

HALTON REGION CONSERVATION AUTHORITY

**CLEAN UP RURAL BEACHES PROGRAM  
FOR THE SIXTEEN MILE CREEK WATERSHED**

**1994 ANNUAL REPORT**

April 1, 1994 - March 31, 1995

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Prepared for: The Ontario Ministry of Environment and Energy



## ACKNOWLEDGEMENTS

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Bob Edmondson	Halton Region Conservation Authority
Bob Hart	Halton Region Health Department
Mark Janiec	Ontario Ministry of Agriculture, Food and Rural Affairs
Peter Mar	Ontario Ministry of Environment and Energy
Cecil Patterson	Halton Soil and Crop Improvement Association

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# INTRODUCTION

## 1.1 PROGRAM HISTORY

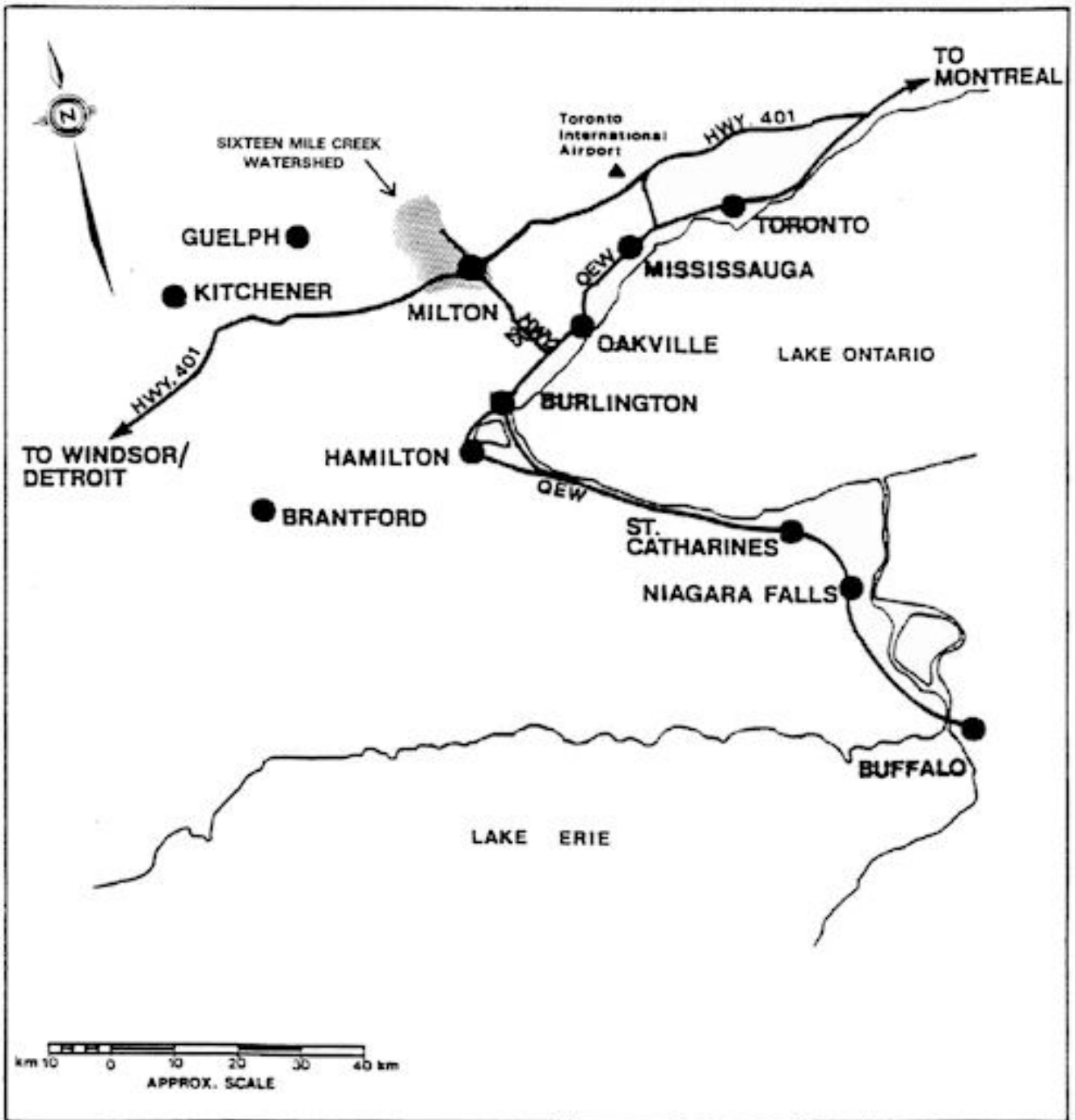
During the 1980s, the deterioration of water quality in Sixteen Mile Creek and at the Kelso Conservation Area swimming beach became a concern to the Halton Region Conservation Authority (HRCA). An increase in fecal coliform bacterial levels resulted in several beach postings during the summer season in 1988. With further beach postings in 1989, the HRCA applied for and received funding from the Provincial Rural Beaches Program (RBP) to study water quality in the Sixteen Mile Creek watershed.

The HRCA RBP study, conducted in 1990 and 1991, identified sources of bacterial pollution impairing water quality in the watershed and assessed their impact (Albanese, 1990; Gale 1991). An extensive water quality monitoring program, including sediment samples, stream surveys, field assessments and interviews with watershed residents revealed a number of contributors to the bacterial pollution at the beach, including agricultural operations, inadequate private sewage treatment systems and natural sources.

As part of the Provincial Clean Up Rural Beaches (CURB) program, a CURB plan was developed to predict the total seasonal fecal coliform bacterial loads delivered to the Kelso Reservoir beach area from the watershed (Gale, 1991). Wildlife inputs, livestock access and faulty septic systems were found to be the three highest contributors of bacteria to the beach. In an effort to improve water quality within the watershed, the HRCA CURB plan recommended remedial measures aimed at reducing bacterial inputs. A 40 per cent reduction in the load delivered from the watershed to the beach area was established as the goal. The restriction of livestock access to the watercourse, repair of faulty septic systems and the containment of runoff from manure stacks and barnyards were recommended as remedial measures for reducing bacterial pollution at the sources. Based on the size of the watershed and potential impact on the beach area, it was recommended that the remedial measures be systematically implemented throughout the study area. Ongoing water quality monitoring would evaluate the effectiveness of remedial programs. The total cost for these remedial programs was projected to be \$80,000.

During 1994-95, the third year for the HRCA CURB program, one remedial project, considerable technical assistance and a number of public education programs were undertaken. Ongoing water quality monitoring of the watershed continued to provide baseline information.

This report summarizes the activities of the HRCA during the third year of the CURB program with emphasis on the results of implementation programs, public education, water quality monitoring and the overall response by the public to CURB financial incentives.



**FIGURE 1:** Location Of Curb Watershed

# WATER QUALITY MONITORING PROGRAM

## 2.1 OBJECTIVES

The objective of the 1994 HRCA CURB water quality monitoring program was to continue the program to identify the sources and types of bacterial pollutants that affect the Kelso Reservoir swimming area and to provide base line data to help assess the impact of remedial projects. Particular attention was paid to monitoring the cattle access restriction project that was implemented during the year. The program continued to make use of an extensive water sampling network already established, The water quality analyses consisted of:

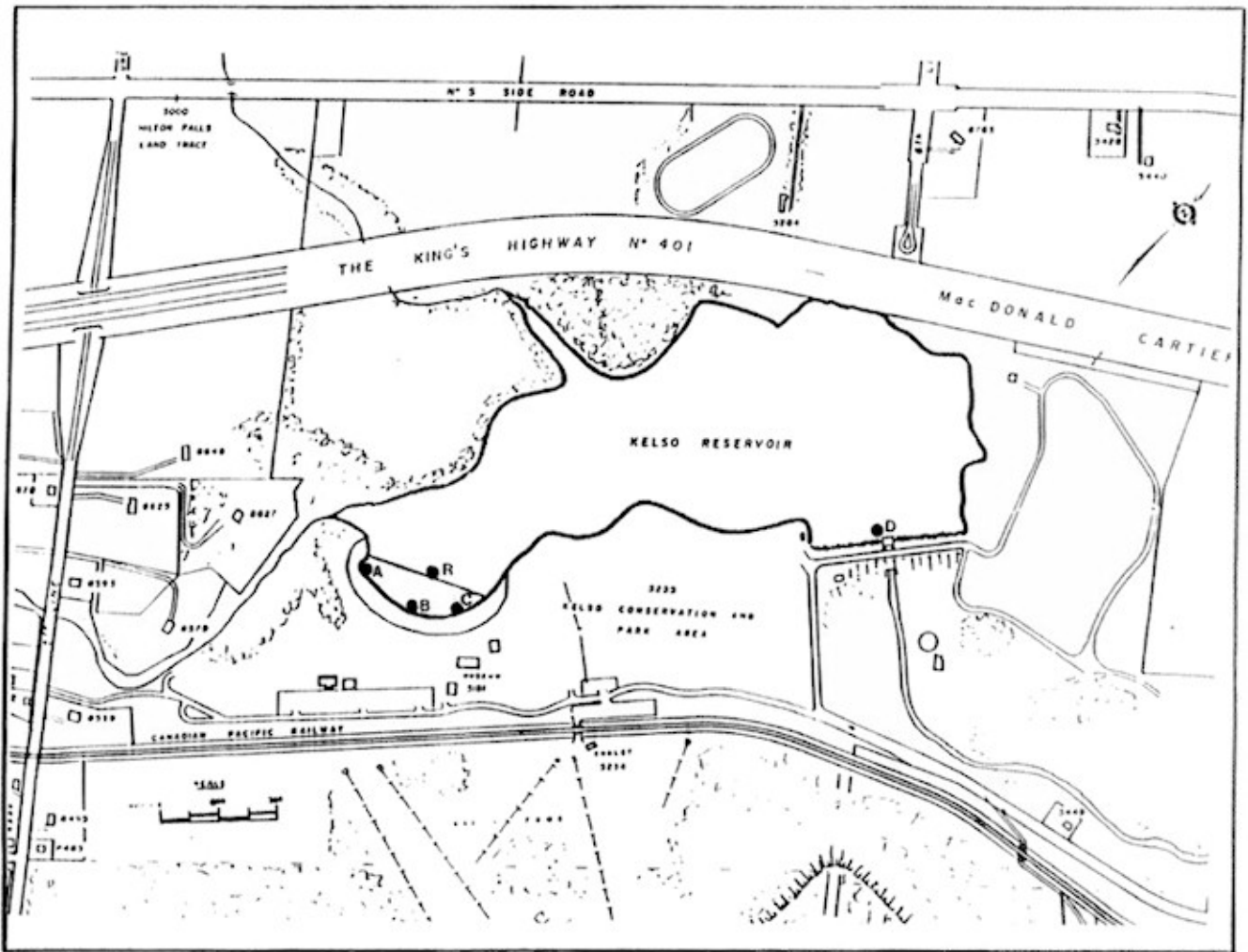
- i) bacterial analyses
- ii) nutrient, chemical and physical analyses

## 2.2 RESULTS

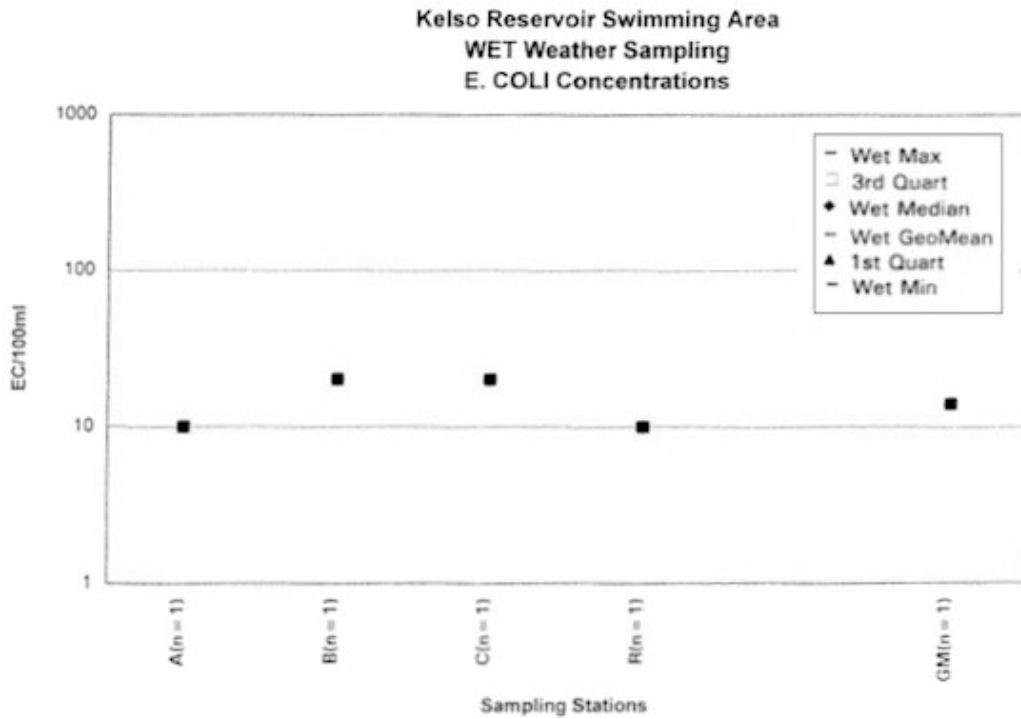
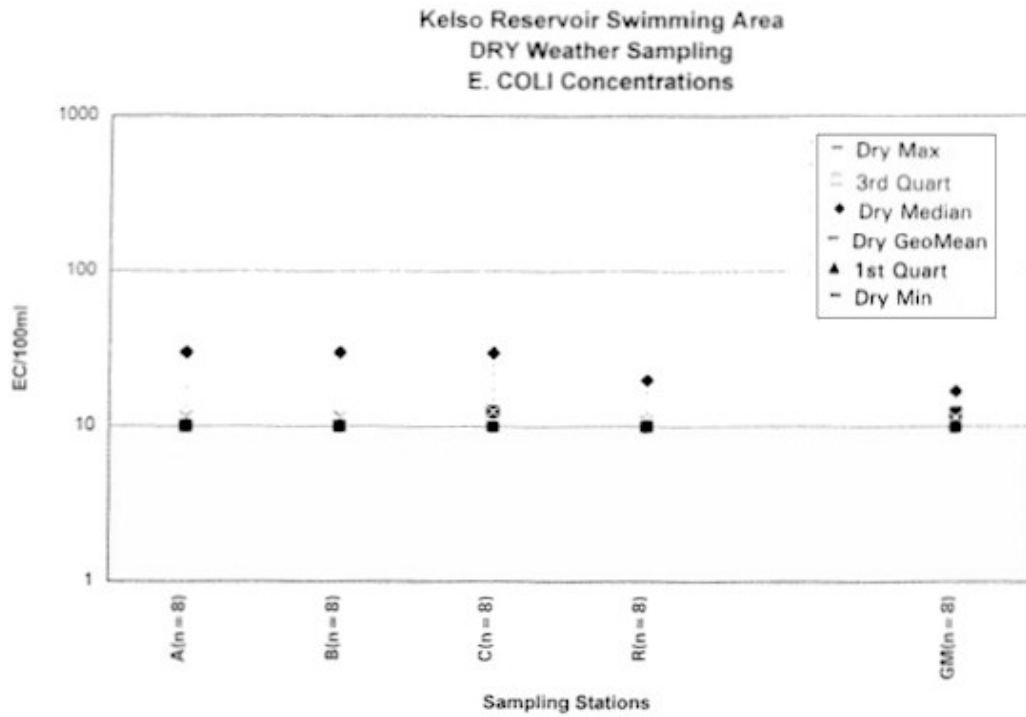
### 2.2.1 Kelso Reservoir

Kelso Reservoir beach area was sampled under two different programs during the 1994 swimming season. Water samples for the Halton Region Health Department (HRHD) to monitor *E. coli* concentrations were taken at each of the four sampling stations established at the swimming area (Figure 2) each Tuesday morning from June 14 until August 30, 1994. The geometric mean of the daily *E. coli* counts of all four samples was used by the HRHD to determine whether the beach should be posted as unsafe for swimming (Figure 3). Bacterial results for the Kelso swimming area from the HRHD samples are shown in Appendix 1. As part of the regular CURB water quality monitoring program, Station B was sampled for all bacterial, nutrient, chemical and physical parameters weekly (except July 4) from June 14 to September 13, 1994 and analyzed at the MOEE laboratory in Rexdale, Ont. Results of all water quality parameters for Station B are shown in Appendices 2 and 3.

The results of both bacterial monitoring programs indicate that the water quality at the Kelso swimming area continues to be acceptable. The seasonal geometric mean of *E. coli* concentrations taken by both the Health Department and the CURB program was approximately 11 EC/100ml of water, well below the PWQO recommended limit of 100 EC/100ml. The seasonal geometric mean of wet events was approximately 9 EC/100 ml, while the seasonal mean of dry events was approximately 8 EC/100 ml. Approximately three per cent of all bacterial samples taken at the swimming area were above PWQO standards. There were no postings or beach closures during the 1994 summer swimming season.



**FIGURE 2:** Kelso Reservoir With Sampling Stations



**FIGURE 3:** Kelso Reservoir Swimming Area - 1994 *E. Coli* Concentrations

The results of the nutrient, chemical and physical parameters for Station B are presented in Appendices 2 and 3, These results again indicate that the water quality was acceptable. No seasonal mean for any parameter monitored exceeded PWQO standards. Less than two per cent of all samples exceeded PWQO standards. Excess nutrient concentrations and algae growth were not problems at the reservoir.

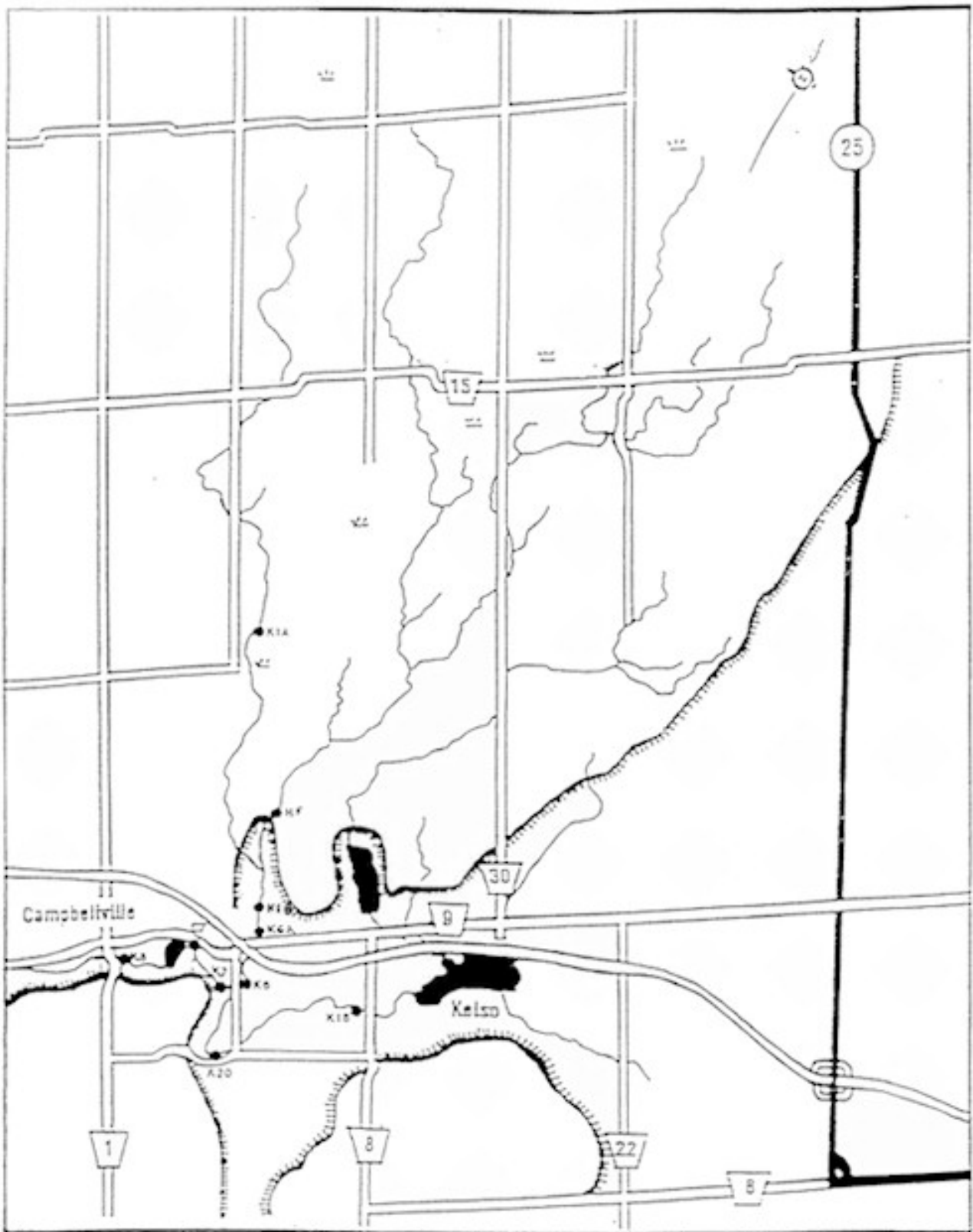
### 2.2.2 Sixteen Mile Creek Watershed

The Sixteen Mile Creek watershed upstream of the Kelso reservoir was only sampled under the CURB program. Water samples to monitor bacterial, nutrient, physical and chemical parameters were collected weekly (except for July 4) from each sampling station (Figure 4) from June 14 until September 13, 1994, Based on the results from previous years, some sampling stations were added or deleted from the network.

Results for all the parameters tested for each station are presented in Appendices 2 and 3.

The pattern of bacterial concentrations throughout the Sixteen Mile Creek watershed upstream of the Kelso reservoir was somewhat different than concentrations monitored in previous years (Albanese, 1990; Gale, 1991; Gale, 1992; Gale, 1993) (Figure 5), Sampling stations with seasonal geometric means above the PWQO standard of 100 EC/100ml were found in association with two different sources. Elevated concentrations at Stations K1A and K6A, located downstream from a large forest, were thought to be due to a large and very active beaver population. Station K7, on the Campbellville tributary, was downstream of a small pond where up to a dozen domestic geese and ducks are kept. In turn, this tended to attract large numbers of waterfowl, This source was believed to be a major contributor to the elevated bacterial counts found in the lower reaches of this tributary. The extremely high concentrations of *Pseudomonas aeruginosa* at Station K7 were unexpected and the source is somewhat of a mystery. Stations K20 and K18 simply reflected higher concentrations being delivered from upstream. Twenty-eight per cent of all samples taken had concentrations exceeding PWQO guidelines, while 30 per cent of all watershed stations had bacterial seasonal geometric means above PWQO standards.

Nutrient, chemical and physical concentrations monitored in the watershed showed a similar pattern. Higher concentrations of Total Phosphorus, Ammonium, Total Kjeldahl Nitrogen and Nitrite Nitrogen were again found at some of the same sampling stations (e.g. Station K1A) that had elevated bacterial concentrations (Appendices 2 and 3). Elevated concentrations of Nitrate and Nitrite Nitrogen were found along the Campbellville tributary. Chronic low-level contamination from private sewage treatment systems in the village of Campbellville was believed to be the primary source. Elevated concentrations of Chlorides and the resulting higher Conductivity readings from seasonal use of road salt were also associated with the Campbellville tributary. Approximately 14 per cent of all nutrient, chemical and physical seasonal means were above PWQO standards.



**FIGURE 4:** Sixteen Mile Creek Watershed With Sampling Stations

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### 2.2.3 Special Projects

With the implementation of the first remedial project in the watershed in 1993, the special program to monitor the impact of the access restriction project was continued. Sampling station K20, upstream of the farmstead and station K18, located immediately downstream, were used to monitor the impact of the remedial project (Figure 4).

Based on the results of the samples the project continues to have a positive impact on the watercourse. In previous years bacterial concentrations and other water quality parameters were generally worse downstream of the farm. During the 1993 and 1994 sampling season the water quality was always better downstream of the farm (Appendix 2). This was the first indication of the positive impact of the remedial projects on surface water quality.

During 1994 a complete CURB program was also delivered for the Hamilton Region Conservation Authority in the Spencer Creek watershed upstream of the Christie and Valens reservoirs. A copy of the report for the Hamilton RCA CURB program is available upon request.

## **CURB IMPLEMENTATION PROGRAM**

### **3.1 OBJECTIVES**

The object of the 1994 HRCA CURB implementation program for the Sixteen Mile Creek watershed was to continue to implement as many projects as possible throughout the subject watershed. Two properties were immediately targeted as being high priority.

### **3.2 HRCA CURB COMMITTEE**

A local committee was established to review CURB applications within the watershed. Agency representation and voting structure on the committee was within the guidelines set by the MOEE.

The 1994 membership of the local committee was as follows:

Bob Edmondson	Halton Region Conservation Authority
Bob Hart	Halton Region Health Department
Mark Janiec	Ontario Ministry of Agriculture, Food and Rural Affairs
Peter Mar	Ontario Ministry of the Environment and Energy
Cecil Patterson	Halton Soil and Crop Improvement Association

The committee has agreed to meet as applications and circumstances require. Members are regularly consulted by telephone.

### **3.3 CURB APPLICATIONS**

Since the implementation of the CURB program, over 30 inquiries have been received. The majority were requests for additional details on the program or confirmation as to whether the landowner was within the CURB watershed. While many of the landowners had legitimate projects, unfortunately they were located outside the subject watershed. To date eight applications have been received. During 1994 one application was received and approved. The application was to assist in the repair to a failed septic system, located approximately four kilometres upstream from the Kelso swimming area.

Negotiations continue with several other landowners whose farms are considered to be high-priority based on location and impact. However, the HRCA program faces some difficulties. The CURB program is voluntary and landowners cannot be forced into participation. Some land owners remain unconvinced that their agricultural practices contribute to surface water degradation. Many farms designated as high-priority for remedial projects by the CURB model are owned by farmers who are semi-retired. These landowners appear to have little or no interest in undertaking capital projects that will be of no direct benefit to themselves. Nevertheless, efforts continue to convince watershed landowners of the merits of improving surface water quality, and progress is being made with some of them.

### **3.4 CURB PROJECTS**

As of February 1, 1995, two remedial projects have been implemented and another approved. The first project involved fencing approximately 4400 feet of the watercourse on both sides, and the installation of alternate watering systems. Riparian revegetation was supplied by the HRCA. The landowner has agreed to have his farmstead serve as a demonstration project for other landowners in the watershed. The total cost of the project was approximately \$20,000.00. The other project involved repairs to a failed septic system. The total cost of this project was approximately \$5,000.00. The third project was never implemented. Shortly after project approval, the subject property was listed for sale. The owner indicated that she did not wish to spend any additional money on the farm at this time.

## **INFORMATION AND EDUCATION PROGRAM**

### **4.1 OBJECTIVES**

Along with water quality monitoring and the implementation of remedial projects, an integral part of the 1994 HRCA CURB program was public information and education. A major component of water quality improvement must include the changing of public attitudes and habits regarding farm management and septic system maintenance. It was apparent from the results of 1991 HRCA RBP study that most landowners, whether farm operators or rural residents, did not feel that they were contributing to bacterial or nutrient pollution in the watershed (Gale, 1991). Unfortunately, this remains the case. Public awareness of the nature, scope and sources of bacterial and nutrient pollution, along with the implementation of effective remedial measures, is seen to be a vital aspect of improving water quality throughout the watershed. The goal of the public information and education program is to provide details of the CURB program to all watershed residents and to assist all interested parties with surface water quality concerns.

### **4.2 INFORMATION AND EDUCATION ACTIVITIES**

One tool for increasing public awareness was a portable display used at various public venues. The purpose of the display was to introduce the CURB program to the public. In addition, it illustrated some causes and effects of rural pollution and recommended some remedial measures.

The display was used at the Milton Fall Fair. The actual impact of the display was difficult to gauge, since no watershed residents were encountered. In view of the limited effectiveness of the display it is doubtful that it will be used in the future unless specifically requested by an interested group or organization.

Newsletters were used to heighten the profile of the program and to increase the awareness of the rural community to water quality problems. The newsletters were used to publicize the activities of the HRCA CURB staff in and around the watershed and to answer questions regarding the program. The public was also encouraged to contact CURB staff to discuss any concerns regarding water quality in the study watershed. Copies of the newsletters were hand delivered to each resident located along the watercourse. In a small watershed this was felt to be the most effective means of communicating the aims of the program.

### **4.3 OTHER EXTENSION ACTIVITIES**

During 1994, CURB staff of the Halton RCA worked co-operatively with staff of the Hamilton Region Conservation Authority to deliver a CURB program in the Spencer Creek watershed and write a report, In 1992, the Hamilton RCA applied for funding from the Ministry of Environment and Energy under the Provincial CURB program. However, due to Provincial funding constrictions, the MOEE suggested that the Hamilton Authority utilize the expertise available at the Halton Authority, Since the Halton Authority was already participating in the CURB program and had the staff, equipment and experience necessary to conduct the study, an agreement was reached whereby the two Authorities would co-operate and conduct the study jointly.

Based on the study results, the Hamilton Conservation Authority was funded by MOEE to participate in the implementation phase of the CURB program, CURB staff delivered the program to both Authorities, The results of the water quality monitoring and CURB implementation program for the Hamilton Region Conservation Authority are available upon request.

In addition to the program to improve surface water quality in the Sixteen Mile Creek watershed, CURB staff provided information, technical expertise and advice to other interested parties within the HRCA jurisdiction. Technical assistance was provided to the Leaver Mushrooms Company Ltd. to assist in providing a permanent solution to the storage of manure effluent from their operation.

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## APPENDIX 1

### Sixteen Mile Creek 1994 - KELSO HRHD Data

BACTERIAL DATA						
DATE	E	A	B	C	R	G
14-Jun-94	D	10	10	10	10	10
20-Jun-94	D	10	10	10	20	12
28-Jun-94	D	120	100	10	40	46
5-Jul-94	D	10	10	10	10	10
12-Jul-94	D	10	10	10	10	10
19-Jul-94	D	10	10	10	10	10
26-Jul-94	I	50	10	20	30	23
2-Aug-94	I	10	10	10	10	10
9-Aug-94	W	10	20	20	10	14
16-Aug-94	D	10	30	30	10	17
23-Aug94	D	30	10	10	10	13
30-Aug-94	D	10	10	20	10	12
Jun GM		23	22	10	20	18
July GM		15	10	12	13	12
Aug GM		12	14	16	10	13
Season GM		15	14	13	13	14
Dry Max		30	30	30	20	17
3rd Quart		10	10	13	10	12
Dry Median		10	10	10	10	11
Dry GM		11	11	13	11	12
1 <sup>st</sup> Quart		10	10	10	10	10
Dry Min		10	10	10	10	10
Wet Max		10	20	20	10	14
3rd Quart		10	20	20	10	14
Wet Median		10	20	20	10	14
Wet GM		10	20	20	10	14
1 <sup>st</sup> Quart		10	20	20	10	14
Wet Min		10	20	20	10	14

**APPENDIX 2: Sixteen Mile Creek 1994 - STATION B Data**

DATE	E	BACTERIAL DATA			NUTRIENT, PHYSICAL, CHEMICAL DATA											
		EC	FS	PA	Cond.	pH	Chloride	ResP	Turbid	Phos	PO4	T.K.N.	NH4	NO3	NO2	DOC
14-Jun-94	D	4	4	2	625	8.49	49.10	2.6	0.96	0.010	0.0010	0.380	0.028	0.255	0.0060	4.0
20-Jun-94	D	8	8	1	637	8.46	53.40	2.4	2.13	0.012	0.0010	0.400	0.004	0.290	0.0030	4.0
28-Jun-94	I	52	16	2	646	8.45	52.70	3.3	1.45	0.006	0.0010	0.340	0.032	0.275	0.0040	3.8
12-Jul-94	D	4	8	2	653	8.48	56.80	4.0	2.33	0.012	0.0010	0.380	0.032	0.295	0.0070	3.6
19-Jul-94	D	16	8	2	647	8.50	57.30	5.6	2.05	0.006	0.0010	0.340	0.014	0.210	0.0070	3.4
26-Jul-94	I	4	8	4	636	8.38	58.40	5.9	4.21	0.012	0.0010	0.380	0.038	0.130	0.0100	3.6
2-Aug-94	I	44	8	10	635	8.37	57.40	5.8	4.12	0.022	0.0015	0.420	0.036	0.010	0.0080	3.7
9-Aug-94	W	4	16	2	641	8.35	58.40	4.0	4.09	0.006	0.0015	0.320	0.050	0.070	0.0120	3.5
16-Aug-94	D	8	4	2	661	8.37	59.80	5.0	3.59	0.012	0.0015	0.360	0.050	0.120	0.0090	3.1
23-Aug-94	D	4	8	2	663	8.47	62.80	4.7	2.94	0.016	0.0010	0.500	0.030	0.155	0.0100	3.5
30-Aug-94	D	8	16	2	666	8.46	62.20	5.5	3.82	0.010	0.0010	0.340	0.002	0.120	0.0060	3.4
6-Sep-94	D	4	4	2	668	8.37	61.30	7.5	5.61	0.012	0.0025	0.360	0.016	0.100	0.0060	3.3
13-Sep-94	D	4	12	2	670	8.39	61.00	7.4	5.12	0.008	0.0010	0.320	0.002	0.105	0.0020	3.5
Jun GM/Avg		12	8	2	636	8.47	51.73	2.8	1.51	0.009	0.0010	0.373	0.021	0.273	0.0043	3.9
July GM/Avg		6	8	3	645	8.45	57.50	5.2	2.86	0.010	0.0010	0.367	0.028	0.212	0.0080	3.5
Aug GM/Avg		9	9	3	653	8.40	60.12	5.0	3.71	0.013	0.0013	0.388	0.034	0.095	0.0090	3.4
Sep GM/Avg		4	7	2	669	8.38	61.15	7.5	5.37	0.010	0.0018	0.340	0.009	0.103	0.0040	3.4
<b>Season GM/Avg</b>		<b>8</b>	<b>8</b>	<b>2</b>	<b>650</b>	<b>8.43</b>	<b>57.74</b>	<b>4.9</b>	<b>3.26</b>	<b>0.011</b>	<b>0.0012</b>	<b>0.372</b>	<b>0.026</b>	<b>0.164</b>	<b>0.0069</b>	<b>3.6</b>
Dry Max		16	16	2	670	8.50	62.80	7.5	5.61	0.016	0.0025	0.500	0.050	0.295	0.0100	4.0
3 <sup>rd</sup> Quart		8	8	2	666	8.48	61.30	5.6	3.82	0.012	0.0010	0.380	0.030	0.255	0.0070	3.6
Dry Median		4	8	2	661	8.46	59.80	5.0	2.94	0.012	0.0010	0.360	0.016	0.155	0.0060	3.5
<b>Dry GM/Avg</b>		<b>6</b>	<b>7</b>	<b>2</b>	<b>654</b>	<b>8.44</b>	<b>58.19</b>	<b>5.0</b>	<b>3.17</b>	<b>0.011</b>	<b>0.0012</b>	<b>0.376</b>	<b>0.020</b>	<b>0.183</b>	<b>0.0062</b>	<b>3.5</b>
1 <sup>st</sup> Quart		4	4	2	647	8.39	56.80	4.0	2.13	0.010	0.0010	0.340	0.004	0.120	0.0060	3.4
Dry Min		4	4	1	625	8.37	49.10	2.4	0.96	0.006	0.0010	0.320	0.002	0.100	0.0020	3.1
Wet Max		4	16	2	641	8.35	58.40	4.0	4.09	0.006	0.0015	0.320	0.050	0.070	0.0120	3.5
3 <sup>rd</sup> Quart		4	16	2	641	8.35	58.40	4.0	4.09	0.006	0.0015	0.320	0.050	0.070	0.0120	3.5
Wet Median		4	16	2	641	8.35	58.40	4.0	4.09	0.006	0.0015	0.320	0.050	0.070	0.0120	3.5
<b>Wet GM/Avg</b>		<b>4</b>	<b>16</b>	<b>2</b>	<b>641</b>	<b>8.35</b>	<b>58.40</b>	<b>4.0</b>	<b>4.09</b>	<b>0.006</b>	<b>0.0015</b>	<b>0.320</b>	<b>0.050</b>	<b>0.070</b>	<b>0.0120</b>	<b>3.5</b>
1 <sup>st</sup> Quart		4	16	2	641	8.35	58.40	4.0	4.09	0.006	0.0015	0.320	0.050	0.070	0.0120	3.5
Wet Min		4	16	2	641	8.35	58.40	4.0	4.09	0.006	0.0015	0.320	0.050	0.070	0.0120	3.5

**Sixteen Mile Creek 1994 - STATION K18 Data**

DATE	E	BACTERIAL DATA			NUTRIENT, PHYSICAL, CHEMICAL DATA											
		EC	FS	PA	Cond.	pH	Chloride	ResP	Turbid	Phos	PO4	T.K.N.	NH4	NO3	NO2	DOC
14-Jun-94	D	80	72	2	659	8.45	60.80	4.2	1.14	0.014	0.0010	0.380	0.006	0.400	0.0030	4.0
20-Jun-94	D	88	120	1	662	8.42	62.60	5.1	1.63	0.014	0.0010	0.340	0.002	0.110	0.0020	5.2
28-Jun-94	I	80	244	2	631	8.49	54.50	5.0	1.94	0.012	0.0010	0.340	0.002	0.375	0.0030	4.1
12-Jul-94	D	80	244	2	664	8.46	65.50	2.4	0.86	0.012	0.0010	0.320	0.008	0.355	0.0050	3.5
19-Jul-94	D	20	316	2	725	8.47	78.90	2.6	0.90	0.006	0.0015	0.280	0.014	0.450	0.0070	2.7
26-Jul-94	I	36	140	2	701	8.36	73.90	2.8	0.88	0.010	0.0010	0.280	0.002	0.430	0.0050	3.0
2-Aug-94	I	32	196	2	716	8.37	78.30	2.8	0.75	0.012	0.0010	0.280	0.020	0.320	0.0040	2.9
9-Aug-94	W	104	352	2	635	8.39	60.20	3.2	0.96	0.010	0.0010	0.300	0.002	0.270	0.0020	3.4
16-Aug-94	D	64	140	2	655	8.44	64.30	2.5	0.71	0.010	0.0015	0.280	0.014	0.325	0.0060	3.2
23-Aug-94	D	44	108	2	708	8.42	73.20	2.0	0.48	0.008	0.0010	0.280	0.006	0.405	0.0040	3.2
30-Aug-94	D	68	232	2	751	8.46	82.00	1.0	0.54	0.004	0.0010	0.240	0.002	0.440	0.0030	2.6
6-Sep-94	D	24	96	2	758	8.38	84.10	1.6	0.51	0.006	0.0010	0.220	0.004	0.430	0.0020	2.2
13-Sep-94	D	24	224	2	759	8.41	84.80	0.8	0.38	0.004	0.0010	0.200	0.002	0.495	0.0010	2.2
Jun GM/Avg		83	128	2	651	8.45	59.30	4.8	1.57	0.013	0.0010	0.353	0.003	0.295	0.0027	4.4
July GM/Avg		39	221	2	697	8.43	72.77	2.6	0.88	0.009	0.0012	0.293	0.008	0.412	0.0057	3.1
Aug GM/Avg		58	189	2	693	8.42	71.60	2.3	0.69	0.009	0.0011	0.276	0.009	0.352	0.0038	3.1
Sep GM/Avg		24	147	2	759	8.40	84.45	1.2	0.45	0.005	0.0010	0.210	0.003	0.463	0.0015	2.2
<b>Season GM/Avg</b>		<b>50</b>	<b>172</b>	<b>2</b>	<b>694</b>	<b>8.42</b>	<b>71.01</b>	<b>2.8</b>	<b>0.90</b>	<b>0.009</b>	<b>0.0011</b>	<b>0.288</b>	<b>0.006</b>	<b>0.370</b>	<b>0.0036</b>	<b>3.2</b>
Dry Max		88	316	2	759	8.47	84.80	5.1	1.63	0.014	0.0015	0.380	0.014	0.495	0.0070	5.2
3 <sup>rd</sup> Quart		80	232	2	751	8.46	82.00	2.6	0.90	0.012	0.0010	0.320	0.008	0.440	0.0050	3.5
Dry Median		64	140	2	708	8.44	73.20	2.4	0.71	0.008	0.0010	0.280	0.006	0.405	0.0030	3.2
<b>Dry GM/Avg</b>		<b>48</b>	<b>155</b>	<b>2</b>	<b>705</b>	<b>8.43</b>	<b>72.91</b>	<b>2.5</b>	<b>0.79</b>	<b>0.009</b>	<b>0.0011</b>	<b>0.282</b>	<b>0.006</b>	<b>0.379</b>	<b>0.0037</b>	<b>3.2</b>
1 <sup>st</sup> Quart		24	108	2	662	8.42	64.30	1.6	0.51	0.006	0.0010	0.240	0.002	0.355	0.0020	2.6
Dry Min		20	72	1	655	8.38	60.80	0.8	0.38	0.004	0.0010	0.200	0.002	0.110	0.0010	2.2
Wet Max		104	352	2	635	8.39	60.20	3.2	0.96	0.010	0.0010	0.300	0.002	0.270	0.0020	3.4
3 <sup>rd</sup> Quart		104	352	2	635	8.39	60.20	3.2	0.96	0.010	0.0010	0.300	0.002	0.270	0.0020	3.4
Wet Median		104	352	2	635	8.39	60.20	3.2	0.96	0.010	0.0010	0.300	0.002	0.270	0.0020	3.4
<b>Wet GM/Avg</b>		<b>104</b>	<b>352</b>	<b>2</b>	<b>635</b>	<b>8.39</b>	<b>60.20</b>	<b>3.2</b>	<b>0.96</b>	<b>0.010</b>	<b>0.0010</b>	<b>0.300</b>	<b>0.002</b>	<b>0.270</b>	<b>0.0020</b>	<b>3.4</b>
1 <sup>st</sup> Quart		104	352	2	635	8.39	60.20	3.2	0.96	0.010	0.0010	0.300	0.002	0.270	0.0020	3.4
Wet Min		104	352	2	635	8.39	60.20	3.2	0.96	0.010	0.0010	0.300	0.002	0.270	0.0020	3.4

**APPENDIX 2: Sixteen Mile Creek 1994 - STATION K20 Data**

DATE	E	BACTERIAL DATA			NUTRIENT, PHYSICAL, CHEMICAL DATA											
		EC	FS	PA	Cond.	pH	Chloride	ResP	Turbid	Phos	PO4	T.K.N.	NH4	NO3	NO2	DOC
14-Jun-94	D	92	56	8	642	8.45	58.10	5.1	1.48	0.014	0.0010	0.400	0.004	0.325	0.0040	4.3
20-Jun-94	D	92	136	1	670	8.39	66.40	5.8	2.29	0.020	0.0010	0.400	0.002	0.335	0.0030	4.0
28-Jun-94	I	80	184	6	635	8.40	55.50	4.3	1.50	0.014	0.0010	0.340	0.002	0.310	0.0060	4.5
12-Jul-94	D	64	256	2	676	8.46	70.30	2.7	1.30	0.014	0.0010	0.340	0.010	0.280	0.0060	3.9
19-Jul-94	D	64	392	2	713	6.51	83.70	3.0	0.99	0.010	0.0015	0.360	0.004	0.340	0.0070	3.1
26-Jul-94	I	48	190	22	720	8.33	79.50	5.0	1.11	0.016	0.0010	0.340	0.014	0.325	0.0040	3.3
2-Aug-94	I	52	208	2	723	8.35	83.40	3.1	1.10	0.016	0.0010	0.340	0.002	0.245	0.0030	3.2
9-Aug-94	W	100	348	2	658	8.39	66.60	3.7	0.70	0.008	0.0010	0.300	0.002	0.185	0.0070	3.6
16-Aug-94	D	56	156	2	644	8.42	63.80	3.0	1.04	0.008	0.0015	0.300	0.012	0.255	0.0040	3.7
23-Aug-94	D	48	176	2	700	8.43	75.30	1.8	0.76	0.012	0.0010	0.320	0.008	0.240	0.0050	3.7
30-Aug-94	D	80	352	2	772	8.43	90.80	1.3	0.63	0.010	0.0015	0.300	0.002	0.275	0.0020	3.0
6-Sep-94	D	36	168	2	771	8.36	90.70	1.3	0.64	0.008	0.0010	0.240	0.014	0.320	0.0060	2.6
13-Sep-94	D	12	380	2	780	8.41	93.40	1.1	0.49	0.004	0.0010	0.220	0.002	0.365	0.0010	2.7
Jun GM/Avg		88	112	4	649	8.41	60.00	5.1	1.76	0.016	0.0010	0.380	0.003	0.323	0.0043	4.3
July GM/Avg		58	267	4	703	7.77	77.83	3.6	1.13	0.013	0.0012	0.347	0.009	0.315	0.0057	3.4
Aug GM/Avg		65	234	2	699	8.40	75.98	2.6	0.85	0.011	0.0012	0.312	0.005	0.240	0.0042	3.4
Sep GM/Avg		21	253	2	776	8.39	92.05	1.2	0.57	0.006	0.0010	0.230	0.008	0.343	0.0035	2.7
<b>Season GM/Avg</b>		<b>57</b>	<b>206</b>	<b>3</b>	<b>700</b>	<b>8.26</b>	<b>75.19</b>	<b>3.2</b>	<b>1.08</b>	<b>0.012</b>	<b>0.0011</b>	<b>0.323</b>	<b>0.006</b>	<b>0.292</b>	<b>0.0045</b>	<b>3.5</b>
Dry Max		92	392	8	780	8.46	93.40	5.8	2.29	0.020	0.0015	0.400	0.014	0.365	0.0070	4.3
3 <sup>rd</sup> Quart		80	352	2	771	8.43	90.70	3.0	1.30	0.014	0.0015	0.360	0.010	0.335	0.0060	3.9
Dry Median		64	176	2	700	8.42	75.30	2.7	0.99	0.010	0.0010	0.320	0.004	0.320	0.0040	3.7
<b>Dry GM/Avg</b>		<b>53</b>	<b>198</b>	<b>2</b>	<b>708</b>	<b>8.21</b>	<b>76.94</b>	<b>2.8</b>	<b>1.07</b>	<b>0.011</b>	<b>0.0012</b>	<b>0.320</b>	<b>0.006</b>	<b>0.304</b>	<b>0.0042</b>	<b>3.4</b>
1 <sup>st</sup> Quart		48	156	2	670	8.39	66.40	1.3	0.64	0.008	0.0010	0.300	0.002	0.275	0.0030	3.0
Dry Min		12	56	1	642	6.51	58.10	1.1	0.49	0.004	0.0010	0.220	0.002	0.240	0.0010	2.6
Wet Max		100	348	2	658	8.39	66.60	3.7	0.70	0.008	0.0010	0.300	0.002	0.185	0.0070	3.6
3 <sup>rd</sup> Quart		100	348	2	658	8.39	66.60	3.7	0.70	0.008	0.0010	0.300	0.002	0.185	0.0070	3.6
Wet Median		100	348	2	658	8.39	66.60	3.7	0.70	0.008	0.0010	0.300	0.002	0.185	0.0070	3.6
<b>Wet GM/Avg</b>		<b>100</b>	<b>348</b>	<b>2</b>	<b>658</b>	<b>8.39</b>	<b>66.60</b>	<b>3.7</b>	<b>0.70</b>	<b>0.008</b>	<b>0.0010</b>	<b>0.300</b>	<b>0.002</b>	<b>0.185</b>	<b>0.0070</b>	<b>3.6</b>
1st Quart		100	348	2	658	8.39	66.60	3.7	0.70	0.008	0.0010	0.300	0.002	0.185	0.0070	3.6
Wet Min		100	348	2	658	8.39	66.60	3.7	0.70	0.008	0.0010	0.300	0.002	0.185	0.0070	3.6

**Sixteen Mile Creek 1994 - STATION K7 Data**

DATE	E	BACTERIAL DATA			NUTRIENT, PHYSICAL, CHEMICAL DATA											
		EC	FS	PA	Cond.	pH	Chloride	ResP	Turbid	Phos	PO4	T.K.N.	NH4	NO3	NO2	DOC
14-Jun-94	D	104	96	2	926	8.35	127.40	7.5	2.97	0.010	0.0010	0.280	0.018	0.775	0.0070	2.0
20-Jun-94	D	88	88	203	904	8.35	125.80	5.5	2.46	0.012	0.0010	0.300	0.006	0.660	0.0060	2.3
28-Jun-94	I	32	84	2	884	8.34	132.00	8.5	3.85	0.006	0.0010	0.300	0.010	0.700	0.0060	2.8
12-Jul-94	D	56	248	146	887	8.42	124.00	18.7	2.00	0.024	0.0010	0.460	0.018	0.615	0.0070	2.9
19-Jul-94	D	104	236	10	907	8.32	132.00	21.5	1.45	0.018	0.0010	0.380	0.024	0.605	0.0080	2.3
26-Jul-94	I	116	80	2	911	8.28	133.00	11.4	2.07	0.014	0.0010	0.300	0.022	0.585	0.0080	2.5
2-Aug-94	I	160	180	2	904	8.30	133.00	10.4	2.01	0.022	0.0010	0.400	0.026	0.405	0.0050	2.6
9-Aug-94	W	200	376	300	899	8.31	131.00	5.5	1.20	0.008	0.0010	0.300	0.002	0.520	0.0050	2.5
16-Aug-94	D	192	160	36	796	8.39	106.00	5.1	1.30	0.010	0.0015	0.340	0.036	0.515	0.0070	3.8
23-Aug-94	D	90	310	4	869	8.39	118.00	6.4	1.32	0.014	0.0010	0.380	0.010	0.515	0.0090	3.7
30-Aug-94	D	292	1460	144	911	8.35	129.00	28.4	3.06	0.050	0.0010	0.660	0.006	0.515	0.0050	2.9
6-Sep-94	D	120	104	2	919	8.28	129.00	3.9	1.33	0.014	0.0010	0.420	0.012	0.590	0.0080	2.4
13-Sep-94	D	160	210	112	917	8.35	131.50	4.2	1.05	0.014	0.0010	0.280	0.002	0.665	0.0020	2.1
Jun GM/Avg		66	89	9	905	8.35	128.40	7.2	3.09	0.009	0.0010	0.293	0.011	0.712	0.0063	2.4
July GM/Avg		88	167	14	902	8.34	129.67	17.2	1.84	0.019	0.0010	0.380	0.021	0.602	0.0077	2.6
Aug GM/Avg		174	345	26	876	8.35	123.40	11.2	1.78	0.021	0.0011	0.416	0.016	0.494	0.0062	3.1
Sep GM/Avg		139	148	15	918	8.32	130.25	4.1	1.19	0.014	0.0010	0.350	0.007	0.628	0.0050	2.3
<b>Season GM/Avg</b>		<b>115</b>	<b>188</b>	<b>16</b>	<b>895</b>	<b>8.34</b>	<b>127.05</b>	<b>10.5</b>	<b>2.01</b>	<b>0.017</b>	<b>0.0010</b>	<b>0.369</b>	<b>0.015</b>	<b>0.590</b>	<b>0.0064</b>	<b>2.7</b>
Dry Max		292	1460	203	926	8.42	132.00	28.4	3.06	0.050	0.0015	0.660	0.036	0.775	0.0090	3.8
3 <sup>rd</sup> Quart		160	248	144	917	8.39	129.00	18.7	2.46	0.018	0.0010	0.420	0.018	0.660	0.0080	2.9
Dry Median		104	210	36	907	8.35	127.40	6.4	1.45	0.014	0.0010	0.380	0.012	0.605	0.0070	2.4
<b>Dry GM/Avg</b>		<b>120</b>	<b>210</b>	<b>24</b>	<b>893</b>	<b>8.36</b>	<b>124.74</b>	<b>11.2</b>	<b>1.88</b>	<b>0.018</b>	<b>0.0011</b>	<b>0.389</b>	<b>0.015</b>	<b>0.606</b>	<b>0.0066</b>	<b>2.7</b>
1 <sup>st</sup> Quart		90	104	4	887	8.35	124.00	5.1	1.32	0.012	0.0010	0.300	0.006	0.515	0.0060	2.3
Dry Min		56	88	2	796	8.28	106.00	3.9	1.05	0.010	0.0010	0.280	0.002	0.515	0.0020	2.0
Wet Max		200	376	300	899	8.31	131.00	5.5	1.20	0.008	0.0010	0.300	0.002	0.520	0.0050	2.5
3 <sup>rd</sup> Quart		200	376	300	899	8.31	131.00	5.5	1.20	0.008	0.0010	0.300	0.002	0.520	0.0050	2.5
Wet Median		200	376	300	899	8.31	131.00	5.5	1.20	0.008	0.0010	0.300	0.002	0.520	0.0050	2.5
<b>Wet GM/Avg</b>		<b>200</b>	<b>376</b>	<b>300</b>	<b>899</b>	<b>8.31</b>	<b>131.00</b>	<b>5.5</b>	<b>1.20</b>	<b>0.008</b>	<b>0.0010</b>	<b>0.300</b>	<b>0.002</b>	<b>0.520</b>	<b>0.0050</b>	<b>2.5</b>
1st Quart		200	376	300	899	8.31	131.00	5.5	1.20	0.008	0.0010	0.300	0.002	0.520	0.0050	2.5
Wet Min		-200	376	300	899	8.31	131.00	5.5	1.20	0.008	0.0010	0.300	0.002	0.520	0.0050	2.5

**APPENDIX 2: Sixteen Mile Creek 1994 - STATION C7 Data**

DATE	E	BACTERIAL DATA			NUTRIENT, PHYSICAL, CHEMICAL DATA											
		EC	FS	PA	Cond.	pH	Chloride	ResP	Turbid	Phos	PO4	T.K.N.	NH4	NO3	NO2	DOC
14-Jun-94	D	24	32	2	938	8.32	127.60	5.1	2.99	0.012	0.0010	0.320	0.024	0.885	0.0100	1.9
20-Jun-94	D	28	12	1	904	8.32	126.60	6.3	4.14	0.010	0.0010	0.320	0.028	0.725	0.0100	2.5
28-Jun-94	I	4	20	2	888	8.33	166.00	5.3	5.50	0.008	0.0010	0.340	0.032	0.750	0.0120	3.0
12-Jul-94	D	8	40	2	892	8.38	124.00	7.0	1.78	0.012	0.0010	0.420	0.048	0.670	0.0130	3.0
19-Jul-94	D	48	68	2	913	8.28	132.00	8.0	1.58	0.006	0.0010	0.340	0.052	0.670	0.0110	2.5
26-Jul-94	I	4	24	2	916	8.29	134.00	4.5	2.44	0.014	0.0010	0.360	0.042	0.605	0.0110	2.8
2-Aug-94	I	8	12	2	910	8.29	134.00	8.8	1.25	0.012	0.0010	0.340	0.034	0.480	0.0140	3.1
9-Aug-94	W	4	20	2	912	8.28	132.00	5.3	1.51	0.010	0.0010	0.420	0.044	0.605	0.1400	2.9
16-Aug-94	D	124	124	2	795	8.36	106.00	4.7	2.79	0.012	0.0015	0.400	0.076	0.550	0.0130	4.0
23-Aug-94	D	4	32	2	873	8.34	117.00	2.7	0.93	0.010	0.0010	0.420	0.048	0.555	0.0140	4.2
30-Aug-94	D	32	100	2	914	8.36	129.00	5.2	2.69	0.010	0.0010	0.400	0.044	0.545	0.0100	3.1
6-Sep-94	D	4	76	2	915	8.25	128.00	6.8	2.63	0.012	0.0010	0.440	0.048	0.620	0.0130	2.6
13-Sep-94	D	8	144	2	907	8.28	130.00	12.3	2.74	0.006	0.0010	0.360	0.040	0.710	0.0070	2.4
Jun GM/Avg		14	20	2	910	8.32	140.07	5.6	4.21	0.010	0.0010	0.327	0.028	0.787	0.0107	2.5
July GM/Avg		12	40	2	907	8.32	130.00	6.5	1.93	0.011	0.0010	0.373	0.047	0.648	0.0117	2.8
Aug GM/Avg		14	39	2	881	8.33	123.60	5.3	1.83	0.011	0.0011	0.396	0.049	0.547	0.0382	3.5
Sep GM/Avg		6	105	2	911	8.27	129.00	9.6	2.69	0.009	0.0010	0.400	0.044	0.665	0.0100	2.5
<b>Season GM/Avg</b>		<b>12</b>	<b>39</b>	<b>2</b>	<b>898</b>	<b>8.31</b>	<b>129.71</b>	<b>6.3</b>	<b>2.54</b>	<b>0.010</b>	<b>0.0010</b>	<b>0.375</b>	<b>0.043</b>	<b>0.644</b>	<b>0.0214</b>	<b>2.9</b>
Dry Max		124	144	2	938	8.38	132.00	12.3	4.14	0.012	0.0015	0.440	0.076	0.885	0.0140	4.2
3 <sup>rd</sup> Quart		32	100	2	914	8.36	129.00	7.0	2.79	0.012	0.0010	0.420	0.048	0.710	0.0130	3.1
Dry Median		24	68	2	907	8.32	127.60	6.3	2.69	0.010	0.0010	0.400	0.048	0.670	0.0110	2.6
<b>Dry GM/Avg</b>		<b>17</b>	<b>55</b>	<b>2</b>	<b>895</b>	<b>8.32</b>	<b>124.47</b>	<b>6.5</b>	<b>2.47</b>	<b>0.010</b>	<b>0.0011</b>	<b>0.380</b>	<b>0.045</b>	<b>0.659</b>	<b>0.0112</b>	<b>2.9</b>
1 <sup>st</sup> Quart		8	32	2	892	8.28	124.00	5.1	1.78	0.010	0.0010	0.340	0.040	0.555	0.0100	2.5
Dry Min		4	12	1	795	8.25	106.00	2.7	0.93	0.006	0.0010	0.320	0.024	0.545	0.0070	1.9
Wet Max		4	20	2	912	8.28	132.00	5.3	1.51	0.010	0.0010	0.420	0.044	0.605	0.1400	2.9
3 <sup>rd</sup> Quart		4	20	2	912	8.28	132.00	5.3	1.51	0.010	0.0010	0.420	0.044	0.605	0.1400	2.9
Wet Median		4	20	2	912	8.28	132.00	5.3	1.51	0.010	0.0010	0.420	0.044	0.605	0.1400	2.9
<b>Wet GM/Avg</b>		<b>4</b>	<b>20</b>	<b>2</b>	<b>912</b>	<b>8.28</b>	<b>132.00</b>	<b>5.3</b>	<b>1.51</b>	<b>0.010</b>	<b>0.0010</b>	<b>0.420</b>	<b>0.044</b>	<b>0.605</b>	<b>0.1400</b>	<b>2.9</b>
1st Quart		4	20	2	912	8.28	132.00	5.3	1.51	0.010	0.0010	0.420	0.044	0.605	0.1400	2.9
Wet Min		4	20	2	912	8.28	132.00	5.3	1.51	0.010	0.0010	0.420	0.044	0.605	0.1400	2.9

**Sixteen Mile Creek 1994 - STATION K8 Data**

DATE	E	BACTERIAL DATA			NUTRIENT, PHYSICAL, CHEMICAL DATA											
		EC	FS	PA	Cond.	pH	Chloride	ResP	Turbid	Phos	PO4	T.K.N.	NH4	NO3	NO2	DOC
14-Jun-94	D	76	76	2	924	8.26	120.40	2.9	1.58	0.014	0.0010	0.340	0.018	0.985	0.0080	2.3
20-Jun-94	D	56	56	1	946	8.26	136.00	3.9	2.21	0.014	0.0010	0.320	0.024	0.930	0.0110	2.6
28-Jun-94	I	84	116	2	872	8.26	107.00	2.5	1.08	0.008	0.0010	0.380	0.022	0.805	0.0090	3.6
12-Jul-94	D	24	52	2	923	8.29	124.00	4.0	1.80	0.012	0.0010	0.380	0.034	0.870	0.0140	2.8
19-Jul-94	D	16	64	2	929	8.20	126.00	7.1	1.33	0.018	0.0010	0.400	0.050	0.865	0.0130	2.2
26-Jul-94	I	24	32	2	913	8.17	120.00	5.2	1.85	0.010	0.0010	0.360	0.044	0.805	0.0120	2.5
2-Aug-94	I	32	84	2	894	8.20	116.00	4.0	1.20	0.012	0.0010	0.320	0.066	0.590	0.0130	2.4
9-Aug-94	W	16	80	2	864	8.20	111.00	7.9	2.33	0.010	0.0010	0.360	0.034	0.725	0.0120	2.3
16-Aug-94	D	332	312	2	722	8.31	86.20	4.0	3.61	0.014	0.0020	0.500	0.060	0.440	0.0100	8.3
23-Aug-94	D	8	32	2	878	8.24	111.00	5.3	2.20	0.012	0.0010	0.380	0.040	0.685	0.0150	3.1
30-Aug-94	D	4	36	2	890	8.26	113.00	6.0	2.61	0.018	0.0010	0.400	0.038	0.695	0.0110	2.4
6-Sep-94	D	4	48	2	871	8.30	109.00	4.5	2.32	0.012	0.0010	0.340	0.024	0.695	0.0010	2.1
13-Sep-94	D	4	8	2	858	8.36	106.20	3.8	1.78	0.004	0.0010	0.300	0.016	0.755	0.0060	2.1
Jun GM/Avg		71	79	2	914	8.26	121.13	3.1	1.62	0.012	0.0010	0.347	0.021	0.907	0.0093	2.8
July GM/Avg		21	47	2	922	8.22	123.33	5.4	1.66	0.013	0.0010	0.380	0.043	0.847	0.0130	2.5
Aug GM/Avg		22	75	2	850	8.24	107.44	5.4	2.39	0.013	0.0012	0.392	0.048	0.627	0.0122	3.7
Sep GM/Avg		4	20	2	865	8.33	107.60	4.2	2.05	0.008	0.0010	0.320	0.020	0.725	0.0035	2.1
<b>Season GM/Avg</b>		<b>22</b>	<b>56</b>	<b>2</b>	<b>883</b>	<b>8.25</b>	<b>114.29</b>	<b>4.7</b>	<b>1.99</b>	<b>0.012</b>	<b>0.0011</b>	<b>0.368</b>	<b>0.036</b>	<b>0.757</b>	<b>0.0104</b>	<b>3.0</b>
Dry Max		332	312	2	946	8.36	136.00	7.1	3.61	0.018	0.0020	0.500	0.060	0.985	0.0150	8.3
3 <sup>rd</sup> Quart		56	64	2	924	8.30	124.00	5.3	2.32	0.014	0.0010	0.400	0.040	0.870	0.0130	2.8
Dry Median		16	52	2	890	8.26	113.00	4.0	2.20	0.014	0.0010	0.380	0.034	0.755	0.0110	2.4
<b>Dry GM/Avg</b>		<b>19</b>	<b>50</b>	<b>2</b>	<b>882</b>	<b>8.28</b>	<b>114.64</b>	<b>4.6</b>	<b>2.16</b>	<b>0.013</b>	<b>0.0011</b>	<b>0.373</b>	<b>0.034</b>	<b>0.769</b>	<b>0.0099</b>	<b>3.1</b>
1 <sup>st</sup> Quart		4	36	2	871	8.26	109.00	3.9	1.78	0.012	0.0010	0.340	0.024	0.695	0.0080	2.2
Dry Min		4	8	1	722	8.20	86.20	2.9	1.33	0.004	0.0010	0.300	0.016	0.440	0.0010	2.1
Wet Max		16	80	2	864	8.20	111.00	7.9	2.33	0.010	0.0010	0.360	0.034	0.725	0.0120	2.3
3 <sup>rd</sup> Quart		16	80	2	864	8.20	111.00	7.9	2.33	0.010	0.0010	0.360	0.034	0.725	0.0120	2.3
Wet Median		16	80	2	864	8.20	111.00	7.9	2.33	0.010	0.0010	0.360	0.034	0.725	0.0120	2.3
<b>Wet GM/Avg</b>		<b>16</b>	<b>80</b>	<b>2</b>	<b>864</b>	<b>8.20</b>	<b>111.00</b>	<b>7.9</b>	<b>2.33</b>	<b>0.010</b>	<b>0.0010</b>	<b>0.360</b>	<b>0.034</b>	<b>0.725</b>	<b>0.0120</b>	<b>2.3</b>
1st Quart		16	80	2	864	8.20	111.00	7.9	2.33	0.010	0.0010	0.360	0.034	0.725	0.0120	2.3
Wet Min		16	80	2	864	8.20	111.00	7.9	2.33	0.010	0.0010	0.360	0.034	0.725	0.0120	2.3

**APPENDIX 2: Sixteen Mile Creek 1994 - STATION K6 Data**

DATE	E	BACTERIAL DATA			NUTRIENT, PHYSICAL, CHEMICAL DATA											
		EC	FS	PA	Cond.	pH	Chloride	ResP	Turbid	Phos	PO4	T.K.N.	NH4	NO3	NO2	DOC
14-Jun-94	D	96	112	2	459	8.40	14.50	2.3	0.96	0.016	0.0010	0.420	0.002	0.065	0.0030	5.4
20-Jun-94	D	188	180	1	465	8.34	14.40	4.1	1.68	0.014	0.0010	0.420	0.002	0.060	0.0040	5.3
28-Jun-94	I	208	160	2	459	8.48	14.10	5.5	2.39	0.020	0.0030	0.420	0.002	0.060	0.0050	5.5
12-Jul-94	D	220	228	2	462	8.30	15.10	4.0	1.78	0.018	0.0010	0.500	0.008	0.030	0.0060	5.3
19-Jul-94	D	120	284	2	461	8.20	15.70	6.4	2.87	0.026	0.0025	0.500	0.036	0.010	0.0080	4.8
26-Jul-94	I	40	270	2	469	8.16	16.20	6.1	3.26	0.025	0.0010	0.450	0.042	0.060	0.0070	4.7
2-Aug-94	I	132	296	2	455	8.23	15.70	9.5	2.84	0.024	0.0040	0.480	0.044	0.015	0.0020	4.8
9-Aug-94	W	308	616	2	462	8.19	15.70	4.1	1.43	0.012	0.0010	0.400	0.010	0.015	0.0030	4.6
16-Aug-94	D	110	160	2	466	8.40	15.70	3.4	1.07	0.012	0.0025	0.360	0.020	0.025	0.0070	4.2
23-Aug-94	D	70	50	2	469	8.28	16.20	2.7	1.42	0.014	0.0010	0.380	0.008	0.020	0.0020	4.4
30-Aug-94	D	44	192	2	468	8.36	16.40	1.2	1.32	0.014	0.0010	0.400	0.002	0.010	0.0020	4.3
6-Sep-94	D	4	168	2	463	8.36	16.30	2.3	1.11	0.012	0.0010	0.340	0.006	0.010	0.0020	4.0
13-Sep-94	D	28	220	2	463	8.39	16.90	1.9	1.27	0.036	0.0015	0.300	0.002	0.005	0.0010	3.9
Jun GM/Avg		155	148	2	461	8.41	14.33	4.0	1.68	0.017	0.0017	0.420	0.002	0.062	0.0040	5.4
July GM/Avg		102	260	2	464	8.22	15.67	5.5	2.64	0.023	0.0015	0.483	0.029	0.033	0.0070	4.9
Aug GM/Avg		107	195	2	464	8.29	15.94	4.2	1.62	0.015	0.0019	0.404	0.017	0.017	0.0032	4.5
Sep GM/Avg		11	192	2	463	8.38	16.60	2.1	1.19	0.024	0.0013	0.320	0.004	0.008	0.0015	4.0
<b>Season GM/Avg</b>		<b>81</b>	<b>195</b>	<b>2</b>	<b>463</b>	<b>8.31</b>	<b>15.61</b>	<b>4.1</b>	<b>1.80</b>	<b>0.019</b>	<b>0.0017</b>	<b>0.413</b>	<b>0.014</b>	<b>0.030</b>	<b>0.0040</b>	<b>4.7</b>
Dry Max		220	284	2	469	8.40	16.90	6.4	2.87	0.036	0.0025	0.500	0.036	0.065	0.0080	5.4
3 <sup>rd</sup> Quart		120	220	2	466	8.39	16.30	4.0	1.68	0.018	0.0015	0.420	0.008	0.030	0.0060	5.3
Dry Median		96	180	2	463	8.36	15.70	2.7	1.32	0.014	0.0010	0.400	0.006	0.020	0.0030	4.4
<b>Dry GM/Avg</b>		<b>64</b>	<b>161</b>	<b>2</b>	<b>464</b>	<b>8.34</b>	<b>15.69</b>	<b>3.1</b>	<b>1.50</b>	<b>0.018</b>	<b>0.0014</b>	<b>0.402</b>	<b>0.010</b>	<b>0.026</b>	<b>0.0039</b>	<b>4.6</b>
1 <sup>st</sup> Quart		44	160	2	462	8.30	15.10	2.3	1.11	0.014	0.0010	0.360	0.002	0.010	0.0020	4.2
Dry Min		4	50	1	459	8.20	14.40	1.2	0.96	0.012	0.0010	0.300	0.002	0.005	0.0010	3.9
Wet Max		308	616	2	462	8.19	15.70	4.1	1.43	0.012	0.0010	0.400	0.010	0.015	0.0030	4.6
3 <sup>rd</sup> Quart		308	616	2	462	8.19	15.70	4.1	1.43	0.012	0.0010	0.400	0.010	0.015	0.0030	4.6
Wet Median		308	616	2	462	8.19	15.70	4.1	1.43	0.012	0.0010	0.400	0.010	0.015	0.0030	4.6
<b>Wet GM/Avg</b>		<b>308</b>	<b>616</b>	<b>2</b>	<b>462</b>	<b>8.19</b>	<b>15.70</b>	<b>4.1</b>	<b>1.43</b>	<b>0.012</b>	<b>0.0010</b>	<b>0.400</b>	<b>0.010</b>	<b>0.015</b>	<b>0.0030</b>	<b>4.6</b>
1 <sup>st</sup> Quart		308	616	2	462	8.19	15.70	4.1	1.43	0.012	0.0010	0.400	0.010	0.015	0.0030	4.6
Wet Min		308	616	2	462	8.19	15.70	4.1	1.43	0.012	0.0010	0.400	0.010	0.015	0.0030	4.6

**Sixteen Mile Creek 1994 - STATION K6A Data**

DATE	E	BACTERIAL DATA			NUTRIENT, PHYSICAL, CHEMICAL DATA											
		EC	FS	PA	Cond.	pH	Chloride	ResP	Turbid	Phos	PO4	T.K.N.	NH4	NO3	NO2	DOC
14-Jun-94	D	136	56	2	461	8.34	14.40	3.1	1.27	0.018	0.0035	0.420	0.010	0.090	0.0040	5.4
20-Jun-94	D	256	144	1	465	8.34	14.50	2.6	1.64	0.018	0.0015	0.420	0.002	0.110	0.0020	5.2
28-Jun-94	I	88	244	2	464	8.37	14.10	3.4	1.20	0.016	0.0065	0.380	0.002	0.075	0.0030	5.6
12-Jul-94	D	180	188	2	461	8.32	15.10	2.4	1.44	0.016	0.0010	0.380	0.002	0.045	0.0040	5.0
19-Jul-94	D	164	260	2	476	8.17	15.70	2.7	1.04	0.012	0.0025	0.380	0.002	0.005	0.0040	4.6
26-Jul-94	I	148	360	2	470	8.13	15.00	3.7	1.43	0.012	0.0010	0.350	0.016	0.060	0.0070	4.5
2-Aug-94	I	288	344	2	470	8.11	16.30	2.5	1.25	0.016	0.0010	0.380	0.016	0.020	0.0060	4.6
9-Aug-94	W	452	592	2	453	8.19	12.50	2.4	1.24	0.012	0.0010	0.360	0.002	0.050	0.0050	4.5
16-Aug-94	D	180	100	2	468	8.41	15.70	1.3	0.95	0.012	0.0025	0.320	0.020	0.040	0.0060	4.1
23-Aug-94	D	70	130	2	480	8.19	16.30	3.5	1.39	0.016	0.0010	0.400	0.002	0.020	0.0030	4.3
30-Aug-94	D	40	128	2	490	8.23	16.50	2.2	1.02	0.014	0.0010	0.360	0.002	0.005	0.0010	4.0
6-Sep-94	D	36	40	2	489	8.20	16.60	1.5	0.89	0.012	0.0010	0.300	0.002	0.005	0.0020	4.0
13-Sep-94	D	52	56	2	477	8.39	16.70	1.6	0.95	0.012	0.0010	0.240	0.002	0.005	0.0010	3.8
Jun GM/Avg		145	125	2	463	8.35	14.33	3.0	1.37	0.017	0.0038	0.407	0.005	0.092	0.0030	5.4
July GM/Avg		163	260	2	469	8.21	15.27	2.9	1.30	0.013	0.0015	0.370	0.007	0.037	0.0050	4.7
Aug GM/Avg		146	202	2	472	8.23	15.46	2.4	1.17	0.014	0.0013	0.364	0.008	0.027	0.0042	4.3
Sep GM/Avg		43	47	2	483	8.30	16.65	1.6	0.92	0.012	0.0010	0.270	0.002	0.005	0.0015	3.9
<b>Season GM/Avg</b>		<b>124</b>	<b>154</b>	<b>2</b>	<b>471</b>	<b>8.26</b>	<b>15.34</b>	<b>2.5</b>	<b>1.21</b>	<b>0.014</b>	<b>0.0019</b>	<b>0.361</b>	<b>0.006</b>	<b>0.041</b>	<b>0.0037</b>	<b>4.6</b>
Dry Max		256	260	2	490	8.41	16.70	3.5	1.64	0.018	0.0035	0.420	0.020	0.110	0.0060	5.4
3 <sup>rd</sup> Quart		180	144	2	480	8.34	16.50	2.7	1.39	0.016	0.0025	0.400	0.002	0.045	0.0040	5.0
Dry Median		136	128	2	476	8.32	15.70	2.4	1.04	0.014	0.0010	0.380	0.002	0.020	0.0030	4.3
<b>Dry GM/Avg</b>		<b>100</b>	<b>104</b>	<b>2</b>	<b>474</b>	<b>8.29</b>	<b>15.72</b>	<b>2.3</b>	<b>1.18</b>	<b>0.014</b>	<b>0.0017</b>	<b>0.358</b>	<b>0.005</b>	<b>0.036</b>	<b>0.0030</b>	<b>4.5</b>
1 <sup>st</sup> Quart		52	56	2	465	8.20	15.10	1.6	0.95	0.012	0.0010	0.320	0.002	0.005	0.0020	4.0
Dry Min		36	40	1	461	8.17	14.40	1.3	0.89	0.012	0.0010	0.240	0.002	0.005	0.0010	3.8
Wet Max		452	592	2	453	8.19	12.50	2.4	1.24	0.012	0.0010	0.360	0.002	0.050	0.0050	4.5
3 <sup>rd</sup> Quart		452	592	2	453	8.19	12.50	2.4	1.24	0.012	0.0010	0.360	0.002	0.050	0.0050	4.5
Wet Median		452	592	2	453	8.19	12.50	2.4	1.24	0.012	0.0010	0.360	0.002	0.050	0.0050	4.5
<b>Wet GM/Avg</b>		<b>452</b>	<b>592</b>	<b>2</b>	<b>453</b>	<b>8.19</b>	<b>12.50</b>	<b>2.4</b>	<b>1.24</b>	<b>0.012</b>	<b>0.0010</b>	<b>0.360</b>	<b>0.002</b>	<b>0.050</b>	<b>0.0050</b>	<b>4.5</b>
1 <sup>st</sup> Quart		452	592	2	453	8.19	12.50	2.4	1.24	0.012	0.0010	0.360	0.002	0.050	0.0050	4.5
Wet Min		452	592	2	453	8.19	12.50	2.4	1.24	0.012	0.0010	0.360	0.002	0.050	0.0050	4.5

**APPENDIX 2: Sixteen Mile Creek 1994 - STATION K1B Data**

DATE	E	BACTERIAL DATA			NUTRIENT, PHYSICAL, CHEMICAL DATA											
		EC	FS	PA	Cond.	pH	Chloride	ResP	Turbid	Phos	PO4	T.K.N.	NH4	NO3	NO2	DOC
14-Jun-94	D															
20-Jun-94	D															
28-Jun-94	I															
12-Jul-94	D															
19-Jul-94	D	188	152	2	477	8.27	15.60	5.1	0.92	0.010	0.0015	0.360	0.014	0.065	0.0040	4.2
26-Jul-94	I	240	230	2	469	8.21	15.00	3.4	1.42	0.014	0.0010	0.360	0.018	0.090	0.0050	4.4
2-Aug-94	I	504	400	2	472	8.16	15.80	4.6	1.90	0.016	0.0015	0.380	0.032	0.035	0.0050	4.4
9-Aug-94	W	310	400	2	461	8.27	15.60	3.8	1.37	0.012	0.0055	0.380	0.002	0.065	0.0040	4.6
16-Aug-94	D	150	130	2	468	8.42	15.70	2.1	1.23	0.008	0.0020	0.320	0.018	0.055	0.0030	4.0
23-Aug-94	D	150	180	2	484	8.34	16.20	1.3	1.03	0.014	0.0010	0.360	0.008	0.025	0.0070	4.3
30-Aug-94	D	50	130	2	493	8.28	16.60	1.7	0.86	0.012	0.0015	0.360	0.002	0.010	0.0020	3.8
6-Sep-94	D															
13-Sep-94	D															
Jun GM/Avg																
July GM/Avg		212	187	2	473	8.24	15.30	4.3	1.17	0.012	0.0013	0.360	0.016	0.078	0.0045	4.3
Aug GM/Avg		177	217	2	476	8.29	15.98	2.7	1.28	0.012	0.0023	0.360	0.012	0.038	0.0042	4.2
Sep GM/Avg																
<b>Season GM/Avg</b>		<b>187</b>	<b>208</b>	<b>2</b>	<b>475</b>	<b>8.28</b>	<b>15.79</b>	<b>3.1</b>	<b>1.25</b>	<b>0.012</b>	<b>0.0020</b>	<b>0.360</b>	<b>0.013</b>	<b>0.049</b>	<b>0.0043</b>	<b>4.2</b>
Dry Max		188	180	2	493	8.42	16.60	5.1	1.23	0.014	0.0020	0.360	0.018	0.065	0.0070	4.3
3 <sup>rd</sup> Quart		160	159	2	486	8.36	16.30	2.9	1.08	0.013	0.0016	0.360	0.015	0.058	0.0048	4.2
Dry Median		150	141	2	481	8.31	15.95	1.9	0.98	0.011	0.0015	0.360	0.011	0.040	0.0035	4.1
<b>Dry GM/Avg</b>		<b>121</b>	<b>147</b>	<b>2</b>	<b>481</b>	<b>8.33</b>	<b>16.03</b>	<b>2.6</b>	<b>1.01</b>	<b>0.011</b>	<b>0.0015</b>	<b>0.350</b>	<b>0.011</b>	<b>0.039</b>	<b>0.0040</b>	<b>4.1</b>
1 <sup>st</sup> Quart		125	130	2	475	8.28	15.68	1.6	0.91	0.010	0.0014	0.350	0.007	0.021	0.0028	4.0
Dry Min		50	130	2	468	8.27	15.60	1.3	0.86	0.008	0.0010	0.320	0.002	0.010	0.0020	3.8
Wet Max		310	400	2	461	8.27	15.60	3.8	1.37	0.012	0.0055	0.380	0.002	0.065	0.0040	4.6
3 <sup>rd</sup> Quart		310	400	2	461	8.27	15.60	3.8	1.37	0.012	0.0055	0.380	0.002	0.065	0.0040	4.6
Wet Median		310	400	2	461	8.27	15.60	3.8	1.37	0.012	0.0055	0.380	0.002	0.065	0.0040	4.6
<b>Wet GM/Avg</b>		<b>310</b>	<b>400</b>	<b>2</b>	<b>461</b>	<b>8.27</b>	<b>15.60</b>	<b>3.8</b>	<b>1.37</b>	<b>0.012</b>	<b>0.0055</b>	<b>0.380</b>	<b>0.002</b>	<b>0.065</b>	<b>0.0040</b>	<b>4.6</b>
1st Quart		310	400	2	461	8.27	15.60	3.8	1.37	0.012	0.0055	0.380	0.002	0.065	0.0040	4.6
Wet Min		310	400	2	461	8.27	15.60	3.8	1.37	0.012	0.0055	0.380	0.002	0.065	0.0040	4.6

**Sixteen Mile Creek 1994 - STATION K1A Data**

DATE	E	BACTERIAL DATA			NUTRIENT, PHYSICAL, CHEMICAL DATA											
		EC	FS	PA	Cond.	pH	Chloride	ResP	Turbid	Phos	PO4	T.K.N.	NH4	NO3	NO2	DOC
14-Jun-94	D															
20-Jun-94	D															
28-Jun-94	I															
12-Jul-94	D	120	70	2	475	7.95	21.20	9.1	4.79	0.134	0.0565	1.300	0.454	0.035	0.0100	10.5
19-Jul-94	D															
26-Jul-94	I	200	120	2	493	7.81	20.70	9.4	5.57	0.160	0.0390	1.500	0.502	0.035	0.0110	10.1
2-Aug-94	I	124	312	2	487	7.60	20.70	8.9	2.02	0.070	0.0065	1.200	0.022	0.065	0.0040	11.5
9-Aug-94	W	50	120	4	558	7.73	21.10	14.3	7.36	0.138	0.0210	1.680	0.592	0.005	0.0090	11.0
16-Aug-94	D	10	110	2	569	8.05	22.50	6.2	2.37	0.046	0.0045	0.900	0.048	0.045	0.0050	11.4
23-Aug-94	D	190	640	2	625	7.71	24.60	14.0	5.03	0.128	0.0115	1.880	0.442	0.015	0.0120	14.1
30-Aug-94	D	30	150	2	641	8.14	22.80	12.2	10.50	0.184	0.0550	2.100	1.250	0.005	0.0060	14.3
6-Sep-94	D	16	600	2	663	7.99	22.50	10.3	12.30	0.130	0.0515	3.100	1.730	0.005	0.0070	13.7
13-Sep-94	D															
Jun GM/Avg																
July GM/Avg		155	92	2	484	7.88	20.95	9.3	5.18	0.147	0.0478	1.400	0.478	0.035	0.0105	10.3
Aug GM/Avg		51	209	2	576	7.85	22.34	11.1	5.46	0.113	0.0197	1.552	0.471	0.027	0.0072	12.5
Sep GM/Avg		16	600	2	663	7.99	22.50	10.3	12.30	0.130	0.0515	3.100	1.730	0.005	0.0070	13.7
<b>Season GM/Avg</b>		<b>58</b>	<b>194</b>	<b>2</b>	<b>564</b>	<b>7.87</b>	<b>22.01</b>	<b>10.6</b>	<b>6.24</b>	<b>0.124</b>	<b>0.0307</b>	<b>1.708</b>	<b>0.630</b>	<b>0.026</b>	<b>0.0080</b>	<b>12.1</b>
<b>Dry Max</b>		190	640	2	663	8.14	24.60	14.0	12.30	0.184	0.0565	3.100	1.730	0.045	0.0120	14.3
3 <sup>rd</sup> Quart		120	600	2	641	8.05	22.80	12.2	10.50	0.134	0.0550	2.100	1.250	0.035	0.0100	14.1
Dry Median		30	150	2	625	7.99	22.50	10.3	5.03	0.130	0.0515	1.880	0.454	0.015	0.0070	13.7
<b>Dry GM/Avg</b>		<b>41</b>	<b>213</b>	<b>2</b>	<b>595</b>	<b>7.97</b>	<b>22.72</b>	<b>10.4</b>	<b>7.00</b>	<b>0.124</b>	<b>0.0358</b>	<b>1.856</b>	<b>0.785</b>	<b>0.021</b>	<b>0.0080</b>	<b>12.8</b>
1 <sup>st</sup> Quart		16	110	2	569	7.95	22.50	9.1	4.79	0.128	0.0115	1.300	0.442	0.005	0.0060	11.4
Dry Min		10	70	2	475	7.71	21.20	6.2	2.37	0.046	0.0045	0.900	0.048	0.005	0.0050	10.5
Wet Max		50	120	4	558	7.73	21.10	14.3	7.36	0.138	0.0210	1.680	0.592	0.005	0.0090	11.0
3 <sup>rd</sup> Quart		50	120	4	558	7.73	21.10	14.3	7.36	0.138	0.0210	1.680	0.592	0.005	0.0090	11.0
Wet Median		50	120	4	558	7.73	21.10	14.3	7.36	0.138	0.0210	1.680	0.592	0.005	0.0090	11.0
<b>Wet GM/Avg</b>		<b>50</b>	<b>120</b>	<b>4</b>	<b>558</b>	<b>7.73</b>	<b>21.10</b>	<b>14.3</b>	<b>7.36</b>	<b>0.138</b>	<b>0.0210</b>	<b>1.680</b>	<b>0.592</b>	<b>0.005</b>	<b>0.0090</b>	<b>11.0</b>
1st Quart		50	120	4	558	7.73	21.10	14.3	7.36	0.138	0.0210	1.680	0.592	0.005	0.0090	11.0
Wet Min		50	120	4	558	7.73	21.10	14.3	7.36	0.138	0.0210	1.680	0.592	0.005	0.0090	11.0

**APPENDIX 2: Sixteen Mile Creek 1994 - STATION HF Data**

DATE	E	BACTERIAL DATA			NUTRIENT, PHYSICAL, CHEMICAL DATA											
		EC	FS	PA	Cond.	pH	Chloride	ResP	Turbid	Phos	PO4	T.K.N.	NH4	NO3	NO2	DOC
14-Jun-94	D	28	112	2	456	8.21	13.90	5.9	1.44	0.022	0.0055	0.480	0.004	0.065	0.0040	6.7
20-Jun-94	D	12	236	1	455	8.15	14.10	4.4	2.27	0.092	0.0180	0.920	0.052	0.120	0.0020	6.8
28-Jun-94	I	8	372	2	461	8.21	14.30	2.8	1.59	0.016	0.0060	0.420	0.002	0.060	0.0040	6.8
12-Jul-94	D	8	224	2	440	8.22	14.90	3.1	1.64	0.024	0.0075	0.500	0.002	0.130	0.0060	6.7
19-Jul-94	D	4	164	2	449	8.07	14.70	3.5	1.34	0.024	0.0065	0.520	0.002	0.150	0.0060	6.1
26-Jul-94	I	20	112	2	443	8.10	14.30	3.4	1.82	0.025	0.0070	0.500	0.006	0.155	0.0060	6.3
2-Aug-94	I	4	144	2	428	8.11	14.90	3.3	1.65	0.022	0.0055	0.480	0.002	0.135	0.0040	6.3
9-Aug-94	W	4	148	2	421	8.09	14.70	3.7	1.86	0.020	0.0065	0.480	0.002	0.110	0.0040	5.9
16-Aug-94	D	8	136	2	445	8.33	14.80	2.1	1.34	0.030	0.0025	0.520	0.004	0.095	0.0050	5.5
23-Aug-94	D	12	104	2	446	8.18	14.40	10.8	1.58	0.024	0.0055	0.480	0.002	0.180	0.0070	5.7
30-Aug-94	D	4	8	2	449	8.28	14.10	2.5	1.68	0.024	0.0140	0.460	0.002	0.215	0.0030	5.2
6-Sep-94	D	4	16	2	447	8.19	13.90	3.2	2.68	0.032	0.0045	0.480	0.002	0.160	0.0030	5.2
13-Sep-94	D	4	20	2	443	8.24	13.90	2.7	1.48	0.020	0.0120	0.380	0.002	0.225	0.0010	5.0
Jun GM/Avg		14	214	2	457	8.19	14.10	4.4	1.77	0.043	0.0098	0.607	0.019	0.082	0.0033	6.8
July GM/Avg		9	160	2	444	8.13	14.63	3.3	1.60	0.024	0.0070	0.507	0.003	0.145	0.0060	6.4
Aug GM/Avg		6	75	2	438	8.20	14.58	4.5	1.62	0.024	0.0068	0.484	0.002	0.147	0.0046	5.7
Sep GM/Avg		4	18	2	445	8.22	13.90	3.0	2.08	0.026	0.0083	0.430	0.002	0.193	0.0020	5.1
<b>Season GM/Avg</b>		<b>7</b>	<b>91</b>	<b>2</b>	<b>445</b>	<b>8.18</b>	<b>14.38</b>	<b>4.0</b>	<b>1.72</b>	<b>0.029</b>	<b>0.0078</b>	<b>0.509</b>	<b>0.006</b>	<b>0.138</b>	<b>0.0042</b>	<b>6.0</b>
Dry Max		28	236	2	456	8.33	14.90	10.8	2.68	0.092	0.0180	0.920	0.052	0.225	0.0070	6.8
3 <sup>rd</sup> Quart		12	164	2	449	8.24	14.70	4.4	1.68	0.030	0.0120	0.520	0.004	0.180	0.0060	6.7
Dry Median		8	112	2	447	8.21	14.10	3.2	1.58	0.024	0.0065	0.480	0.002	0.150	0.0040	5.7
<b>Dry GM/Avg</b>		<b>7</b>	<b>69</b>	<b>2</b>	<b>448</b>	<b>8.21</b>	<b>14.30</b>	<b>4.2</b>	<b>1.72</b>	<b>0.632</b>	<b>0.0084</b>	<b>0.527</b>	<b>0.008</b>	<b>0.149</b>	<b>0.0041</b>	<b>5.9</b>
1 <sup>st</sup> Quart		4	20	2	445	8.18	13.90	2.7	1.44	0.024	0.0055	0.480	0.002	0.120	0.0030	5.2
Dry Min		4	8	1	440	8.07	13.90	2.1	1.34	0.020	0.0025	0.380	0.002	0.065	0.0010	5.0
Wet Max		4	148	2	421	8.09	14.70	3.7	1.86	0.020	0.0065	0.480	0.002	0.110	0.0040	5.9
3 <sup>rd</sup> Quart		4	148	2	421	8.09	14.70	3.7	1.86	0.020	0.0065	0.480	0.002	0.110	0.0040	5.9
Wet Median		4	148	2	421	8.09	14.70	3.7	1.86	0.020	0.0065	0.480	0.002	0.110	0.0040	5.9
<b>Wet GM/Avg</b>		<b>4</b>	<b>148</b>	<b>2</b>	<b>421</b>	<b>8.09</b>	<b>14.70</b>	<b>3.7</b>	<b>1.86</b>	<b>0.020</b>	<b>0.0065</b>	<b>0.480</b>	<b>0.002</b>	<b>0.110</b>	<b>0.0040</b>	<b>5.9</b>
1st Quart		4	148	2	421	8.09	14.70	3.7	1.86	0.020	0.0065	0.480	0.002	0.110	0.0040	5.9
Wet Min		4	148	2	421	8.09	14.70	3.7	1.86	0.020	0.0065	0.480	0.002	0.110	0.0040	5.9

**APPENDIX 3: Sixteen Mile Creek 1994 - E. COLI Data**

DATE	E	SAMPLING STATIONS										
		HF	K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B
14-Jun-94	D	28			136	96	76	24	104	92	80	4
20-Jun-94	D	12			256	188	56	28	88	92	88	8
28-Jun-94	I	8			88	208	84	4	32	80	80	52
12-Jul-94	D	8	120		180	220	24	8	56	64	80	4
19-Jul-94	D	4		188	164	120	16	48	104	64	20	16
26-Jul-94	I	20	200	240	148	40	24	4	116	48	36	4
2-Aug-94	I	4	124	504	288	132	32	8	160	52	32	44
9-Aug-94	W	4	50	310	452	308	16	4	200	100	104	4
16-Aug-94	D	8	10	150	180	110	332	124	192	56	64	8
23-Aug-94	D	12	190	150	70	70	8	4	90	48	44	4
30-Aug-94	D	4	30	50	40	44	4	32	292	80	68	8
6-Sep-94	D	4	16		36	4	4	4	120	36	24	4
13-Sep-94	D	4			52	28	4	8	160	12	24	4
Jun GM		14			145	155	71	14	66	88	83	12
July GM		9	155	212	163	102	21	12	88	58	39	6
Aug GM		6	51	177	146	107	22	14	174	65	58	9
Sep GM		4	16		43	11	4	6	139	21	24	4
<b>Season GM</b>		7	58	187	124	81	22	12	115	57	50	8
Dry Max		28	190	188	256	220	332	124	292	92	88	16
3 <sup>rd</sup> Quart		12	120	160	180	120	56	32	160	80	80	8
Dry Median		8	30	150	136	96	16	24	104	64	64	4
<b>Dry GeoMean</b>		7	41	121	100	64	19	17	120	53	48	6
1 <sup>st</sup> Quart		4	16	125	52	44	4	8	90	48	24	4
Dry Min		4	10	50	36	4	4	4	56	12	20	4
Wet Max		4	50	310	452	308	16	4	200	100	104	4
3 <sup>rd</sup> Quart		4	50	310	452	308	16	4	200	100	104	4
Wet Median		4	50	310	452	308	16	4	200	100	104	4
<b>Wet GeoMean</b>		4	50	310	452	308	16	4	200	100	104	4
1st Quart		4	50	310	452	308	16	4	200	100	104	4
Wet Min		4	50	310	452	308	16	4	200	100	104	4

**Sixteen Mile Creek 1994 - FECAL STREPTOCOCCI Data**

DATE	E	SAMPLING STATIONS										
		HF	K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B
14-Jun-94	D	112			56	112	76	32	96	56	72	4
20-Jun-94	D	236			144	180	56	12	88	136	120	8
28-Jun-94	I	372			244	160	116	20	84	184	244	16
12-Jul-94	D	224	70		188	228	52	40	248	256	244	8
19-Jul-94	D	164		152	260	284	64	68	236	392	316	8
26-Jul-94	I	112	120	230	360	270	32	24	80	190	140	8
2-Aug-94	D	144	312	400	344	296	84	12	180	208	196	8
9-Aug-94	W	148	120	400	592	616	80	20	376	348	352	16
16-Aug-94	D	136	110	130	100	160	312	124	160	156	140	4
23-Aug-94	D	104	640	180	130	50	32	32	310	176	108	8
30-Aug-94	D	8	150	130	128	192	36	100	1460	352	232	16
6-Sep-94	D	16	600		40	168	48	76	104	168	96	4
13-Sep-94	D	20			56	220	8	144	210	3.80	224	12
Jun GM		214			125	148	79	20	89	112	128	8
July GM		160	92	187	260	260	47	40	167	267	221	8
Aug GM		75	209	217	202	195	75	39	345	234	189	9
Sep GM		18	600		47	192	20	105	148	253	147	7
<b>Season GM</b>		91	194	208	154	195	56	39	188	206	172	8
Dry Max		236	640	180	260	284	312	144	1460	392	316	16
3 <sup>rd</sup> Quart		164	600	159	144	220	64	100	248	352	232	8
Dry Median		112	150	141	128	180	52	68	210	176	140	8
<b>Dry GeoMean</b>		69	213	147	104	161	50	55	210	198	155	7
1 <sup>st</sup> Quart		20	110	130	56	160	36	32	104	156	108	4
Dry Min		8	70	130	40	50	8	12	88	56	72	4
Wet Max		148	120	400	592	616	80	20	376	348	352	16
3 <sup>rd</sup> Quart		148	120	400	592	616	80	20	376	348	352	16
Wet Median		148	120	400	592	616	80	20	376	348	352	16
<b>Wet GeoMean</b>		148	120	400	592	616	80	20	376	348	352	16
1st Quart		148	120	400	592	616	80	20	376	348	352	16
Wet Min		148	120	400	592	616	80	20	376	348	352	16

**APPENDIX 3: Sixteen Mile Creek 1994 - PSEUDOMONAS AERUGINOSA Data**

DATE	E	SAMPLING STATIONS										
		HF	K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B
14-Jun-94	D	2			2	2	2	2	2	8	2	2
20-Jun-94	D	1			1	1	1	1	203	1	1	1
28-Jun-94	I	2			2	2	2	2	2	6	2	2
12-Jul-94	D	2	2		2	2	2	2	146	2	2	2
19-Jul-94	D	2		2	2	2	2	2	10	2	2	2
26-Jul-94	I	2	2	2	2	2	2	2	2	22	2	4
2-Aug-94	I	2	2	2	2	2	2	2	2	2	2	10
9-Aug-94	W	2	4	2	2	2	2	2	300	2	2	2
16-Aug-94	D	2	2	2	2	2	2	2	36	2	2	2
23-Aug-94	D	2	2	2	2	2	2	2	4	2	2	2
30-Aug-94	D	2	2	2	2	2	2	2	144	2	2	2
6-Sep-94	D	2	2		2	2	2	2	2	2	2	2
13-Sep-94	D	2			2	2	2	2	112	2		
Jun GM		2			2	2	2	2	9	4	2	2
July GM		2	2	2	2	2	2	2	14	4	2	3
Aug GM		2	2	2	2	2	2	2	26	2	2	3
Sep GM		2	2		2	2	2	2	15	2	2	2
<b>Season GM</b>		2	2	2	2	2	2	2	16	3	2	2
Dry Max		2	2	2	2	2	2	2	203	8	2	2
3 <sup>rd</sup> Quart		2	2	2	2	2	2	2	144	2	2	2
Dry Median		2	2	2	2	2	2	2	36	2	2	2
<b>Dry GeoMean</b>		2	2	2	2	2	2	2	24	2	2	2
1 <sup>st</sup> Quart		2	2	2	2	2		2	4	2	2	2
Dry Min		1	2	2	1	1	1	1	2	1	1	1
Wet Max		2	4	2	2	2	2	2	300	2	2	2
3 <sup>rd</sup> Quart		2	4	2	2	2	2	2	300	2	2	2
Wet Median		2	4	2	2	2	2	2	300	2	2	2
<b>Wet GeoMean</b>		2	4	2	2	2	2	2	300	2	2	2
1st Quart		2	4	2	2	2	2	2	300	2	2	2
Wet Min		2	4	2	2	2	2	2	300	2	2	2

**APPENDIX 3: Sixteen Mile Creek 1994 - CONDUCTIVITY Data**

DATE	E	HF	SAMPLING STATIONS									
			K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B
14-Jun-94	D	456			461	459	924	938	926	642	659	625
20-Jun-94	D	455			465	465	946	904	904	670	662	637
28-Jun-94	I	461			464	459	872	888	884	635	631	646
12-Jul-94	D	440	475		461	462	923	892	887	676	664	653
19-Jul-94	D	449		477	476	461	929	913	907	713	725	647
26-Jul-94	I	443	493	469	470	469	913	916	911	720	701	636
2-Aug-94	I	428	487	472	470	455	894	910	904	723	716	635
9-Aug-94	W	421	558	461	453	462	864	912	899	658	635	641
16-Aug-94	D	445	569	468	468	466	722	795	796	644	655	661
23-Aug-94	D	446	625	484	480	469	878	873	869	700	708	663
30-Aug-94	D	449	641	493	490	468	890	914	911	772	751	666
6-Sep-94	D	447	663		489	463	871	915	919	771	758	668
13-Sep-94	D	443			477	463	858	907	917	780	759	670
Jun GM		457			463	461	914	910	905	649	651	636
July GM		444	484	473	469	464	922	907	902	703	697	645
Aug GM		438	576	476	472	464	850	881	876	699	693	653
Sep GM		445	663		483	463	865	911	918	776	759	669
<b>Season GM</b>		445	564	475	471	463	883	898	895	700	694	650
Dry Max		456	663	493	490	469	946	938	926	780	759	670
3 <sup>rd</sup> Quart		449	641	486	480	466	924	914	917	771	751	666
Dry Median		447	625	481	476	463	890	907	907	700	708	661
<b>Dry GeoMean</b>		448	595	481	474	464	882	895	893	708	705	654
1 <sup>st</sup> Quart		445	569	475	465	462	871	892	887	670	662	647
Dry Min		440	475	468	461	459	722	795	796	642	655	625
Wet Max		421	558	461	453	462	864	912	899	658	635	641
3 <sup>rd</sup> Quart		421	558	461	453	462	864	912	899	658	635	641
Wet Median		421	558	461	453	462	864	912	899	658	635	641
<b>Wet GeoMean</b>		421	558	461	453	462	864	912	899	658	635	641
1st Quart		421	558	461	453	462	864	912	899	658	635	641
Wet Min		421	558	461	453	462	864	912	899	658	635	641

**Sixteen Mile Creek 1994 - pH Data**

DATE	E	HF	SAMPLING STATIONS									
			K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B
14-Jun-94	D	8.21			8.34	8.40	8.26	8.32	8.35	8.45	8.45	8.49
20-Jun-94	D	8.15			8.34	8.34	8.26	8.32	8.35	8.39	8.42	8.46
28-Jun-94	I	8.21			8.37	8.48	8.26	8.33	8.34	8.40	8.49	8.45
12-Jul-94	D	8.22	7.95		8.32	8.30	8.29	8.38	8.42	8.46	8.46	8.48
19-Jul-94	D	8.07		8.27	8.17	8.20	8.20	8.28	8.32	6.51	8.47	8.50
26-Jul-94	I	8.10	7.81	8.21	8.13	8.16	8.17	8.29	8.28	8.33	8.36	8.38
2-Aug-94	I	8.11	7.60	8.16	8.11	8.23	8.20	8.29	8.30	8.35	8.37	8.37
9-Aug-94	W	8.09	7.73	8.27	8.19	8.19	8.20	8.28	8.31	8.39	8.39	8.35
16-Aug-94	D	8.33	8.05	8.42	8.41	8.40	8.31	8.36	8.39	8.42	8.44	8.37
23-Aug-94	D	8.18	7.71	8.34	8.19	8.28	8.24	8.34	8.39	8.43	8.42	8.47
30-Aug-94	D	8.28	8.14	8.28	8.23	8.36	8.26	8.36	8.35	8.43	8.46	8.46
6-Sep-94	D	8.19	7.99		8.20	8.36	8.30	8.25	8.28	8.36	8.38	8.37
13-Sep-94	D	8.24			8.39	8.39	8.36	8.28	8.35	8.41	8.41	8.39
Jun GM		8.19			8.35	8.41	8.26	8.32	8.35	8.41	8.45	8.47
July GM		8.13	7.88	8.24	8.21	8.22	8.22	8.32	8.34	7.77	8.43	8.45
Aug GM		8.20	7.85	8.29	8.23	8.29	8.24	8.33	8.35	8.40	8.42	8.40
Sep GM		8.22	7.99		8.30	8.38	8.33	8.27	8.32	8.39	8.40	8.38
<b>Season GM</b>		8.18	7.87	8.28	8.26	8.31	8.25	8.31	8.34	8.26	8.42	8.43
Dry Max		8.33	8.14	8.42	8.41	8.40	8.36	8.38	8.42	8.46	8.47	8.50
3 <sup>rd</sup> Quart		8.24	8.05	8.36	8.34	8.39	8.30	8.36	8.39	8.43	8.46	8.48
Dry Median		8.21	7.99	8.31	8.32	8.36	8.26	8.32	8.35	8.42	8.44	8.46
<b>Dry GeoMean</b>		8.21	7.97	8.33	8.29	8.34	8.28	8.32	8.36	8.21	8.43	8.44
1 <sup>st</sup> Quart		8.18	7.95	8.28	8.20	8.30	8.26	8.28	8.35	8.39	8.42	8.39
Dry Min		8.07	7.71	8.27	8.17	8.20	8.20	8.25	8.28	6.51	8.38	8.37
Wet Max		8.09	7.73	8.27	8.19	8.19	8.20	8.28	8.31	8.39	8.39	8.35
3 <sup>rd</sup> Quart		8.09	7.73	8.27	8.19	8.19	8.20	8.28	8.31	8.39	8.39	8.35
Wet Median		8.09	7.73	8.27	8.19	8.19	8.20	8.28	8.31	8.39	8.39	8.35
<b>Wet GeoMean</b>		8.09	7.73	8.27	8.19	8.19	8.20	8.28	8.31	8.39	8.39	8.35
1st Quart		8.09	7.73	8.27	8.19	8.19	8.20	8.28	8.31	8.39	8.39	8.35
Wet Min		8.09	7.73	8.27	8.19	8.19	8.20	8.28	8.31	8.39	8.39	8.35

**APPENDIX 3: Sixteen Mile Creek 1994 - CHLORIDE Data**

DATE	E	SAMPLING STATIONS										
		HF	K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B
14-Jun-94	D	13.90			14.40	14.50	120.40	127.60	127.40	58.10	60.80	49.10
20-Jun-94	D	14.10			14.50	14.40	136.00	126.60	125.80	66.40	62.60	53.40
28-Jun-94	I	14.30			14.10	14.10	107.00	166.00	132.00	55.50	54.50	52.70
12-Jul-94	D	14.90	21.20		15.10	15.10	124.00	124.00	124.00	70.30	65.50	56.80
19-Jul-94	D	14.70		15.60	15.70	15.70	126.00	132.00	132.00	83.70	78.90	57.30
26-Jul-94	I	14.30	20.70	15.00	15.00	16.20	120.00	134.00	133.00	79.50	73.90	58.40
2-Aug-94	I	14.90	20.70	15.80	16.30	15.70	116.00	134.00	133.00	83.40	78.30	57.40
9-Aug-94	W	14.70	21.10	15.60	12.50	15.70	111.00	132.00	131.00	66.60	60.20	58.40
16-Aug-94	D	14.80	22.50	15.70	15.70	15.70	86.20	106.00	106.00	63.80	64.30	59.80
23-Aug-94	D	14.40	24.60	16.20	16.30	16.20	111.00	117.00	118.00	75.30	73.20	62.80
30-Aug-94	D	14.10	22.80	16.60	16.50	16.40	113.00	129.00	129.00	90.80	82.00	62.20
6-Sep-94	D	13.90	22.50		16.60	16.30	109.00	128.00	129.00	90.70	84.10	61.30
13-Sep-94	D	13.90			16.70	16.90	106.20	130.00	131.50	93.40	84.80	61.00
Jun GM		14.10			14.33	14.33	121.13	140.07	128.40	60.00	59.30	51.73
July GM		14.63	20.95	15.30	15.27	15.67	123.33	130.00	129.67	77.83	72.77	57.50
Aug GM		14.58	22.34	15.98	15.46	15.94	107.44	123.60	123.40	75.98	71.60	60.12
Sep GM		13.90	22.50		16.65	16.60	107.60	129.00	130.25	92.05	84.45	61.15
<b>Season GM</b>		14.38	22.01	15.79	15.34	15.61	114.29	129.71	127.05	75.19	71.01	57.74
Dry Max		14.90	24.60	16.60	16.70	16.90	136.00	132.00	132.00	93.40	84.80	62.80
3 <sup>rd</sup> Quart		14.70	22.80	16.30	16.50	16.30	124.00	129.00	129.00	90.70	82.00	61.30
Dry Median		14.10	22.50	15.95	15.70	15.70	113.00	127.60	127.40	75.30	73.20	59.80
<b>Dry GeoMean</b>		14.30	22.72	16.03	15.72	15.69	114.64	124.47	124.74	76.94	72.91	58.19
1 <sup>st</sup> Quart		13.90	22.50	15.68	15.10	15.10	109.00	124.00	124.00	66.40	64.30	56.80
Dry Min		13.90	21.20	15.60	14.40	14.40	86.20	106.00	106.00	58.10	60.80	49.10
Wet Max		14.70	21.10	15.60	12.50	15.70	111.00	132.00	131.00	66.60	60.20	58.40
3 <sup>rd</sup> Quart		14.70	21.10	15.60	12.50	15.70	111.00	132.00	131.00	66.60	60.20	58.40
Wet Median		14.70	21.10	15.60	12.50	15.70	111.00	132.00	131.00	66.60	60.20	58.40
<b>Wet GeoMean</b>		14.70	21.10	15.60	12.50	15.70	111.00	132.00	131.00	66.60	60.20	58.40
1st Quart		14.70	21.10	15.60	12.50	15.70	111.00	132.00	131.00	66.60	60.20	58.40
Wet Min		14.70	21.10	15.60	12.50	15.70	111.00	132.00	131.00	66.60	60.20	58.40

**Sixteen Mile Creek 1994 - RESIDUE PARTICULATE Data**

DATE	E	SAMPLING STATIONS										
		HF	K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B
14-Jun-94	D	5.9			3.1	2.3	2.9	5.1	7.5	5.1	4.2	2.6
20-Jun-94	D	4.4			2.6	4.1	3.9	6.3	5.5	5.8	5.1	2.4
28-Jun-94	I	2.8			3.4	5.5	2.5	5.3	8.5	4.3	5.0	3.3
12-Jul-94	D	3.1	9.1		2.4	4.0	4.0	7.0	18.7	2.7	2.4	4.0
19-Jul-94	D	3.5		5.1	2.7	6.4	7.1	8.0	21.5	3.0	2.6	5.6
26-Jul-94	I	3.4	9.4	3.4	3.7	6.1	5.2	4.5	11.4	5.0	2.8	5.9
2-Aug-94	I	3.3	8.9	4.6	2.5	9.5	4.0	8.8	10.4	3.1	2.8	5.8
9-Aug-94	W	3.7	14.3	3.8	2.4	4.1	7.9	5.3	5.5	3.7	3.2	4.0
16-Aug-94	D	2.1	6.2	2.1	1.3	3.4	4.0	4.7	5.1	3.0	2.5	5.0
23-Aug-94	D	10.8	14.0	1.3	3.5	2.7	5.3	2.7	6.4	1.8	2.0	4.7
30-Aug-94	D	2.5	12.2	1.7	2.2	1.2	6.0	5.2	28.4	1.3	1.0	5.5
6-Sep-94	D	3.2	10.3		1.5	2.3	4.5	6.8	3.9	1.3	1.6	7.5
13-Sep-94	D	2.7			1.6	1.9	3.8	12.3	4.2	1.1	0.8	7.4
Jun GM		4.4			3.0	4.0	3.1	5.6	7.2	5.1	4.8	2.8
July GM		3.3	9.3	4.3	2.9	5.5	5.4	6.5	17.2	3.6	2.6	5.2
Aug GM		4.5	11.1	2.7	2.4	4.2	5.4	5.3	11.2	2.6	2.3	5.0
Sep GM		3.0	10.3		1.6	2.1	4.2	9.6	4.1	1.2	1.2	7.5
<b>Season GM</b>		4.0	10.6	3.1	2.5	4.1	4.7	6.3	10.5	3.2	2.8	4.9
Dry Max		10.8	14.0	5.1	3.5	6.4	7.1	12.3	28.4	5.8	5.1	7.5
3 <sup>rd</sup> Quart		4.4	12.2	2.9	2.7	4.0	5.3	7.0	18.7	3.0	2.6	5.6
Dry Median		3.2	10.3	1.9	2.4	2.7	4.0	6.3	6.4	2.7	2.4	5.0
<b>Dry GeoMean</b>		4.2	10.4	2.6	2.3	3.1	4.6	6.5	11.2	2.8	2.5	5.6
1 <sup>st</sup> Quart		2.7	9.1	1.6	1.6	1.6	3.9	5.1	5.1	1.3	1.6	4.0
Dry Min		2.1	6.2	1.3	1.3	1.2	2.9	2.7	3.9	1.1	0.8	2.4
Wet Max		3.7	14.3	3.8	2.4	4.1	7.9	5.3	5.5	3.7	3.2	4.0
3 <sup>rd</sup> Quart		3.7	14.3	3.8	2.4	4.1	7.9	5.3	5.5	3.7	3.2	4.0
Wet Median		3.7	14.3	3.8	2.4	4.1	7.9	5.3	5.5	3.7	3.2	4.0
<b>Wet GeoMean</b>		3.7	14.3	3.8	2.4	4.1	7.9	5.3	5.5	3.7	3.2	4.0
1st Quart		3.7	14.3	3.8	2.4	4.1	7.9	5.3	5.5	3.7	3.2	4.0
Wet Min		3.7	14.3	3.8	2.4	4.1	7.9	5.3	5.5	3.7	3.2	4.0

**APPENDIX 3: Sixteen Mile Creek 1994 - TURBIDITY Data**

DATE	E	SAMPLING STATIONS										
		HF	K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B
14-Jun-94	D	1.44			1.27	0.96	1.58	2.99	2.97	1.48	1.14	0.96
20-Jun-94	D	2.27			1.64	1.68	2.21	4.14	2.46	2.29	1.63	2.13
28-Jun-94	I	1.59			1.20	2.39	1.08	5.50	3.85	1.50	1.94	1.45
12-Jul-94	D	1.64	4.79		1.44	1.78	1.80	1.78	2.00	1.30	0.86	2.33
19-Jul-94	D	1.34		0.92	1.04	2.87	1.33	1.58	1.45	0.99	0.90	2.05
26-Jul-94	I	1.82	5.57	1.42	1.43	3.26	1.85	2.44	2.07	1.11	0.88	4.21
2-Aug-94	I	1.65	2.02	1.90	1.25	2.84	1.20	1.25	2.01	1.10	0.75	4.12
9-Aug-94	W	1.86	7.36	1.37	1.24	1.43	2.33	1.51	1.20	0.70	0.96	4.09
16-Aug-94	D	1.34	2.37	1.23	0.95	1.07	3.61	2.79	1.30	1.04	0.71	3.59
23-Aug-94	D	1.58	5.03	1.03	1.39	1.42	2.20	0.93	1.32	0.76	0.48	2.94
30-Aug-94	D	1.68	10.50	0.86	1.02	1.32	2.61	2.69	3.06	0.63	0.54	3.82
6-Sep-94	D	2.68	12.30		0.89	1.11	2.32	2.63	1.33	0.64	0.51	5.61
13-Sep-94	D	1.48			0.95	1.27	1.78	2.74	1.05	0.49	0.38	5.12
Jun GM		1.77			1.37	1.68	1.62	4.21	3.09	1.76	1.57	1.51
July GM		1.60	5.18	1.17	1.30	2.64	1.66	1.93	1.84	1.13	0.88	2.86
Aug GM		1.62	5.46	1.28	1.17	1.62	2.39	1.83	1.78	0.85	0.69	3.71
Sep GM		2.08	12.30		0.92	1.19	2.05	2.69	1.19	0.57	0.45	5.37
<b>Season GM</b>		1.72	6.24	1.25	1.21	1.80	1.99	2.54	2.01	1.08	0.90	3.26
Dry Max		2.68	12.30	1.23	1.64	2.87	3.61	4.14	3.06	2.29	1.63	5.61
3 <sup>rd</sup> Quart		1.68	10.50	1.08	1.39	1.68	2.32	2.79	2.46	1.30	0.90	3.82
Dry Median		1.58	5.03	0.98	1.04	1.32	2.20	2.69	1.45	0.99	0.71	2.94
<b>Dry GeoMean</b>		1.72	7.00	1.01	1.18	1.50	2.16	2.47	1.88	1.07	0.79	3.17
1 <sup>st</sup> Quart		1.44	4.79	0.91	0.95	1.11	1.78	1.78	1.32	0.64	0.51	2.13
Dry Min		1.34	2.37	0.86	0.89	0.96	1.33	0.93	1.05	0.49	0.38	0.96
Wet Max		1.86	7.36	1.37	1.24	1.43	2.33	1.51	1.20	0.70	0.96	4.09
3 <sup>rd</sup> Quart		1.86	7.36	1.37	1.24	1.43	2.33	1.51	1.20	0.70	0.96	4.09
Wet Median		1.86	7.36	1.37	1.24	1.43	2.33	1.51	1.20	0.70	0.96	4.09
<b>Wet GeoMean</b>		1.86	7.36	1.37	1.24	1.43	2.33	1.51	1.20	0.70	0.96	4.09
1st Quart		1.86	7.36	1.37	1.24	1.43	2.33	1.51	1.20	0.70	0.96	4.09
Wet Min		1.86	7.36	1.37	1.24	1.43	2.33	1.51	1.20	0.70	0.96	4.09

**Sixteen Mile Creek 1994 - TOTAL PHOSPHORUS Data**

DATE	E	SAMPLING STATIONS										
		HF	K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B
14-Jun-94	D	0.022			0.018	0.016	0.014	0.012	0.010	0.014	0.014	0.010
20-Jun-94	D	0.092			0.018	0.014	0.014	0.010	0.012	0.020	0.014	0.012
28-Jun-94	I	0.016			0.016	0.020	0.008	0.008	0.006	0.014	0.012	0.006
12-Jul-94	D	0.024	0.134		0.016	0.018	0.012	0.012	0.024	0.014	0.012	0.012
19-Jul-94	D	0.024		0.010	0.012	0.026	0.018	0.006	0.018	0.010	0.006	0.006
26-Jul-94	I	0.025	0.160	0.014	0.012	0.025	0.010	0.014	0.014	0.016	0.010	0.012
2-Aug-94	I	0.022	0.070	0.016	0.016	0.024	0.012	0.012	0.022	0.016	0.012	0.022
9-Aug-94	W	0.020	0.138	0.012	0.012	0.012	0.010	0.010	0.008	0.008	0.010	0.006
16-Aug-94	D	0.030	0.046	0.008	0.012	0.012	0.014	0.012	0.010	0.008	0.010	0.012
23-Aug-94	D	0.024	0.128	0.014	0.016	0.014	0.012	0.010	0.014	0.012	0.008	0.016
30-Aug-94	D	0.024	0.184	0.012	0.014	0.014	0.018	0.010	0.050	0.010	0.004	0.010
6-Sep-94	D	0.032	0.130		0.012	0.012	0.012	0.012	0.014	0.008	0.006	0.012
13-Sep-94	D	0.020			0.012	0.036	0.004	0.006	0.014	0.004	0.004	0.008
Jun GM		0.043			0.017	0.017	0.012	0.010	0.009	0.016	0.013	0.009
July GM		0.024	0.147	0.012	0.013	0.023	0.013	0.011	0.019	0.013	0.009	0.010
Aug GM		0.024	0.113	0.012	0.014	0.015	0.013	0.011	0.021	0.011	0.009	0.013
Sep GM		0.026	0.130		0.012	0.024	0.008	0.009	0.014	0.006	0.005	0.010
<b>Season GM</b>		0.029	0.124	0.012	0.014	0.019	0.012	0.010	0.017	0.012	0.009	0.011
Dry Max		0.092	0.184	0.014	0.018	0.036	0.018	0.012	0.050	0.020	0.014	0.016
3 <sup>rd</sup> Quart		0.030	0.134	0.013	0.016	0.018	0.014	0.012	0.018	0.014	0.012	0.012
Dry Median		0.024	0.130	0.011	0.014	0.014	0.014	0.010	0.014	0.010	0.008	0.012
<b>Dry GeoMean</b>		0.032	0.124	0.011	0.014	0.018	0.013	0.010	0.018	0.011	0.009	0.011
1 <sup>st</sup> Quart		0.024	0.128	0.010	0.012	0.014	0.012	0.010	0.012	0.008	0.006	0.010
Dry Min		0.020	0.046	0.008	0.012	0.012	0.004	0.006	0.010	0.004	0.004	0.006
Wet Max		0.020	0.138	0.012	0.012	0.012	0.010	0.010	0.008	0.008	0.010	0.006
3 <sup>rd</sup> Quart		0.020	0.138	0.012	0.012	0.012	0.010	0.010	0.008	0.008	0.010	0.006
Wet Median		0.020	0.138	0.012	0.012	0.012	0.010	0.010	0.008	0.008	0.010	0.006
<b>Wet GeoMean</b>		0.020	0.138	0.012	0.012	0.012	0.010	0.010	0.008	0.008	0.010	0.006
1st Quart		0.020	0.138	0.012	0.012	0.012	0.010	0.010	0.008	0.008	0.010	0.006
Wet Min		0.020	0.138	0.012	0.012	0.012	0.010	0.010	0.008	0.008	0.010	0.006

**APPENDIX 3: Sixteen Mile Creek 1994 - PHOSPHATE Data**

DATE	E	SAMPLING STATIONS											
		HF	K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B	
14-Jun-94	D	0.0055			0.0035	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
20-Jun-94	D	0.0180			0.0015	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
28-Jun-94	I	0.0060			0.0065	0.0030	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
12-Jul-94	D	0.0075	0.0565		0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
19-Jul-94	D	0.0065		0.0015	0.0025	0.0025	0.0010	0.0010	0.0010	0.0015	0.0015	0.0010	0.0010
26-Jul-94	I	0.0070	0.0390	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
2-Aug-94	I	0.0055	0.0065	0.0015	0.0010	0.0040	0.0010	0.0010	0.0010	0.0010	0.0010	0.0015	0.0015
9-Aug-94	W	0.0065	0.0210	0.0055	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0015	0.0015
16-Aug-94	D	0.0025	0.0045	0.0020	0.0025	0.0025	0.0020	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
23-Aug-94	D	0.0055	0.0115	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
30-Aug-94	D	0.0140	0.0550	0.0015	0.0010	0.0010	0.0010	0.0010	0.0010	0.0015	0.0010	0.0010	0.0010
6-Sep-94	D	0.0045	0.0515		0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0025	0.0025
13-Sep-94	D	0.0120			0.0010	0.0015	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
Jun GM		0.0098			0.0038	0.0017	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
July GM		0.0070	0.0478	0.0013	0.0015	0.0015	0.0010	0.0010	0.0010	0.0012	0.0012	0.0010	0.0010
Aug GM		0.0068	0.0197	0.0023	0.0013	0.0019	0.0012	0.0011	0.0011	0.0012	0.0011	0.0013	0.0013
Sep GM		0.0083	0.0515		0.0010	0.0013	0.0010	0.0010	0.0010	0.0010	0.0010	0.0018	0.0018
<b>Season GM</b>		<b>0.0078</b>	<b>0.0307</b>	<b>0.0020</b>	<b>0.0019</b>	<b>0.0017</b>	<b>0.0011</b>	<b>0.0010</b>	<b>0.0010</b>	<b>0.0011</b>	<b>0.0011</b>	<b>0.0012</b>	<b>0.0012</b>
Dry Max		0.0180	0.0565	0.0020	0.0035	0.0025	0.0020	0.0015	0.0015	0.0015	0.0015	0.0025	0.0025
3 <sup>rd</sup> Quart		0.0120	0.0550	0.0016	0.0025	0.0015	0.0010	0.0010	0.0010	0.0015	0.0010	0.0010	0.0010
Dry Median		0.0065	0.0515	0.0015	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
<b>Dry GeoMean</b>		<b>0.0084</b>	<b>0.0358</b>	<b>0.0015</b>	<b>0.0017</b>	<b>0.0014</b>	<b>0.0011</b>	<b>0.0011</b>	<b>0.0011</b>	<b>0.0012</b>	<b>0.0011</b>	<b>0.0012</b>	<b>0.0012</b>
1 <sup>st</sup> Quart		0.0055	0.0115	0.0014	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
Dry Min		0.0025	0.0045	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
Wet Max		0.0065	0.0210	0.0055	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0015	0.0015
3 <sup>rd</sup> Quart		0.0065	0.0210	0.0055	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0015	0.0015
Wet Median		0.0065	0.0210	0.0055	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0015	0.0015
<b>Wet GeoMean</b>		<b>0.0065</b>	<b>0.0210</b>	<b>0.0055</b>	<b>0.0010</b>	<b>0.0010</b>	<b>0.0010</b>	<b>0.0010</b>	<b>0.0010</b>	<b>0.0010</b>	<b>0.0010</b>	<b>0.0015</b>	<b>0.0015</b>
1st Quart		0.0065	0.0210	0.0055	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0015	0.0015
Wet Min		0.0065	0.0210	0.0055	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0015	0.0015

**Sixteen Mile Creek 1994 - TOTAL KJELDAHL NITROGEN Data**

DATE	E	SAMPLING STATIONS											
		HF	K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B	
14-Jun-94	D	0.480			0.420	0.420	0.340	0.320	0.280	0.400	0.380	0.380	0.380
20-Jun-94	D	0.920			0.420	0.420	0.320	0.320	0.300	0.400	0.340	0.400	0.400
28-Jun-94	I	0.420			0.380	0.420	0.380	0.340	0.300	0.340	0.340	0.340	0.340
12-Jul-94	D	0.500	1.300		0.380	0.500	0.380	0.420	0.460	0.340	0.320	0.380	0.380
19-Jul-94	D	0.520		0.360	0.380	0.500	0.400	0.340	0.380	0.360	0.280	0.340	0.340
26-Jul-94	I	0.500	1.500	0.360	0.350	0.450	0.360	0.360	0.300	0.340	0.280	0.380	0.380
2-Aug-94	I	0.480	1.200	0.380	0.380	0.480	0.320	0.340	0.400	0.340	0.280	0.420	0.420
9-Aug-94	W	0.480	1.680	0.380	0.360	0.400	0.360	0.420	0.300	0.300	0.300	0.320	0.320
16-Aug-94	D	0.520	0.900	0.320	0.320	0.360	0.500	0.400	0.340	0.300	0.280	0.360	0.360
23-Aug-94	D	0.480	1.880	0.360	0.400	0.380	0.380	0.420	0.380	0.320	0.280	0.500	0.500
30-Aug-94	D	0.460	2.100	0.360	0.360	0.400	0.400	0.400	0.660	0.300	0.240	0.340	0.340
6-Sep-94	D	0.480	3.100		0.300	0.340	0.340	0.440	0.420	0.240	0.220	0.360	0.360
13-Sep-94	D	0.380			0.240	0.300	0.300	0.360	0.280	0.220	0.200	0.320	0.320
Jun GM		0.607			0.407	0.420	0.347	0.327	0.293	0.380	0.353	0.373	0.373
July GM		0.507	1.400	0.360	0.370	0.483	0.380	0.373	0.380	0.347	0.293	0.367	0.367
Aug GM		0.484	1.552	0.360	0.364	0.404	0.392	0.396	0.416	0.312	0.276	0.388	0.388
Sep GM		0.430	3.100		0.270	0.320	0.320	0.400	0.350	0.230	0.210	0.340	0.340
<b>Season GM</b>		<b>0.509</b>	<b>1.708</b>	<b>0.360</b>	<b>0.361</b>	<b>0.413</b>	<b>0.368</b>	<b>0.375</b>	<b>0.369</b>	<b>0.323</b>	<b>0.288</b>	<b>0.372</b>	<b>0.372</b>
Dry Max		0.920	3.100	0.360	0.420	0.500	0.500	0.440	0.660	0.400	0.380	0.500	0.500
3 <sup>rd</sup> Quart		0.520	2.100	0.360	0.400	0.420	0.400	0.420	0.420	0.360	0.320	0.380	0.380
Dry Median		0.480	1.880	0.360	0.380	0.400	0.380	0.400	0.380	0.320	0.280	0.360	0.360
<b>Dry GeoMean</b>		<b>0.527</b>	<b>1.856</b>	<b>0.350</b>	<b>0.358</b>	<b>0.402</b>	<b>0.373</b>	<b>0.380</b>	<b>0.389</b>	<b>0.320</b>	<b>0.282</b>	<b>0.376</b>	<b>0.376</b>
1 <sup>st</sup> Quart		0.480	1.300	0.350	0.320	0.360	0.340	0.340	0.300	0.300	0.240	0.340	0.340
Dry Min		0.380	0.900	0.320	0.240	0.300	0.300	0.320	0.280	0.220	0.200	0.320	0.320
Wet Max		0.480	1.680	0.380	0.360	0.400	0.360	0.420	0.300	0.300	0.300	0.320	0.320
3 <sup>rd</sup> Quart		0.480	1.680	0.380	0.360	0.400	0.360	0.420	0.300	0.300	0.300	0.320	0.320
Wet Median		0.480	1.680	0.380	0.360	0.400	0.360	0.420	0.300	0.300	0.300	0.320	0.320
<b>Wet GeoMean</b>		<b>0.480</b>	<b>1.680</b>	<b>0.380</b>	<b>0.360</b>	<b>0.400</b>	<b>0.360</b>	<b>0.420</b>	<b>0.300</b>	<b>0.300</b>	<b>0.300</b>	<b>0.320</b>	<b>0.320</b>
1st Quart		0.480	1.680	0.380	0.360	0.400	0.360	0.420	0.300	0.300	0.300	0.320	0.320
Wet Min		0.480	1.680	0.380	0.360	0.400	0.360	0.420	0.300	0.300	0.300	0.320	0.320

**APPENDIX 3: Sixteen Mile Creek 1994 - AMMONIUM Data**

DATE	E	HF	SAMPLING STATIONS									
			K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B
14-Jun-94	D	0.004			0.010	0.002	0.018	0.024	0.018	0.004	0.006	0.028
20-Jun-94	D	0.052			0.002	0.002	0.024	0.028	0.006	0.002	0.002	0.004
28-Jun-94	I	0.002			0.002	0.002	0.022	0.032	0.010	0.002	0.002	0.032
12-Jul-94	D	0.002	0.454		0.002	0.008	0.034	0.048	0.018	0.010	0.008	0.032
19-Jul-94	D	0.002		0.014	0.002	0.036	0.050	0.052	0.024	0.004	0.014	0.014
26-Jul-94	I	0.006	0.502	0.018	0.016	0.042	0.044	0.042	0.022	0.014	0.002	0.038
2-Aug-94	I	0.002	0.022	0.032	0.016	0.044	0.066	0.034	0.026	0.002	0.020	0.036
9-Aug-94	W	0.002	0.592	0.002	0.002	0.010	0.034	0.044	0.002	0.002	0.002	0.050
16-Aug-94	D	0.004	0.048	0.018	0.020	0.020	0.060	0.076	0.036	0.012	0.014	0.050
23-Aug-94	D	0.002	0.442	0.008	0.002	0.008	0.040	0.048	0.010	0.008	0.006	0.030
30-Aug-94	D	0.002	1.250	0.002	0.002	0.002	0.038	0.044	0.006	0.002	0.002	0.002
6-Sep-94	D	0.002	1.730		0.002	0.006	0.024	0.048	0.012	0.014	0.004	0.016
13-Sep-94	D	0.002			0.002	0.002	0.016	0.040	0.002	0.002	0.002	0.002
Jun GM		0.019			0.005	0.002	0.021	0.028	0.011	0.003	0.003	0.021
July GM		0.003	0.478	0.016	0.007	0.029	0.043	0.047	0.021	0.009	0.008	0.028
Aug GM		0.002	0.471	0.012	0.008	0.017	0.048	0.049	0.016	0.005	0.009	0.034
Sep GM		0.002	1.730		0.002	0.004	0.020	0.044	0.007	0.008	0.003	0.009
<b>Season GM</b>		0.006	0.630	0.013	0.006	0.014	0.036	0.043	0.015	0.006	0.006	0.026
Dry Max		0.052	1.730	0.018	0.020	0.036	0.060	0.076	0.036	0.014	0.014	0.050
3 <sup>rd</sup> Quart		0.004	1.250	0.015	0.002	0.008	0.040	0.048	0.018	0.010	0.008	0.030
Dry Median		0.002	0.454	0.011	0.002	0.006	0.034	0.048	0.012	0.004	0.006	0.016
<b>Dry GeoMean</b>		0.008	0.785	0.011	0.005	0.010	0.034	0.045	0.015	0.006	0.006	0.020
1 <sup>st</sup> Quart		0.002	0.442	0.007	0.002	0.002	0.024	0.040	0.006	0.002	0.002	0.004
Dry Min		0.002	0.048	0.002	0.002	0.002	0.016	0.024	0.002	0.002	0.002	0.002
Wet Max		0.002	0.592	0.002	0.002	0.010	0.034	0.044	0.002	0.002	0.002	0.050
3 <sup>rd</sup> Quart		0.002	0.592	0.002	0.002	0.010	0.034	0.044	0.002	0.002	0.002	0.050
Wet Median		0.002	0.592	0.002	0.002	0.010	0.034	0.044	0.002	0.002	0.002	0.050
<b>Wet GeoMean</b>		0.002	0.592	0.002	0.002	0.010	0.034	0.044	0.002	0.002	0.002	0.050
1st Quart		0.002	0.592	0.002	0.002	0.010	0.034	0.044	0.002	0.002	0.002	0.050
Wet Min		0.002	0.592	0.002	0.002	0.010	0.034	0.044	0.002	0.002	0.002	0.050

**Sixteen Mile Creek 1994 - NITRATES Data**

DATE	E	HF	SAMPLING STATIONS									
			K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B
14-Jun-94	D	0.065			0.090	0.065	0.985	0.885	0.775	0.325	0.400	0.255
20-Jun-94	D	0.120			0.110	0.060	0.930	0.725	0.660	0.335	0.110	0.290
28-Jun-94	I	0.060			0.075	0.060	0.805	0.750	0.700	0.310	0.375	0.275
12-Jul-94	D	0.130	0.035		0.045	0.030	0.870	0.670	0.615	0.280	0.355	0.295
19-Jul-94	D	0.150		0.065	0.005	0.010	0.865	0.670	0.605	0.340	0.450	0.210
26-Jul-94	I	0.155	0.035	0.090	0.060	0.060	0.805	0.605	0.585	0.325	0.430	0.130
2-Aug-94	I	0.135	0.065	0.035	0.020	0.015	0.590	0.480	0.405	0.245	0.320	0.010
9-Aug-94	W	0.110	0.005	0.065	0.050	0.015	0.725	0.605	0.520	0.185	0.270	0.070
16-Aug-94	D	0.095	0.045	0.055	0.040	0.025	0.440	0.550	0.515	0.255	0.325	0.120
23-Aug-94	D	0.180	0.015	0.025	0.020	0.020	0.685	0.555	0.515	0.240	0.405	0.155
30-Aug-94	D	0.215	0.005	0.010	0.005	0.010	0.695	0.545	0.515	0.275	0.440	0.120
6-Sep-94	D	0.160	0.005		0.005	0.010	0.695	0.620	0.590	0.320	0.430	0.100
13-Sep-94	D	0.225			0.005	0.005	0.755	0.710	0.665	0.365	0.495	0.105
Jun GM		0.082			0.092	0.062	0.907	0.787	0.712	0.323	0.295	0.273
July GM		0.145	0.035	0.078	0.037	0.033	0.847	0.648	0.602	0.315	0.412	0.212
Aug GM		0.147	0.027	0.038	0.027	0.017	0.627	0.547	0.494	0.240	0.352	0.095
Sep GM		0.193	0.005		0.005	0.008	0.725	0.665	0.628	0.343	0.463	0.103
<b>Season GM</b>		0.138	0.026	0.049	0.041	0.030	0.757	0.644	0.590	0.292	0.370	0.164
Dry Max		0.225	0.045	0.065	0.110	0.065	0.985	0.885	0.775	0.365	0.495	0.295
3 <sup>rd</sup> Quart		0.180	0.035	0.058	0.045	0.030	0.870	0.710	0.660	0.335	0.440	0.255
Dry Median		0.150	0.015	0.040	0.020	0.020	0.755	0.670	0.605	0.320	0.405	0.155
<b>Dry GeoMean</b>		0.149	0.021	0.039	0.036	0.026	0.769	0.659	0.606	0.304	0.379	0.183
1 <sup>st</sup> Quart		0.120	0.005	0.021	0.005	0.010	0.695	0.555	0.515	0.275	0.355	0.120
Dry Min		0.065	0.005	0.010	0.005	0.005	0.440	0.545	0.515	0.240	0.110	0.100
Wet Max		0.110	0.005	0.065	0.050	0.015	0.725	0.605	0.520	0.185	0.270	0.070
3 <sup>rd</sup> Quart		0.110	0.005	0.065	0.050	0.015	0.725	0.605	0.520	0.185	0.270	0.070
Wet Median		0.110	0.005	0.065	0.050	0.015	0.725	0.605	0.520	0.185	0.270	0.070
<b>Wet GeoMean</b>		0.110	0.005	0.065	0.050	0.015	0.725	0.605	0.520	0.185	0.270	0.070
1st Quart		0.110	0.005	0.065	0.050	0.015	0.725	0.605	0.520	0.185	0.270	0.070
Wet Min		0.110	0.005	0.065	0.050	0.015	0.725	0.605	0.520	0.185	0.270	0.070

**APPENDIX 3: Sixteen Mile Creek 1994 - NITRITE Data**

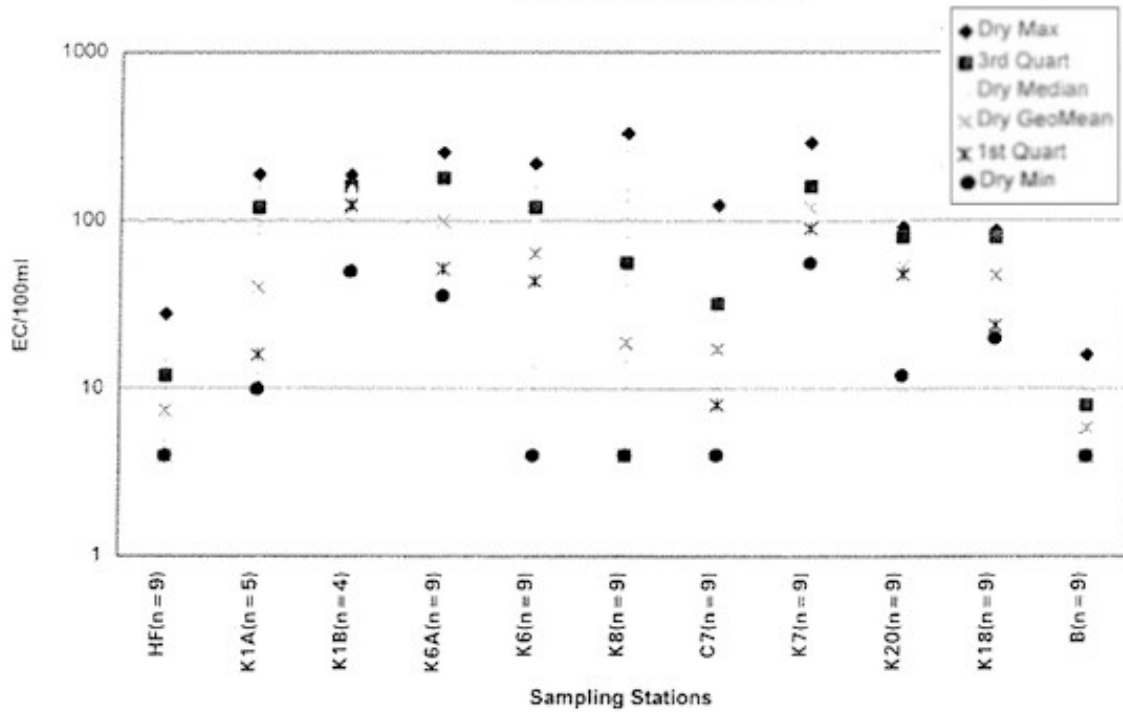
DATE	E	HF	SAMPLING STATIONS									
			K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B
14-Jun-94	D	0.0040			0.0040	0.0030	0.0080	0.0100	0.0070	0.0040	0.0030	0.0060
20-Jun-94	D	0.0020			0.0020	0.0040	0.0110	0.0100	0.0060	0.0030	0.0020	0.0030
28-Jun-94	I	0.0040			0.0030	0.0050	0.0090	0.0120	0.0060	0.0060	0.0030	0.0040
12-Jul-94	D	0.0060	0.0100		0.0040	0.0060	0.0140	0.0130	0.0070	0.0060	0.0050	0.0070
19-Jul-94	D	0.0060		0.0040	0.0040	0.0080	0.0130	0.0110	0.0080	0.0070	0.0070	0.0070
26-Jul-94	I	0.0060	0.0110	0.0050	0.0070	0.0070	0.0120	0.0110	0.0080	0.0040	0.0050	0.0100
2-Aug-94	I	0.0040	0.0040	0.0050	0.0060	0.0020	0.0130	0.0140	0.0050	0.0030	0.0040	0.0080
9-Aug-94	W	0.0040	0.0090	0.0040	0.0050	0.0030	0.0120	0.1400	0.0050	0.0070	0.0020	0.0120
16-Aug-94	D	0.0050	0.0050	0.0030	0.0060	0.0070	0.0100	0.0130	0.0070	0.0040	0.0060	0.0090
23-Aug-94	D	0.0070	0.0120	0.0070	0.0030	0.0020	0.0150	0.0140	0.0090	0.0050	0.0040	0.0100
30-Aug-94	D	0.0030	0.0060	0.0020	0.0010	0.0020	0.0110	0.0100	0.0050	0.0020	0.0030	0.0060
6-Sep-94	D	0.0030	0.0070		0.0020	0.0020	0.0010	0.0130	0.0080	0.0060	0.0020	0.0060
13-Sep-94	D	0.0010			0.0010	0.0010	0.0060	0.0070	0.0020	0.0010	0.0010	0.0020
Jun GM		0.0033			0.0030	0.0040	0.0093	0.0107	0.0063	0.0043	0.0027	0.0043
July GM		0.0060	0.0105	0.0045	0.0050	0.0070	0.0130	0.0117	0.0077	0.0057	0.0057	0.0080
Aug GM		0.0046	0.0072	0.0042	0.0042	0.0032	0.0122	0.0382	0.0062	0.0042	0.0038	0.0090
Sep GM		0.0020	0.0070		0.0015	0.0015	0.0035	0.0100	0.0050	0.0035	0.0015	0.0040
<b>Season GM</b>		0.0042	0.0080	0.0043	0.0037	0.0040	0.0104	0.0214	0.0064	0.0045	0.0036	0.0069
Dry Max		0.0070	0.0120	0.0070	0.0060	0.0080	0.0150	0.0140	0.0090	0.0070	0.0070	0.0100
3 <sup>rd</sup> Quart		0.0060	0.0100	0.0048	0.0040	0.0060	0.0130	0.0130	0.0080	0.0060	0.0050	0.0070
Dry Median		0.0040	0.0070	0.0035	0.0030	0.0030	0.0110	0.0110	0.0070	0.0040	0.0030	0.0060
<b>Dry GeoMean</b>		0.0041	0.0080	0.0040	0.0030	0.0039	0.0099	0.0112	0.0066	0.0042	0.0037	0.0062
1 <sup>st</sup> Quart		0.0030	0.0060	0.0028	0.0020	0.0020	0.0080	0.0100	0.0060	0.0030	0.0020	0.0060
Dry Min		0.0010	0.0050	0.0020	0.0010	0.0010	0.0010	0.0070	0.0020	0.0010	0.0010	0.0020
Wet Max		0.0040	0.0090	0.0040	0.0050	0.0030	0.0120	0.1400	0.0050	0.0070	0.0020	0.0120
3 <sup>rd</sup> Quart		0.0040	0.0090	0.0040	0.0050	0.0030	0.0120	0.1400	0.0050	0.0070	0.0020	0.0120
Wet Median		0.0040	0.0090	0.0040	0.0050	0.0030	0.0120	0.1400	0.0050	0.0070	0.0020	0.0120
<b>Wet GeoMean</b>		0.0040	0.0090	0.0040	0.0050	0.0030	0.0120	0.1400	0.0050	0.0070	0.0020	0.0120
1st Quart		0.0040	0.0090	0.0040	0.0050	0.0030	0.0120	0.1400	0.0050	0.0070	0.0020	0.0120
Wet Min		0.0040	0.0090	0.0040	0.0050	0.0030	0.0120	0.1400	0.0050	0.0070	0.0020	0.0120

**Sixteen Mile Creek 1994 - DISSOLVED ORGANIC CARBON Data**

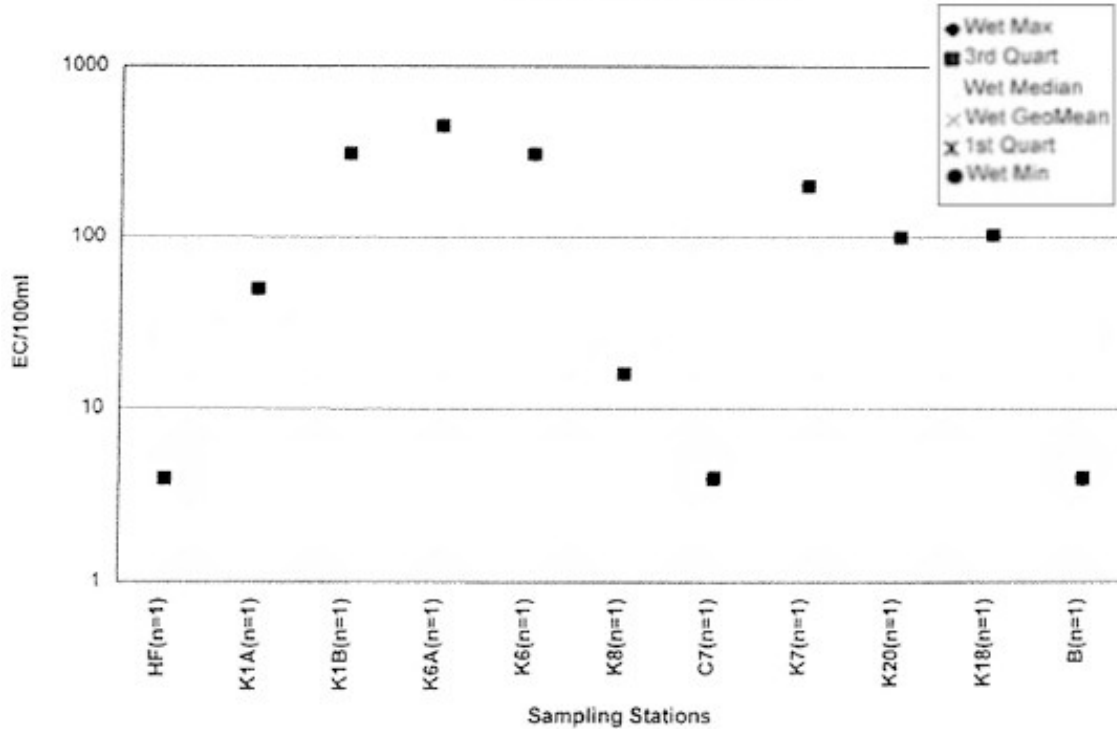
DATE	E	HF	SAMPLING STATIONS									
			K1A	K1B	K6A	K6	K8	C7	K7	K20	K18	B
14-Jun-94	D	6.7			5.4	5.4	2.3	1.9	2.0	4.3	4.0	4.0
20-Jun-94	D	6.8			5.2	5.3	2.6	2.5	2.3	4.0	5.2	4.0
28-Jun-94	I	6.8			5.6	5.5	3.6	3.0	2.8	4.5	4.1	3.8
12-Jul-94	D	6.7	10.5		5.0	5.3	2.8	3.0	2.9	3.9	3.5	3.6
19-Jul-94	D	6.1		4.2	4.6	4.8	2.2	2.5	2.3	3.1	2.7	3.4
26-Jul-94	I	6.3	10.1	4.4	4.5	4.7	2.5	2.8	2.5	3.3	3.0	3.6
2-Aug-94	I	6.3	11.5	4.4	4.6	4.8	2.4	3.1	2.6	3.2	2.9	3.7
9-Aug-94	W	5.9	11.0	4.6	4.5	4.6	2.3	2.9	2.5	3.6	3.4	3.5
16-Aug-94	D	5.5	11.4	4.0	4.1	4.2	8.3	4.0	3.8	3.7	3.2	3.1
23-Aug-94	D	5.7	14.1	4.3	4.3	4.4	3.1	4.2	3.7	3.7	3.2	3.5
30-Aug-94	D	5.2	14.3	3.8	4.0	4.3	2.4	3.1	2.9	3.0	2.6	3.4
6-Sep-94	D	5.2	13.7		4.0	4.0	2.1	2.6	2.4	2.6	2.2	3.3
13-Sep-94	D	5.0			3.8	3.9	2.1	2.4	2.1	2.7	2.2	3.5
Jun GM		6.8			5.4	5.4	2.8	2.5	2.4	4.3	4.4	3.9
July GM		6.4	10.3	4.3	4.7	4.9	2.5	2.8	2.6	3.4	3.1	3.5
Aug GM		5.7	12.5	4.2	4.3	4.5	3.7	3.5	3.1	3.4	3.1	3.4
Sep GM		5.1	13.7		3.9	4.0	2.1	2.5	2.3	2.7	2.2	3.4
<b>Season GM</b>		6.0	12.1	4.2	4.6	4.7	3.0	2.9	2.7	3.5	3.2	3.6
Dry Max		6.8	14.3	4.3	5.4	5.4	8.3	4.2	3.8	4.3	5.2	4.0
3 <sup>rd</sup> Quart		6.7	14.1	4.2	5.0	5.3	2.8	3.1	2.9	3.9	3.5	3.6
Dry Median		5.7	13.7	4.1	4.3	4.4	2.4	2.6	2.4	3.7	3.2	3.5
<b>Dry GeoMean</b>		5.9	12.8	4.1	4.5	4.6	3.1	2.9	2.7	3.4	3.2	3.5
1 <sup>st</sup> Quart		5.2	11.4	4.0	4.0	4.2	2.2	2.5	2.3	3.0	2.6	3.4
Dry Min		5.0	10.5	3.8	3.8	3.9	2.1	1.9	2.0	2.6	2.2	3.1
Wet Max		5.9	11.0	4.6	4.5	4.6	2.3	2.9	2.5	3.6	3.4	3.5
3 <sup>rd</sup> Quart		5.9	11.0	4.6	4.5	4.6	2.3	2.9	2.5	3.6	3.4	3.5
Wet Median		5.9	11.0	4.6	4.5	4.6	2.3	2.9	2.5	3.6	3.4	3.5
<b>Wet GeoMean</b>		5.9	11.0	4.6	4.5	4.6	2.3	2.9	2.5	3.6	3.4	3.5
1st Quart		5.9	11.0	4.6	4.5	4.6	2.3	2.9	2.5	3.6	3.4	3.5
Wet Min		5.9	11.0	4.6	4.5	4.6	2.3	2.9	2.5	3.6	3.4	3.5



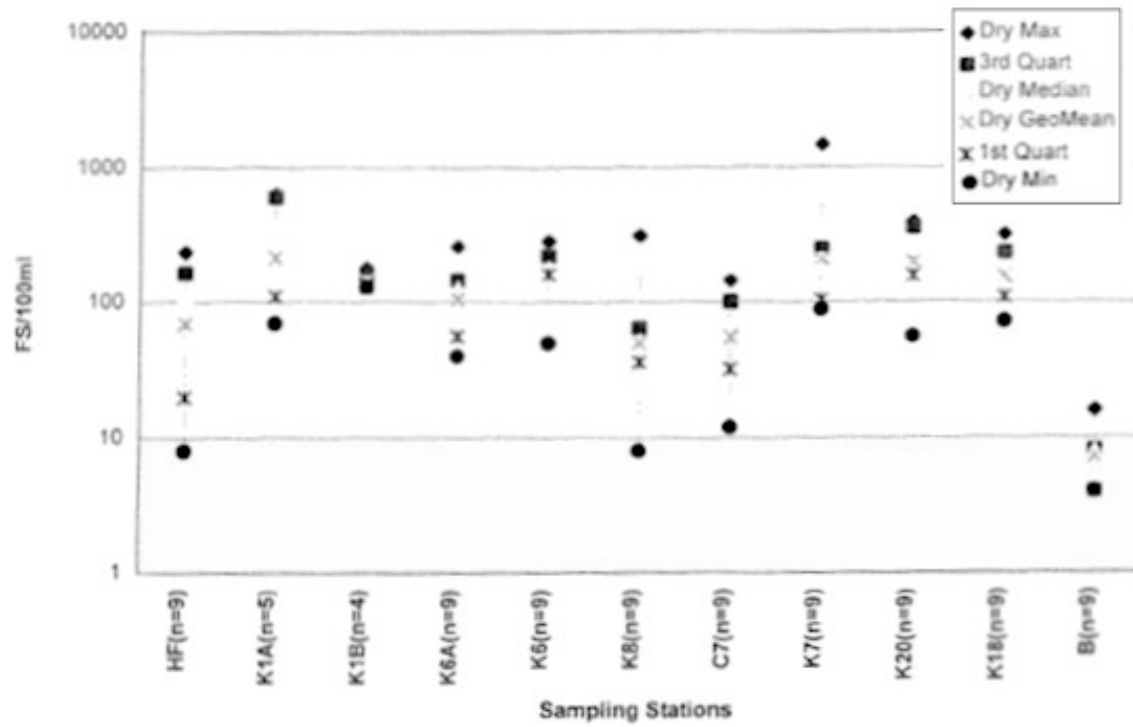
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E. COLI Concentrations



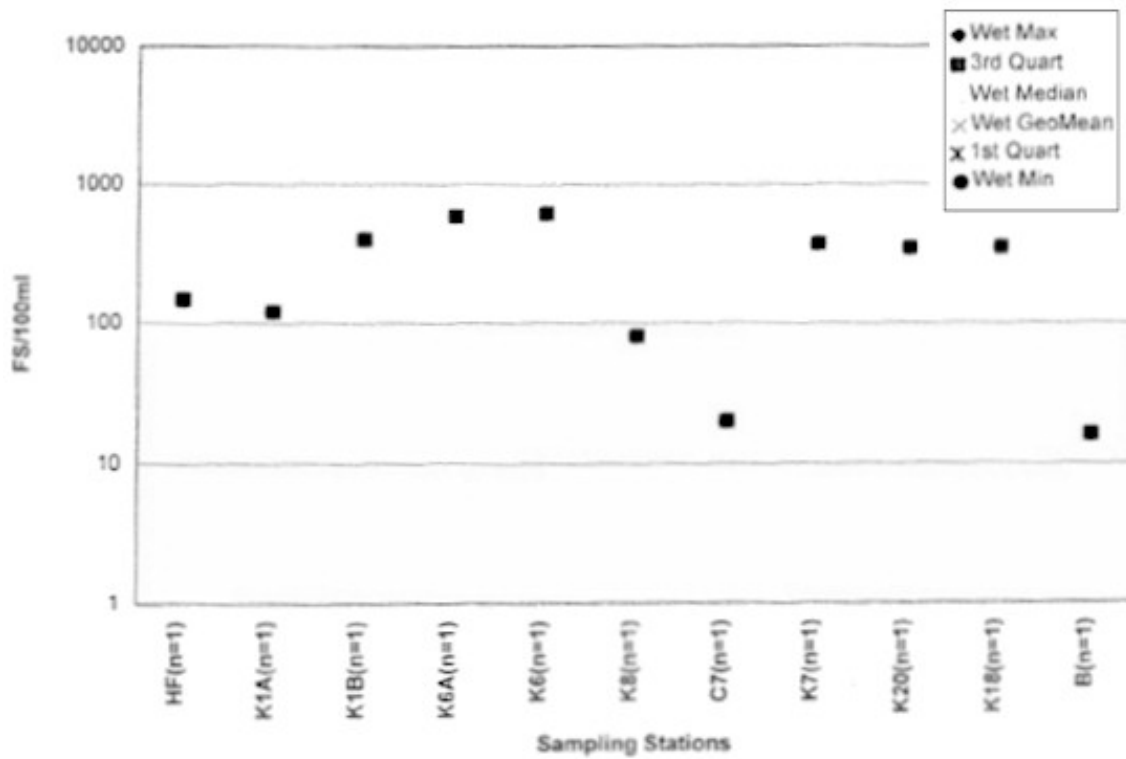
Sixteen Mile Creek WET Weather Sampling  
E. COLI Concentrations



Sixteen Mile Creek DRY Weather Sampling  
FECAL STREPTOCOCCI Concentrations

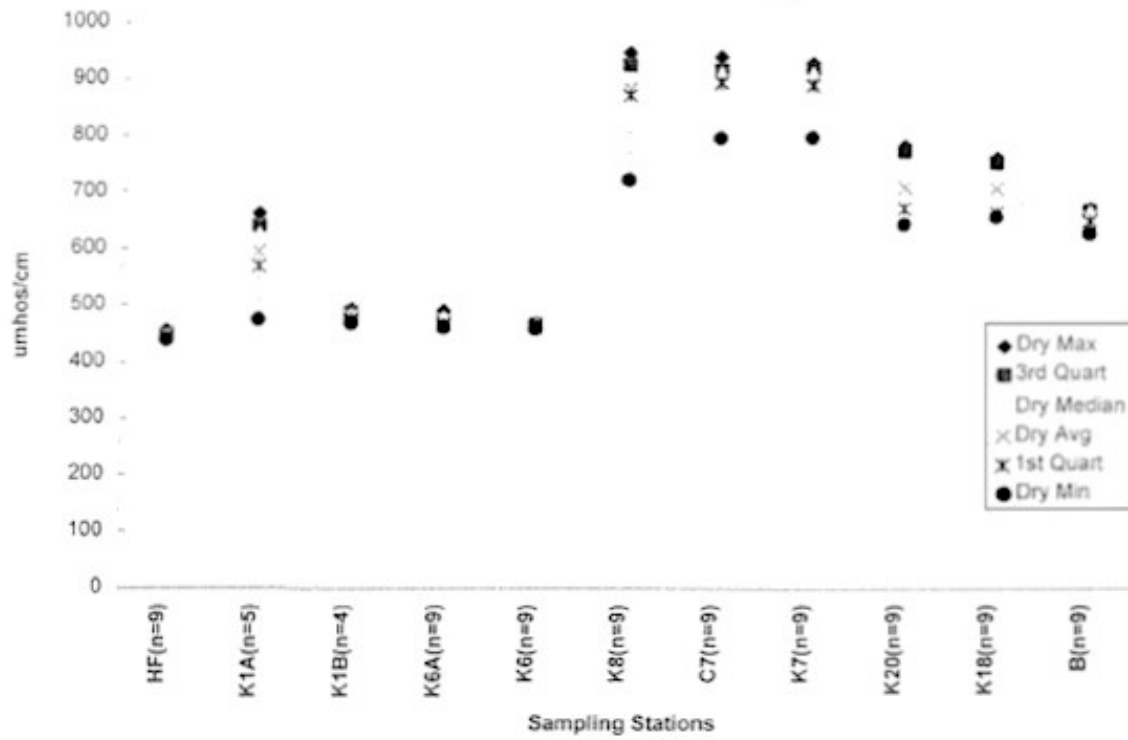


Sixteen Mile Creek WET Weather Sampling  
FECAL STREPTOCOCCI Concentrations

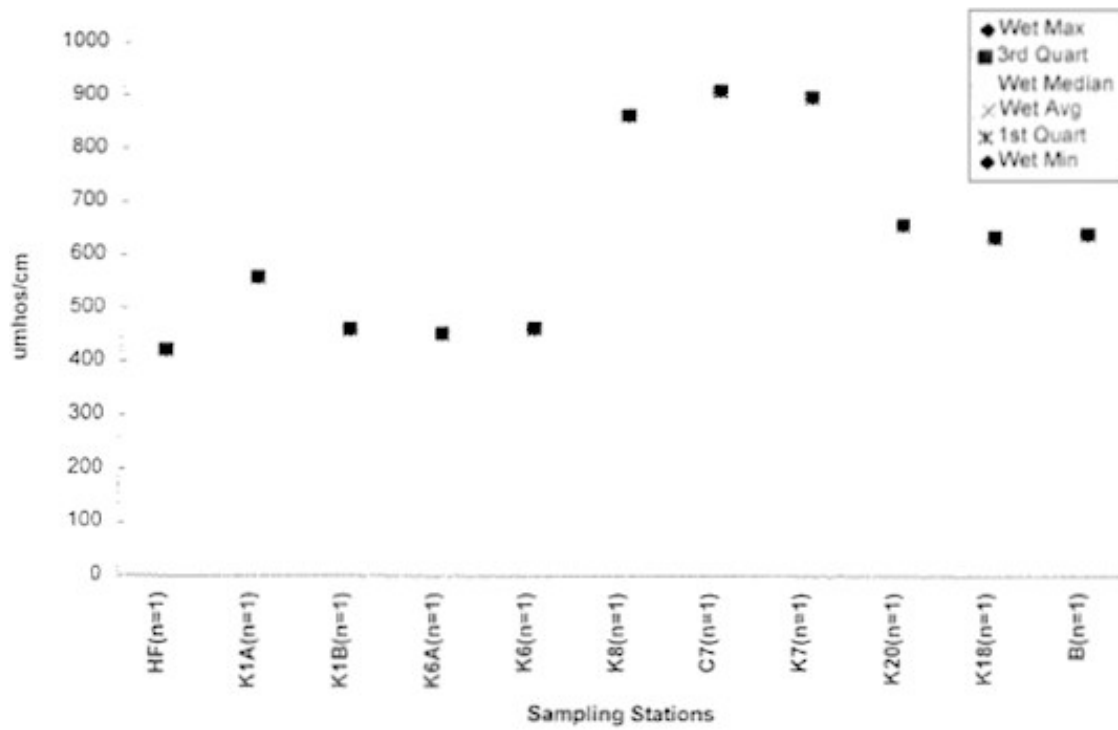


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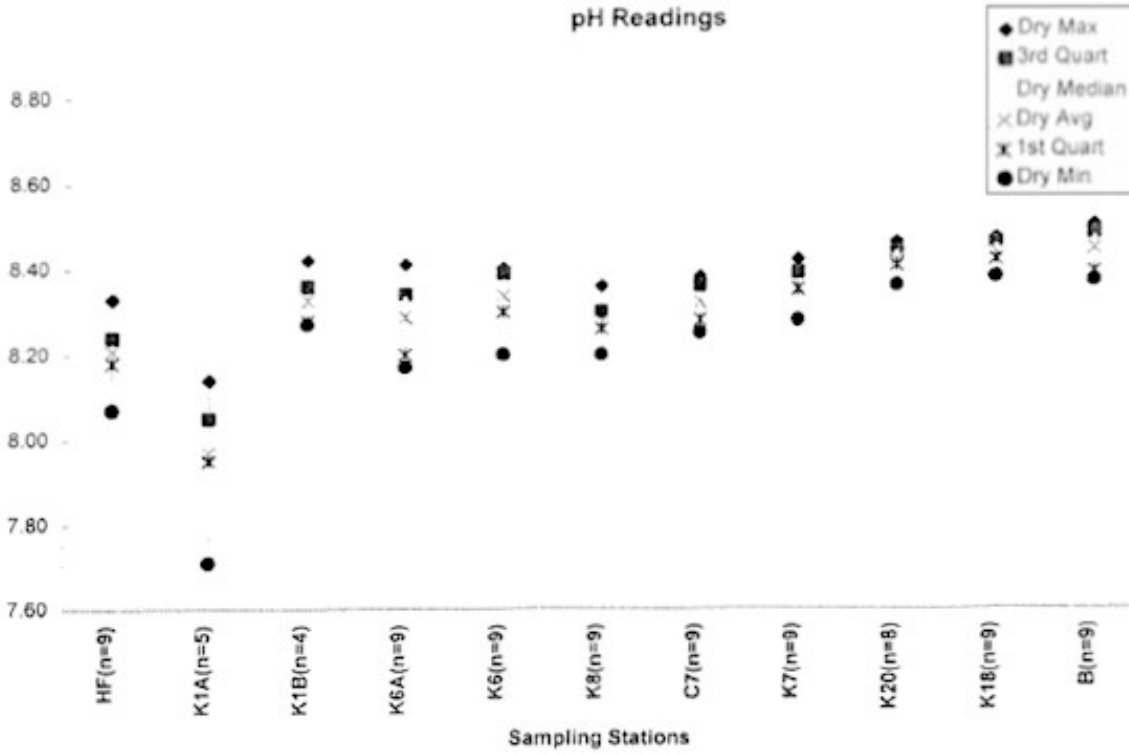
Sixteen Mile Creek DRY Weather Sampling  
CONDUCTIVITY Readings



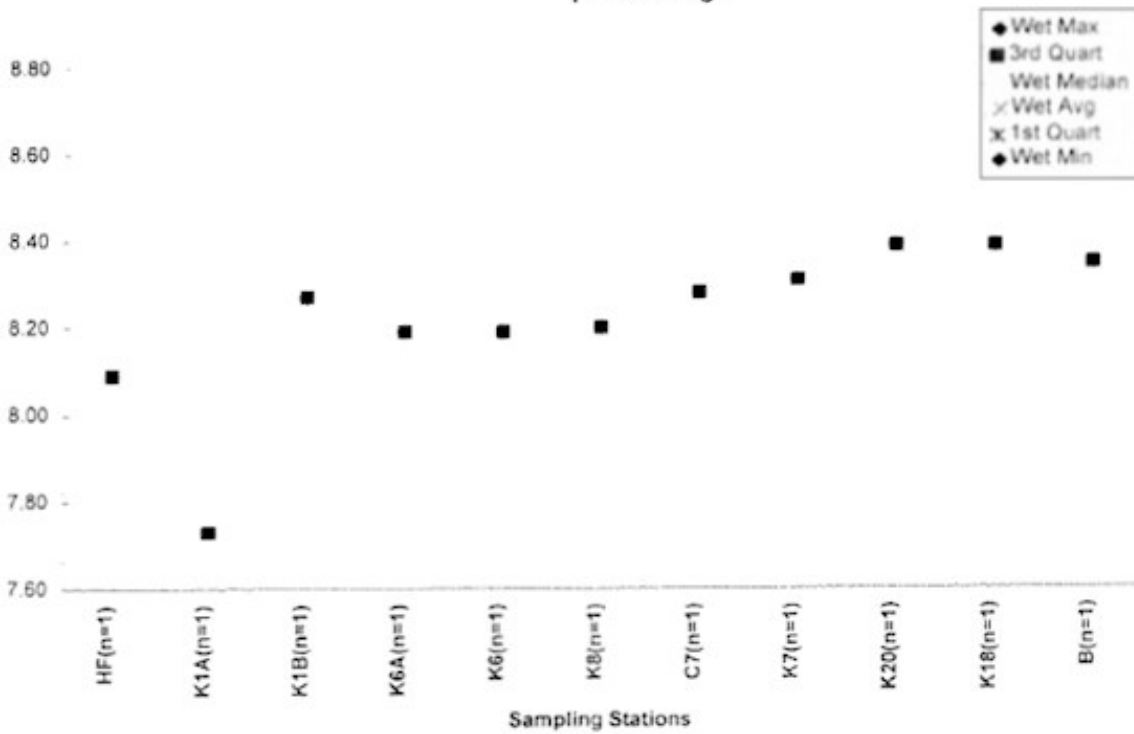
Sixteen Mile Creek WET Weather Sampling  
CONDUCTIVITY Readings



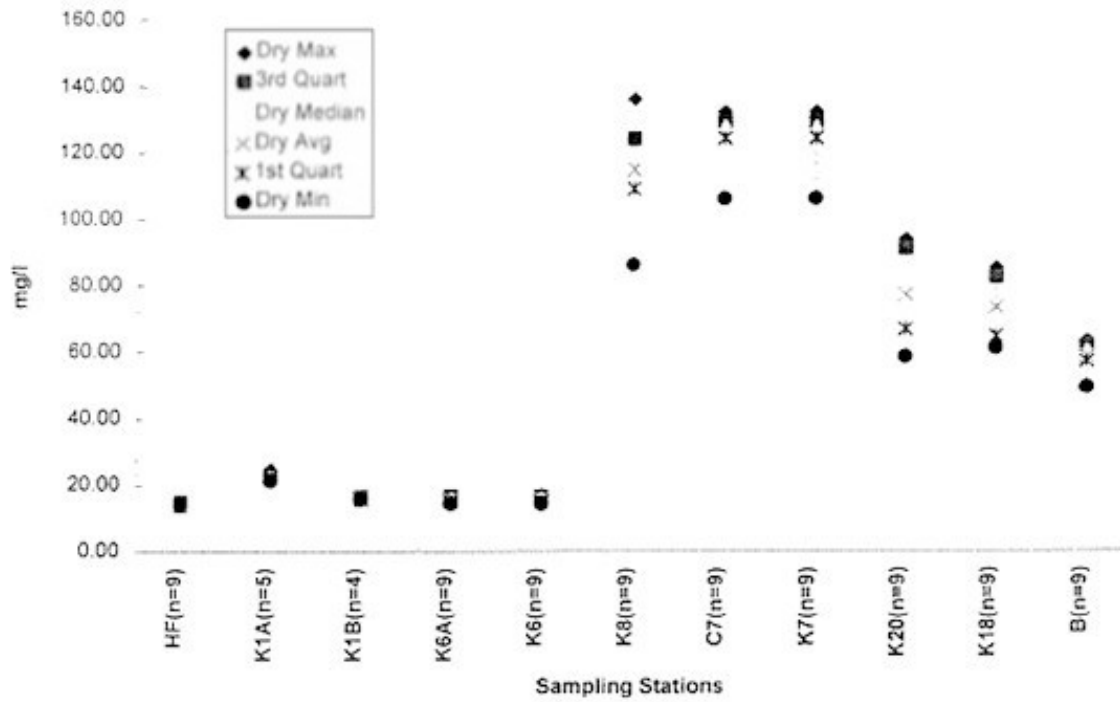
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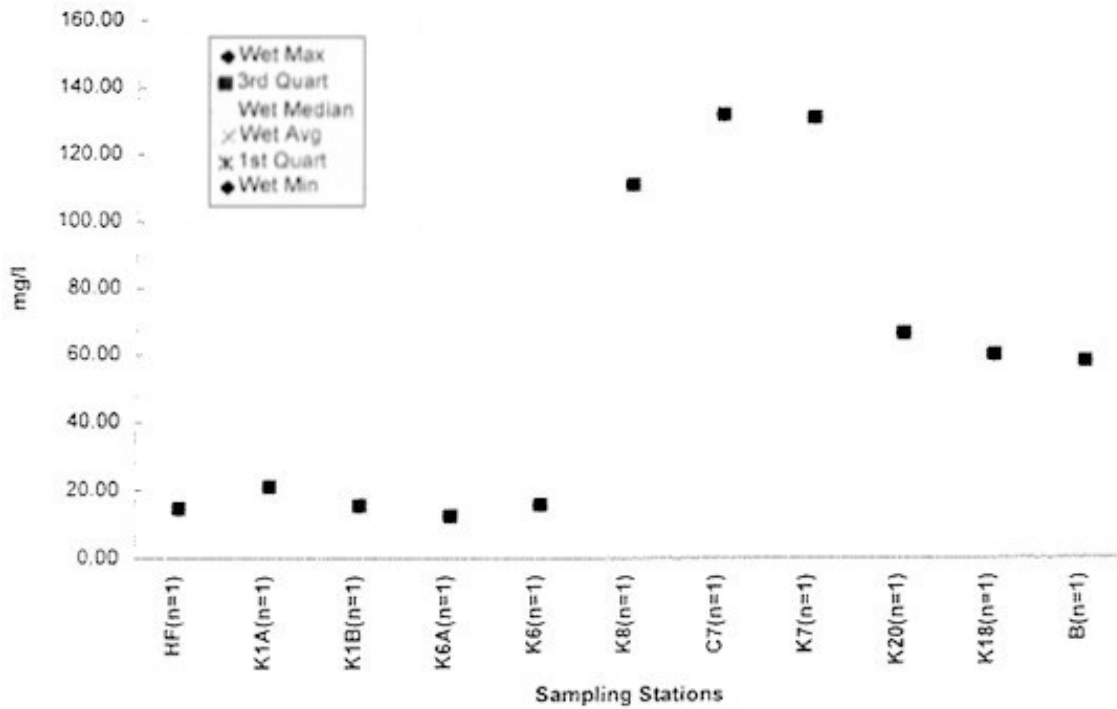
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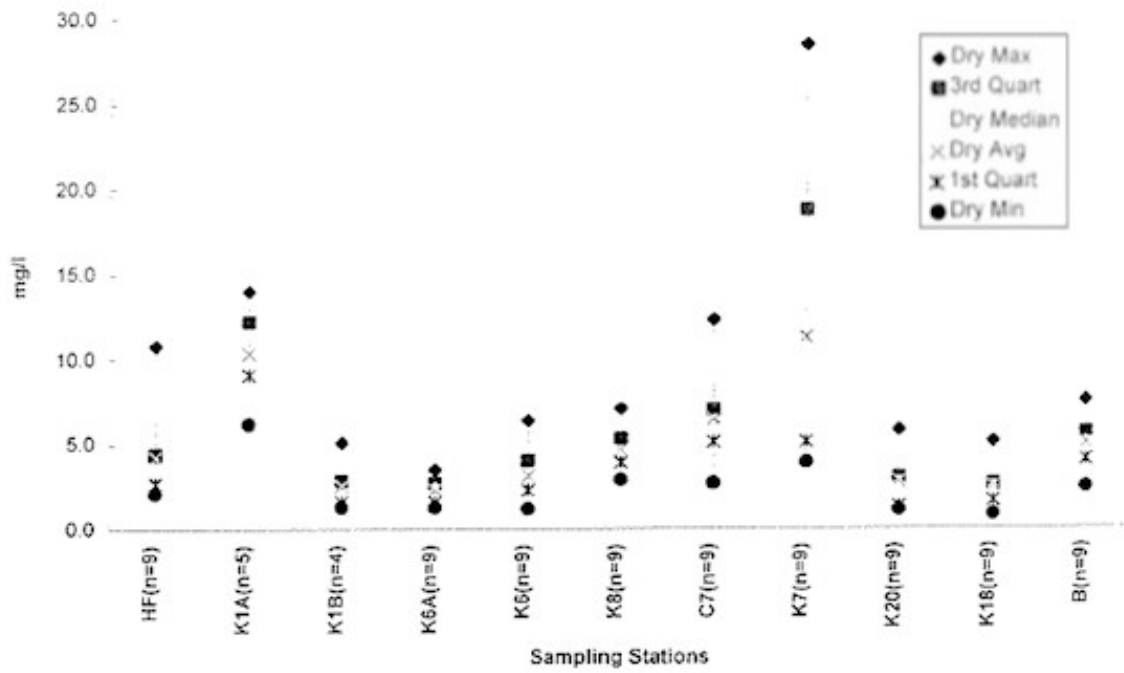
Sixteen Mile Creek DRY Weather Sampling  
CHLORIDE Readings



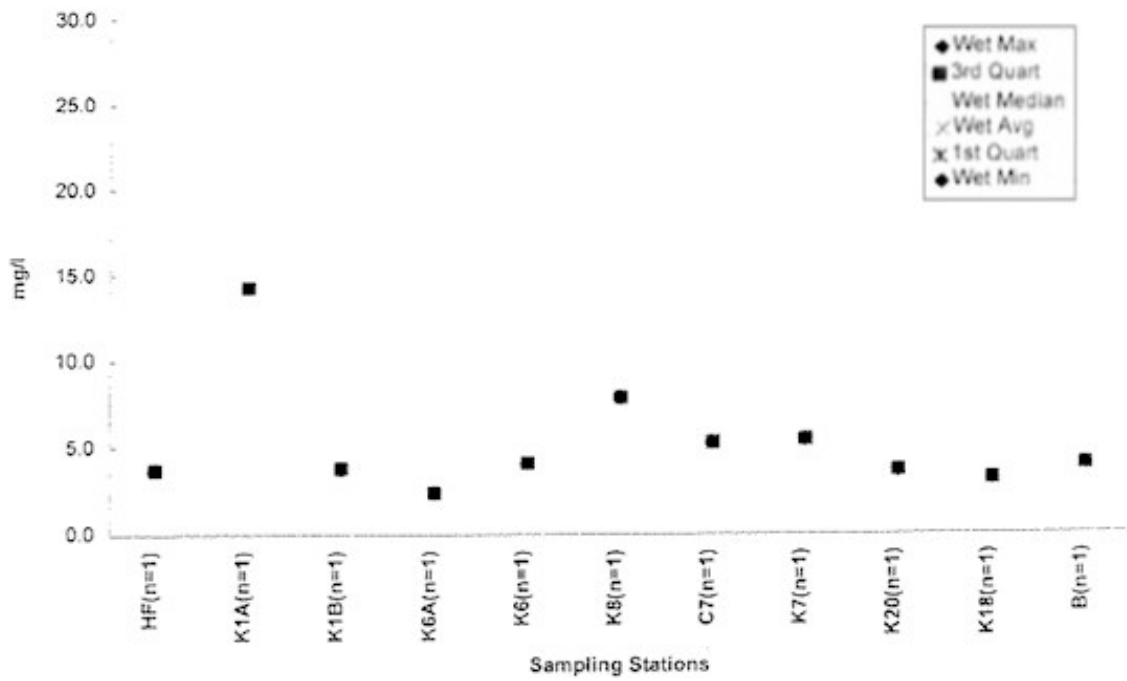
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CHLORIDE Readings



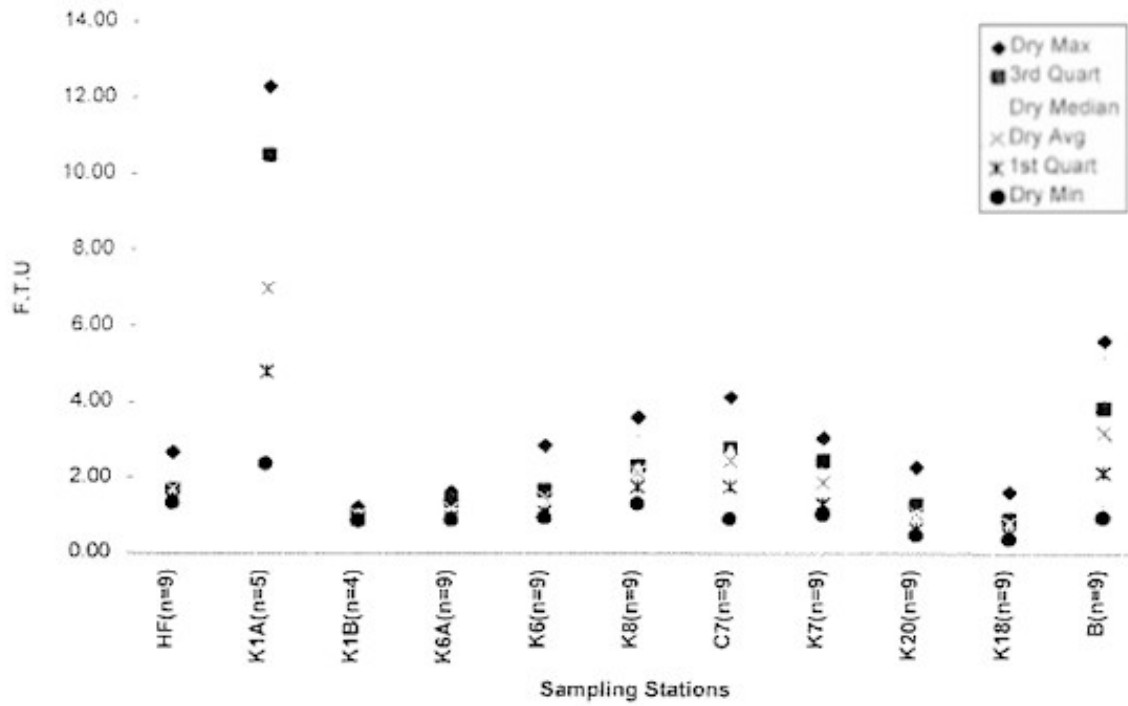
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RESIDUE PARTICULATE Readings



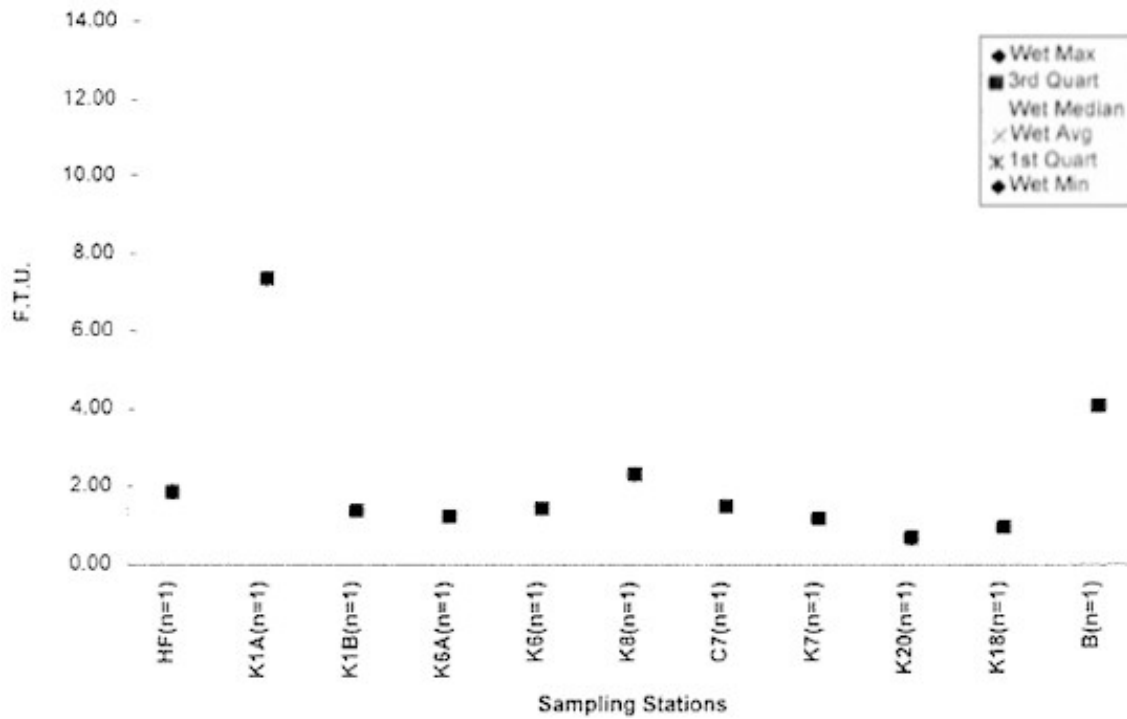
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RESIDUE PARTICULATE Readings



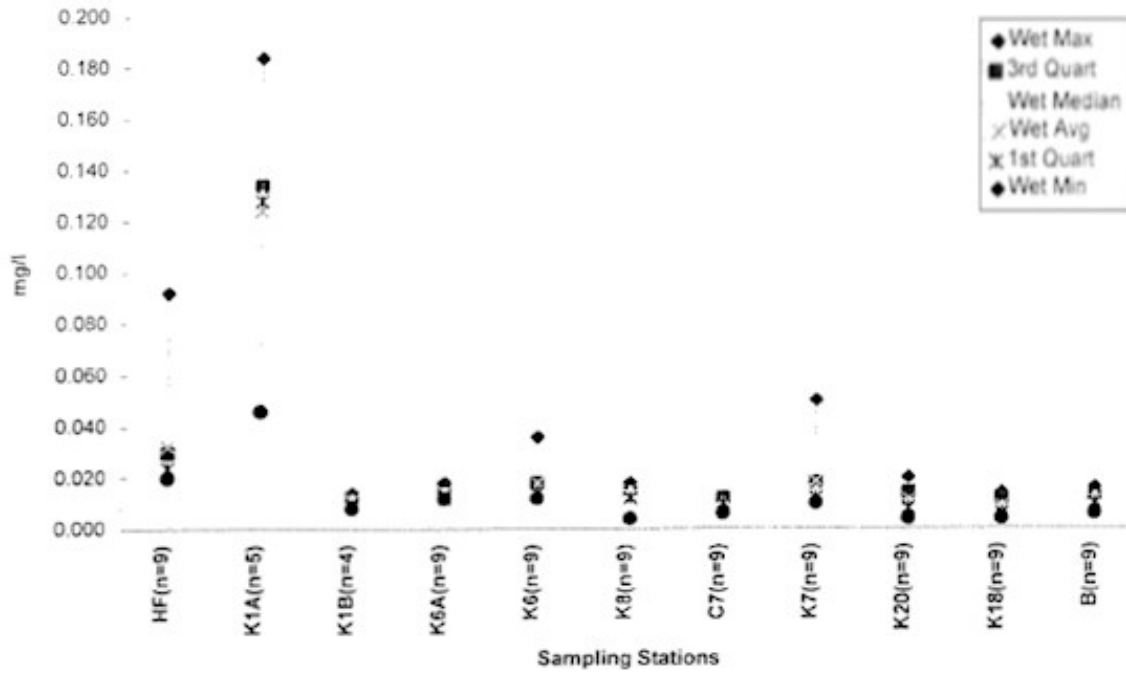
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TURBIDITY Readings



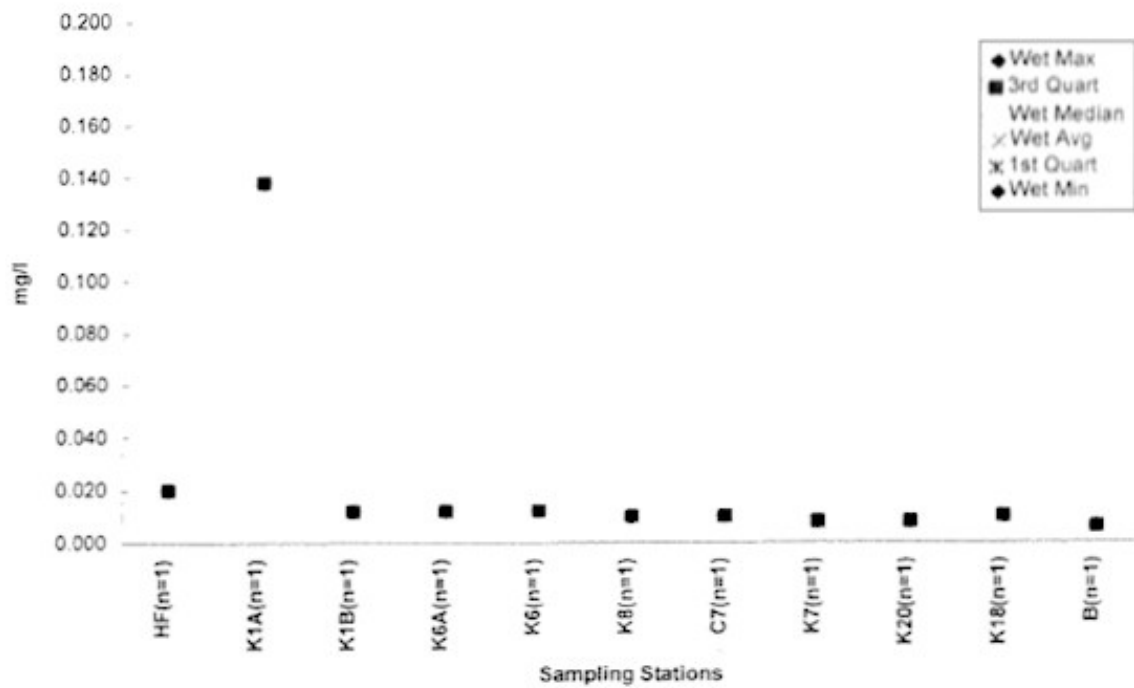
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TURBIDITY Readings



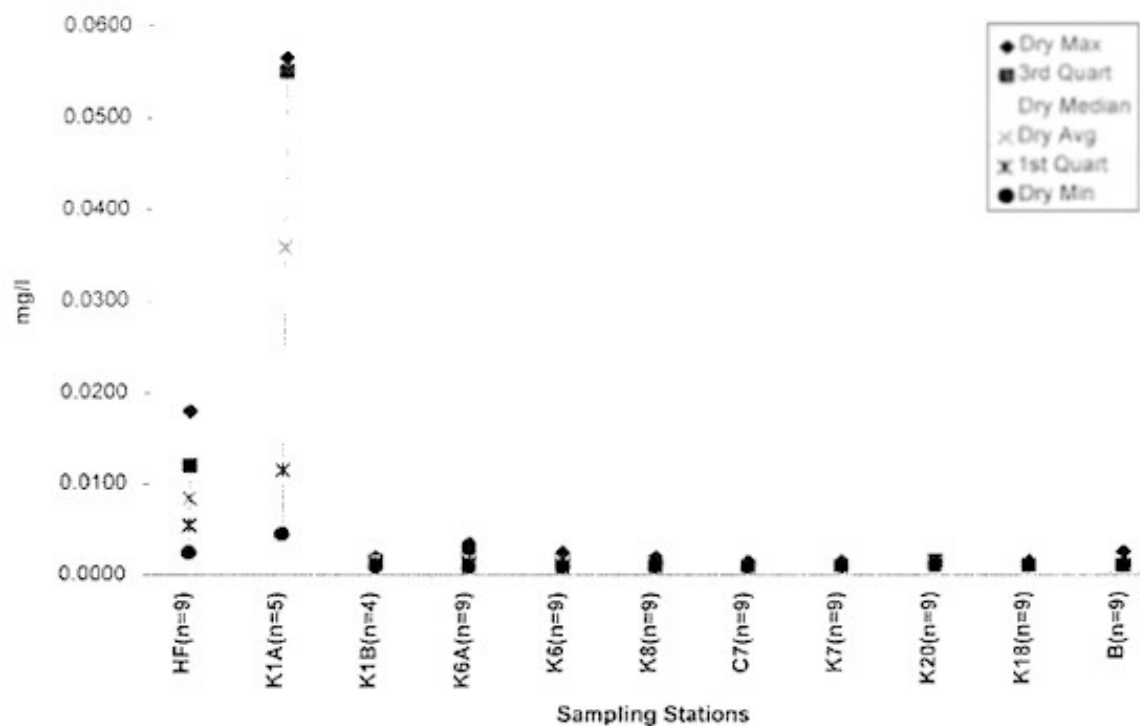
Sixteen Mile Creek DRY Weather Sampling  
TOTAL PHOSPHORUS Readings



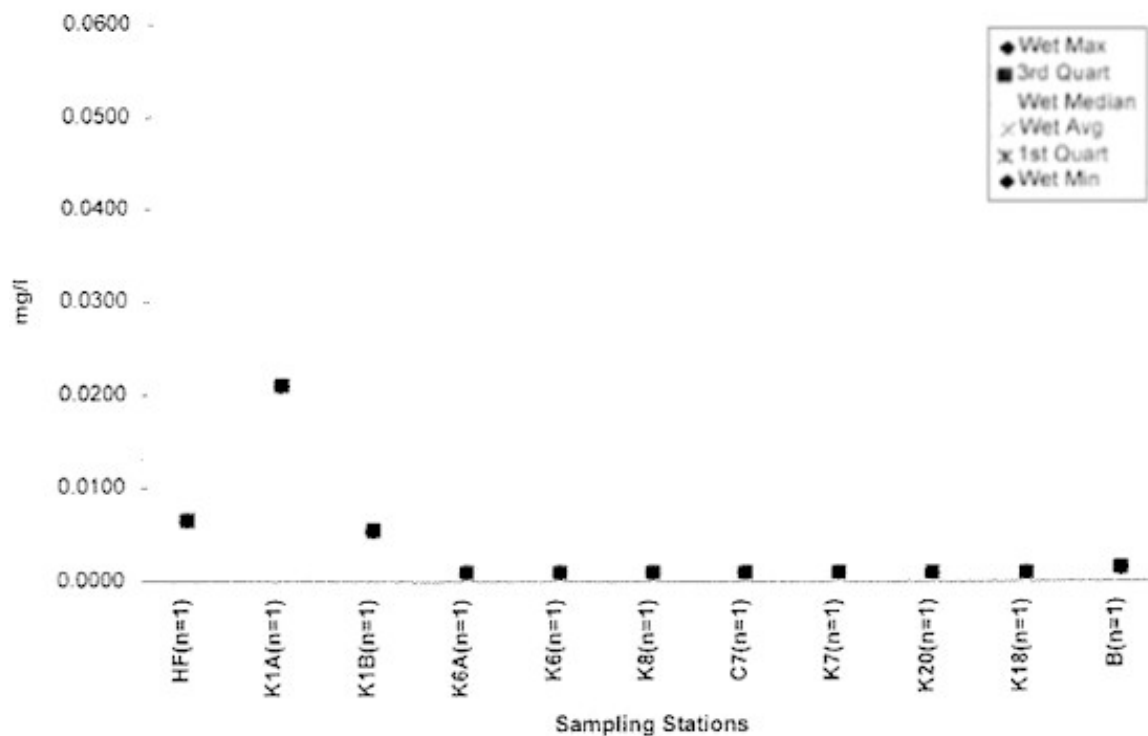
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TOTAL PHOSPHORUS Readings



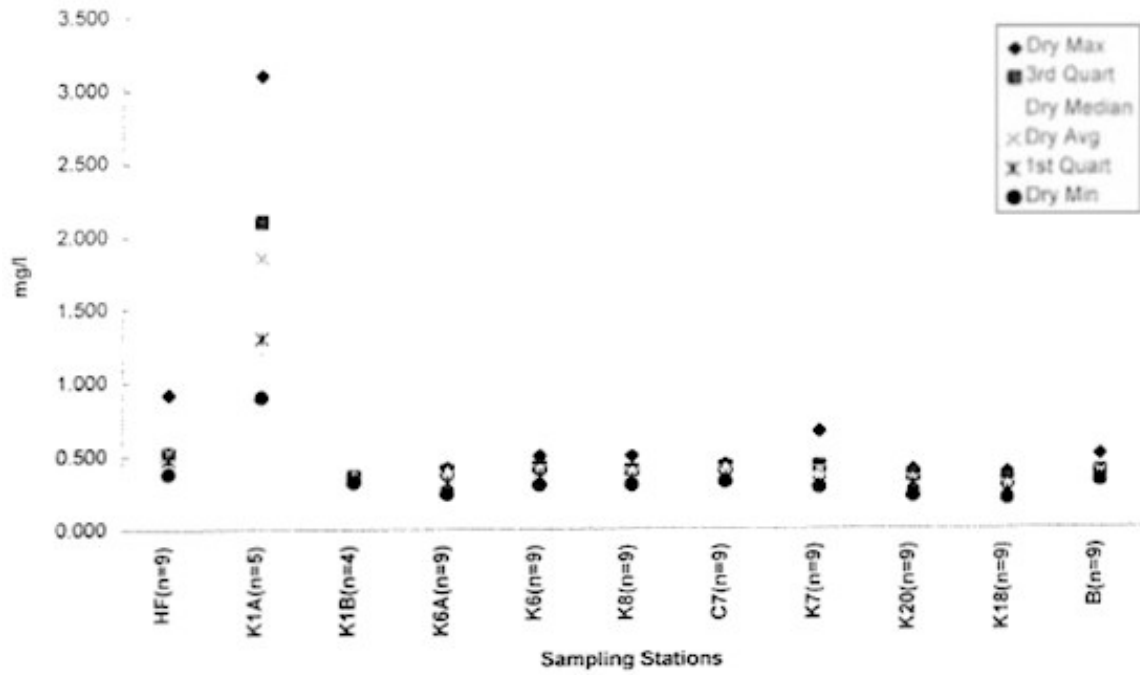
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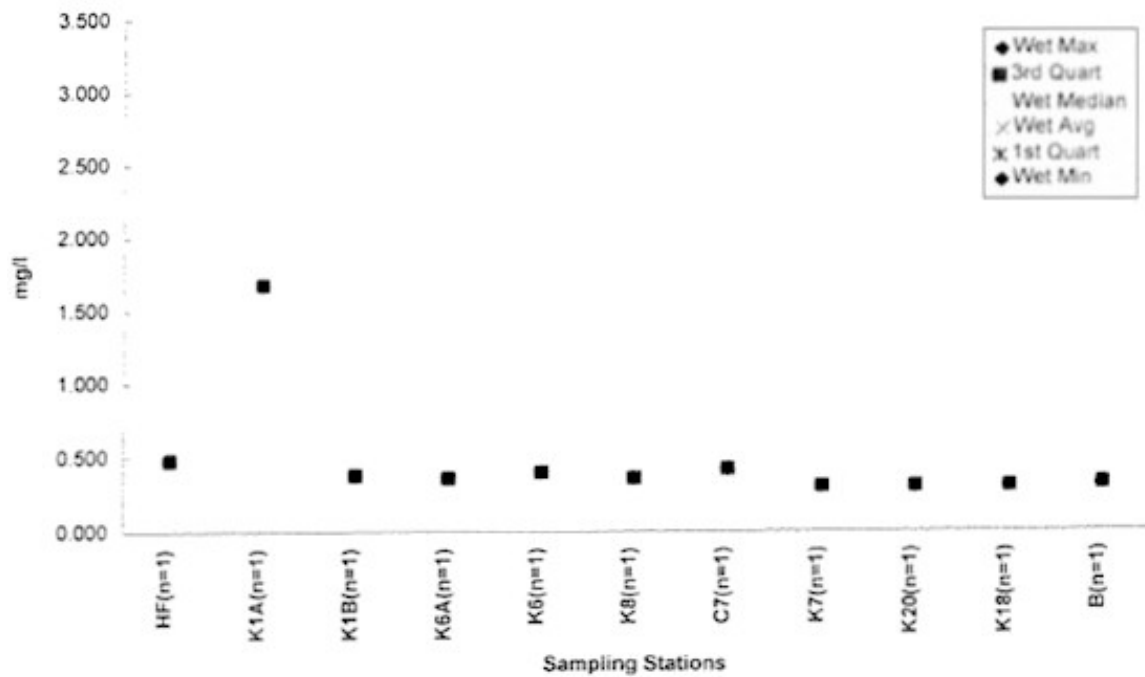
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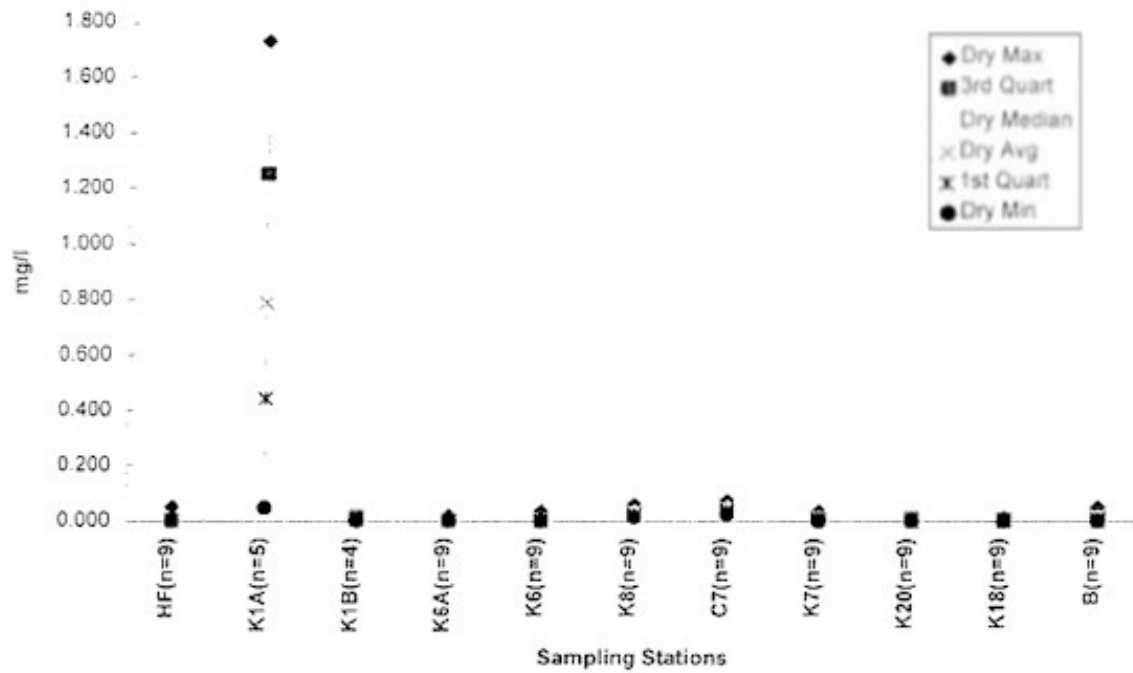
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TOTAL KJELDAHL NITROGEN Readings



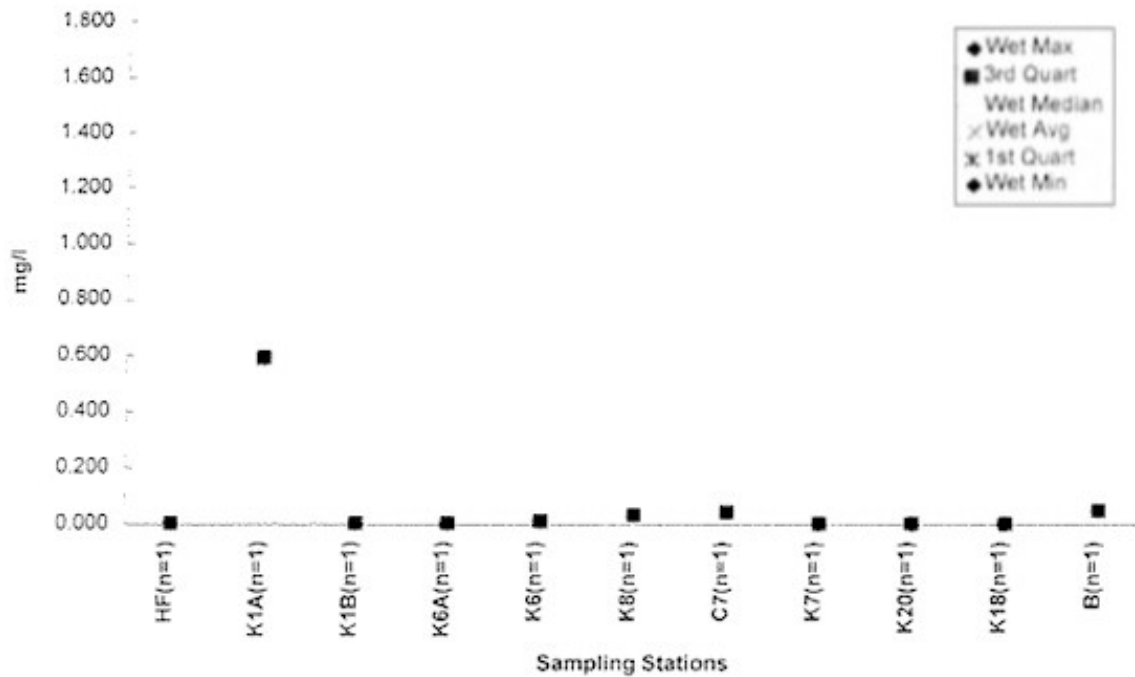
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TOTAL KJELDAHL NITROGEN Readings



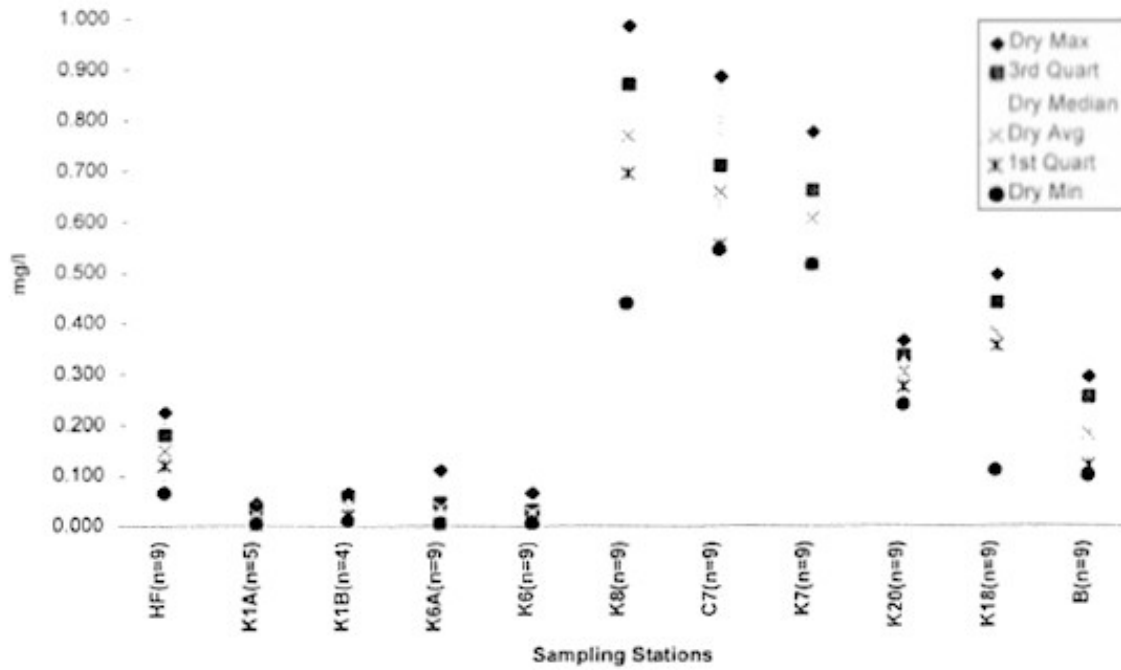
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AMMONIUM Readings



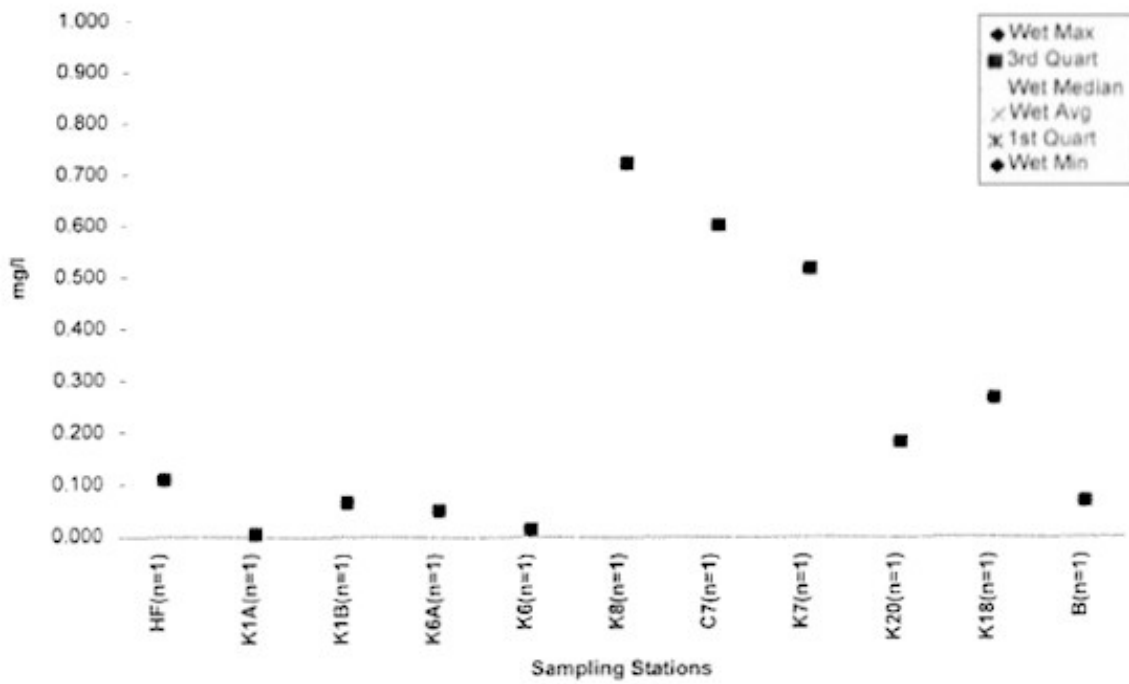
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AMMONIUM Readings



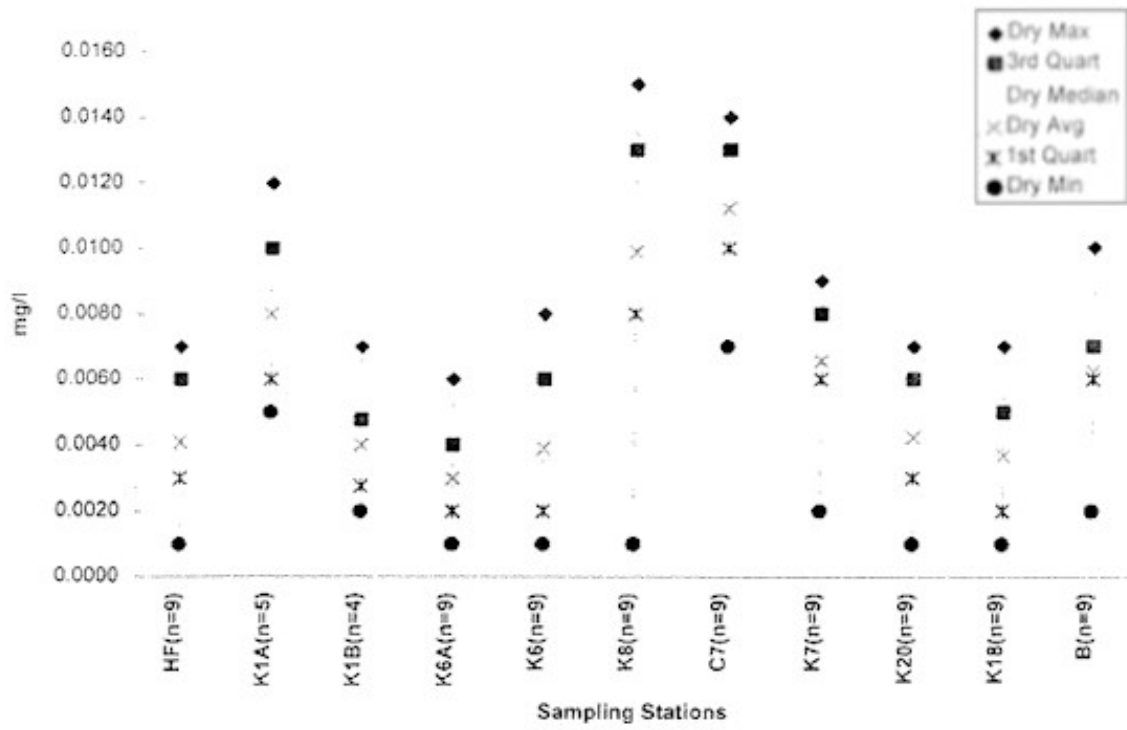
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NITRATES Readings



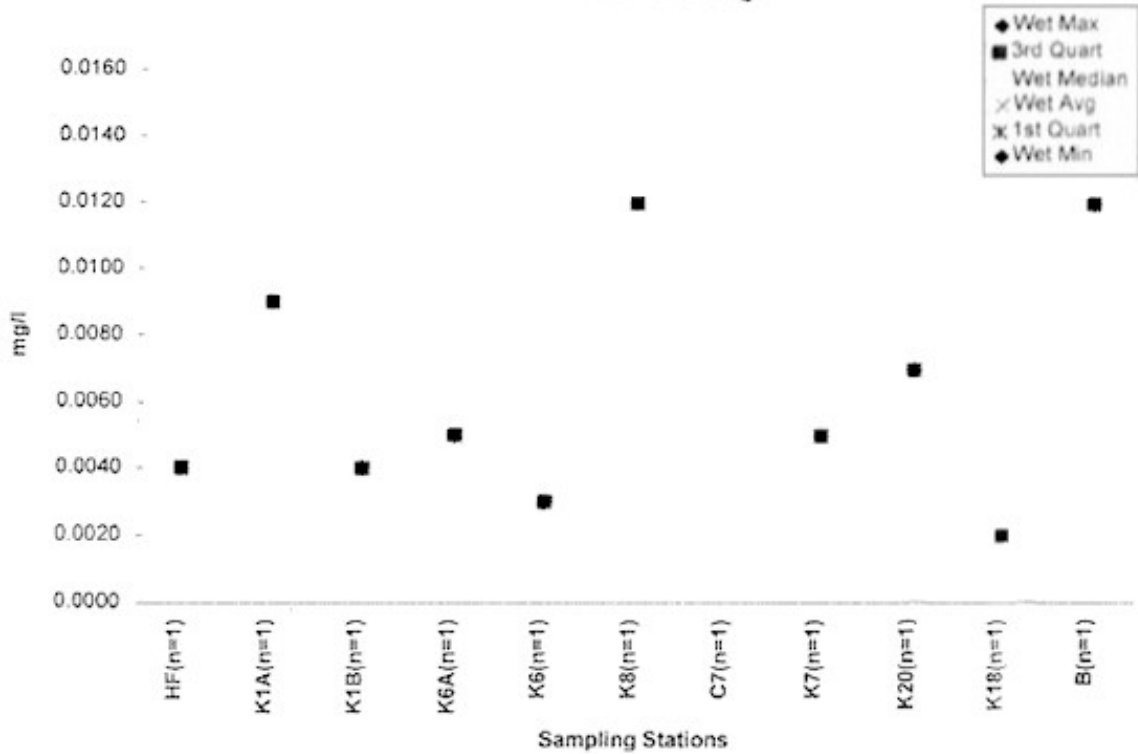
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NITRATE Readings



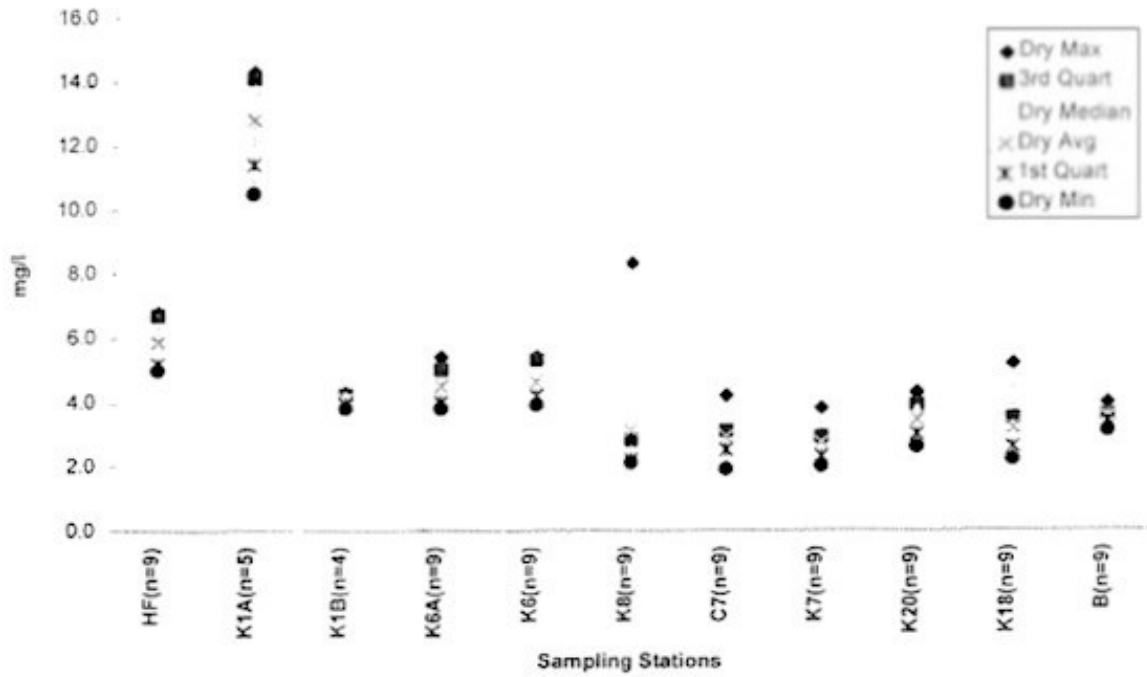
Sixteen Mile Creek DRY Weather Sampling  
NITRITE Readings



Sixteen Mile Creek WET Weather Sampling  
NITRITE Readings



Sixteen Mile Creek DRY Weather Sampling  
DISOLVED ORGANIC CARBON Readings



Sixteen Mile Creek WET Weather Sampling  
DISOLVED ORGANIC CARBON Readings

