OXYGEN, DISSOLVED (MG/L)	30.0	0.0
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION%	200.0	0.0
00310	BOD, 5 DAY, 20 DEG C (MG/L)	150.0	0.0
00335	COD, .025N K2CR2O7 (MG/L)	1000.0	0.0
00340	COD, .25N K2CR2O7 (MG/L)	1000.0	0.0
00365	CHLORINE DEMAND, 15 MINUTE (MG/L)	15.0	0.0
00400	PH (STANDARD UNITS)	12.0	0.9
00403	PH, LAB, STANDARD UNITS, (STANDARD UNITS)	12.0	0.9
00405	CARBON DIOXIDE (MG/L AS CO2)	100.0	0.0
00406	PH, FIELD (STANDARD UNITS)	12.0	0.9
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	1000.0	0.0
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	750.0	0.0
00435	ACIDITY, TOTAL (MG/L AS CACO3)	1000.0	0.0
00436	ACIDITY, MINERAL (METHYL ORANGE) (MG/L AS CACO3)	1000.0	0.0
00437	ACIDITY, CO2 (PHENOLPHTHALEIN) (MG/L AS CACO3)	750.0	0.0
00440	BICARBONATE ION (MG/L AS HCO3)	450.0	0.0
00445	CARBONATE ION (MG/L AS CO3)	100.0	0.0
00480	SALINITY - PARTS PER THOUSAND	40.0	0.0
00500	RESIDUE, TOTAL (MG/L)	15000.0	0.0
00505	RESIDUE, TOTAL VOLATILE (MG/L)	10000.0	0.0
00510	RESIDUE, TOTAL FIXED (MG/L)	10000.0	0.0
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C), (MG/L)	20000.0	0.0
00520	RESIDUE, VOLATILE FILTRABLE (MG/L)	10000.0	0.0
00525	RESIDUE, FIXED FILTRABLE (MG/L)	10000.0	0.0
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10000.0	0.0
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10000.0	0.0
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	10000.0	0.0
00545	RESIDUE, SETTLEABLE (ML/L)	1000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
00546	RESIDUE, SETTLEABLE (MG/L)	1000.0	0.0
00550	OIL & GREASE (SOXHLET EXTRACTION) TOTAL,REC., (MG/L)	250.0	0.0
00600	NITROGEN, TOTAL (MG/L AS N)	100.0	0.0
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	15.0	0.0
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	25.0	0.0
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	20.0	0.0
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	5.0	0.0
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	50.0	0.0
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	50.0	0.0
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	55.0	0.0
00635	NITROGEN, AMMONIA & ORG., TOTAL 1 DET (MG/L AS N)	70.0	0.0
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	30.0	0.0
00653	PHOSPHATE, TOTAL SOLUBLE (MG/L)	30.0	0.0
00655	PHOSPHATE, POLY (MG/L AS PO4)	30.0	0.0
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	30.0	0.0
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10.0	0.0
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	10.0	0.0
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	100.0	0.0
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	100.0	0.0
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	100.0	0.0
00690	CARBON, TOTAL (MG/L AS C)	150.0	0.0
00720	CYANIDE, TOTAL (MG/L AS CN)	10.0	0.0
00745	SULFIDE, TOTAL (MG/L AS S)	1500.0	0.0
00746	SULFIDE, DISSOLVED (MG/L AS S)	1500.0	0.0
00760	SULFITE WASTE LIQUOR, PEARL BENSON INDEX (MG/L)	150.0	0.0
00900	HARDNESS, TOTAL (MG/L AS CACO3)	5000.0	0.0
00910	CALCIUM (MG/L AS CACO3)	3000.0	0.0
00915	CALCIUM, DISSOLVED (MG/L AS CA)	1000.0	0.0
00916	CALCIUM, TOTAL (MG/L AS CA)	1000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
00920	MAGNESIUM (MG/L AS CACO3)	3000.0	0.0
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	1000.0	0.0
00927	MAGNESIUM, TOTAL (MG/L AS MG)	1000.0	0.0
00929	SODIUM, TOTAL (MG/L AS NA)	5000.0	0.0
00930	SODIUM, DISSOLVED (MG/L AS NA)	5000.0	0.0
00931	SODIUM ADSORPTION RATIO	50.0	0.0
00935	POTASSIUM, DISSOLVED (MG/L AS K)	175.0	0.0
00937	POTASSIUM, TOTAL MG/L AS K)	175.0	0.0
00940	CHLORIDE, TOTAL IN WATER, (MG/L)	22000.0	0.0
00945	SULFATE, TOTAL (MG/L AS SO4)	2500.0	0.0
00946	SULFATE, DISSOLVED (MG/L AS SO4)	2500.0	0.0
00950	FLUORIDE, DISSOLVED (MG/L AS F)	15.0	0.0
00951	FLUORIDE, TOTAL (MG/L AS F)	15.0	0.0
00955	SILICA, DISSOLVED (MG/L AS SI02)	2000.0	0.0
00956	SILICA, TOTAL (MG/L AS SI02)	2000.0	0.0
01000	ARSENIC, DISSOLVED (UG/L AS AS)	5000.0	0.0
01002	ARSENIC, TOTAL (UG/L AS AS)	5000.0	0.0
01005	BARIUM, DISSOLVED (UG/L AS BA)	2000.0	0.0
01007	BARIUM, TOTAL (UG/L AS BA)	2000.0	0.0
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	2000.0	0.0
01012	BERYLLIUM, TOTAL (UG/L AS BE)	2000.0	0.0
01020	BORON, DISSOLVED (UG/L AS B)	5000.0	0.0
01022	BORON, TOTAL (UG/L AS B)	5000.0	0.0
01025	CADMIUM, DISSOLVED (UG/L AS CD)	500.0	0.0
01027	CADMIUM, TOTAL (UG/L AS CD)	500.0	0.0
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	2000.0	0.0
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	2000.0	0.0
01033	CHROMIUM, TRI-VAL (UG/L AS CR)	2000.0	0.0
01034	CHROMIUM, TOTAL (UG/L AS CR)	2000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
01040	COPPER, DISSOLVED (UG/L AS CU)	2000.0	0.0
01042	COPPER, TOTAL (UG/L AS CU)	5000.0	0.0
01045	IRON, TOTAL (UG/L AS FE)	56000.0	0.0
01046	IRON, DISSOLVED (UG/L AS FE)	56000.0	0.0
01047	IRON, FERROUS (UG/L AS FE)	56000.0	0.0
01049	LEAD, DISSOLVED (UG/L AS PB)	1000.0	0.0
01051	LEAD, TOTAL (UG/L AS PB)	1000.0	0.0
01055	MANGANESE, TOTAL (UG/L AS MN)	5000.0	0.0
01056	MANGANESE, DISSOLVED (UG/L AS MN)	5000.0	0.0
01065	NICKEL, DISSOLVED (UG/L AS NI)	2000.0	0.0
01067	NICKEL, TOTAL (UG/L AS NI)	2000.0	0.0
01075	SILVER, DISSOLVED (UG/L AS AG)	5000.0	0.0
01077	SILVER, TOTAL (UG/L AS AG)	5000.0	0.0
01090	ZINC, DISSOLVED (UG/L AS ZN)	25000.0	0.0
01092	ZINC, TOTAL (UG/L AS ZN)	25000.0	0.0
01105	ALUMINUM, TOTAL (UG/L AS AL)	20000.0	0.0
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	20000.0	0.0
01145	SELENIUM, DISSOLVED (UG/L AS SE)	100.0	0.0
01501	ALPHA, TOTAL	200.0	0.0
01503	ALPHA, DISSOLVED	75.0	0.0
01505	ALPHA, SUSPENDED	150.0	0.0
03501	BETA, TOTAL	3500.0	0.0
03503	BETA, DISSOLVED	3000.0	0.0
03505	BETA, SUSPENDED	1500.0	0.0
09503	RADIUM 226, DISSOLVED	500.0	0.0
13501	STRONTIUM 90, TOTAL	500.0	0.0
22703	URANIUM, NATURAL, DISSOLVED	500.0	0.0
31501	COLIFORM, TOT,MEMBRANE FILTER,IMMED.M-ENDO MED, 35C	24000000.0	0.0
31502	COLIFORM, TOTAL, 10/ML	24000000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
31503	COLIFORM, TOT,MEMBR FILTER, DELAYED,M-ENDO MED, 35C	24000000.0	0.0
31504	COLIFORM, TOT,MEMBR FILTER,IMMED,LES ENDO AGAR, 35C	24000000.0	0.0
31613	FECAL COLIFORM, MEMBR FILTER, M-FC AGAR,44.5C, 24HR	10000000.0	0.0
31615	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	10000000.0	0.0
31616	FECAL COLIFORM, MEMBR FILTER,M-FC BROTH, 44.5C	10000000.0	0.0
31672	FECAL STREPTOCOCCI,PLATE COUNT M-ENTER AGAR,35C48HR	500000.0	0.0
31673	FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	500000.0	0.0
31677	FECAL STREPTOCOCCI,MPN,AD-EVA, 35C (TUBE 31678)	500000.0	0.0
31679	FECAL STREPTOCOCCI, MF M-ENTEROCOCCUS AGAR,35C,48H	500000.0	0.0
31749	PLATE COUNT, TOTAL, TPC AGAR, 20C, 48 HRS	99999999.0	0.0
31751	PLATE COUNT, TOTAL, TPC AGAR, 35C, 24 HRS	99999999.0	0.0
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	500.0	0.0
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	750.0	0.0
32212	CHLOROPHYLL-B UG/L TRICHROMATIC UNCORRECTED	1000.0	0.0
32214	CHLOROPHYLL-C UG/L TRICHROMATIC UNCORRECTED	200.0	0.0
32217	CHLOROPHYLL A UG/L FLUOROMETRIC UNCORRECTED	500.0	0.0
32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	200.0	0.0
32219	PHEOPHYTIN RATIO(OD 663)SPECTRO,BEFORE/AFTER ACID	2.0	0.0
32221	CHLOROPHYLL A,% OF(PHEOPHYTIN A+CHL A),SPEC-ACID.	101.0	0.0
32230	CHLOROPHYLL A (MG/L)	0.5	0.0
32231	CHLOROPHYLL B (MG/L)	0.8	0.0
32232	CHLOROPHYLL C (MG/L)	0.2	0.0
32234	CHLOROPHYLL, TOTAL (A+B+C) (MG/L)	1.0	0.0
32270	CHLOROFORM EXTRACTABLES TOTAL IN MG PER LITER	5.0	0.0
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	1500.0	0.0
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	10.0	0.0
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39340	GAMMA-BHC(LINDANE),WHOLE WATER, (UG/L)	20.0	0.0
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER, (UG/L)	20.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39540	PARATHION IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	5.0	0.0
60050	ALGAE, TOTAL (CELLS/ML)	700000.0	0.0
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), (MG/L)	4000.0	0.0
70505	PHOSPHATE, TOTAL,COLORIMETRIC METHOD (MG/L AS P)	10.0	0.0
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10.0	0.0
71850	NITRATE NITROGEN, TOTAL (MG/L AS NO3)	65.0	0.0
71886	PHOSPHORUS, TOTAL, AS PO4 - (MG/L)	30.0	0.0
71890	MERCURY, DISSOLVED (UG/L AS HG)	10.0	0.0
71895	MERCURY, SUSPENDED (UG/L AS HG)	10.0	0.0
71900	MERCURY, TOTAL (UG/L AS HG)	10.0	0.0
74010	IRON, TOTAL (MG/L AS FE)	56000.0	0.0

Appendix D

STORET Administrative Parameters

STORET Code	Description of STORET Administrative Parameters
00022	LENGTH OF EXPOSURE OF SAMPLE OR TEST - DAYS
00026	TOXICS-IDENTIFY DATA COLLECTION BY EPA DIRECTIVE
00027	CODE NO FOR AGENCY COLLECTING SAMPLE
00028	CODE NO FOR AGENCY ANALYZING SAMPLE
00029	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE
00063	SAMPLING POINTS, NUMBER OF IN A CROSS SECTION
00073	SAMPLE LOC CODE DEFINED BY THERMAL STRUCT & DEPTH
00111	RATIO OF FECAL COLIFORM TO FECAL STREPTOCOCCI
00115	SAMPLE TREATMENT CODE (1=RAW,2=TREATED)
00116	INTENSIVE SURVEY IDENTIFICATION NUMBER
00145	TOTAL PRODUCTION OF PRODUCT MANUFACTURED TONS/DAY
01273	TOTAL ACID PRIORITY POLLUTANTS MG/L
01274	TOTAL BASE-NEUTRAL PRIORITY POLLUTANTS MG/L
01275	TOTAL VOLATILE PRIORITY POLLUTANTS MG/L
01365	ANALYSIS DATE (DIOXIN) (YYMMDD)
04177	SAMPLE STABILIZATION, RECOVERY TEST CODE
04178	FIELD PROTOCOL(CONFDNCE ASSIGNED FIELD SAMPLE) CODE
04179	SAMPLE STATION LOCKED CODE
04180	CONDITION OF STATION SITE CODE
04181	LABORATORY QA/QC PLAN CONFIDENCE CODE
04182	SAMPLE TYPE CODE
04183	SAMPLE REMARKS CODE
30333	BAG MESH SIZE, BEDLOAD SAMPLER, MM
34772	NPDES NUMBER, CROSS REFERENCE CODE
34785	GAGE TYPE, METHOD CODE

STORET Code	Description of STORET Administrative Parameters
45575	GC MAKE AND MODEL INFORMATION CODE
45576	GC DETECTOR TYPE CODE
45577	GC COLUMN TYPE CODE
45580	METHOD OF ANALYSIS CODE
45581	LABORATORY LOCATION CODE
46107	SAMPLE LOCATION CODE (TREATMENT PLANT OPERATION)
46390	TOXICITY CHARACTERISTIC LEACHING PROCEDURE P OR F
46396	PROCESS TO SIGNIFICANTLY REDUCE PATHOGENS YES OR NO
46397	PROCESS TO FURTHER REDUCE PATHOGENS YES OR NO
47001	PERMIT EXPIRATION DATE (JULIAN CALENDAR)
47044	OBSERVATIONS,WASTE SITE-SEVERITY OF PROBLEMS CODE
47460	SUBSAMPLE - DECIMAL FRACTION OF WHOLE NUMBER
47477	COMPOSITION AND/OR DISPOSITION OF CATCH NUM CODE
70231	CURRENT DIRECTION (DEGREES FROM DOWNSTREAM FLOW)
71999	SAMPLE PURPOSE CODE
72032	NUMBER OF SPILLWAY GATES OPEN
73672	DATE OF ANALYSIS YYMMDD
73673	DATE OF EXTRACTION YYMMDD
74031	GRANT, PROJECT COST ELIGIBLE FOR CONSTRUCTION
74032	GRANT, AMOUNT OF PL 660 GRANT FOR THIS PROJECT
74033	GRANT, FEDERAL, OTHER THAN PL 660 GRANT
74034	GRANT, FUTURE PL 660 WHICH MAY APPLY TO THIS PROJ
74035	GRANT, TOTAL FEDERAL, WHICH APPLIES TO THIS PROJ
74036	GRANT, PROJ NUMBER ASSIGNED TO THIS APPLICATION
74037	GRANT, TYPE OF PROJECT TO WHICH GRANT APPLIES
74038	GRANT, STATUS OF PROJECT TO WHICH GRANT APPLIES
74039	PCS/STORET WATER QUALITY FILE INTERFACE YR/MO/DAY
74040	SURVEY NUMBER YYMMNO
74041	STORET STORAGE TRANSACTION DATE YR/MO/DAY

STORET Code	Description of STORET Administrative Parameters
74050	RADIOACTIVITY, GENERAL (PERMIT)
74051	ALGICIDES, GENERAL (PERMIT)
74052	CHLORINATED HYDROCARBONS, GENERAL (PERMIT)
74053	PESTICIDES, GENERAL (PERMIT)
74056	COLIFORM, TOTAL, GENERAL (PERMIT)
74065	STREAM FLOW CLASS
74066	ANNUAL RUNOFF
74067	SOIL CLASSIFICATION
74068	WATER QUALITY DESIGNATED USE CLASSIFICATION (IA)
74100	PRIMARY 1972 SIC CODE
74101	SECONDARY 1972 SIC CODE
74102	SECONDARY 1972 SIC CODE
74103	SECONDARY 1972 SIC CODE
74200	SAMPLE PRESERVATION METHODS ONE OR MORE IN COMB.
74205	LAND RESOURCE AREA (IOWA)
74206	SOIL EROSION POTENTIAL (IOWA)
74209	WATER QUALITY INDEX - STATE OF ILLINOIS, EPA
74210	FOREST STREAM WATER QUALITY INDEX CALC. NUMBER
74990	FISH SPECIES NUMERIC CODE - F&W SERVICE
74995	ANATOMY CODE
75000	SPECIES CODE-REMARK=SEX (M=MALE,F=FEMALE,U=UNK.)
81028	WITHDRAWAL OF GROUNDWATER (MILLION GAL/DAY)
82258	WATER CLASSIFICATION CODE (1-9) CODE
82292	DATA RELAY GROUND STATION SOURCE NODE CODE, CODE
82309	CONTAMINATION SOURCE POSSIBLE CODES NUMERIC CODE
82310	DEPTH CONFIDENCE IN REPORTED VALUES NUMERIC CODES
82373	FREQUENCY OF SAMPLING M=MON,Q=QUAR,Y=YR,R=RNFFCODE
82519	DRILLER REGISTRATION NUMBER ALPHA-NUMERIC CODE
82562	NARRATIVE REQUIREMENT EXCEEDANCES INTEGER

STORET Code	Description of STORET Administrative Parameters
82576	DAILY EXCURSION TIME, WATER MIN
82577	MONTHLY EXCURSION TIME, WATER TOTAL MIN
82578	DAY/MAXIMUM EXCURSION TIME, WATER MIN
82579	CODE NUMBER FOR PERSON COLLECTING SAMPLE
84002	CODE, GENERAL INFORMATION - ALPHA, NUMERIC CODE
84003	WATER SHED ID NUMBER (IOWA)
84005	FISH SPECIES CODE-FISH & WILDLIFE SER
84006	OWNERSHIP CLASSIFICATION OF LAKE, ILLINOIS SYSTEM
84010	PUBLIC ACCESS TO LAKE ILLINOIS SYSTEM
84011	CONFIDENCE CODE FOR GLC CONFIRMATION CODE
84012	PATIENT PARAMETERS (AGE, SEX, WT, ETC.) CODE
84013	SAMPLE PARAMETERS D=DESIGN SPECIMEN, S=SURPLUS
84027	CODE NUMBER FOR AGENCY COLLECTING SAMPLE
84028	CODE NO FOR AGENCY ANALYZING SAMPLE
84029	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE FIELD
84033	EGD ANALYTICAL DATA COMPLETENESS Y=YES N=NO CODE
84034	EGD SMPL NO.(SMPL.IDENT) NUMERIC=SCS ALPH+4NUM=JRB
84035	EGD SAMPLE CLASSIFICATION CATEGORY ALPHA CODE
84036	EGD INDUSTRIAL CATEGORY NUMERIC CODE
84037	EGD INDUSTRIAL CATEGORY NAME ALPHA CODE
84038	EGD LABORATORY NUMERIC CODE
84039	EGD LABORATORY NAME ALPHA CODE
84040	EGD SAMPLE STATUS (1-5,9,AND BLANK) NUMERIC CODE
84041	EGD ACID STATUS (1-5,9,AND BLANK) NUMERIC CODE
84042	EGD BASE STATUS (1-5,9AND BLANK) NUMERIC CODE
84043	EGD PESTICIDE STATUS (1-5,9,AND BLANK) NUMERIC CODE
84044	EGD VOA FRACT. STATUS INDICATOR (1-5,9,BLANK) CODE
84045	EGD ACID EXTRACT DATE (YYMMDD) NUMERIC CODE
84046	EGD BASE EXTRACTION DATE (YYMMDD) NUMERIC CODE

STORET Code	Description of STORET Administrative Parameters
84047	EGD PESTICIDE EXTRACTION DATE (YYMMDD) NUMERIC CODE
84048	EGD VOA FRACTION INJECTION DATE YYMMDD NUMERIC CODE
84049	EGD ACID CONC. FACTOR (FIVE NUMERIC DIGITS) CODE
84050	EGD BASE CONC.FACTOR (FIVE NUMERIC DIGITS) CODE
84051	EGD PESTICIDE CONC.FACTOR (FIVE NUMERIC DIGITS) CODE
84052	EGD VOA FRACTION CONC. FACTOR (5 NUMERIC DIGITS) CODE
84053	SAMPLE TYPE AND FREQUENCY OF COLLECTION CODE
84054	LITHOLOGY ALPHA-NUMERIC CODE
84055	AVAILABLE LOGS ALPHA-NUMERIC CODE
84056	WATER USE CATEGORY ALPHA-NUMERIC CODE
84057	INSPECTION TYPE ALPHA-NUMERIC CODE
84058	HYDROGEOLOGIC SYSTEM ALPHA-NUMERIC CODE
84059	WELL OWNERSHIP ALPHA-NUMERIC CODE
84060	TOPOGRAPHY ALPHA-NUMERIC CODE
84061	WELL USE ALPHA-NUMERIC CODE
84062	MEASURING POINT DESCRIPTION ALPHA-NUMERIC CODE
84063	DRILLING METHOD ALPHA-NUMERIC CODE
84064	WELL DATA AVAILABILITY ALPHA-NUMERIC CODE
84065	PERMIT COMPLIANCE DATA ALPHA-NUMERIC CODE
84067	NATURE OF MONITORING ALPHA-NUMERIC CODE
84073	REPLACES EXISTING WELL ALPHA-NUMERIC CODE
84074	AQUIFER TYPE (SEE USGS HANDBOOK) ALPHA CODE
84075	WELL PERMIT NUMBER ALPHA-NUMERIC CODE
84076	TSD MONITORING WELL TYPE ALPHA CODE
84077	TSD MONITORING WELL SAMPLING METHOD ALPHA CODE
84083	POLLUTION VERIFICATION ALPHA CODE
84084	WELL SAMPLE PURPOSE ALPHA CODE
84090	SAMPLE FILE CONTROL PROJECT IDENTIFICATION A-CODE
84091	INFILTRATION DATE/BEGINNING 'YYMMDD'

STORET Code	Description of STORET Administrative Parameters
84092	INFILTRATION DATE/ENDING 'YYMMDD'
84093	ENFORCEMENT FORM #2-C,DATA IDENTIFICATION CODE
84102	SAMPLE SPECIES-SUB ID ALPHA CODE
84103	DIOXIN LABORATORY ALPHA CODE
84104	DIOXIN STUDY ALPHA CODE
84112	SOURCE OF GEOHYDROLOGIC DATA CODE
84119	SOURCE OF EVACUATION DATA CODE
84121	REGULATING AGENCY CODE
84122	SAMPLE PURPOSE CODE
84126	SOURCE OF DEPTH DATA CODE
84127	METHOD OF DEPTH MEASUREMENT CODE
84128	SOURCE OF WATER-LEVEL DATA CODE
84129	DATA QUALITY
84141	LAKE, PHYSICAL CONDITION AT SAMPLE TIME, 1-5, CODE
84142	LAKE,RECREATIONAL SUITABILITY @ SMPL TIME,1-5, CODE
84164	SAMPLER TYPE, CODE
85300	PROBLEM CODE NES SURVEY
85327	WATER LEVEL AT SAMPLE COLLECTION TIME-CODE-NES
85332	CLOUD COVER AT SAMPLE COLLECTION TIME-CODE-NES
85553	WELL COMPLETION DATE (MONTH/YEAR)
85554	WELL WORKOVER DATE, LATEST (MONTH/YEAR)

Appendix E

STORET Parameters Not Suitable for Statistical Analysis

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
00001	X-SEC. LOC., HORIZ (FT. FROM R BANK LOOK UPSTR.)
00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)
00003	SAMPLING STATION LOCATION, VERTICAL (FEET)
00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)
00006	DISTANCE FROM LOCATION IN X MILES
00007	DISTANCE FROM LOCATION IN Y MILES
00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE
00009	X-SEC. LOC.(FT FROM LEFT BANK LOOKING DOWNSTRM)
00027	CODE NO FOR AGENCY COLLECTING SAMPLE
00028	CODE NO FOR AGENCY ANALYZING SAMPLE
00033	WEATHER CODE FOR OCEAN-OBSERV. (WMO CODE 4677)
00037	WIND FORCE (BEAUFORT UNITS)
00038	WIND DIRECTION (WMO CODES 0885 + 0887)
00041	WEATHER (WMO CODE 4501)
00042	ALTITUDE IN FEET ABOVE MEAN SEA LEVEL
00043	CLOUD TYPE (WMO CODE 0500)
00044	CLOUD AMOUNT (WMO CODE 2700)
00047	TOTAL PARTIAL PRESSURE DISSOLVED GASES (MM HG)
00048	TOTAL PARTIAL PRESSURE DISSOLVED GASES (% SAT)
00049	SURFACE AREA IN SQUARE MILES
00050	EVAPORATION, TOTAL (INCHES PER DAY)
00051	SURFACE AREA IN SQUARE FEET
00053	SURFACE AREA, ACRES
00054	RESERVOIR STORAGE - ACRE FEET
00063	SAMPLING POINTS, NUMBER OF IN A CROSS SECTION

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
00067	TIDE STAGE
00069	SEA WAVES(0=NONE;1=0-3";2=4-20";3=21-48";4=4-8')
00097	SAMPLING STATION LOCATION, VERTICAL (FEET)
00098	SAMPLING STATION LOCATION, VERTICAL (METERS)
00111	RATIO OF FECAL COLIFORM TO FECAL STREPTOCOCCI
00115	SAMPLE TREATMENT CODE (1=RAW,2=TREATED)
01300	OIL-GREASE (SEVERITY)
01305	DETERGENT SUDS (SEVERITY)
01310	GAS BUBBLES (SEVERITY)
01315	SLUDGE, FLOATING (SEVERITY)
01320	GARBAGE, FLOATING (SEVERITY)
01325	ALGAE, FLOATING MATS (SEVERITY)
01330	ODOR, ATMOSPHERIC (SEVERITY)
01331	TASTE (SEVERITY)
01335	SEWAGE SOLIDS, FRESH, FLOATING (SEVERITY)
01340	FISH, DEAD (SEVERITY)
01345	DEBRIS, FLOATING (SEVERITY)
01350	TURBIDITY (SEVERITY)
01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE
01355	ICE COVER, FLOATING OR SOLID (SEVERITY)
03595	BIOASSAY (96 HR), EFFLUENT, TOTAL CODE
03596	BIOASSAY (48 HR), EFFLUENT, TOTAL CODE
03597	BIOASSAY (24 HR), EFFLUENT, TOTAL CODE
03598	TOXICITY, EFFLUENT, TOTAL CODE
03599	TOXICITY, CHOICE OF SPECIES, EFFLUENT CODE
03600	TOXICITY, TROUT, EFFLUENT, TOTAL CODE
03601	TOXICITY, SAND DOLLAR, EFFLUENT CODE
03602	BIOCHEMICAL OXYGEN DEMAND, EFFLUENT, TOTAL CODE
03603	SOLIDS, TOTAL SUSPENDABLE, EFFLUENT, TOTAL CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
03605	FLOW METER CALIBRATION, WATER CODE
03717	ONCORHYNCHUS MYKISS, WATER CODE
04117	TETHER LINE USED FOR COLLECTING SAMPLE CODE
04160	HALOCARBONS, PURGEABLE, SCAN, EFFLUENT CODE
04161	HALOCARBONS, PURGEABLE, SCAN, SLUDGE CODE
04162	AROMATIC, PURGEABLE, SCAN, EFFLUENT CODE
04163	AROMATIC, PURGEABLE, SCAN, SLUDGE CODE
04164	PHENOLIC, TOTAL, SCAN, EFFLUENT CODE
04165	PHENOLIC, TOTAL, SCAN, SLUDGE CODE
04166	PCB, TOTAL, SCAN, EFFLUENT CODE
04167	PCB, TOTAL, SCAN, SLUDGE CODE
04174	FREE LIQUIDS IN SEWAGE SLUDGE CODE
34765	AVIAN NUMERICAL SPECIES CODE (BIRDS)
34766	MAMMALIAN NUMERICAL SPECIES CODE
34771	MACROPHYTE, INSTREAM, VISUAL SIGHTING CODE
34773	ODOR, AMBIENT WATER CODE
34774	FISH, INSTREAM, VISUAL SIGHTING CODE
34775	STREAMBANK CHANNEL ALTERATIONS CODE
34776	HYDRAULIC STRUCTURES, INSTREAM CODE
34780	LAND USE, ADJACENT STREAM CODE
34781	SAMPLE POINTS, # OF LONGTDNL TRANSECTS, REACH CODE
34782	STREAM STAGE TREND CODE
34789	HABITATS, TYPES SAMPLED CODE
45613	FLOATING SOLIDS/VISIBLE FOAM, VISUAL, YES=1, NO=0, CODE
45614	SANITARY WASTE DISCHARGE ASSESSMENT, YES=1, NO=0, CODE
45615	INTERMITTENT DISCHARGE ASSESSMENT, YES=1, NO=0,CODE
46001	WATER APPEARANCE CODE (BASED ON FIELD ASSESSMENT)
46478	EQUIPMENT INSPECTION, VISUAL CODE
46486	TOXICITY,ACUTE 24HR(STATIC)CERIODAPHNIA (P/F) CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
47454	FLOW METER REVOLUTIONS NUMBER
47455	LATITUDE, STARTING, OF A SAMPLE TOW DDMMSS
47456	LONGITUDE, STARTING, OF A SAMPLE TOW DDDMMSS
47457	LATITUDE, FINISHING, OF A SAMPLE TOW DDMMSS
47458	LONGITUDE, FINISHING, OF A SAMPLE TOW DDDMMSS
47459	LENGTH FREQUENCY NUMBER
47461	TIME THAT THE EQUIPMENT WAS SAMPLING MINUTES
47476	DIRECTION OF TOW IN RELATION TO CURRENT NUM CODE
50044	HYDROGRAPH LIMB, 1BASE, 2RISING, 3PEAK, 4FALLING, CODE
61390	DIATOMS,FIRST DOMINANT SPECIES OF UNITS - CODE
61391	DIATOMS,SECOND DOMINANT SPECIES OF UNITS - CODE
61392	DIATOMS,THIRD DOMINANT SPECIES OF UNITS - CODE
61393	DIATOMS,FOURTH DOMINANT SPECIES OF UNITS - CODE
70220	WAVE DIRECTION (WMO CODES 0885 + 0887)
70222	WAVE HEIGHT (WMO CODE 1555)
70223	WAVE PERIOD (WMO CODE 3155)
71090	BIVALVE SPECIES CODE
71500	EQUITABILITY INDEX,BENTHIC MACROINVER CODE
72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)
72001	DEPTH, TOTAL OF HOLE (FT BELOW LAND SURFACE DATUM)
72002	DEPTH TO TOP OF WATER-BEARING ZONE SAMPLED (FT)
72003	DEPTH TO BOTTOM OF WATER-BEARING ZONE SAMPLED (FT)
72004	PUMP OR FLOW PERIOD PRIOR TO SAMPLING MINUTES
72005	SAMPLE SOURCE CODE (BM WELL DATA)
72006	SAMPLING CONDITION CODE (BM WELL DATA)
72007	FORMATION NAME CODE (BM WELL DATA)
72017	SERIES CODE (BM WELL DATA)
72018	SYSTEM CODE (BM WELL DATA)
72111	DIRECT READOUT GROUND STATN TRANSMIT EROR CODE NUM

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
74054	FECAL STREPTOCOCCI, GENERAL (PERMIT)
74055	FECAL COLIFORM, GENERAL (PERMIT)
80889	ACTIVATED SLUDGE PROCESS MODIFICATION CODE
81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)
81637	SHELLFISH SPECIES NUMERIC CODE
82289	LAGOON OBSERVATION, VISUAL, Y=YES N=NO CODE
82398	SAMPLING METHOD (CODES)
82524	STORAGE COEFFICIENT NUMERICAL CODE
82923	ATMOSPHERIC DEPOSITION TYPE, WET CODE
83205	ATMOSPHERIC DEPOSITION TYPE, BULK CODE
84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)
84001	AQUIFER NAME CODE (SEE USGS CATALOG)
84004	LAKE TYPE ILLINOIS CLASSIFICATION SYSTEM
84007	ANATOMY ALPHA CODE
84008	LIFE STYLE/HABITAT OF THE INDIVIDUALS IN THE SAMPLE
84009	SHELLFISH SPECIES ALPHANUMERIC CODE
84014	SPECIES SEX CODE
84030	CLOUD AMOUNT ALPHA WEATHER CODES
84031	PHYSICAL WEATHER ALPHA WEATHER CODES
84032	STREAM CONDITION ALPHA WEATHER CODES
84066	OIL AND GREASE, VISUAL, ALPHA-NUMERIC CODE
84068	SERIES CODE ALPHA-NUMERIC CODE
84069	FORMATION CODE ALPHA-NUMERIC CODE
84070	METHOD OF TESTING WELL YIELD ALPHA-NUMERIC CODE
84071	WATER LEVEL MEASUREMENT CONDITIONS ALPHA-NUM CODE
84072	WATER LEVEL MEASUREMENT METHOD ALPHA-NUMERIC CODE
84078	GIARDIA LAMBLIA, 2HSO4 OR SUC GRAD, MICRO, CODE
84079	BACTERIA, CELLUOLYTIC, AEROBIC-ANAEROBIC, RT 5-7, CODE
84080	BACTERIA, HYDROCARBONOCLASTIC, SHAKE INC 32C/WK, CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
84081	YERSINIA ENTEROCOLITICA, SB BROTH, MAC AGAR,22C, CODE
84082	SALMONELLA/SHIGELLA, QUANT OR QUAL, HVF OR SWAB, CODE
84085	ORGANICS, VOLATILE, DETECTED, NUMERIC CODE, CODE
84086	MACROINVERTEBRATE SPECIES NUMERIC CODE
84087	MACROINVERTEBRATE HABITAT CODE
84088	BIOLOGY 1 MACROINVERTEBRATE CODE
84089	BIOLOGY 2 MACROINVERTEBRATE CODE
84094	PHYTOPLANKTON SPECIES CODE, NUMERIC
84095	PHYTOPLANKTON SPECIES CODE, ALPHA
84096	SEVERITY OF NON-PLANKTON ALGAE-MAT COVERAGE CODE
84097	LAGOON MOUTH CONDITION CODE
84098	COLOR OF NON-PLANKTONIC ALGAE CODE
84099	WATER - RELATIVE WATER LEVEL CODE
84100	SEX(1-MALE,2-FEMALE,3-MIXED,4-UNKNOWN) NUM CODE
84101	METAFORM, BENTHIC, ADULT(A), PUPAE(P), LARVAE(L) CODE
84105	OIL-SEPARATOR OBSERVATION ASSESS (0=DID NOT,1=DID)
84106	EVAPORAT/BED OBS ASSESS (0=DID NOT LOOK, 1=DID LOOK)
84107	AREA INSPECTION, VISUAL (0=DID NOT, 1=DID) CODE
84108	DRAIN FIELD INSPECTION ASSESS (0=DID NOT, 1=DID) CODE
84109	SLUDGE BUILD-UP IN WATER (0=DID NOT OBS, 1=OBS) CODE
84110	POND OBSERVATION ASSESS WATER (0=DID NOT, 1=DID) CODE
84111	LITHOLOGIC MODIFIER CODE
84113	WELL INTAKE FINISH CODE
84114	WELL CASING MATERIAL CODE
84115	TYPE OF MATERIAL FROM WHICH OPENING IS MADE CODE
84116	DRILLING FLUID CODE
84117	TYPE OF SURFACE SEAL CODE
84118	METHOD OF DEVELOPMENT CODE
84120	PACKING MATERIAL CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
84124	METHOD OF EVACUTAION CODE
84125	METHOD OF WATER-LEVEL MEASUREMENT CODE
84130	OUTFALL OBSERVATION, VISUAL, Y=YES N=NO CODE
84131	SAMPLING METHOD, CONFIDENCE CODE (A,B,C,D) CODE
84132	STREAMBANK, VEGETATIVE STABILITY RATING CODE
84133	STREAMBANK, STABILITY (BANK EROSION) RATING CODE
84134	PARTICLES, DEGREE SURROUNDED BY FINE SEDIMENT, CODE
84135	STREAMSIDE, (SHORELINE) COVER RATING CODE
84136	CANOPY TYPE CODE
84137	CHANNEL STABILITY RATING CODE (E,G,F,P) CODE
84138	COLIFORM, TOTAL, WATER, WHOLE, MPN, PRES=1, ABSNT=2, CODE
84139	ENTEROBACTER AGGLOMERANS, WTR, MF, PRES=1, ABSNT=2, CODE
84140	KLEBSIELLA PNEUMONIAE, WTR, WH, MF, PRES=1, ABSNT=2, CODE
84143	WELL, PURGING CONDITION CODE
84144	WELL, SELECTION CRITERIA CODE
84145	PROJECT COMPONENT CODE
84146	LAND USE, PREDOMINANT, WITHIN 100 FT OF WELL, CODE
84147	LAND USE, PREDOMINANT, 1/4 MI.RADIUS OF WELL, CODE
84148	LAND USE, PREDMNT., FRAC., WITHIN 1/4 MI OF WELL, CODE
84149	LAND USE, CHANGE, LAST 10 YRS, WITHIN 1/4MI WELL, CODE
84150	HABITAT QUALITY INDEX RATING CODE
84151	AQUATIC LIFE, USE CLASSES CODE
84152	STREAM, STAGE CLASS CODE
84153	STREAMBANKS, GRAZING DAMAGE CODE
84154	CHANNEL, MAJOR ALTERATIONS CODE
84155	RIFFLE/RUNS, OCCURRENCE CODE
84156	POOL, DESCRIPTION CODE
84157	SANDBARS, LARGE, OCCURRENCE CODE
84158	LAND USE, NEAR STREAM, PREDOMINANT CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
84159	STREAM,COVER (INSTREAM SHELTER FOR ADULT FISH), CODE
84160	STREAM, DEGRADATION RATING CODE
84161	STREAM, ORDER CODE
84162	LAND RESOURCE AREA CODE
84163	FLOW, STREAM, CLASSIFICATION CODE
84165	DISCHARGE EVENT OBSERVATION, YES=1 NO=0, CODE
84166	STORM HYDROGRAPH, DIRECTION, (RISE,FALL), CODE
84167	MICROSCOPIC EXAMINATION CODE
84168	AVIAN SPECIES ALPHA CODE (BIRDS)
84169	MAMMALIAN ALPHA SPECIES CODE
84170	ALPHA AGE TEXT CODE
84200	LATITUDE/LONGITUDE COORDINATES OF WELL, METHOD CODE
84201	NATIONAL REFERENCE DATUM, ALTITUDE(VERTICAL) CODE
84202	ALTITUDE METHOD CODE
85000	STREAM MILE, ACTUAL MILES
85014	HABITAT, 1970 ACRES THIS TYPE FOR THIS STATION
85015	HAB., ESTIMATED ACRES THIS TYPE THIS STATION
85016	HAB., ESTIMATED ACRES THIS TYPE THIS STA. BY 1990
85017	HAB., ESTIMATED ACRES THIS TYPE THIS STA. BY 2000
85018	TYPE CODES: 1=CLEAR CUT/2=SELECT CUT/3=RNGE DEVLP
85019	ACRES, NO. ALTERED FROM 1965-1970 (0-5 YEARS OLD)
85020	ACRES, NO. ALTERED 1960-1965 (5-10 YEARS OLD)
85021	ACRES, NO. ALTERED 1955-1960 (10-15 YEARS OLD)
85022	ACRES, NO. ALTERED 1950-1955 (15-20 YEARS OLD)
85023	ACRES, NO. ALTERED BEFORE 1950 (20+ YEARS OLD)
85024	ACRES,PREDICTED YRLY.AVE.TO BE ALTERED IN FUTURE
85025	LANDOWNERS, CODES FOR ALL IN STATE OF OREGON
85026	ACRES, CURRENT OWNED THIS LANDOWNER THIS STATION
85027	ACRES, ESTIMATED OWNED BY L-O THIS STA. BY 1980

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85028	ACRES, ESTIMATED OWNED BY L-O THIS STA. BY 1990
85029	ACRES, ESTIMATED OWNED BY L-O THIS STA. BY 2000
85030	LAND USES, CODES FOR ALL IN STATE OF OREGON
85031	ACRES, CURRENT DEDICATED TO THIS USE THIS STATION
85032	ACRES, ESTM. DEDICTD TO THIS USE THIS STA BY 1980
85033	ACRES, ESTM. DEDICTD TO THIS USE THIS STA BY 1990
85034	ACRES, ESTM. DEDICTD TO THIS USE BY YR.2000 --STA.
85035	HAB., INDICATED ANIMAL USES THIS TYPE IN WINTER
85036	HAB., INDICATED ANIMAL USES THIS TYPE IN SPRING
85037	HAB., INDICATED ANIMAL USES THIS TYPE IN SUMMER
85038	HAB., INDICATED ANIMAL USES THIS TYPE IN FALL
85039	HAB., INDICATED ANML USES THIS TYPE FOR WINTERING
85040	HAB., INDICATED ANML USES THIS TYPE FOR FEEDING
85041	HAB., INDICATED ANML USES TYPE FOR REARING YOUNG
85042	HAB., INDICATED BIRD USES THIS TYPE FOR NESTING
85043	HAB., INDICATED ANML USES THIS TYPE FOR SHELTER
85044	HAB., INDICATED ANML USES THIS TYPE FOR REST AREA
85045	ANML, SHOWS PRESENCE/ABSNC OF COMMENTS ON THIS ANML
85046	HAB.,ACRES OCCUPIED BY THIS ANML THIS UNIT & CO.
85050	ANIMALS ARE NOT PRESENT THIS STATION
85051	ANIMALS, ONLY A FEW ARE PRESENT THIS STATION
85052	ANIMALS COMMONLY SEEN; USE MODERATE THIS STATION
85053	ANIMALS FREQUENTLY SEEN; USE HEAVY THIS STATION
85070	OWNERSHIP (.1) AND ACCESS (.2) BY YEAR
85071	PRIVATE OWNERSHIP AND ACCESS MILEAGE
85072	FEDERAL OWNERSHIP AND ACCESS MILEAGE
85073	STATE OWNERSHIP AND ACCESS MILEAGE
85074	COUNTY OWNERSHIP AND ACCESS MILEAGE
85075	CITY OWNERSHIP AND ACCESS MILEAGE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85076	WATER YEAR DATA REFERS TO
85077	CALENDAR YEAR DATA REFERS TO
85088	MONTHS POLLUTION IS A PROBLEM JAN THRU JUNE
85089	MONTHS POLLUTION IS A PROBLEM JULY TO DECEMBER
85090	MAN-CAUSED CHANNEL CHANGE IN MILES
85091	STREAM BANK HABITAT DESTROYED IN MILES
85092	STREAMBED SILTED IN MILES
85093	TURBIDITY PROBLEM IN MILES
85094	SEVERITY: 1=ELIMINATES 2=INTERFERES 3=NO PROBLEM
85095	DURATION OF TURBIDITY PROBLEM IN MONTHS
85096	SEASON OF NATURAL DRY CHANNEL 1=SP 2=SU 3=F 4=W
85097	NATURAL DRY CHANNEL IN MILES
85098	MAN-CAUSED DRY CHANNEL SEASON 1=SP 2=SU 3=F 4=W
85099	MAN-CAUSED DRY CHANNEL IN MILES
85100	YEAR BARRIER IS PRESENT
85101	NUMBER OF NATURAL BARRIERS
85102	MILES BLOCKED BY NATURAL BARRIERS
85103	NUMBER OF NATURAL BARRIERS TO BE REMOVED
85104	NUMBER OF DAMS AND MAN CAUSED OBSTRUCTIONS
85105	MILES BLOCKED BY DAMS OR MAN CAUSED OBSTRUCTIONS
85106	NUMBER OF DAMS TO BE ALTERED
85107	MILES OF STREAM OCCUPIED BY IMPOUNDMENT
85108	LOWER END OF SECTION COVERED BY THIS FORM
85109	UPPER END OF SECTION COVERED BY THIS FORM
85110	LOWER LIMIT THIS SPECIES THIS FORM BY RIVER MILE
85111	UPPER LIMIT THIS SPECIES THIS FORM BY RIVER MILE
85112	STREAM SURVEY:1=COMPLETE 2=INCOMPLETE 3=NONE
85113	ABUNDANCE: 1=FSHWY/TAG&R 2=SURVEY 3=EST PLUS 4=EST
85114	ABUNDANCE: N=S&ST 1=ABUNDANT 4=SCARCE RGH FSH 3=SCARCE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85116	SQUARE YARDS OF SPAWNING AREA IN 1970
85117	SQUARE YARDS OF SPAWNING AREA IN 1980
85118	SQUARE YARDS OF SPAWNING AREA IN 1990
85119	SQUARE YARDS OF SPAWNING AREA IN 2000
85120	MILES OF REARING AREA IN 1970
85121	MILES OF REARING AREA IN 1980
85122	MILES OF REARING AREA IN 1990
85123	MILES OF REARING AREA IN 2000
85124	CATCH BY SPORT ANGLING IN 1970
85125	RECREATION DAYS SPENT ANGLING IN 1970
85126	RECREATION DAYS SPENT ANGLING IN 1980
85127	RECREATION DAYS SPENT ANGLING IN 1990
85128	RECREATION DAYS SPENT ANGLING IN 2000
85129	CONTRIBUTION TO COMMERCIAL CATCH IN 1970
85130	PERCENT OF TOTAL FISHING DONE FROM BOAT IN 1970
85131	PERCENT OF TOTAL FISHING DONE FROM BANK IN 1970
85132	PERCENT OF TOTAL FISHING DONE WITH LURE IN 1970
85133	PERCENT OF TOTAL FISHING DONE WITH BAIT IN 1970
85134	PERCENT OF TOTAL FISHING DONE WITH A FLY IN 1970
85146	YEAR THIS FACTOR HAS A LIMITING EFFECT
85157	MAN DAYS OF WATER SKIING
85158	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NO ACTIVITY
85159	MAN DAYS OF BOATING OTHER THAN ANGLING
85160	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NO ACTIVITY
85161	MAN DAYS OF SWIMMING
85162	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NO ACTIVITY
85163	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NOT PRESENT
85165	NUMBER OF MONTHS SUSPENDED SOLIDS ARE A PROBLEM
85167	NUMBER OF MONTHS PLANKTON IS A PROBLEM

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85168	1=ELIMINATE PROD 2=REDUCE 3=NO INTER. 4=NOT PRES
85169	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85170	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85171	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85172	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85173	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85174	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85175	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85176	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85177	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85178	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85179	YEAR THIS NUMBER OF FACILITIES PRESENT
85180	NUMBER OF BOAT RAMPS
85181	NUMBER OF MOORAGES
85182	NUMBER OF PICNIC AREAS
85183	NUMBER OF CAMP AREAS
85184	NUMBER OF RESORTS
85185	YEAR THIS ZONED AREA PRESENT
85186	ACRES SET ASIDE FOR OTHER BOATING
85187	ACRES SET ASIDE FOR WATER SKIING
85188	MILES OF SHORE LOST TO ACCESS BY HOME SITES
85189	TOTAL MILES OF SHORELINE
85193	WILL RECR BE INC BY RELEASE OF FINGERL 0=NO 1=YES
85195	CATCH AND RECREATION ESTIMATE 1=BEST 4=POOREST
85333	PRECIPITATION-SAMPLE COLLECTION TIME-CODE- NES
85538	GAMMA SCAN DATE (YR,MO,DAY)
85539	DATE OF REPORT (YR,MO,DAY)
85658	TIME NIGHT CO2 HR
85661	TIME, INTERVAL DAY CO2 HR

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Appendix I

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Appendix H

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STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
81939	COPPER (CU) DISSOLVED CATIONIC SPECIES (UG/L)	7440508
81940	ZINC (ZN) DISSOLVED CATIONIC SPECIES (UG/L)	7440666
81941	CHROMIUM, DISSOLVED ANIONIC SPECIES (UG/L)	7440473
81942	COPPER (CU) DISSOLVED ANIONIC SPECIES (UG/L)	7440508
81943	ZINC (ZN) DISSOLVED ANIONIC SPECIES (UG/L)	7440666
82058	CHROMIUM, TOTAL, PERCENT REMOVAL	7440473
82399	CHROMIUM, HEXAVALENT (KG/BATCH)	18540299
82512	M,P-DICHLOROBENZENE (MEASURES 1,3&1,4) TOT. (UG/L)	541731
82573	CYANIDE/CHLORINATION IN WATER (MG/L)	57125
82621	HEXACHLOROBENZENE, WATER, TOTAL RECOVER. (UG/L)	118741
82622	ENDRIN ALDEHYDE, WH. WATER, TOTAL RECOVER. (UG/L)	7421934
82623	ENDOSULFAN SULFATE, WATER, TOTAL RECOVER. (UG/L)	1031078
82624	ENDOSULFAN, BETA, WH. WATER, TOTAL RECOVER. (UG/L)	33213659
82626	1,2-DIPHENYLHYDRAZINE, WATER, TOTAL RECOVER. (UG/L)	122667
82627	PARACHLOROMETA CRESOL, WATER, TOTAL RECOVER. (UG/L)	59507
85006	ZINC, TOTAL - (#/DAY)	7440666
85007	CHROMIUM, TOTAL (#/DAY)	7440473
85010	NICKEL, TOTAL - (#/DAY)	7440020
85013	MERCURY, TOTAL - (#/DAY)	7439976

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
78208	2,4-DINITRO-O-CRESOL IN WHOLE WATER SAMPLE (UG/L)	534521
78247	CHROMIUM, HEXAVALENT, TOTAL RECOVERABLE, WT (UG/L)	18540299
78248	CYANIDE, TOTAL RECOVERABLE, WATER, WHOLE (UG/L)	57125
80357	CHROMIUM, TRIVALENT, DISSOLVED, AS CR	16065831
81208	CYANIDE, FREE (NOT AMEN. TO CHLORINATION) (MG/L)	57125
81210	CYANIDE - STATE OF ILLINOIS (MG/L)	57125
81214	CADMIUM - STATE OF ILLINOIS (MG/L)-COLD	7440439
81215	CHROMIUM - STATE OF ILLINOIS (MG/L), COLD DIGEST	18540299
81216	CHROMIUM(TRI)-STATE OF ILLINOIS (MG/L)-COLD DIGEST	16065831
81217	CHROMIUM, TOTAL - STATE OF ILLINOIS (MG/L) COLD DIGEST	7440473
81218	COPPER, STATE OF ILLINOIS, MG/L, COLD DIGEST	7440508
81220	LEAD, STATE OF ILLINOIS, MG/L, COLD DIGEST	7439921
81222	NICKEL - STATE OF ILLINOIS, MG/L, COLD DIGEST	7440020
81223	SILVER, STATE OF ILLINOIS, MG/L, COLD DIGEST	7440224
81224	ZINC - STATE OF ILLINOIS, MG/L, COLD DIGEST	7440666
81642	SILVER (AG) IN WATER POUNDS PER DAY (LBS/DAY)	7440224
81750	COPPER, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7440508
81751	LEAD, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7439921
81752	NICKEL, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7440020
81753	CADMIUM, INTERSTITIAL WATER FROM SEDIMENT	7440439
81754	ZINC, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7440666
81766	HEPTACHLOR EPOXIDE IN EPILITHIC ALGAE SED. (UG/KG)	1024573
81931	MERCURY (HG) SUSPENDED FRACTION OF WATER (UG/G)	7439976
81932	CADMIUM (CD) SUSPENDED FRACTION OF WATER (UG/G)	7440439
81933	ZINC (ZN) SUSPENDED FRACTION OF WATER (UG/G)	7440666
81934	LEAD (PB) SUSPENDED FRACTION OF WATER (UG/G)	7439921
81936	LEAD (PB) DISSOLVED CATIONIC SPECIES (UG/L)	7439921
81937	CADMIUM (CD) DISSOLVED CATIONIC SPECIES (UG/L)	7440439
81938	CHROMIUM, DISSOLVED CATIONIC SPECIES (UG/L)	7440473

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
46326	HEPTACHLOR AND METABOLITES IN WH. H2O SAMP. (UG/L)	76448
46479	CYANIDE, DISSOLVED, WATER (UG/L)	57125
46551	ARSENIC, FIELD ACIDIFIED W/HNO3, LAB FILT. (UG/L)	7440382
46559	CADMIUM, FIELD ACIDIFIED-HNO3-LAB FILTER (UG/L-CD)	7440439
46560	CHROMIUM, FIELD ACIDIFIED-HN03-LAB FILT. (UG/L-CR)	7440473
46562	COPPER, FIELD ACIDIFIED-HNO3-LAB FILTER. (UG/L-CU)	7440508
46564	LEAD, FIELD ACIDIFIED-HNO3-LAB FILTERED (UG/L-PB)	7439921
46566	SILVER, FIELD ACIDIFIED-HNO3-LAB FILTER.(UG/L-AG)	7440224
46567	ZINC, EXTRACT. FIELD ACID W/HNO3, LAB FILT. (UG/L)	7440666
70012	PARACHLOROMETA CRESOL, WATER, WHOLE (LBS/DAY)	59507
70017	HEXACHLOROCYCLOPENTADIENE, WATER, WHOLE (LBS/DAY)	77474
70021	LEAD, (TCLP), WATER, TOTAL (MG/L)	7439921
71890	MERCURY, DISSOLVED (UG/L AS HG)	7439976
71895	MERCURY, SUSPENDED (UG/L AS HG)	7439976
71900	MERCURY, TOTAL (UG/L AS HG)	7439976
71901	MERCURY, TOTAL RECOVERABLE IN WATER AS HG (UG/L)	7439976
71946	CADMIUM, EXTRACTABLE (UG/L AS CD)	7440439
71947	CHROMIUM, EXTRACTABLE (UG/L AS CR)	7440473
71949	LEAD, EXTRACTABLE (UG/L AS PB)	7439921
71950	ZINC, EXTRACTABLE (UG/L AS ZN)	7440666
71951	COPPER, EXTRACTABLE (UG/L AS CU)	7440508
73063	CHLOROGUAIACOL,4-, TOTAL, WATER (UG/L)	16766306
73522	PROPANE, 2,2'-OXYBIS(1-CHLORO)- TOTAL (UG/L)	108601
77163	1,3-DICHLOROPROPENE-1, WHOLE WATER (UG/L)	542756
77354	1,1-DICHLORO-2,2-DIFLUOROETHANE WHOLE WATER (UG/L)	471432
77771	3-CHLORO-4-HYDROXYBENZOPHENONE, WHOLE WATER (UG/L)	55191203
78113	ETHYL BENZENE WHOLE WATER SAMPLE (UG/L)	100414
78124	BENZENE IN WATER (VOLATILE ANALYSIS) (UG/L)	71432
78131	TOLUENE IN WHOLE WATER (VOLATILE ANALYSIS) (UG/L)	108883

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
39391	ENDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	72208
39392	ENDRIN IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	72208
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	8001352
39401	TOXAPHENE IN FILT. FRAC. OF WATER SAMPLE (UG/L)	8001352
39402	TOXAPHENE IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	8001352
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	76448
39411	HEPTACHLOR IN FILT. FRAC. OF WATER SAMPLE (UG/L)	76448
39412	HEPTACHLOR IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	76448
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	1024573
39421	HEPTACHLOR EPOXIDE IN FILT. FRAC. WAT. SAM. (UG/L)	1024573
39422	HEPTACHLOR EPOXIDE IN SUSP. FRAC. WAT. SAM. (UG/L)	1024573
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE (UG/L)	11104282
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE (UG/L)	11141165
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE (UG/L)	53469219
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE (UG/L)	12672296
39501	PCB - 1248 IN FILT. FRAC. OF WATER SAMPLE (UG/L)	12672296
39502	PCB - 1248 IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	12672296
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE (UG/L)	11097691
39505	PCB - 1254 IN FILT. FRAC. OF WATER SAMPLE (UG/L)	11097691
39506	PCB - 1254 IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	11097691
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE (UG/L)	11096825
39509	PCB - 1260 IN FILT. FRAC. OF WATER SAMPLE (UG/L)	11096825
39510	PCB - 1260 IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	11096825
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	118741
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE (UG/L)	87683
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	58899
39920	DNOC IN WHOLE WATER SAMPLE (UG/L)	534521
46322	LINDANE PLUS ISOMERS IN WHOLE WATER SAMPLE (UG/L)	58899
46323	DELTA-BHC IN WHOLE WATER SAMPLE (UG/L)	319868

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	50293
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	72548
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	72559
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	309002
39331	ALDRIN IN FILT. FRAC. OF WAT. SAMP. (UG/L)	309002
39332	ALDRIN IN SUSP. FRAC. OF WAT. SAMP. (UG/L)	309002
39336	BHC-ALPHA, WATER, WHOLE (LBS/DAY)	319846
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	319846
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	319857
39340	GAMMA-BHC(LINDANE), WHOLE WATER (UG/L)	58899
39341	GAMMA-BHC(LINDANE), DISSOLVED (UG/L)	58899
39342	GAMMA-BHC(LINDANE), SUSPENDED (UG/L)	58899
39344	BHC-GAMMA, WATER, WHOLE (LBS/DAY)	58899
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATER (UG/L)	57749
39352	CHLORDANE(TECH MIX & METABS), DISSOLVED (UG/L)	57749
39353	CHLORDANE(TECH MIX & METABS), SUSPENDED (UG/L)	57749
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	72548
39361	DDD IN FILT. FRAC. OF WATER SMAPLE (UG/L)	72548
39362	DDD IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	72548
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	72559
39366	DDE IN FILT. FRAC. OF WATER SAMPLE (UG/L)	72559
39367	DDE IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	72559
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	50293
39371	DDT IN FILT. FRAC. OF WATER SAMPLE (UG/L)	50293
39372	DDT IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	50293
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	60571
39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	60571
39382	DIELDRIN IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	60571
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	72208

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34658	DNOC (4,6-DINITRO-ORTHO-CRESOL), DISSOLVED (UG/L)	534521
34659	DNOC (4,6-DINITRO-ORTHO-CRESOL), SUSPENDED (UG/L)	534521
34662	PCB - 1221, DISSOLVED (UG/L)	11104282
34663	PCB - 1221, SUSPENDED (UG/L)	11104282
34665	PCB - 1232, DISSOLVED (UG/L)	11141165
34666	PCB - 1232, SUSPENDED (UG/L)	11141165
34671	PCB - 1016, TOTAL (UG/L)	12674112
34672	PCB - 1016, DISSOLVED (UG/L)	12674112
34673	PCB - 1016, SUSPENDED (UG/L)	12674112
34675	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD),TOT(UG/L)	1746016
34676	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)DISS(UG/L)	1746016
34677	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)SUSP(UG/L)	1746016
34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTAL (UG/L)	108952
34696	NAPHTHALENE, TOTAL (UG/L)	91203
34750	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)TOT(PG/L)	1746016
34751	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)DISS(PG/L)	1746016
34752	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)SUSP(PG/L)	1746016
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE (UG/L)	87865
39039	HEXACHLOROBENZENE WATER SAMPLE,ELECTRON CPT (UG/L)	118741
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER (UG/L)	117817
39103	BIS(2-ETHYLHEXYL) PHTHALATE, DISSOLVED, (UG/L)	117817
39104	BIS(2-ETHYLHEXYL) PHTHALATE, SUSPENDED, (UG/L)	117817
39107	PHTHALATES,DIETHYLHEXYL SUS.FRAC.WTR DWT (MG/KG)	117817
39110	DI-N-BUTYL PHTHALATE, WHOLE WATER (UG/L)	84742
39114	DI-N-BUTYL PHTHALATE, SUSPENDED (UG/L)	84742
39115	PHTHALATES,DIBUTYL SUS.FRAC.WATER DWT (UG/KG)	84742
39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	92875
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE (UG/L)	75014
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE (UG/L)	79016

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34613	2,4-DINITROTOLUENE, SUSPENDED (UG/L)	121142
34616	2,4-DINITROPHENOL, TOTAL (UG/L)	51285
34617	2,4-DINITROPHENOL, DISSOLVED (UG/L)	51285
34618	2,4-DINITROPHENOL, SUSPENDED (UG/L)	51285
34621	2,4,6-TRICHLOROPHENOL, TOTAL (UG/L)	88062
34622	2,4,6-TRICHLOROPHENOL, DISSOLVED (UG/L)	88062
34623	2,4,6-TRICHLOROPHENOL, SUSPENDED (UG/L)	88062
34626	2,6-DINITROTOLUENE, TOTAL (UG/L)	606202
34627	2,6-DINITROTOLUENE, DISSOLVED (UG/L)	606202
34628	2,6-DINITROTOLUENE, SUSPENDED (UG/L)	606202
34631	3,3'-DICHLOROBENZIDINE, TOTAL (UG/L)	91941
34632	3,3'-DICHLOROBENZIDINE, DISSOLVED (UG/L)	91941
34633	3,3'-DICHLOROBENZIDINE, SUSPENDED (UG/L)	91941
34636	4-BROMOPHENYL PHENYL ETHER, TOTAL (UG/L)	101553
34637	4-BROMOPHENYL PHENYL ETHER, DISSOLVED (UG/L)	101553
34638	4-BROMOPHENYL PHENYL ETHER, SUSPENDED (UG/L)	101553
34641	4-CHLOROPHENYL PHENYL ETHER, TOTAL (UG/L)	7005723
34642	4-CHLOROPHENYL PHENYL ETHER, DISSOLVED (UG/L)	7005723
34643	4-CHLOROPHENYL PHENYL ETHER, SUSPENDED (UG/L)	7005723
34646	4-NITROPHENOL, TOTAL (UG/L)	100027
34647	4-NITROPHENOL, DISSOLVED (UG/L)	100027
34648	4-NITROPHENOL, SUSPENDED (UG/L)	100027
34651	P,P'-DDD, DISSOLVED (UG/L)	72548
34652	P,P'-DDD, SUSPENDED (UG/L)	72548
34653	P,P'-DDE, DISSOLVED (UG/L)	72559
34654	P,P'-DDE, SUSPENDED (UG/L)	72559
34655	P,P'-DDT, DISSOLVED (UG/L)	50293
34656	P,P'-DDT, SUSPENDED (UG/L)	50293
34657	DNOC (4,6-DINITRO-ORTHO-CRESOL), TOTAL (UG/L)	534521

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34566	1,3-DICHLOROBENZENE, TOTAL (UG/L)	541731
34567	1,3-DICHLOROBENZENE, DISSOLVED (UG/L)	541731
34568	1,3-DICHLOROBENZENE, SUSPENDED (UG/L)	541731
34571	1,4-DICHLOROBENZENE, TOTAL (UG/L)	106467
34572	1,4-DICHLOROBENZENE, DISSOLVED (UG/L)	106467
34573	1,4-DICHLOROBENZENE, SUSPENDED (UG/L)	106467
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (UG/L)	110758
34577	2-CHLOROETHYL VINYL ETHER, DISSOLVED (UG/L)	110758
34578	2-CHLOROETHYL VINYL ETHER, SUSPENDED (UG/L)	110758
34581	2-CHLORONAPHTHALENE, TOTAL (UG/L)	91587
34582	2-CHLORONAPHTHALENE, DISSOLVED (UG/L)	91587
34583	2-CHLORONAPHTHALENE, SUSPENDED (UG/L)	91587
34586	2-CHLOROPHENOL, TOTAL (UG/L)	95578
34587	2-CHLOROPHENOL, DISSOLVED (UG/L)	95578
34588	2-CHLOROPHENOL, SUSPENDED (UG/L)	95578
34591	2-NITROPHENOL, TOTAL (UG/L)	88755
34592	2-NITROPHENOL, DISSOLVED (UG/L)	88755
34593	2-NITROPHENOL, SUSPENDED (UG/L)	88755
34596	DI-N-OCTYL PHTHALATE, TOTAL (UG/L)	117840
34597	DI-N-OCTYL PHTHALATE, DISSOLVED (UG/L)	117840
34598	DI-N-OCTYL PHTHALATE, SUSPENDED (UG/L)	117840
34601	2,4-DICHLOROPHENOL, TOTAL (UG/L)	120832
34602	2,4-DICHLOROPHENOL, DISSOLVED (UG/L)	120832
34603	2,4-DICHLOROPHENOL, SUSPENDED (UG/L)	120832
34606	2,4-DIMETHYLPHENOL, TOTAL (UG/L)	105679
34607	2,4-DIMETHYLPHENOL, DISSOLVED (UG/L)	105679
34608	2,4-DIMETHYLPHENOL, SUSPENDED (UG/L)	105679
34611	2,4-DINITROTOLUENE, TOTAL (UG/L)	121142
34612	2,4-DINITROTOLUENE, DISSOLVED (UG/L)	121142

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34517	1,1,2,2-TETRACHLOROETHANE, DISSOLVED (UG/L)	79345
34518	1,1,2,2-TETRACHLOROETHANE, SUSPENDED (UG/L)	79345
34521	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE, TOTAL (UG/L)	191242
34522	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE, DISS. (UG/L)	191242
34523	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE, SUSP. (UG/L)	191242
34526	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, TOTAL (UG/L)	56553
34527	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, DISS. (UG/L)	56553
34528	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, SUSP. (UG/L)	56553
34531	1,2-DICHLOROETHANE, TOTAL (UG/L)	107062
34532	1,2-DICHLOROETHANE, DISSOLVED (UG/L)	107062
34533	1,2-DICHLOROETHANE, SUSPENDED (UG/L)	107062
34536	1,2-DICHLOROBENZENE, TOTAL (UG/L)	95501
34537	1,2-DICHLOROBENZENE, DISSOLVED (UG/L)	95501
34538	1,2-DICHLOROBENZENE, SUSPENDED (UG/L)	95501
34541	1,2-DICHLOROPROPANE, TOTAL (UG/L)	78875
34542	1,2-DICHLOROPROPANE, DISSOLVED (UG/L)	78875
34543	1,2-DICHLOROPROPANE, SUSPENDED (UG/L)	78875
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER (UG/L)	156605
34547	TRANS-1,2-DICHLOROETHENE, DISSOLVED (UG/L)	156605
34548	TRANS-1,2-DICHLOROETHENE, SUSPENDED (UG/L)	156605
34551	1,2,4-TRICHLOROBENZENE, TOTAL (UG/L)	120821
34552	1,2,4-TRICHLOROBENZENE, DISSOLVED (UG/L)	120821
34553	1,2,4-TRICHLOROBENZENE, SUSPENDED (UG/L)	120821
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (UG/L)	53703
34557	1,2,5,6-DIBENZANTHRACENE, DISSOLVED (UG/L)	53703
34558	1,2,5,6-DIBENZANTHRACENE, SUSPENDED (UG/L)	53703
34561	1,3-DICHLOROPROPENE, TOTAL (UG/L)	542756
34562	1,3-DICHLOROPROPENE, DISSOLVED (UG/L)	542756
34563	1,3-DICHLOROPROPENE, SUSPENDED (UG/L)	542756

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34462	PHENANTHRENE, DISSOLVED (UG/L)	85018
34463	PHENANTHRENE, SUSPENDED (UG/L)	85018
34466	PHENOL, DISSOLVED (UG/L)	108952
34467	PHENOL, SUSPENDED (UG/L)	108952
34469	PYRENE, TOTAL (UG/L)	129000
34470	PYRENE, DISSOLVED (UG/L)	129000
34471	PYRENE, SUSPENDED (UG/L)	129000
34475	TETRACHLOROETHYLENE, TOTAL (UG/L)	127184
34476	TETRACHLOROETHYLENE, DISSOLVED (UG/L)	127184
34477	TETRACHLOROETHYLENE, SUSPENDED (UG/L)	127184
34481	TOLUENE, DISSOLVED (UG/L)	108883
34482	TOLUENE, SUSPENDED (UG/L)	108883
34485	TRICHLOROETHYLENE, DISSOLVED (UG/L)	79016
34486	TRICHLOROETHYLENE, SUSPENDED (UG/L)	79016
34493	VINYL CHLORIDE, DISSOLVED (UG/L)	75014
34494	VINYL CHLORIDE, SUSPENDED (UG/L)	75014
34496	1,1-DICHLOROETHANE, TOTAL (UG/L)	75343
34497	1,1-DICHLOROETHANE, DISSOLVED (UG/L)	75343
34498	1,1-DICHLOROETHANE, SUSPENDED (UG/L)	75343
34501	1,1-DICHLOROETHYLENE, TOTAL (UG/L)	75354
34502	1,1-DICHLOROETHYLENE, DISSOLVED (UG/L)	75354
34503	1,1-DICHLOROETHYLENE, SUSPENDED (UG/L)	75354
34506	1,1,1-TRICHLOROETHANE, TOTAL (UG/L)	71556
34507	1,1,1-TRICHLOROETHANE, DISSOLVED (UG/L)	71556
34508	1,1,1-TRICHLOROETHANE, SUSPENDED (UG/L)	71556
34511	1,1,2-TRICHLOROETHANE, TOTAL (UG/L)	79005
34512	1,1,2-TRICHLOROETHANE, DISSOLVED (UG/L)	79005
34513	1,1,2-TRICHLOROETHANE, SUSPENDED (UG/L)	79005
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (UG/L)	79345

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34415	METHYL BROMIDE, SUSPENDED (UG/L)	74839
34418	METHYL CHLORIDE, TOTAL (UG/L)	74873
34419	METHYL CHLORIDE, DISSOLVED (UG/L)	74873
34420	METHYL CHLORIDE, SUSPENDED (UG/L)	74873
34423	METHYLENE CHLORIDE, TOTAL (UG/L)	75092
34424	METHYLENE CHLORIDE, DISSOLVED (UG/L)	75092
34425	METHYLENE CHLORIDE, SUSPENDED (UG/L)	75092
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (UG/L)	621647
34429	N-NITROSODI-N-PROPYLAMINE, DISSOLVED (UG/L)	621647
34430	N-NITROSODI-N-PROPYLAMINE, SUSPENDED (UG/L)	621647
34433	N-NITROSODIPHENYLAMINE, TOTAL (UG/L)	86306
34434	N-NITROSODIPHENYLAMINE, DISSOLVED (UG/L)	86306
34435	N-NITROSODIPHENYLAMINE, SUSPENDED (UG/L)	86306
34438	N-NITROSODIMETHYLAMINE, TOTAL (UG/L)	62759
34439	N-NITROSODIMETHYLAMINE, DISSOLVED (UG/L)	62759
34440	N-NITROSODIMETHYLAMINE, SUSPENDED (UG/L)	62759
34443	NAPHTHALENE, DISSOLVED (UG/L)	91203
34444	NAPHTHALENE, SUSPENDED (UG/L)	91203
34447	NITROBENZENE, TOTAL (UG/L)	98953
34448	NITROBENZENE, DISSOLVED (UG/L)	98953
34449	NITROBENZENE, SUSPENDED (UG/L)	98953
34452	PARACHLOROMETA CRESOL, TOTAL (UG/L)	59507
34453	PARACHLOROMETA CRESOL, DISSOLVED (UG/L)	59507
34454	PARACHLOROMETA CRESOL, SUSPENDED (UG/L)	59507
34457	PCB - 1242, DISSOLVED (UG/L)	53469219
34458	PCB - 1242, SUSPENDED (UG/L)	53469219
34459	PCP (PENTACHLOROPHENOL), DISSOLVED (UG/L)	87865
34460	PCP (PENTACHLOROPHENOL), SUSPENDED (UG/L)	87865
34461	PHENANTHRENE, TOTAL (UG/L)	85018

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34363	ENDOSULFAN, ALPHA, SUSPENDED (UG/L)	959988
34371	ETHYLBENZENE, TOTAL (UG/L)	100414
34372	ETHYLBENZENE, DISSOLVED (UG/L)	100414
34373	ETHYLBENZENE, SUSPENDED (UG/L)	100414
34376	FLUORANTHENE, TOTAL (UG/L)	206440
34377	FLUORANTHENE, DISSOLVED (UG/L)	206440
34378	FLUORANTHENE, SUSPENDED (UG/L)	206440
34381	FLUORENE, TOTAL (UG/L)	86737
34382	FLUORENE, DISSOLVED (UG/L)	86737
34383	FLUORENE, SUSPENDED (UG/L)	86737
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (UG/L)	77474
34387	HEXACHLOROCYCLOPENTADIENE, DISSOLVED (UG/L)	77474
34388	HEXACHLOROCYCLOPENTADIENE, SUSPENDED (UG/L)	77474
34391	HEXACHLOROBUTADIENE, TOTAL (UG/L)	87683
34392	HEXACHLOROBUTADIENE, DISSOLVED (UG/L)	87683
34393	HEXACHLOROBUTADIENE, SUSPENDED (UG/L)	87683
34396	HEXACHLOROETHANE, TOTAL (UG/L)	67721
34397	HEXACHLOROETHANE, DISSOLVED (UG/L)	67721
34398	HEXACHLOROETHANE, SUSPENDED (UG/L)	67721
34401	HEXACHLOROBENZENE, DISSOLVED (UG/L)	118741
34402	HEXACHLOROBENZENE, SUSPENDED (UG/L)	118741
34403	INDENO (1,2,3-CD) PYRENE, TOTAL (UG/L)	193395
34404	INDENO (1,2,3-CD) PYRENE, DISSOLVED (UG/L)	193395
34405	INDENO (1,2,3-CD) PYRENE, SUSPENDED (UG/L)	193395
34408	ISOPHORONE, TOTAL (UG/L)	78591
34409	ISOPHORONE, DISSOLVED (UG/L)	78591
34410	ISOPHORONE, SUSPENDED (UG/L)	78591
34413	METHYL BROMIDE, TOTAL (UG/L)	74839
34414	METHYL BROMIDE, DISSOLVED (UG/L)	74839

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34311	CHLOROETHANE, TOTAL (UG/L)	75003
34312	CHLOROETHANE, DISSOLVED (UG/L)	75003
34313	CHLOROETHANE, SUSPENDED (UG/L)	75003
34316	CHLOROFORM, DISSOLVED (UG/L)	67663
34317	CHLOROFORM, SUSPENDED (UG/L)	67663
34320	CHRYSENE, TOTAL (UG/L)	218019
34321	CHRYSENE, DISSOLVED (UG/L)	218019
34322	CHRYSENE, SUSPENDED (UG/L)	218019
34325	CYANIDE, SUSPENDED (MG/L)	57125
34327	DI-N-BUTYL PHTHALATE, DISSOLVED (UG/L)	84742
34328	DICHLOROBROMOMETHANE, DISSOLVED (UG/L)	75274
34329	DICHLOROBROMOMETHANE, SUSPENDED (UG/L)	75274
34336	DIETHYL PHTHALATE, TOTAL (UG/L)	84662
34337	DIETHYL PHTHALATE, DISSOLVED (UG/L)	84662
34338	DIETHYL PHTHALATE, SUSPENDED (UG/L)	84662
34341	DIMETHYL PHTHALATE, TOTAL (UG/L)	131113
34342	DIMETHYL PHTHALATE, DISSOLVED (UG/L)	131113
34343	DIMETHYL PHTHALATE, SUSPENDED (UG/L)	131113
34346	1,2-DIPHENYLHYDRAZINE, TOTAL (UG/L)	122667
34347	1,2-DIPHENYLHYDRAZINE, DISSOLVED (UG/L)	122667
34348	1,2-DIPHENYLHYDRAZINE, SUSPENDED (UG/L)	122667
34351	ENDOSULFAN SULFATE, TOTAL (UG/L)	1031078
34352	ENDOSULFAN SULFATE, DISSOLVED (UG/L)	1031078
34353	ENDOSULFAN SULFATE, SUSPENDED (UG/L)	1031078
34356	ENDOSULFAN, BETA, TOTAL (UG/L)	33213659
34357	ENDOSULFAN, BETA, DISSOLVED (UG/L)	33213659
34358	ENDOSULFAN, BETA, SUSPENDED (UG/L)	33213659
34361	ENDOSULFAN, ALPHA, TOTAL (UG/L)	959988
34362	ENDOSULFAN, ALPHA, DISSOLVED (UG/L)	959988

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34249	BENZO-A-PYRENE, SUSPENDED (UG/L)	50328
34253	A-BHC-ALPHA, DISSOLVED (UG/L)	319846
34254	A-BHC-ALPHA, SUSPENDED (UG/L)	319846
34255	B-BHC-BETA, DISSOLVED (UG/L)	319857
34256	B-BHC-BETA, SUSPENDED (UG/L)	319857
34259	DELTA BENZENE HEXACHLORIDE, TOTAL (UG/L)	319868
34260	DELTA BENZENE HEXACHLORIDE, DISSOLVED (UG/L)	319868
34261	DELTA BENZENE HEXACHLORIDE, SUSPENDED (UG/L)	319868
34265	R-BHC (LINDANE) GAMMA, DISSOLVED (UG/L)	58899
34266	R-BHC (LINDANE) GAMMA, SUSPENDED (UG/L)	58899
34273	BIS (2-CHLOROETHYL) ETHER, TOTAL (UG/L)	111444
34274	BIS (2-CHLOROETHYL) ETHER, DISSOLVED (UG/L)	111444
34275	BIS (2-CHLOROETHYL) ETHER, SUSPENDED (UG/L)	111444
34278	BIS (2-CHLOROETHOXY) METHANE, TOTAL (UG/L)	111911
34279	BIS (2-CHLOROETHOXY) METHANE, DISSOLVED (UG/L)	111911
34280	BIS (2-CHLOROETHOXY) METHANE, SUSPENDED (UG/L)	111911
34288	BROMOFORM, DISSOLVED (UG/L)	75252
34289	BROMOFORM, SUSPENDED (UG/L)	75252
34292	N-BUTYL BENZYL PHTHALATE, WHOLE WATER (UG/L)	85687
34293	N-BUTYL BENZYL PHTHALATE, DISSOLVED (UG/L)	85687
34294	N-BUTYL BENZYL PHTHALATE, SUSPENDED (UG/L)	85687
34297	CARBON TETRACHLORIDE, DISSOLVED (UG/L)	56235
34298	CARBON TETRACHLORIDE, SUSPENDED (UG/L)	56235
34301	CHLOROBENZENE, TOTAL (UG/L)	108907
34302	CHLOROBENZENE, DISSOLVED (UG/L)	108907
34303	CHLOROBENZENE, SUSPENDED (UG/L)	108907
34306	CHLORODIBROMOMETHANE, TOTAL (UG/L)	124481
34307	CHLORODIBROMOMETHANE, DISSOLVED (UG/L)	124481
34308	CHLORODIBROMOMETHANE, SUSPENDED (UG/L)	124481

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34201	ACENAPHTHYLENE, DISSOLVED (UG/L)	208968
34202	ACENAPHTHYLENE, SUSPENDED (UG/L)	208968
34205	ACENAPHTHENE, TOTAL (UG/L)	83329
34206	ACENAPHTHENE, DISSOLVED (UG/L)	83329
34207	ACENAPHTHENE, SUSPENDED (UG/L)	83329
34210	ACROLEIN, TOTAL (UG/L)	107028
34211	ACROLEIN, DISSOLVED (UG/L)	107028
34212	ACROLEIN, SUSPENDED (UG/L)	107028
34215	ACRYLONITRILE, TOTAL (UG/L)	107131
34216	ACRYLONITRILE, DISSOLVED (UG/L)	107131
34217	ACRYLONITRILE, SUSPENDED (UG/L)	107131
34220	ANTHRACENE, TOTAL (UG/L)	120127
34221	ANTHRACENE, DISSOLVED (UG/L)	120127
34222	ANTHRACENE, SUSPENDED (UG/L)	120127
34225	ASBESTOS (FIBROUS) TOTAL (UG/L)	1332214
34226	ASBESTOS (FIBROUS) DISSOLVED (UG/L)	1332214
34227	ASBESTOS (FIBROUS) SUSPENDED (UG/L)	1332214
34230	BENZO(B)FLUORANTHENE, WHOLE WATER (UG/L)	205992
34231	BENZO(B)FLUORANTHENE, DISSOLVED (UG/L)	205992
34232	BENZO(B)FLUORANTHENE, SUSPENDED (UG/L)	205992
34235	BENZENE, DISSOLVED (UG/L)	71432
34236	BENZENE, SUSPENDED (UG/L)	71432
34239	BENZIDINE, DISSOLVED (UG/L)	92875
34240	BENZIDINE, SUSPENDED (UG/L)	92875
34242	BENZO(K)FLUORANTHENE, TOTAL (UG/L)	207089
34243	BENZO(K)FLUORANTHENE, DISSOLVED (UG/L)	207089
34244	BENZO(K)FLUORANTHENE, SUSPENDED (UG/L)	207089
34247	BENZO-A-PYRENE, TOTAL (UG/L)	50328
34248	BENZO-A-PYRENE, DISSOLVED (UG/L)	50328

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
01322	NICKEL, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440020
01323	SELENIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7782492
01324	THALLIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440280
01523	SILVER, IONIC (UG/L)	7440224
22675	SELENIUM, DISSOLVED ORGANIC (UG/L)	7782492
22676	SELENIUM, HEXAVALENT, DISSOLVED (UG/L)	7782492
22677	SELENIUM, TETRAVALENT, DISSOLVED	7782492
22678	ARSENIC, DISSOLVED ORGANIC (UG/L)	7440382
22679	ARSENIC, PENTAVALENT, DISSOLVED (UG/L)	7440382
22680	ARSENIC, TRIVALENT, DISSOLVED (UG/L)	7440382
30197	2-CHLOROETHYLVINYL ETHER,WATER,WHL,RECOVER (UG/L)	110758
30201	CHLOROMETHANE, WATER, WHOLE, RECOVERABLE (UG/L)	74873
30202	BROMOMETHANE, WATER, WHOLE, RECOVERABLE (UG/L)	74839
32003	CARBON CHLOROFORM AND CARBON ALCOHOL EXT. (UG/L)	67663
32005	CARBON CHLOROFORM EXTRACTABLES (UG/L)	67663
32021	CARBON CHLOROFORM EXTRACTS, ETHER INSOLUBLE (UG/L)	67663
32022	CARBON CHLOROFORM EXTRACTS, WATER SOLUBLES (UG/L)	67663
32101	BROMODICHLOROMETHANE, WHOLE WATER (UG/L)	75274
32102	CARBON TETRACHLORIDE, WHOLE WATER, (UG/L)	56235
32103	1,2-DICHLOROETHANE, WHOLE WATER (UG/L)	107062
32104	BROMOFORM, WHOLE WATER, (UG/L)	75252
32105	DIBROMOCHLOROMETHANE, WHOLE WATER, (UG/L)	124481
32106	CHLOROFORM, WHOLE WATER (UG/L)	67663
32260	CARBON TETRACHLORIDE EXTRACTABLES (MG/L)	56235
32270	CHLOROFORM EXTRACTABLES TOTAL IN MG PER LITER	67663
34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXT. (UG/L)	108883
34030	BENZENE IN WTR SMPLE GC-MS, HEXADECONE EXT. (UG/L)	71432
34198	BHC-DELTA, WATER, WHOLE (LBS/DAY)	319868
34200	ACENAPHTHYLENE, TOTAL (UG/L)	208968

Appendix F

National EPA Water Quality Criteria Summary[1]

The following table presents the national water quality criteria that were used to assess water quality data on a station-by-station basis and within the entire study area. Criteria are, for the most part, maximum values (except for dissolved oxygen, pH, and as noted). Criteria exist in any of four categories: Fresh Acute, Drinking Water, Marine Acute, and Other. Acute criteria are the highest 1-hour average concentrations which should not result in unacceptable impacts to aquatic organisms in either fresh or marine waters, respectively. The Drinking Water criteria are intended for human consumption; while the Other criteria represents National Park Service or other concerns. Parameters are listed in ascending order by STORET code. It is important to note that similar parameters often have non-consecutive codes. Consequently, scanning the entire list is necessary to obtain the criteria for all parameters of a particular type (eg. lead, copper, etc.). Refer to the Parameter Period of Record Tabulation to obtain the STORET code for any parameter measured in the park.

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
	00070				50[!]	TURBIDITY, JACKSON CANDLE UNITS	JTU	Physical
	00076				50[!]	TURBIDITY, HACH TURBIDIMETER, FORMAZIN TUR. UNITS	FTU	Physical
14808798	00154		250[e]			SULFATE (AS S) WHOLE WATER	MG/L	General Inorganic
7782447	00299				4.0[u]	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	MG/L	Dissolved Oxygen
7782447	00300				4.0[u]	OXYGEN, DISSOLVED	MG/L	Dissolved Oxygen
	00400				≤6.5, ≥9.0[#]	PH	SU	Physical
	00403				≤6.5, ≥9.0[#]	PH, LAB	SU	Physical
	00406				≤6.5, ≥9.0[#]	PH, FIELD	SU	Physical
471341	00409				<200[~]	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS	UEQ/L	General Inorganic

[1]Sources: (1) U.S. Environmental Protection Agency, Quality Criteria for Water 1995, Final Draft; (2) U.S. Environmental Protection Agency, 40 CFR 141 - National Primary Drinking Water Regulations, and 40 CFR 143 - National Secondary Drinking Water Regulations, July 1, 1994; and (3) Others as Noted in Footnotes.

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
17778880	00613		1			NITRITE NITROGEN, DISSOLVED AS N	MG/L	Nitrogen
17778880	00615		1			NITRITE NITROGEN, TOTAL AS N	MG/L	Nitrogen
17778880	00618		10			NITRATE NITROGEN, DISSOLVED AS N	MG/L	Nitrogen
17778880	00620		10			NITRATE NITROGEN, TOTAL AS N	MG/L	Nitrogen
17778880	00628		10			NITRITE + NITRATE, SUSPENDED AS N	MG/L	Nitrogen
17778880	00630		10			NITRITE PLUS NITRATE, TOTAL 1 DET.	MG/L	Nitrogen
17778880	00631		10			NITRITE PLUS NITRATE, DISSOLVED 1 DET.	MG/L	Nitrogen
57125	00718	22	200	1.0		CYANIDE, WEAK ACID, DISSOCIABLE, WATER, WHOLE	UG/L	General Inorganic
57125	00719	22	200	1.0		CYANIDE, FREE,IN WATER&WASTEWATERS, HBG METHOD	UG/L	General Inorganic
57125	00720	0.022	0.2	0.001		CYANIDE, TOTAL	MG/L	General Inorganic
57125	00722	0.022	0.2	0.001		CYANIDE, FREE (AMENABLE TO CHLORINATION)	MG/L	General Inorganic
57125	00723	22	200	1.0		CYANIDE, DISSOLVED STD METHOD	UG/L	General Inorganic
57125	00724	22	200	1.0		CYANIDE COMPLEXED TO A RANGE OF COMPNDS, WATER	UG/L	General Inorganic
16887006	00940	860	250*			CHLORIDE,TOTAL IN WATER	MG/L	General Inorganic
16887006	00941	860	250*			CHLORIDE, DISSOLVED IN WATER	MG/L	General Inorganic
14808798	00945		250*			SULFATE, TOTAL (AS SO4)	MG/L	General Inorganic
14808798	00946		250*			SULFATE, DISSOLVED (AS SO4)	MG/L	General Inorganic
1332214	00948		7000000			ASBESTOS, WHOLE SAMPLE	CNT/L	General Inorganic
16984488	00950		4.0			FLUORIDE, DISSOLVED AS F	MG/L	General Inorganic
16984488	00951		4.0			FLUORIDE, TOTAL AS F	MG/L	General Inorganic
7782414	00953		4000			FLUORINE, TOTAL	UG/L	General Inorganic
7440382	00978	360	50	69		ARSENIC, TOTAL RECOVERABLE IN WATER AS AS	UG/L	Metal
7782492	00981	20	50	300		SELENIUM,TOTAL RECOVERABLE IN WATER AS SE	UG/L	Metal
7440280	00982	1400*	2.0	2130*		THALLIUM, TOTAL RECOVERABLE IN WATER AS TL	UG/L	Metal
7782492	00990	20	50	300		SELENITE, TOTAL RECOVERABLE INORGANIC	UG/L	Metal
7440382	00991	360	50	69		ARSENIC, TOTAL RECOVERABLE TRIVALENT INORGANIC	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440382	00995	360	50	69		ARSENIC, INORGANIC DISS	UG/L	Metal
7440382	00996	360	50	69		ARSENIC, INORGANIC SUSP	UG/L	Metal
7440382	00997	360	50	69		ARSENIC, INORGANIC TOT	UG/L	Metal
7440417	00998	130*	4.0			BERYLLIUM,TOTAL RECOVERABLE IN WATER AS BE	UG/L	Metal
7440382	01000	360	50	69		ARSENIC, DISSOLVED	UG/L	Metal
7440382	01001	360	50	69		ARSENIC, SUSPENDED	UG/L	Metal
7440382	01002	360	50	69		ARSENIC, TOTAL	UG/L	Metal
7440393	01005		2000			BARIUM, DISSOLVED	UG/L	Metal
7440393	01006		2000			BARIUM, SUSPENDED	UG/L	Metal
7440393	01007		2000			BARIUM, TOTAL	UG/L	Metal
7440393	01009		2000			BARIUM,TOTAL RECOVERABLE IN WATER AS BA	UG/L	Metal
7440417	01010	130*	4.0			BERYLLIUM, DISSOLVED	UG/L	Metal
7440417	01011	130*	4.0			BERYLLIUM, SUSPENDED	UG/L	Metal
7440417	01012	130*	4.0			BERYLLIUM, TOTAL	UG/L	Metal
7440439	01025	3.9+	5.0	43		CADMIUM, DISSOLVED	UG/L	Metal
7440439	01026	3.9+	5.0	43		CADMIUM, SUSPENDED	UG/L	Metal
7440439	01027	3.9+	5.0	43		CADMIUM, TOTAL	UG/L	Metal
7440473	01030		100			CHROMIUM, DISSOLVED	UG/L	Metal
7440473	01031		100			CHROMIUM, SUSPENDED	UG/L	Metal
7440473	01032	16	100	1100		CHROMIUM, HEXAVALENT	UG/L	Metal
16065831	01033	1700+	100	10300*		CHROMIUM, TRI-VAL	UG/L	Metal
7440473	01034		100			CHROMIUM, TOTAL	UG/L	Metal
7440508	01040	18+	1300[a]	2.9		COPPER, DISSOLVED	UG/L	Metal
7440508	01041	18+	1300[a]	2.9		COPPER, SUSPENDED	UG/L	Metal
7440508	01042	18+	1300[a]	2.9		COPPER, TOTAL	UG/L	Metal
7439921	01049	82+	15[a]	220		LEAD, DISSOLVED	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7439921	01050	82[+]	15[a]	220		LEAD, SUSPENDED	UG/L	Metal
7439921	01051	82[+]	15[a]	220		LEAD, TOTAL	UG/L	Metal
7440280	01057	1400[*]	2.0	2130[*]		THALLIUM, DISSOLVED	UG/L	Metal
7440280	01058	1400[*]	2.0	2130[*]		THALLIUM, SUSPENDED	UG/L	Metal
7440280	01059	1400[*]	2.0	2130[*]		THALLIUM, TOTAL	UG/L	Metal
7440020	01065	1400[+]	100	75		NICKEL, DISSOLVED	UG/L	Metal
7440020	01066	1400[+]	100	75		NICKEL, SUSPENDED	UG/L	Metal
7440020	01067	1400[+]	100	75		NICKEL, TOTAL	UG/L	Metal
7440020	01074	1400[+]	100	75		NICKEL, TOTAL RECOVERABLE IN WATER AS NI	UG/L	Metal
7440224	01075	4.1[+]	100[g]	0.12		SILVER, DISSOLVED	UG/L	Metal
7440224	01076	4.1[+]	100[g]	0.12		SILVER, SUSPENDED	UG/L	Metal
7440224	01077	4.1[+]	100[g]	0.12		SILVER, TOTAL	UG/L	Metal
7440224	01079	4.1[+]	100[g]	0.12		SILVER, TOTAL RECOVERABLE IN WATER AS AG	UG/L	Metal
7440508	01089	0.018[+]	1.3[a]	0.0029		COPPER AS SUSPENDED BLACK OXIDE IN WATER	MG/L	General Inorganic
7440666	01090	120[+]	5000[g]	95		ZINC, DISSOLVED	UG/L	Metal
7440666	01091	120[+]	5000[g]	95		ZINC, SUSPENDED	UG/L	Metal
7440666	01092	120[+]	5000[g]	95		ZINC, TOTAL	UG/L	Metal
7440666	01094	120[+]	5000[g]	95		ZINC, TOTAL RECOVERABLE IN WATER AS ZN	UG/L	Metal
7440360	01095	88[p]	6.0	1500[p]		ANTIMONY, DISSOLVED	UG/L	Metal
7440360	01096	88[p]	6.0	1500[p]		ANTIMONY, SUSPENDED	UG/L	Metal
7440360	01097	88[p]	6.0	1500[p]		ANTIMONY, TOTAL	UG/L	Metal
7440439	01113	3.9[+]	5.0	43		CADMIUM,TOTAL RECOVERABLE IN WATER AS CD	UG/L	Metal
7439921	01114	82[+]	15[a]	220		LEAD, TOTAL RECOVERABLE IN WATER AS PB	UG/L	Metal
7440473	01118		100			CHROMIUM TOTAL RECOVERABLE IN WATER AS CR	UG/L	Metal
7440508	01119	18[+]	1300[a]	2.9		COPPER, TOTAL RECOVERABLE IN WATER AS CU	UG/L	Metal
7440280	01124	1400[*]	2.0	2130[*]		THALLIUM, ACID SOLUBLE, WATER, WHOLE	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440280	01128	1400*	2.0	2130*		THALLIUM, TOTAL RECOVERABLE <95%	UG/L	Metal
7782492	01145	20	50	300		SELENIUM, DISSOLVED	UG/L	Metal
7782492	01146	20	50	300		SELENIUM, SUSPENDED	UG/L	Metal
7782492	01147	20	50	300		SELENIUM, TOTAL	UG/L	Metal
7782492	01167	20	50	300		SELENIUM, ACID SOLUBLE, WATER, WHOLE	UG/L	Metal
18540299	01220	16	100	1100		CHROMIUM, HEXAVALENT, DISSOLVED	UG/L	Metal
7440360	01268	88[p]	6.0	1500[p]		ANTIMONY (SB), WATER, TOTAL RECOVERABLE	UG/L	Metal
57125	01291	22	200	1.0		CYANIDE, FILTERABLE, TOTAL IN WATER	UG/L	General Inorganic
7440666	01303	0.120*	5.0[g]	0.095		ZINC, POTENTIALLY DISSOLVED WATER	MG/L	Metal
7440224	01304	0.0041*	0.1[g]	0.00012		SILVER, POTENTIALLY DISSOLVED WATER	MG/L	Metal
7440508	01306	0.018*	1.3[a]	0.0029		COPPER, POTENTIALLY DISSOLVED WATER	MG/L	Metal
18540299	01307	0.016	0.1	1.1		CHROMIUM, HEXAVALENT, POTENTIALLY DISSOLVED	MG/L	Metal
7440382	01309	0.36	0.05	0.069		ARSENIC, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440393	01311		2.0			BARIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440417	01312	0.13*	0.004			BERYLLIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440439	01313	0.0039*	0.005	0.043		CADMIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
16065831	01314	1.7*	0.1	10.3*		CHROMIUM, TRIVALENT, POTENTIALLY DISSOLVED	MG/L	Metal
7439921	01318	0.082*	0.015[a]	0.220		LEAD, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7439976	01321	0.0024	0.002	0.0021		MERCURY, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440020	01322	1.4*	0.1	0.075		NICKEL, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7782492	01323	0.020	0.050	0.300		SELENIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440280	01324	1.4*	0.002	2.13*		THALLIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440611	01326		0.020[c]			URANIUM, POTENTIALLY DISSOLVED, WATER	MG/L	Metal
7440224	01523	4.1*	100[g]	0.12		SILVER, IONIC	UG/L	Metal
50328	03648		0.2			BENZO (A) PYRENE, LIQUID FRACTION, ELUTRIATE	UG/L	General Organic
122349	04035		4.0			SIMAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
10028178	04124		20[r]			TRITIUM, TOTAL, WATER	PC/ML	Radiological
10028178	07000		20000[r]			TRITIUM, TOTAL	PC/L	Radiological
10028178	07005		20000[r]			TRITIUM, DISSOLVED	PC/L	Radiological
10028178	07010		20000[r]			TRITIUM, SUSPENDED	PC/L	Radiological
	11500		5.0			RADIUM 226 + RADIUM 228, DISSOLVED	PC/L	Radiological
	11503		5.0			RADIUM 226 + RADIUM 228, TOTAL	PC/L	Radiological
10098972	13501		8.0[r]			STRONTIUM 90, TOTAL	PC/L	Radiological
10098972	13503		8.0[r]			STRONTIUM 90, DISSOLVED	PC/L	Radiological
10098972	13505		8.0[r]			STRONTIUM 90, SUSPENDED	PC/L	Radiological
7782492	22675	20	50	300		SELENIUM, DISSOLVED ORGANIC	UG/L	Metal
7782492	22676	20	50	300		SELENIUM, HEXAVALENT, DISSOLVED	UG/L	Metal
7782492	22677	20	50	300		SELENIUM, TETRAVALENT, DISSOLVED	UG/L	Metal
7440382	22678	360	50	69		ARSENIC, DISSOLVED ORGANIC	UG/L	Metal
7440382	22679	850*	50	2319*		ARSENIC, PENTAVALENT,DISSOLVED	UG/L	Metal
7440382	22680	360	50	69		ARSENIC, TRIVALENT, DISSOLVED	UG/L	Metal
7440611	22703		20[c]			URANIUM, NATURAL DISSOLVED	UG/L	Metal
7440611	22705		20[c]			URANIUM, NATURAL SUSPENDED	UG/L	Metal
7440611	22706		20[c]			URANIUM, TOTAL AS U308	UG/L	Metal
7440611	22708		0.020[c]			URANIUM, NATURAL, TOTAL	MG/L	Radiological
7440611	28011		20[c]			URANIUM, NATURAL, TOTAL	UG/L	Radiological
88857	30191		7.0			DINOSEB, WATER, WHOLE RECOVERABLE	UG/L	Pesticide
75990	30200		200			DALAPON, WATER, WHOLE RECOVERABLE	UG/L	Pesticide
106934	30203		0.05			ETHANE, 1,2-DIBROMO-, WATER, WHOLE, RECOVERABLE	UG/L	Pesticide
	31501		1.0[n]		1000[b]	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	CFU/100ML	Bacteriological
	31503		1.0[n]		1000[b]	COLIFORM, TOTAL, MEMBRANE FILTER, DELAY. M-ENDO	CFU/100ML	Bacteriological
	31504		1.0[n]		1000[b]	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED. LES-ENDO	CFU/100ML	Bacteriological

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
	31505		1.0[n]		1000[b]	COLIFORM, TOTAL, MPN, CONF. TEST 35C (TUBE 31506)	MPN/100ML	Bacteriological
	31506		1.0[n]		1000[b]	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE CONFIG	MPN/100ML	Bacteriological
	31507		1.0[n]		1000[b]	COLIFORM, TOTAL, MPN, COMP. TEST 35C (TUBE 31508)	MPN/100ML	Bacteriological
	31508		1.0[n]		1000[b]	COLIFORM, TOTAL, MPN, COMP. TEST, TUBE CONFIG	MPN/100ML	Bacteriological
	31613				200[^]	FECAL COLIFORM, MEMBRANE FILTER, AGAR	CFU/100ML	Bacteriological
	31614				200[^]	FECAL COLIFORM, MPN, TUBE CONFIGURATION	MPN/100ML	Bacteriological
	31615				200[^]	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	MPN/100ML	Bacteriological
	31616				200[^]	FECAL COLIFORM, MEMBRANE FILTER, BROTH, 44.5C	CFU/100ML	Bacteriological
	31617				200[^]	FECAL COLIFORM, MPN, EIJKMAN, 44.5C (TUBE 31618)	MPN/100ML	Bacteriological
	31625				200[^]	FECAL COLIFORM, MF, M-FC, 0.7 UM	CFU/100ML	Bacteriological
	31648				126[^]	E. COLI	CFU/100ML	Bacteriological
	31649				33[^]	ENTEROCOCCI	CFU/100ML	Bacteriological
67663	32003	28900[*]	100[t]			CARBON CHLOROFORM AND CARBON ALCOHOL EXTRS.,TOTAL	UG/L	General Organic
67663	32005	28900[*]	100[t]			CARBON CHLOROFORM EXTRACTABLES	UG/L	General Organic
67663	32021	28900[*]	100[t]			CARBON CHLOROFORM EXTRACTS, ETHER INSOLUBLES OF	UG/L	General Organic
67663	32022	28900[*]	100[t]			CARBON CHLOROFORM EXTRACTS, WATER SOLUBLES OF	UG/L	General Organic
75274	32101		100[t]			BROMODICHLOROMETHANE, WHOLE WATER	UG/L	General Organic
56235	32102	35200[*]	5.0	50000[*]		CARBON TETRACHLORIDE, WHOLE WATER	UG/L	General Organic
107062	32103	118000[*]	5.0	113000[*]		1,2-DICHLOROETHANE,WHOLE WATER	UG/L	General Organic
75252	32104		100[t]			BROMOFORM, WHOLE WATER	UG/L	General Organic
124481	32105		100[t]			DIBROMOCHLOROMETHANE, WHOLE WATER	UG/L	General Organic
67663	32106	28900[*]	100[t]			CHLOROFORM, WHOLE WATER	UG/L	General Organic
56235	32260	35.2[*]	0.005	50[*]		CARBON TETRACHLORIDE EXTRACTABLES	MG/L	General Organic
67663	32270	28.9[*]	0.1[t]			CHLOROFORM EXTRACTABLES TOTAL	MG/L	General Organic
108883	34010	17500[*]	1000	6300[*]		TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.	UG/L	General Organic
1330207	34020		10000			XYLENES IN WTR SMPLE GC-MS, HEXADECONE EXTR.	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
83329	34205	1700*		970*		ACENAPHTHENE	UG/L	General Organic
83329	34206	1700*		970*		ACENAPHTHENE	UG/L	General Organic
83329	34207	1700*		970*		ACENAPHTHENE	UG/L	General Organic
107028	34210	68*		55*		ACROLEIN	UG/L	Pesticide
107028	34211	68*		55*		ACROLEIN	UG/L	Pesticide
107028	34212	68*		55*		ACROLEIN	UG/L	Pesticide
107131	34215	7550*				ACRYLONITRILE	UG/L	General Organic
107131	34216	7550*				ACRYLONITRILE	UG/L	General Organic
107131	34217	7550*				ACRYLONITRILE	UG/L	General Organic
71432	34235	5300*	5.0	5100*		BENZENE	UG/L	General Organic
71432	34236	5300*	5.0	5100*		BENZENE	UG/L	General Organic
92875	34239	2500*				BENZIDINE	UG/L	General Organic
92875	34240	2500*				BENZIDINE	UG/L	General Organic
58899	34265	2.0	0.2	0.16		R-BHC (LINDANE) GAMMA	UG/L	Pesticide
58899	34266	2.0	0.2	0.16		R-BHC (LINDANE) GAMMA	UG/L	Pesticide
75252	34288		100t			BROMOFORM, DISSOLVED	UG/L	General Organic
75252	34289		100t			BROMOFORM, SUSPENDED	UG/L	General Organic
56235	34297	35200*	5.0	50000*		CARBON TETRACHLORIDE	UG/L	General Organic
56235	34298	35200*	5.0	50000*		CARBON TETRACHLORIDE	UG/L	General Organic
108907	34301		100			CHLOROBENZENE	UG/L	General Organic
108907	34302		100			CHLOROBENZENE	UG/L	General Organic
108907	34303		100			CHLOROBENZENE	UG/L	General Organic
124481	34306		100t			CHLORODIBROMOMETHANE, TOTAL	UG/L	General Organic
124481	34307		100t			CHLORODIBROMOMETHANE, DISSOLVED	UG/L	General Organic
124481	34308		100t			CHLORODIBROMOMETHANE, SUSPENDED	UG/L	General Organic
67663	34316	28900*	100t			CHLOROFORM	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
67663	34317	28900*	100[t]			CHLOROFORM	UG/L	General Organic
57125	34325	0.022	0.2	0.001		CYANIDE	MG/L	General Inorganic
75274	34328		100[t]			DICHLOROBROMOMETHANE, DISSOLVED	UG/L	General Organic
75274	34329		100[t]			DICHLOROBROMOMETHANE, SUSPENDED	UG/L	General Organic
122667	34346	270*				1,2-DIPHENYLHYDRAZINE	UG/L	General Organic
122667	34347	270*				1,2-DIPHENYLHYDRAZINE	UG/L	General Organic
122667	34348	270*				1,2-DIPHENYLHYDRAZINE	UG/L	General Organic
33213659	34356	0.22		0.034		ENDOSULFAN, BETA	UG/L	Pesticide
33213659	34357	0.22		0.034		ENDOSULFAN, BETA	UG/L	Pesticide
33213659	34358	0.22		0.034		ENDOSULFAN, BETA	UG/L	Pesticide
959988	34361	0.22		0.034		ENDOSULFAN, ALPHA	UG/L	Pesticide
959988	34362	0.22		0.034		ENDOSULFAN, ALPHA	UG/L	Pesticide
959988	34363	0.22		0.034		ENDOSULFAN, ALPHA	UG/L	Pesticide
100414	34371	32000*	700	430*		ETHYLBENZENE	UG/L	General Organic
100414	34372	32000*	700	430*		ETHYLBENZENE	UG/L	General Organic
100414	34373	32000*	700	430*		ETHYLBENZENE	UG/L	General Organic
206440	34376	3980*		40*		FLUORANTHENE	UG/L	General Organic
206440	34377	3980*		40*		FLUORANTHENE	UG/L	General Organic
206440	34378	3980*		40*		FLUORANTHENE	UG/L	General Organic
77474	34386	7.0*	50	7.0*		HEXACHLOROCYCLOPENTADIENE, TOTAL	UG/L	General Organic
77474	34387	7.0*	50	7.0*		HEXACHLOROCYCLOPENTADIENE, DISSOLVED	UG/L	General Organic
77474	34388	7.0*	50	7.0*		HEXACHLOROCYCLOPENTADIENE, SUSPENDED	UG/L	General Organic
87683	34391	90*		32*		HEXACHLOROBUTADIENE	UG/L	General Organic
87683	34392	90*		32*		HEXACHLOROBUTADIENE	UG/L	General Organic
87683	34393	90*		32*		HEXACHLOROBUTADIENE	UG/L	General Organic
67721	34396	980*		940*		HEXACHLOROETHANE	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
67721	34397	980*		940*		HEXACHLOROETHANE	UG/L	General Organic
67721	34398	980*		940*		HEXACHLOROETHANE	UG/L	General Organic
118741	34401	6.0P	1.0			HEXACHLOROBENZENE, DISSOLVED	UG/L	General Organic
118741	34402	6.0P	1.0			HEXACHLOROBENZENE, SUSPENDED	UG/L	General Organic
193395	34403		0.40C			IDENO (1,2,3-CD) PYRENE	UG/L	General Organic
193395	34404		0.40C			IDENO (1,2,3-CD) PYRENE	UG/L	General Organic
193395	34405		0.40C			IDENO (1,2,3-CD) PYRENE	UG/L	General Organic
78591	34408	117000*		12900*		ISOPHORONE	UG/L	Pesticide
78591	34409	117000*		12900*		ISOPHORONE	UG/L	Pesticide
78591	34410	117000*		12900*		ISOPHORONE	UG/L	Pesticide
75092	34423		5.0			METHYLENE CHLORIDE, TOTAL	UG/L	General Organic
75092	34424		5.0			METHYLENE CHLORIDE, DISSOLVED	UG/L	General Organic
75092	34425		5.0			METHYLENE CHLORIDE, SUSPENDED	UG/L	General Organic
91203	34443	2300*		2350*		NAPHTHALENE	UG/L	General Organic
91203	34444	2300*		2350*		NAPHTHALENE	UG/L	General Organic
98953	34447	27000*		6680*		NITROBENZENE	UG/L	General Organic
98953	34448	27000*		6680*		NITROBENZENE	UG/L	General Organic
98953	34449	27000*		6680*		NITROBENZENE	UG/L	General Organic
59507	34452	30*				PARACHLOROMETA CRESOL	UG/L	General Organic
59507	34453	30*				PARACHLOROMETA CRESOL	UG/L	General Organic
59507	34454	30*				PARACHLOROMETA CRESOL	UG/L	General Organic
87865	34459	20***	1.0	13		PCP (PENTACHLOROPHENOL)	UG/L	Pesticide
87865	34460	20***	1.0	13		PCP (PENTACHLOROPHENOL)	UG/L	Pesticide
85018	34461	30P		7.7P		PHENANTHRENE, TOTAL	UG/L	General Organic
85018	34462	30P		7.7P		PHENANTHRENE, DISSOLVED	UG/L	General Organic
85018	34463	30P		7.7P		PHENANTHRENE, SUSPENDED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
108952	34466	10200*		5800*		PHENOL, DISSOLVED	UG/L	General Organic
108952	34467	10200*		5800*		PHENOL, SUSPENDED	UG/L	General Organic
127184	34475	5280*	5.0	10200*		TETRACHLOROETHYLENE, TOTAL	UG/L	General Organic
127184	34476	5280*	5.0	10200*		TETRACHLOROETHYLENE, DISSOLVED	UG/L	General Organic
127184	34477	5280*	5.0	10200*		TETRACHLOROETHYLENE, SUSPENDED	UG/L	General Organic
108883	34481	17500*	1000	6300*		TOLUENE, DISSOLVED	UG/L	General Organic
108883	34482	17500*	1000	6300*		TOLUENE, SUSPENDED	UG/L	General Organic
79016	34485	45000*	5.0	2000*		TRICHLOROETHYLENE, DISSOLVED	UG/L	General Organic
79016	34486	45000*	5.0	2000*		TRICHLOROETHYLENE, SUSPENDED	UG/L	General Organic
75014	34493		2.0			VINYL CHLORIDE, DISSOLVED	UG/L	General Organic
75014	34494		2.0			VINYL CHLORIDE, SUSPENDED	UG/L	General Organic
75354	34501		7.0			1,1-DICHLOROETHYLENE, TOTAL	UG/L	General Organic
75354	34502		7.0			1,1-DICHLOROETHYLENE, DISSOLVED	UG/L	General Organic
75354	34503		7.0			1,1-DICHLOROETHYLENE, SUSPENDED	UG/L	General Organic
71556	34506		200	31200*		1,1,1-TRICHLOROETHANE, TOTAL	UG/L	General Organic
71556	34507		200	31200*		1,1,1-TRICHLOROETHANE, DISSOLVED	UG/L	General Organic
71556	34508		200	31200*		1,1,1-TRICHLOROETHANE, SUSPENDED	UG/L	General Organic
79005	34511		5.0			1,1,2-TRICHLOROETHANE, TOTAL	UG/L	General Organic
79005	34512		5.0			1,1,2-TRICHLOROETHANE, DISSOLVED	UG/L	General Organic
79005	34513		5.0			1,1,2-TRICHLOROETHANE, SUSPENDED	UG/L	General Organic
79345	34516			9020*		1,1,2,2-TETRACHLOROETHANE, TOTAL	UG/L	General Organic
79345	34517			9020*		1,1,2,2-TETRACHLOROETHANE, DISSOLVED	UG/L	General Organic
79345	34518			9020*		1,1,2,2-TETRACHLOROETHANE, SUSPENDED	UG/L	General Organic
107062	34531	118000*	5.0	113000*		1,2-DICHLOROETHANE, TOTAL	UG/L	General Organic
107062	34532	118000*	5.0	113000*		1,2-DICHLOROETHANE, DISSOLVED	UG/L	General Organic
107062	34533	118000*	5.0	113000*		1,2-DICHLOROETHANE, SUSPENDED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
95501	34536		600			1,2-DICHLOROBENZENE, TOTAL	UG/L	General Organic
95501	34537		600			1,2-DICHLOROBENZENE, DISSOLVED	UG/L	General Organic
95501	34538		600			1,2-DICHLOROBENZENE, SUSPENDED	UG/L	General Organic
78875	34541		5.0			1,2-DICHLOROPROPANE, TOTAL	UG/L	General Organic
78875	34542		5.0			1,2-DICHLOROPROPANE, DISSOLVED	UG/L	General Organic
78875	34543		5.0			1,2-DICHLOROPROPANE, SUSPENDED	UG/L	General Organic
156605	34546		100			TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER	UG/L	General Organic
156605	34547		100			TRANS-1,2-DICHLOROETHENE, DISSOLVED	UG/L	General Organic
156605	34548		100			TRANS-1,2-DICHLOROETHENE, SUSPENDED	UG/L	General Organic
120821	34551		70			1,2,4-TRICHLOROBENZENE, TOTAL	UG/L	General Organic
120821	34552		70			1,2,4-TRICHLOROBENZENE, DISSOLVED	UG/L	General Organic
120821	34553		70			1,2,4-TRICHLOROBENZENE, SUSPENDED	UG/L	General Organic
541731	34566		600			1,3-DICHLOROBENZENE, TOTAL	UG/L	General Organic
541731	34567		600			1,3-DICHLOROBENZENE, DISSOLVED	UG/L	General Organic
541731	34568		600			1,3-DICHLOROBENZENE, SUSPENDED	UG/L	General Organic
106467	34571		75			1,4-DICHLOROBENZENE, TOTAL	UG/L	General Organic
106467	34572		75			1,4-DICHLOROBENZENE, DISSOLVED	UG/L	General Organic
106467	34573		75			1,4-DICHLOROBENZENE, SUSPENDED	UG/L	General Organic
95578	34586	4380*				2-CHLOROPHENOL, TOTAL	UG/L	General Organic
95578	34587	4380*				2-CHLOROPHENOL, DISSOLVED	UG/L	General Organic
95578	34588	4380*				2-CHLOROPHENOL, SUSPENDED	UG/L	General Organic
120832	34601	2020*				2,4-DICHLOROPHENOL, TOTAL	UG/L	General Organic
120832	34602	2020*				2,4-DICHLOROPHENOL, DISSOLVED	UG/L	General Organic
120832	34603	2020*				2,4-DICHLOROPHENOL, SUSPENDED	UG/L	General Organic
105679	34606	2120*				2,4-DIMETHYLPHENOL, TOTAL	UG/L	General Organic
105679	34607	2120*				2,4-DIMETHYLPHENOL, DISSOLVED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
105679	34608	2120*				2,4-DIMETHYLPHENOL, SUSPENDED	UG/L	General Organic
121142	34611	330*		590*		2,4-DINITROTOLUENE, TOTAL	UG/L	General Organic
121142	34612	330*		590*		2,4-DINITROTOLUENE, DISSOLVED	UG/L	General Organic
121142	34613	330*		590*		2,4-DINITROTOLUENE, SUSPENDED	UG/L	General Organic
72548	34651	0.6*		3.6*		P,P'-DDD, DISSOLVED	UG/L	Pesticide
72548	34652	0.6*		3.6*		P,P'-DDD, SUSPENDED	UG/L	Pesticide
72559	34653	1050*		14*		P,P'-DDE, DISSOLVED	UG/L	Pesticide
72559	34654	1050*		14*		P,P'-DDE, SUSPENDED	UG/L	Pesticide
50293	34655	1.1		0.13		P,P'-DDT, DISSOLVED	UG/L	Pesticide
50293	34656	1.1		0.13		P,P'-DDT, SUSPENDED	UG/L	Pesticide
1746016	34675	0.01*	0.00003			2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD)	UG/L	General Organic
1746016	34676	0.01*	0.00003			2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD)	UG/L	General Organic
1746016	34677	0.01*	0.00003			2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD)	UG/L	General Organic
108952	34694	10200*		5800*		PHENOL (C6H5OH) - SINGLE COMPOUND	UG/L	General Organic
91203	34696	2300*		2350*		NAPHTHALENE	UG/L	General Organic
75990	38432		200			DALAPON, WATER, TOTAL	UG/L	Pesticide
75990	38433		200			DALAPON, WATER, DISSOLVED	UG/L	Pesticide
75990	38434		200			DALAPON, WATER, SUSPENDED	UG/L	Pesticide
96128	38437		0.2			DIBROMOCHLOROPROPANE, WATER	UG/L	Pesticide
96128	38438		0.2			DIBROMOCHLOROPROPANE, WATER	UG/L	Pesticide
96128	38439		0.2			DIBROMOCHLOROPROPANE WATER	UG/L	Pesticide
96128	38760		0.2			DBCP, WATER	UG/L	Pesticide
96128	38761		0.2			DBCP, WATER	UG/L	Pesticide
96128	38762		0.2			DBCP, WATER	UG/L	Pesticide
88857	38779		7.0			DINOSEB, DISSOLVED	UG/L	Pesticide
88857	38780		7.0			DINOSEB, SUSPENDED	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
23135220	38865		200			OXAMYL, TOTAL	UG/L	Pesticide
23135220	38866		200			OXAMYL, DISSOLVED	UG/L	Pesticide
23135220	38867		200			OXAMYL, SUSPENDED	UG/L	Pesticide
145733	38926		100			ENDOTHALL, WHOLE WATER SAMPLE	UG/L	Pesticide
2921882	38932	0.083		0.011		CHLORPYRIFOS, TOTAL RECOVERABLE	UG/L	Pesticide
2921882	38933	0.083		0.011		CHLORPYRIFOS, DISSOLVED	UG/L	Pesticide
2163806	38935		50			MONOSODIUM METHANEARSONATE (MSMA)	UG/L	Pesticide
2921882	39012	0.083		0.011		DURSBAN, FLAME PHOTOMETRIC, WATER SAMPLE	UG/L	Pesticide
56382	39015	0.065				ETHYLPARATHION, FLAME IONIFATION, WATER SAMPLE	UG/L	Pesticide
122349	39025		4.0			SIMAZINE, COULSON CONDUCTIVITY WATER SAMPLE	UG/L	Pesticide
87865	39032	20***	1.0	13		PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE	UG/L	Pesticide
1912249	39033		3.0			ATRAZINE IN WHOLE WATER SAMPLE	UG/L	Pesticide
118741	39039	6.0[P]	1.0			HEXACHLOROBENZENE WATER SAMPLE, ELECTRON CPT	UG/L	Pesticide
93721	39045		50			2,4,5-TP INCLUDES ACIDS & SALTS WATER SAMPLE	UG/L	Pesticide
116063	39053		3.0			ALDICARB IN WHOLE WATER	UG/L	Pesticide
122349	39055		4.0			SIMAZINE IN WHOLE WATER	UG/L	Pesticide
117817	39100	2000*	6.0			BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	UG/L	General Organic
117817	39103	2000*	6.0			BIS(2-ETHYLHEXYL) PHTHALATE, DISSOLVED	UG/L	General Organic
117817	39104	2000*	6.0			BIS(2-ETHYLHEXYL) PHTHALATE, SUSPENDED	UG/L	General Organic
	39117	0.94*		2.994*		PHTHLATE ESTERS IN WATER	MG/L	General Organic
75014	39175		2.0			VINYL CHLORIDE-WHOLE WATER SAMPLE	UG/L	General Organic
79016	39180	45000*	5.0	2000*		TRICHLOROETHYLENE-WHOLE WATER SAMPLE	UG/L	General Organic
50293	39300	1.1		0.13		P,P' DDT IN WHOLE WATER SAMPLE	UG/L	Pesticide
72548	39310	0.6*		3.6*		P,P' DDD IN WHOLE WATER SAMPLE	UG/L	Pesticide
72559	39320	1050*		14*		P,P' DDE IN WHOLE WATER SAMPLE	UG/L	Pesticide
309002	39330	3.0		1.3		ALDRIN IN WHOLE WATER SAMPLE	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
309002	39331	3.0		1.3		ALDRIN IN FILT. FRAC. OF WAT. SAMP.	UG/L	Pesticide
309002	39332	3.0		1.3		ALDRIN IN SUSP. FRAC. OF WAT. SAMP.	UG/L	Pesticide
58899	39340	2.0	0.2	0.16		GAMMA-BHC(LINDANE), WHOLE WATER	UG/L	Pesticide
58899	39341	2.0	0.2	0.16		GAMMA-BHC(LINDANE), DISSOLVED	UG/L	Pesticide
58899	39342	2.0	0.2	0.16		GAMMA-BHC(LINDANE), SUSPENDED	UG/L	Pesticide
57749	39350	2.4	2.0	0.09		CHLORDANE(TECH MIX & METABS), WHOLE WATER	UG/L	Pesticide
57749	39352	2.4	2.0	0.09		CHLORDANE(TECH MIX & METABS), DISSOLVED	UG/L	Pesticide
57749	39353	2.4	2.0	0.09		CHLORDANE(TECH MIX & METABS), SUSPENDED	UG/L	Pesticide
72548	39360	0.6*		3.6*		DDD IN WHOLE WATER SAMPLE	UG/L	Pesticide
72548	39361	0.6*		3.6*		DDD IN FILT. FRAC. OF WATER SMAPLE	UG/L	Pesticide
72548	39362	0.6*		3.6*		DDD IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
72559	39365	1050*		14*		DDE IN WHOLE WATER SAMPLE	UG/L	Pesticide
72559	39366	1050*		14*		DDE IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
72559	39367	1050*		14*		DDE IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
50293	39370	1.1		0.13		DDT IN WHOLE WATER SAMPLE	UG/L	Pesticide
50293	39371	1.1		0.13		DDT IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
50293	39372	1.1		0.13		DDT IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
60571	39380	2.5		0.71		DIELDRIN IN WHOLE WATER SAMPLE	UG/L	Pesticide
60571	39381	2.5		0.71		DIELDRIN IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
60571	39382	2.5		0.71		DIELDRIN IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
115297	39388	0.22		0.034		ENDOSULFAN IN WHOLE WATER SAMPLE	UG/L	Pesticide
72208	39390	0.18	2.0	0.037		ENDRIN IN WHOLE WATER SAMPLE	UG/L	Pesticide
72208	39391	0.18	2.0	0.037		ENDRIN IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
72208	39392	0.18	2.0	0.037		ENDRIN IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
8001352	39400	0.73	3.0	0.21		TOXAPHENE IN WHOLE WATER SAMPLE	UG/L	Pesticide
8001352	39401	0.73	3.0	0.21		TOXAPHENE IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
8001352	39402	0.73	3.0	0.21		TOXAPHENE IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
76448	39410	0.52	0.4	0.053		HEPTACHLOR IN WHOLE WATER SAMPLE	UG/L	Pesticide
76448	39411	0.52	0.4	0.053		HEPTACHLOR IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
76448	39412	0.52	0.4	0.053		HEPTACHLOR IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
1024573	39420	0.52	0.2	0.053		HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	UG/L	Pesticide
1024573	39421	0.52	0.2	0.053		HEPTACHLOR EPOXIDE IN FILT. FRAC. WATER SAMPLE	UG/L	Pesticide
1024573	39422	0.52	0.2	0.053		HEPTACHLOR EPOXIDE IN SUSP. FRAC. WATER SAMPLE	UG/L	Pesticide
72435	39478		40			METHOXYCHLOR IN WHOLE WATER DISSOLVED	UG/L	Pesticide
72435	39479		40			METHOXYCHLOR IN WHOLE WATER SUSPENDED	UG/L	Pesticide
72435	39480		40			METHOXYCHLOR IN WHOLE WATER SAMPLE	UG/L	Pesticide
56382	39540	0.065				PARATHION IN WHOLE WATER SAMPLE	UG/L	Pesticide
56382	39542	0.065				PARATHION IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
56382	39543	0.065				PARATHION IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
1912249	39630		3.0			ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	UG/L	Pesticide
1912249	39632		3.0			ATRAZINE DISSOLVED IN WATER	PPB	Pesticide
118741	39700	6.0[P]	1.0			HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	UG/L	General Organic
87683	39702	90*		32*		HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE	UG/L	General Organic
1918021	39720		500			PICLORAM IN WHOLE WATER SAMPLE	UG/L	Pesticide
94757	39730		70			2,4-D IN WHOLE WATER SAMPLE	UG/L	Pesticide
94757	39732		70			2,4-D IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
94757	39733		70			2,4-D IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
93721	39760		50			SILVEX IN WHOLE WATER SAMPLE	UG/L	Pesticide
93721	39762		50			SILVEX IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
93721	39763		50			SILVEX IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
58899	39782	2.0	0.2	0.16		LINDANE IN WHOLE WATER SAMPLE	UG/L	Pesticide
1071836	39941		700			ROUNDUP IN WHOLE WATER SAMPLE (GLYPHOSATE)	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7782505	45650	0.019		0.013		CHLORINE, IN ORGANIC COMPOUNDS, WATER, WHOLE	MG/L	General Inorganic
56382	46315	0.065				ETHYL PARATHION IN WHOLE WATER SAMPLE	UG/L	Pesticide
58899	46322	2.0	0.2	0.16		LINDANE PLUS ISOMERS IN WHOLE WATER SAMPLE	UG/L	Pesticide
76448	46326	0.52	0.4	0.053		HEPTACHLOR AND METABOLITES IN WHOLE H2O SAMPLE	UG/L	Pesticide
15972608	46342		2.0			ALACHLOR (LASSO), WATER, DISSOLVED	UG/L	Pesticide
7782505	46472	0.019		0.013		CHLORINE, TOTAL RESIDUAL, AVERAGE VALUE, WATER	MG/L	General Inorganic
7782505	46473	0.019		0.013		CHLORINE, FREE AVAILABLE, AVERAGE VALUE, WATER	MG/L	General Inorganic
57125	46479	22	200	1.0		CYANIDE, DISSOLVED, WATER	UG/L	General Inorganic
7440382	46551	360	50	69		ARSENIC, FIELD ACIDIFIED W/HNO3, LAB FILTERED	UG/L	Metal
7440393	46558		2000			BARIUM, FIELD ACIDIFIED W/HNO3-LAB FILT	UG/L	Metal
7440439	46559	3.9[+]	5.0	43		CADMIUM,FIELD ACIDIFIED-HNO3-LAB FILTER	UG/L	Metal
7440473	46560		100			CHROMIUM, FIELD ACIDIFIED-HNO3-LAB FILT.	UG/L	Metal
7440508	46562	18[+]	1300[a]	2.9		COPPER, FIELD ACIDIFIED-HNO3- LAB FILTER.	UG/L	Metal
7439921	46564	82[+]	15[a]	220		LEAD, FIELD ACIDIFIED-HNO3-LAB FILTERED	UG/L	Metal
7440224	46566	4.1[+]	100[a]	0.12		SILVER, FIELD ACIDIFIED-HNO3-LAB FILTER.	UG/L	Metal
7440666	46567	120[+]	5000[a]	95		ZINC, EXTRACTABLE, FIELD ACID W/HNO3,LAB FILTR	UG/L	Metal
56382	49011	0.065				UNKNOWNS AS PARATHION IN WHOLE WATER SAMPLE	UG/L	Pesticide
7782505	50058	0.019		0.013		CHLORINE DOSE	MG/L	General Inorganic
7782505	50060	0.019		0.013		CHLORINE, TOTAL RESIDUAL	MG/L	General Inorganic
7782505	50064	0.019		0.013		CHLORINE, FREE AVAILABLE	MG/L	General Inorganic
7782505	50066	0.019		0.013		CHLORINE, COMBINED AVAILABLE	MG/L	General Inorganic
7782505	50074	0.019		0.013		CHLORITE, WHOLE WATER	MG/L	General Inorganic
16887006	70352	860	250[a]			CHLORIDE, ORGANIC	MG/L	General Organic
14797558	71850		44			NITRATE NITROGEN, TOTAL (AS NO3)	MG/L	Nitrogen
14797558	71851		44			NITRATE NITROGEN, DISSOLVED (AS NO3)	MG/L	Nitrogen
14797650	71855		3.3			NITRITE NITROGEN, TOTAL (AS NO2)	MG/L	Nitrogen

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
14797650	71856		3.3			NITRITE NITROGEN, DISSOLVED (AS NO2)	MG/L	Nitrogen
7439976	71890	2.4	2.0	2.1		MERCURY, DISSOLVED	UG/L	Metal
7439976	71895	2.4	2.0	2.1		MERCURY, SUSPENDED	UG/L	Metal
7439976	71900	2.4	2.0	2.1		MERCURY, TOTAL	UG/L	Metal
7439976	71901	2.4	2.0	2.1		MERCURY,TOTAL RECOVERABLE IN WATER AS HG	UG/L	Metal
7440439	71946	3.9[+]	5.0	43		CADMIUM, EXTRACTABLE	UG/L	Metal
7440473	71947		100			CHROMIUM, EXTRACTABLE	UG/L	Metal
7439921	71949	82[+]	15[a]	220		LEAD, EXTRACTABLE	UG/L	Metal
7440666	71950	120[+]	5000[a]	95		ZINC, EXTRACTABLE	UG/L	Metal
7440508	71951	18[+]	1300[a]	2.9		COPPER, EXTRACTABLE	UG/L	Metal
1336363	76011	2000	500	10000		PCBS, SUSPENDED, WATER	NG/L	General Organic
1336363	76012	2000	500	10000		PCBS, TOTAL RECOVERABLE, WATER	NG/L	General Organic
156592	77093		70			CIS-1,2-DICHLOROETHYLENE, WHOLE WATER	UG/L	General Organic
100425	77128		100			STYRENE, WHOLE WATER	UG/L	General Organic
106489	77296			29700[*]		P-CHLOROPHENOL, WHOLE WATER	UG/L	General Organic
106934	77651		0.05			1,2-DIBROMOETHANE, WHOLE WATER	UG/L	General Organic
95954	77687	100[p]		240[p]		2,4,5-TRICHLOROPHENOL, WHOLE WATER	UG/L	General Organic
935955	77769			440[*]		2,3,5,6-TETRACHLOROPHENOL, WHOLE WATER	UG/L	General Organic
103231	77903		400			BIS (2-ETHYLHEXYL) ADIPATE, WHOLE WATER	UG/L	General Organic
18540299	78247	16	100	1100		CHROMIUM, HEXAVALENT, TOTAL RECOVERABLE	UG/L	Metal
57125	78248	22	200	1.0		CYANIDE, TOTAL RECOVERABLE, WATER, WHOLE	UG/L	Metal
	78456	11[*]		12[*]		HALOMETHANES, SUMMATION, WHOLE WATER	MG/L	General Organic
14808798	78462		250[a]			SULFATE, WATER, DISSOLVED AS S	MG/L	Metal
85007	78885		20			DIQUAT DIBROMIDE (REGLONE) WHOLE WATER SAMPLE	UG/L	Pesticide
7440611	80020		20[c]			URANIUM, DISS. BY EXTRACTION FLUOROMETRIC	UG/L	Radiological
16065831	80357	1700	100	10300[*]		CHROMIUM, TRIVALENT, DISSOLVED	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
57125	81208	0.022	0.2	0.001		CYANIDE,FREE (NOT AMENABLE TO CHLORINATION)	MG/L	General Inorganic
608731	81283	100*		0.34*		BENZENEHEXACHLORIDE, WHOLE WATER	UG/L	Pesticide
88857	81287		7.0			DNBP(C10H12N2O5), WHOLE WATER SAMPLE	UG/L	Pesticide
26638197	81327	23000*	5.0	10300*		DICHLOROPROPANE, WHOLE WATER SAMPLE	UG/L	General Organic
25321226	81333	1120*		1970*		DICHLOROBENZENE ISOMER, WHOLE WATER SAMPLE	UG/L	General Organic
2921882	81403	0.083		0.011		DURSBAN (CHLOROPYRIFOS) WHOLE WATER SAMPLE	UG/L	Pesticide
1563662	81405		40			CARBOFURAN (EURADAN) WHOLE WATER SAMPLE	UG/L	Pesticide
76017	81501	7240*		390*		PENTACHLOROETHANE, WHOLE WATER SAMPLE	UG/L	General Organic
25321226	81524	1120*		1970*		DICHLOROBENZENE, WHOLE WATER SAMPLE	UG/L	General Organic
25322207	81549	9320*				TETRACHLOROETHANE, WHOLE WATER SAMPLE	UG/L	General Organic
26638197	81703	23*	0.005*	10.3*		DICHLOROPROPANE, WHOLE WATER SAMPLE	MG/L	General Organic
7440508	81750	18+	1300[a]	2.9		COPPER, INTERSTITIAL WATERFROM SEDIMENTS	UG/L	Metal
7440020	81752	1400+	100	75		NICKEL, INTERSTITIAL WATER FROM SEDIMENTS	UG/L	Metal
7440666	81754	120+	5000[a]	95		ZINC, INTERSTITIAL WATER FROM SEDIMENTS	UG/L	Metal
25323891	81853	18000*				TRICHLOROETHANE, WHOLE WATER SAMPLE	UG/L	General Organic
7439976	81931	2.4	2.0	2.1		MERCURY (HG) SUSPENDED FRACTION OF WATER	UG/G	Metal
7440666	81933	120+	5000[a]	95		ZINC (ZN) SUSPENDED FRACTION OF WATER	UG/G	Metal
7439921	81936	82+	15[a]	220		LEAD (PB) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440439	81937	3.9+	5.0	43		CADMIUM (CD) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440473	81938		100			CHROMIUM (CR) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440508	81939	18+	1300[a]	2.9		COPPER (CU) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440666	81940	120+	5000[a]	95		ZINC (ZN) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440473	81941		100			CHROMIUM (CR) DISSOLVED ANIONIC SPECIES	UG/L	Metal
7440508	81942	18+	1300[a]	2.9		COPPER (CU) DISSOLVED ANIONIC SPECIES	UG/L	Metal
7440666	81943	120+	5000[a]	95		ZINC (ZN) DISSOLVED ANIONIC SPECIES	UG/L	Metal
	82078				50[i]	TURBIDITY, FIELD	NTU	Physical

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
	82079				50[!]	TURBIDITY, LAB	NTU	Physical
88857	82226		7.0			2 SECONDARY BUTYL 4,6-DINITROPHENOL	UG/L	Pesticide
16887006	82295	860000	250000[a]			CHLORIDE DISSOLVED AS CL IN WATER	UG/L	General Inorganic
72435	82350		40			METHOXYCHLOR, DISSOLVED IN WATER	UG/L	Pesticide
72435	82351		40			METHOXYCHLOR, SUSPENDED IN WATER	UG/L	Pesticide
115297	82354	0.22		0.034		ENDOSULFAN, DISSOLVED IN WATER	UG/L	Pesticide
115297	82355	0.22		0.034		ENDOSULFAN, SUSPENDED IN WATER	UG/L	Pesticide
57125	82573	0.022	0.2	0.001		CYANIDE/CHLORINATION IN WATER	MG/L	General Inorganic
1646873	82586		4.0			ALDICARB SULFOXIDE, WATER, TOTAL RECOVERABLE	UG/L	General Organic
1646884	82587		2.0			ALDICARB SULFONE, WHOLE WATER, TOTAL RECOVERABLE	UG/L	General Organic
23135220	82613		200			OXAMYL, WHOLE WATER, TOTAL RECOVERABLE	UG/L	Pesticide
1563662	82615		40			CARBOFURAN, WHOLE WATER, TOTAL RECOVERABLE	UG/L	Pesticide
116063	82619		3.0			ALDICARB, WHOLE WATER, TOTAL RECOVERABLE	UG/L	Pesticide
33213659	82624	0.22		0.034		ENDOSULFAN, BETA, WH WATER, TOTAL RECOVERABLE	UG/L	Pesticide
96128	82625		0.2			DIBROMOCHLOROPROPANE, WATER, TOTAL RECOVERABLE	UG/L	Pesticide

Footnote Key:

*Insufficient Data to Develop Criteria. Value Presented is the L.O.E.L. - Lowest Observed Effect Level.

+Hardness Dependent Criteria (100 mg/L $CaCO_3$ Used).

***pH Dependent Criteria (7.8 pH Used).

=Rule of thumb criterion used by the NPS Air Quality Division for determining sensitivity to acid deposition.

^Freshwater bathing criterion, EPA geometric mean based on at least 5 samples equally spaced over a 30-day period; Enterococci marine water bathing criterion 35 CFU/100 ml.

#EPA freshwater aquatic life chronic criterion; marine criterion is ≤6.5, ≥8.5.

!Arizona state standard.

[a]EPA action level, 40 CFR 141.80.

[b]California and Florida state bathing water standards.

[c]A Compilation of Water Quality Goals, California Regional Water Quality Control Board Central Valley Region, Sacramento, California, September, 1991.

[n]Total coliform drinking water maximum contaminant level (1 cfu/100ml or 1 mpn/100ml) was not used in water quality criteria comparisons.

[p]Proposed Criterion.
[r]Average annual concentration assumed to produce a total body or organ dose of 4 mrem/year, 40 CFR 141.16.
[s]EPA National Secondary Drinking Water Regulation, 40 CFR 143.
[t]The maximum contaminant level for the sum of the concentrations of trihalomethanes is 100 μg/L, 40 CFR 141.12.
[u]Coldwater criterion one day minimum; warmwater criterion seven day mean minimum.

Appendix G

Inventory Data Evaluation and Analysis (IDEA)
Servicewide Inventory and Monitoring Program "Level I"
Parameter Groups

The following table provides the Servicewide Inventory and Monitoring Program's "Level I" water quality inventory parameter groups (National Park Service 1993). In order to determine the presence and/or absence of data for each of these parameter groups in the park, the parameter groups had to be defined by STORET parameter codes. This table provides the STORET codes and parameter descriptions for each parameter comprising one of the Servicewide Inventory and Monitoring Program's "Level I" water quality parameter groups. Additional parameters could have been incorporated into each group, but an effort was made to represent each group with the parameters deemed to most likely occur in STORET and parks. The Toxic Elements Parameter Group was defined as the EPA's Clean Water Act Section 304(a) Priority Toxic Pollutants (40 CFR 131.36). Parameters are listed in ascending order of STORET code within each parameter group. It is important to note that similar parameters often have non-consecutive codes. Consequently, scanning the entire list is necessary to find all the parameters of a particular type (eg. lead, copper, etc.). Refer to the Parameter Period of Record Tabulation to obtain the STORET code for any parameter measured in the park.

STORET Code	Water Temperature Parameter Group	C.A.S. Number
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	-
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	-
STORET Code	**Flow Parameter Group[1]**	**C.A.S. Number**
00056	FLOW RATE, GALLONS/DAY	-
00058	FLOW RATE, GALLONS/MIN.	-
00059	FLOW RATE, INSTANTANEOUS, GALLONS/MINUTE	-
00060	FLOW, STREAM, MEAN DAILY CFS	-
00061	FLOW, STREAM, INSTANTANEOUS CFS	-
00065	STAGE, STREAM (FEET)	-
00067	TIDE STAGE CODE	-
00072	STAGE, STREAM (METERS)	-

[1]Tide stage is included in the Flow Parameter Group for coastal parks.

STORET Code	Clarity/Turbidity Parameter Group	C.A.S. Number
00070	TURBIDITY, (JACKSON CANDLE UNITS)	-
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	-
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	-
00077	TRANSPARENCY, SECCHI DISC (INCHES)	-
00078	TRANSPARENCY, SECCHI DISC (METERS)	-
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	-
82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS NTU	-
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	-

STORET Code	Conductivity Parameter Group	C.A.S. Number
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	-
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	-
00096	SALINITY AT 25 DEGREES C (MG/ML)	-
00480	SALINITY - PARTS PER THOUSAND	-

STORET Code	Dissolved Oxygen Parameter Group	C.A.S. Number
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE (MG/L)	7782447
00300	OXYGEN, DISSOLVED (MG/L)	7782447
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION	7782447

STORET Code	pH Parameter Group	C.A.S. Number
00400	PH (STANDARD UNITS)	-
00403	PH, LAB (STANDARD UNITS)	-
00406	PH, FIELD (STANDARD UNITS)	-

STORET Code	Alkalinity Parameter Group	C.A.S. Number
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS (µEQ/L)	471341
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	471341
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	77098
00430	ALKALINITY, CARBONATE (MG/L AS CACO3)	471341
00435	ACIDITY, TOTAL (MG/L AS CACO3)	471341
00440	BICARBONATE ION (MG/L AS HCO3)	71523
00445	CARBONATE ION (MG/L AS CO3)	3812326

STORET Code	Nitrate/Nitrogen Parameter Group	C.A.S. Number
00600	NITROGEN, TOTAL (MG/L AS N)	17778880
00602	NITROGEN, DISSOLVED (MG/L AS N)	17778880
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	17778880
00607	NITROGEN, ORGANIC, DISSOLVED (MG/L AS N)	17778880
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	17778880
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	17778880
00612	AMMONIA, UNIONZED (MG/L AS N)	7664417
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	17778880
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	17778880
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	17778880
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	17778880
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	17778880
00631	NITRITE PLUS NITRATE, DISSOLVED 1 DET. (MG/L AS N)	17778880
71845	NITROGEN, AMMONIA, TOTAL (MG/L AS NH4)	14798039
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	14798039
71850	NITRATE NITROGEN, TOTAL (MG/L AS NO3)	14797558
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	14797558
71855	NITRITE NITROGEN, TOTAL (MG/L AS NO2)	14797650
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	14797650

STORET Code	Phosphate/Phosphorus Parameter Group	C.A.S. Number
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	14265442
00655	PHOSPHATE, POLY (MG/L AS PO4)	14265442
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	14265442
00665	PHOSPHORUS, TOTAL (MG/L AS P)	7723140
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	7723140
00670	PHOSPHORUS, TOTAL ORGANIC (MG/L AS P)	7723140
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	7723140
70505	PHOSPHORUS, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	7723140
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	7723140

STORET Code	Sulfates/Total Dissolved Solids/Hardness Parameter Group	C.A.S. Number
00900	HARDNESS, TOTAL (MG/L AS CACO3)	471341
00945	SULFATE, TOTAL (MG/L AS SO4)	14808798
00946	SULFATE, DISSOLVED (MG/L AS SO4)	14808798
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), (MG/L)	-

STORET Code	Chlorophyll Parameter Group	C.A.S. Number
32209	CHLOROPHYLL A (UG/L) FLUOROMETRIC CORRECTED	479618
32210	CHLOROPHYLL A (UG/L) TRICHROMATIC UNCORRECTED	479618
32211	CHLOROPHYLL A (UG/L) SPECTROPHOTOMETRIC ACID METH.	479618
32217	CHLOROPHYLL A (UG/L) FLUOROMETRIC UNCORRECTED	479618
32223	CHLOROPHYLL A (MG/M2) SPECTROPHOTOMETRIC CORRECTED	479618
32228	CHLOROPHYLL A (MG/M2) PERIPHYTON SPECTRO.	479618
32229	CHLOROPHYLL A (MG/M2) FLUOR. CORRECTED, SUBSTRATER	479618
32230	CHLOROPHYLL A (MG/L)	479618

STORET Code	Bacteria Parameter Group	C.A.S. Number
00111	RATIO OF FECAL COLIFORM TO FECAL STREPTOCOCCI	-
31501	COLIFORM, TOT, MEMBRANE FILTER, IMMED., M-ENDO MED,35C	-
31503	COLIFORM, TOT, MEMBRANE FILTER, DELAY, M-ENDO MED, 35C	-
31504	COLIFORM, TOT, MEMBRANE FILTER, IMMED., LES-ENDO AGAR, 35C	-
31505	COLIFORM, TOT, MPN, CONFIRMED TEST,35C(TUBE 31506)	-
31506	COLIFORM, TOT, MPN, CONFIRMED TEST, TUBE CONFIG.	-
31507	COLIFORM, TOT, MPN, COMPLETED TEST,35C(TUBE 31508)	-
31508	COLIFORM, TOT, MPN, COMPLETED TEST, TUBE CONFIG.	-
31613	FECAL COLIFORM, MEMBR, FILTER,M-FC AGAR,44.5C,24HR	-
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	-
31615	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	-
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5C	-
31617	FECAL COLIFORM, MPN,EIJKMAN TEST,44.5C(TUBE 31618)	-
31625	FECAL COLIFORM, MF, M-FC, 0.7 UM	-
31648	E. COLI - MTEC-MF	-
31649	ENTEROCOCCI- ME-MF	-
31673	FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	-
31676	FECAL STREPTOCOCCI, MPN, KF BROTH, TUBE CONFIG.	-
31677	FECAL STREPTOCOCCI, MPN, AD-EVA, 35C (TUBE 31678)	-
31751	PLATE COUNT, TOTAL, TPC AGAR, 35C, 24 HRS	-

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants)	C.A.S. Number
00718	CYANIDE, WEAK ACID, DISSOC. WATER, WHOLE (UG/L)	57125
00719	CYANIDE, FREE, IN WATER & WASTEWATERS, HBG (UG/L)	57125
00720	CYANIDE, TOTAL (MG/L AS CN)	57125
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) (MG/L)	57125
00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	57125
00724	CYANIDE COMPLEXED TO A RANGE OF COMPNDS (UG/L)	57125

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
00969	CHRYSOTILE ASBESTOS FIBERS/LITER	1332214
00973	AMPHIBOLE ASBESTOS FIBERS/LITER	1332214
00976	AMBIGUOUS ASBESTOS FIBERS/LITER	1332214
00977	NON-AMPHIBOLE NON-CHRYSOTILE ASBESTOS FIBERS/LITER	1332214
00978	ARSENIC, TOTAL RECOVERABLE IN WATER AS AS	7440382
00981	SELENIUM, TOTAL RECOVERABLE IN WATER AS SE (UG/L)	7782492
00982	THALLIUM, TOTAL RECOVERABLE IN WATER AS (UG/L)	7440280
00990	SELENITE, TOTAL RECOVERABLE INORGANIC (UG/L)	7782492
00991	ARSENIC, TOTAL RECOVER. TRIVALENT INORGANIC (UG/L)	7440382
00995	ARSENIC, INORGANIC DISSOLVED (UG/L AS AS)	7440382
00996	ARSENIC, INORGANIC SUSPENDED (UG/L AS AS)	7440382
00997	ARSENIC, INORGANIC TOTAL (UG/L AS AS)	7440382
00998	BERYLLIUM, TOTAL RECOVERABLE IN WATER AS BE (UG/L)	7440417
01000	ARSENIC, DISSOLVED (UG/L AS AS)	7440382
01001	ARSENIC, SUSPENDED (UG/L AS AS)	7440382
01002	ARSENIC, TOTAL (UG/L AS AS)	7440382
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	7440417
01011	BERYLLIUM, SUSPENDED (UG/L AS BE)	7440417
01012	BERYLLIUM, TOTAL (UG/L AS BE)	7440417
01025	CADMIUM, DISSOLVED (UG/L AS CD)	7440439
01026	CADMIUM, SUSPENDED (UG/L AS CD)	7440439
01027	CADMIUM, TOTAL (UG/L AS CD)	7440439
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	7440473
01031	CHROMIUM, SUSPENDED (UG/L AS CR)	7440473
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	7440473
01033	CHROMIUM, TRI-VAL (UG/L AS CR)	16065831
01034	CHROMIUM, TOTAL (UG/L AS CR)	7440473
01040	COPPER, DISSOLVED (UG/L AS CU)	7440508
01041	COPPER, SUSPENDED (UG/L AS CU)	7440508

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
01042	COPPER, TOTAL (UG/L AS CU)	7440508
01049	LEAD, DISSOLVED (UG/L AS PB)	7439921
01050	LEAD, SUSPENDED (UG/L AS PB)	7439921
01051	LEAD, TOTAL (UG/L AS PB)	7439921
01057	THALLIUM, DISSOLVED (UG/L AS TL)	7440280
01058	THALLIUM, SUSPENDED (UG/L AS TL)	7440280
01059	THALLIUM, TOTAL (UG/L AS TL)	7440280
01065	NICKEL, DISSOLVED (UG/L AS NI)	7440020
01066	NICKEL, SUSPENDED (UG/L AS NI)	7440020
01067	NICKEL, TOTAL (UG/L AS NI)	7440020
01074	NICKEL, TOTAL RECOVERABLE IN WATER AS NI (UG/L)	7440020
01075	SILVER, DISSOLVED (UG/L AS AG)	7440224
01076	SILVER, SUSPENDED (UG/L AS AG)	7440224
01077	SILVER, TOTAL (UG/L AS AG)	7440224
01079	SILVER, TOTAL RECOVERABLE IN WATER AS AG (UG/L)	7440224
01089	COPPER AS SUSPENDED BLACK OXIDE IN WATER (MG/L)	7440508
01090	ZINC, DISSOLVED (UG/L AS ZN)	7440666
01091	ZINC, SUSPENDED (UG/L ZN)	7440666
01092	ZINC, TOTAL (UG/L AS ZN)	7440666
01094	ZINC, TOTAL RECOVERABLE IN WATER AS ZN (UG/L)	7440666
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	7440360
01096	ANTIMONY, SUSPENDED (UG/L AS SB)	7440360
01097	ANTIMONY, TOTAL (UG/L AS SB)	7440360
01113	CADMIUM, TOTAL RECOVERABLE IN WATER AS CD (UG/L)	7440439
01114	LEAD, TOTAL RECOVERABLE IN WATER AS PB (UG/L)	7439921
01118	CHROMIUM, TOTAL RECOVERABLE IN WATER AS CR (UG/L)	7440473
01119	COPPER,TOTAL RECOVERABLE IN WATER AS CU (UG/L)	7440508
01124	THALLIUM, ACID SOLUBLE, WATER, WHOLE (UG/L)	7440280
01128	THALLIUM,TOTAL RECOVERABLE <95%, UG/L AS TL	7440280

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
01138	SELENIUM, IN WATER, LBS/DAY	7782492
01145	SELENIUM, DISSOLVED (UG/L AS SE)	7782492
01146	SELENIUM, SUSPENDED (UG/L AS SE)	7782492
01147	SELENIUM, TOTAL (UG/L AS SE)	7782492
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE (UG/L)	7782492
01220	CHROMIUM, HEXAVALENT, DISSOLVED IN (UG/L AS CR)	18540299
01252	ARSENIC, LB/DAY/CFS STREAM FLOW	7440382
01253	CADMIUM, LB/DAY/CFS STREAM FLOW	7440439
01254	CHROMIUM, TOTAL (LBS/DAY/CFS STREAM FLOW)	7740473
01255	CHROMIUM, HEXAVALENT, LB/DAY/CFS STREAM FLOW	18540299
01256	COPPER, LB/DAY/CFS STREAM FLOW	7440508
01257	CYANIDE LB/DAY/CFS STREAM FLOW	57125
01259	LEAD, LB/DAY/CFS STREAM FLOW	7439921
01260	MERCURY, LB/DAY/CFS STREAM FLOW	7439976
01261	NICKEL, LB/DAY/CFS STREAM FLOW	7440020
01263	SILVER, LB/DAY/CFS STREAM FLOW	7440224
01264	ZINC LB/DAY/CFS STREAM FLOW	7440666
01268	ANTIMONY, (SB), WATER, TOTAL RECOVERABLE (UG/L)	7440360
01291	CYANIDE, FILTERABLE, TOTAL IN WATER (UG/L)	57125
01303	ZINC, POTENTIALLY DISSOLVED WATER (MG/L)	7440666
01304	SILVER, POTENTIALLY DISSOLVED WATER (MG/L)	7440224
01306	COPPER, POTENTIALLY DISSOLVED WATER (MG/L)	7440508
01307	CHROMIUM, HEXAVALENT, POTENT. DISS. WATER (MG/L)	18540299
01309	ARSENIC, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440382
01312	BERYLLIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440417
01313	CADMIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440439
01314	CHROMIUM, TRIVALENT, POTENT., DISS., WATER (MG/L)	16065831
01318	LEAD, POTENTIALLY, DISSOLVED, WATER (MG/L)	7439921
01321	MERCURY, POTENTIALLY, DISSOLVED, WATER (MG/L)	7439976