Appendix E: Metals Trending Graphs

Battle River

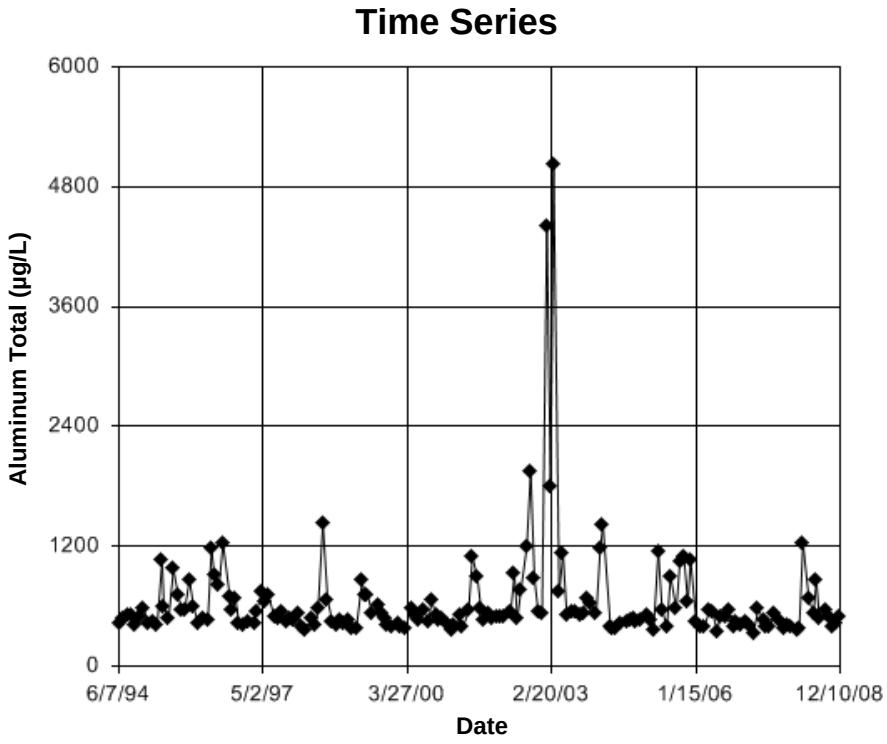


Figure E1 Battle River: Aluminum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 18.73
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 18.73
Adjusted Kruskal-Wallis statistic (H') = 18.73

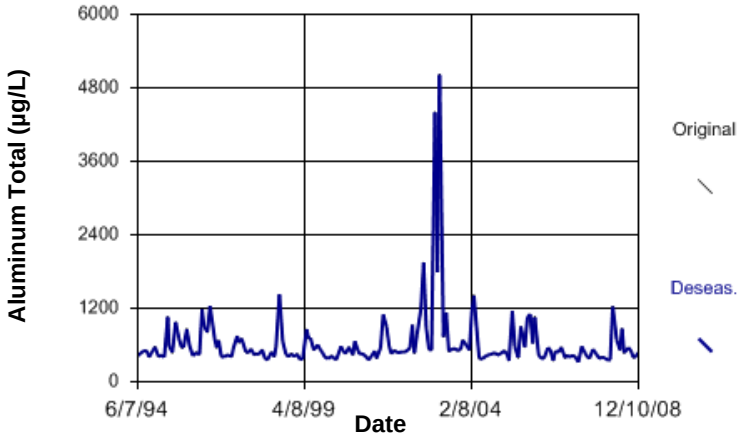


Figure E2 Battle River: Aluminum Total

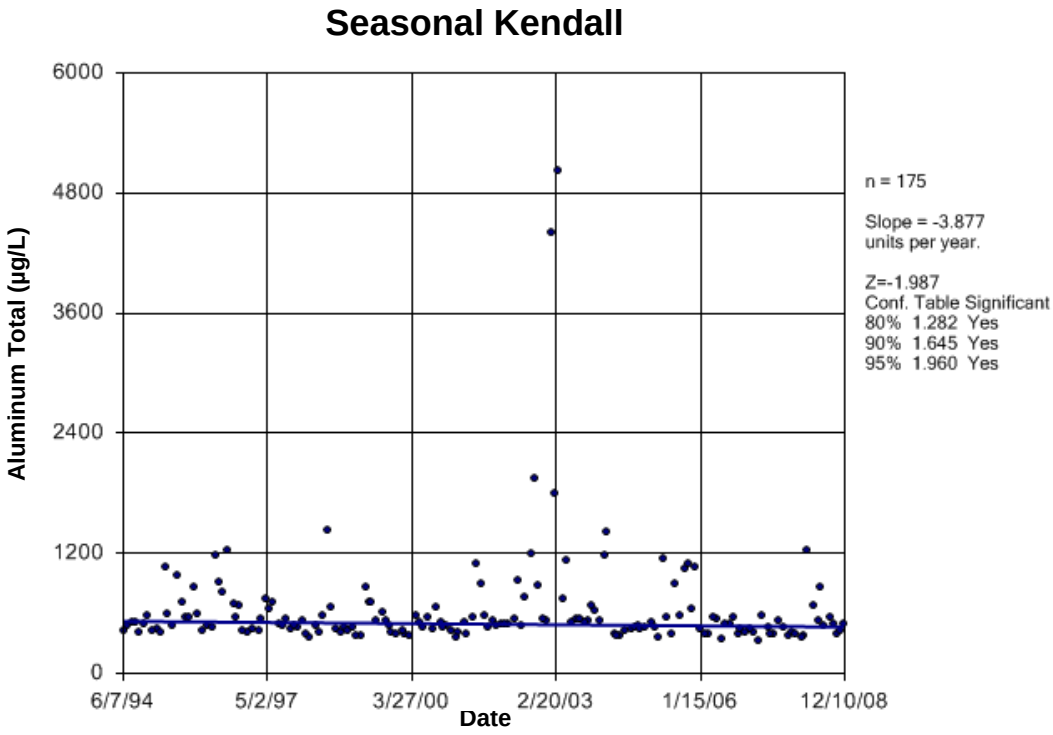


Figure E3 Battle River: Aluminum Total

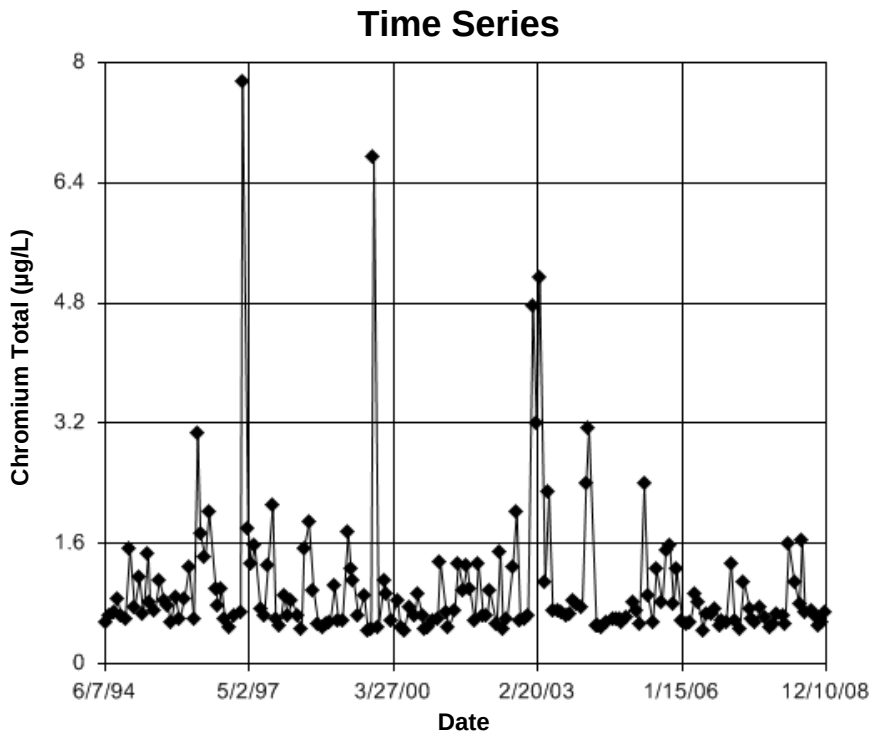


Figure E4 Battle River: Chromium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.618
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 1.618
Adjusted Kruskal-Wallis statistic (H') = 1.618

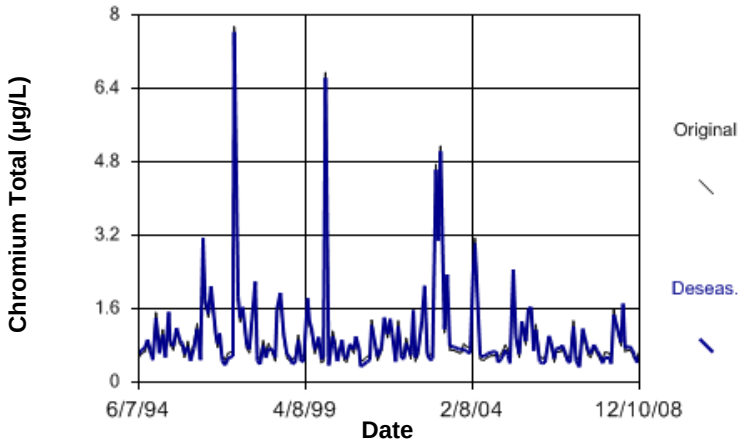


Figure E5 Battle River: Chromium Total

Sen's Slope Estimator

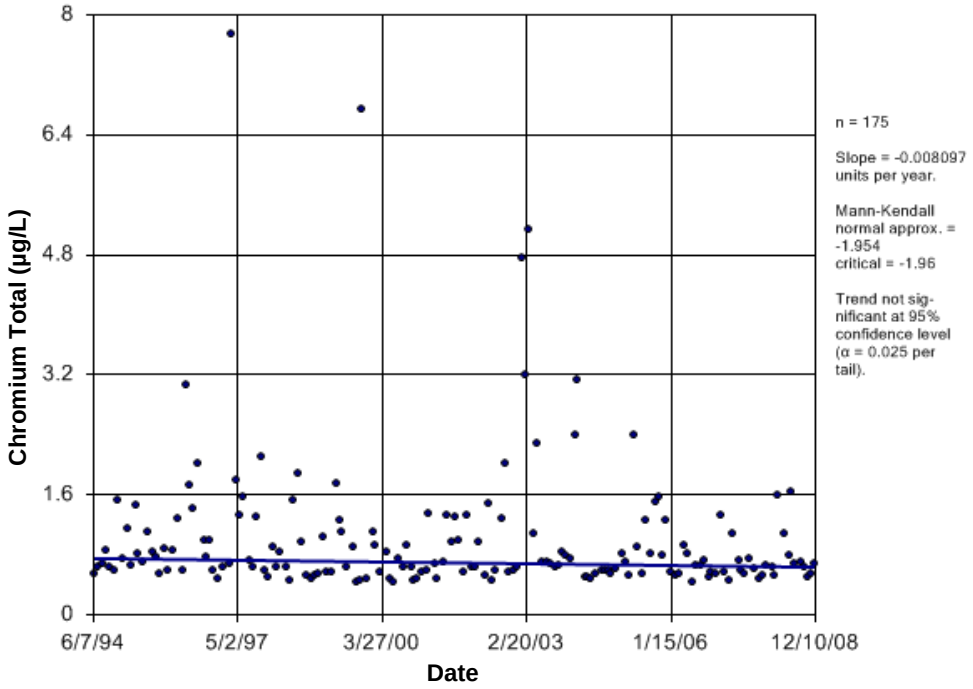


Figure E6 Battle River: Chromium Total

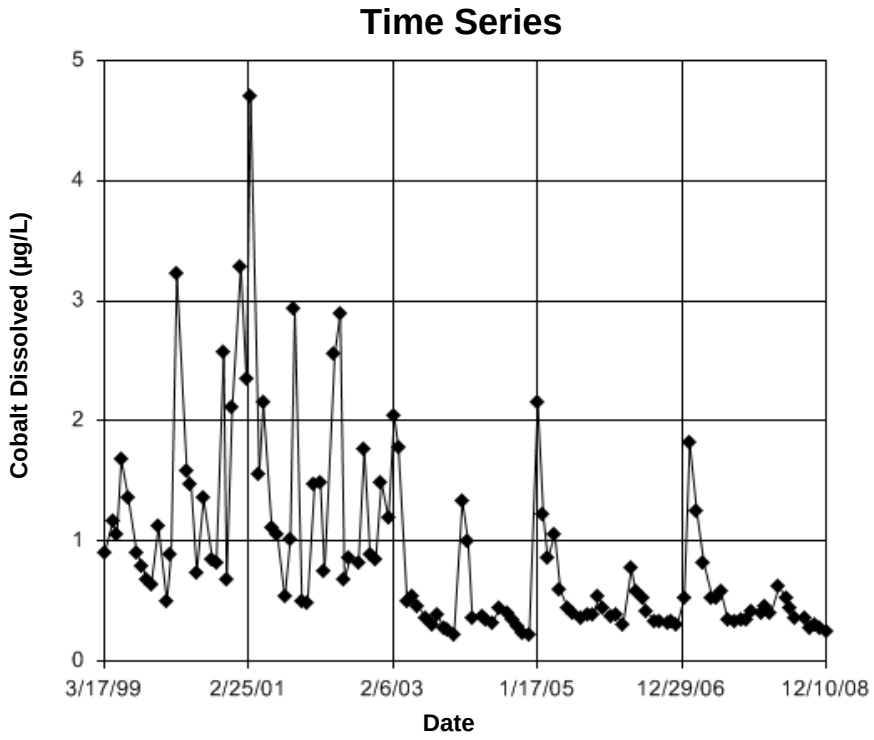


Figure E7 Battle River: Cobalt Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.5551
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.5551
Adjusted Kruskal-Wallis statistic (H') = 0.5551

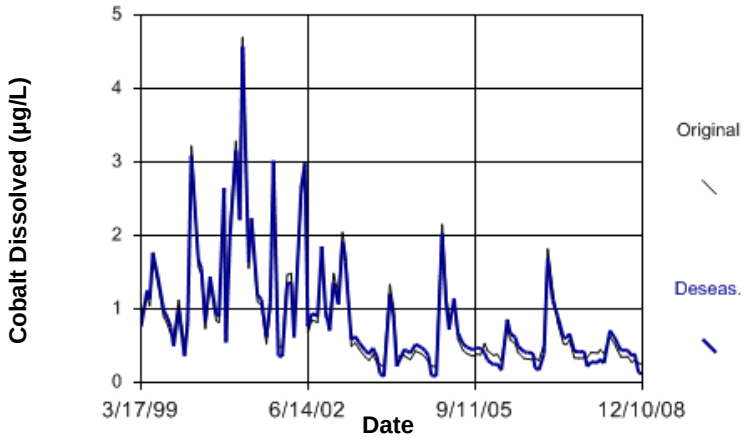


Figure E8 Battle River: Cobalt Dissolved

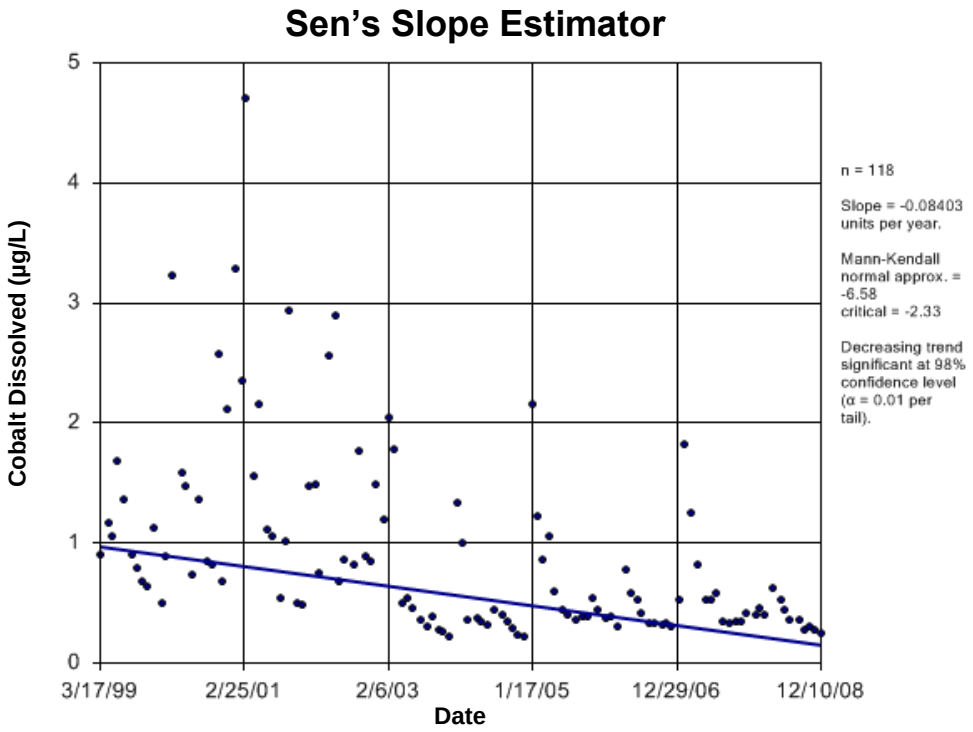


Figure E9 Battle River: Cobalt Dissolved

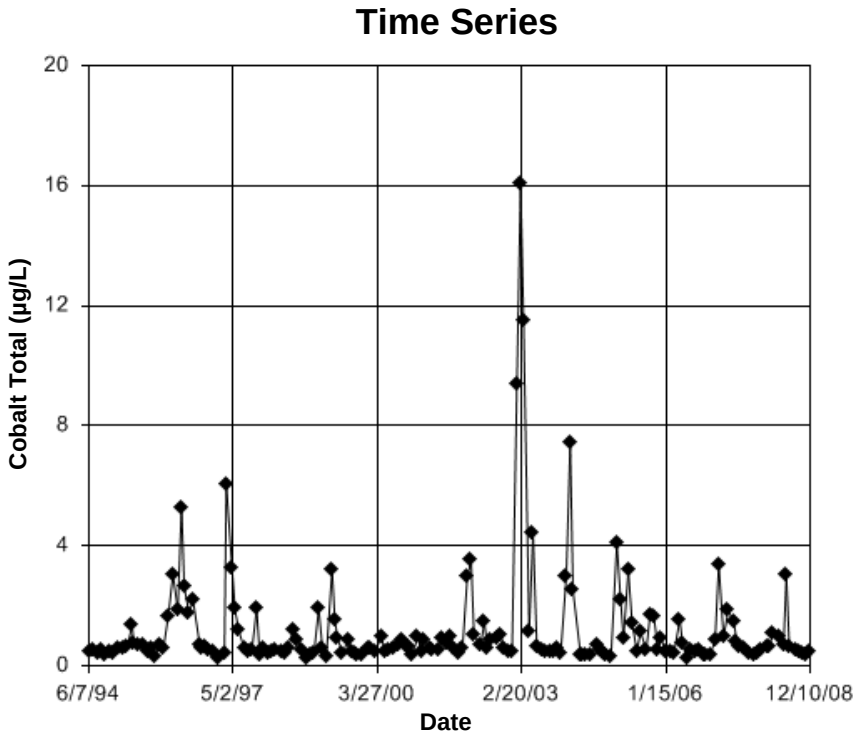


Figure E10 Battle River: Cobalt Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.8921
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 4 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.8921
Adjusted Kruskal-Wallis statistic (H') = 0.8921

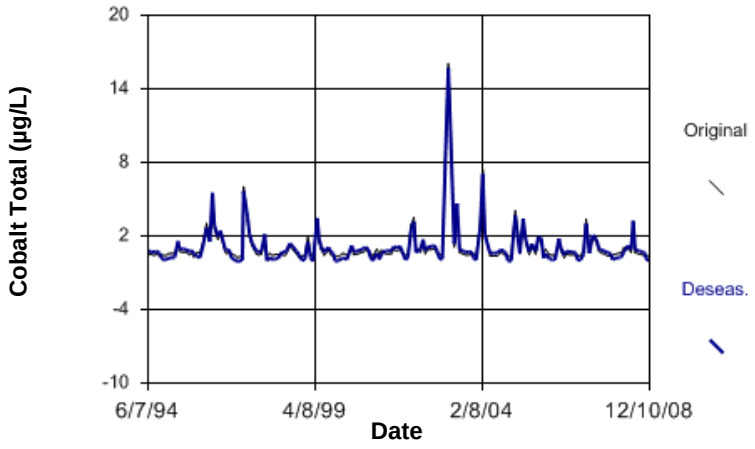


Figure E11 Battle River: Cobalt Total

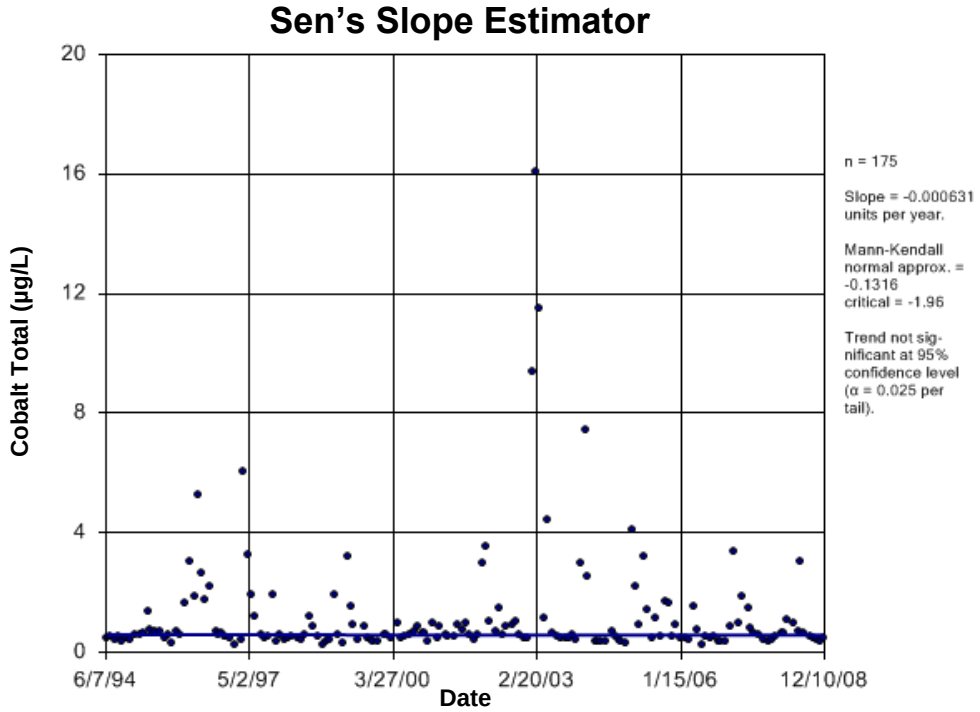


Figure E12 Battle River: Cobalt Total

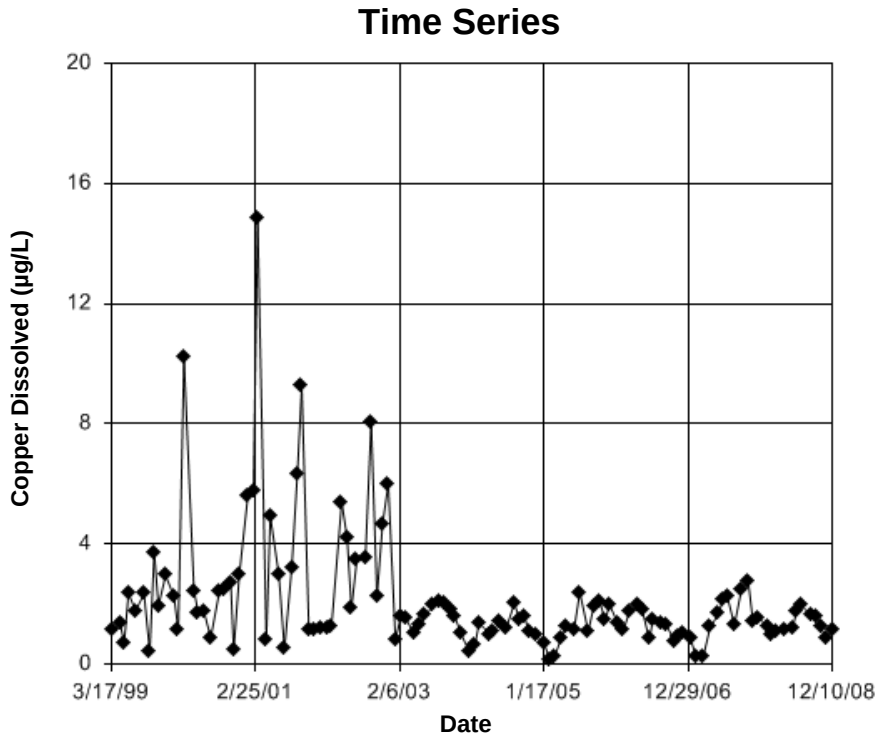


Figure E13 Battle River: Copper

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 9.345
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 9.345
Adjusted Kruskal-Wallis statistic (H') = 9.345

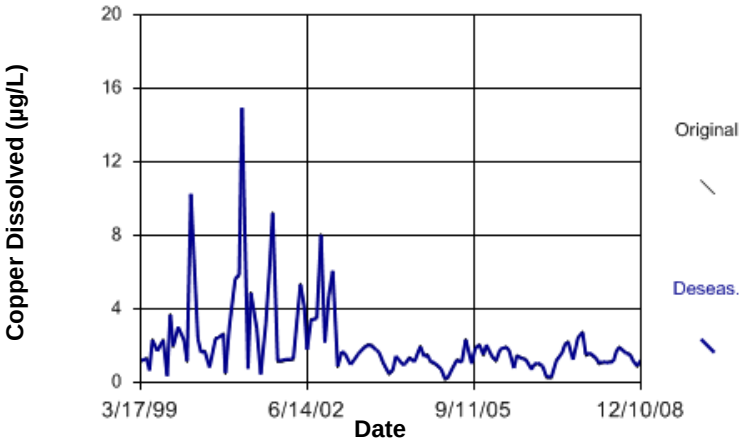


Figure E14 Battle River: Copper Dissolved

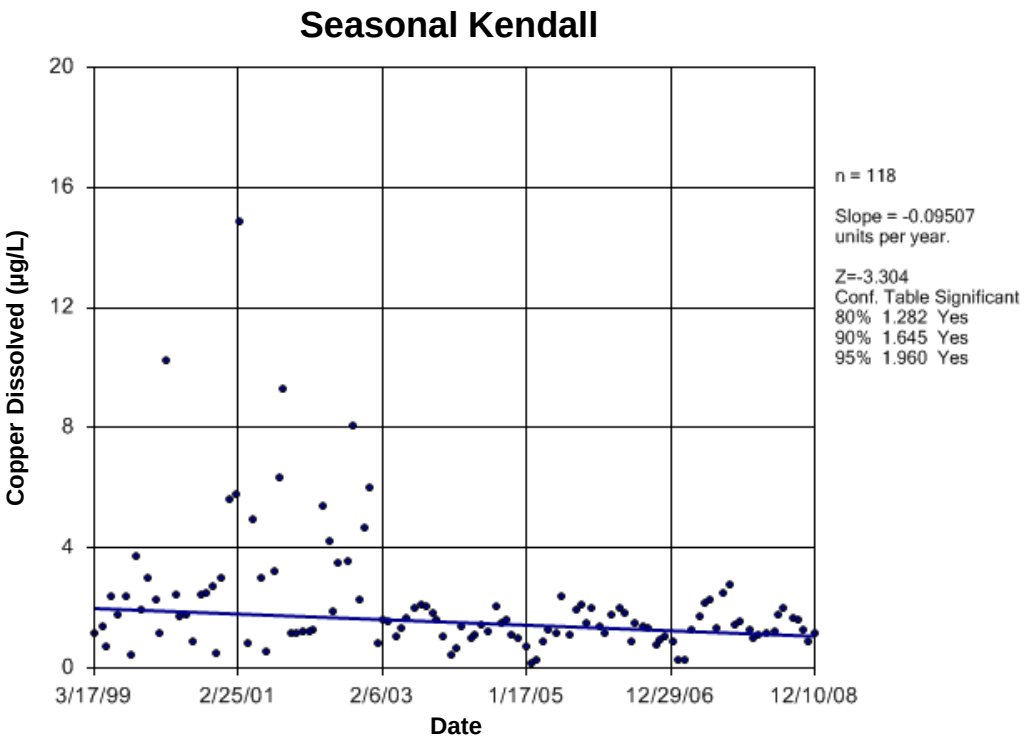


Figure E15 Battle River: Copper Dissolved

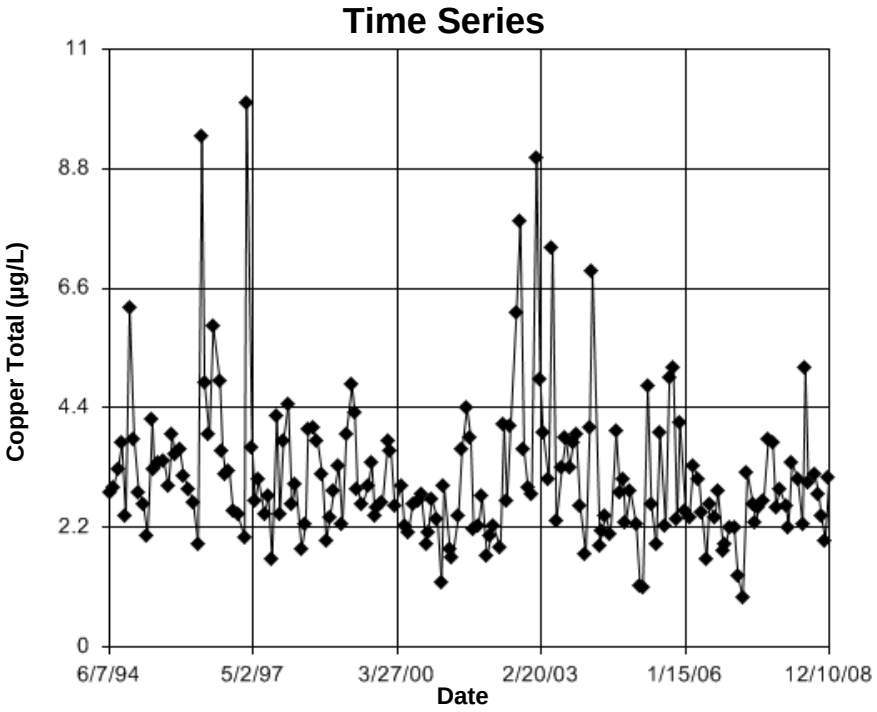


Figure E16 Battle River: Copper Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 5.752
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 4 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 5.752
Adjusted Kruskal-Wallis statistic (H') = 5.752

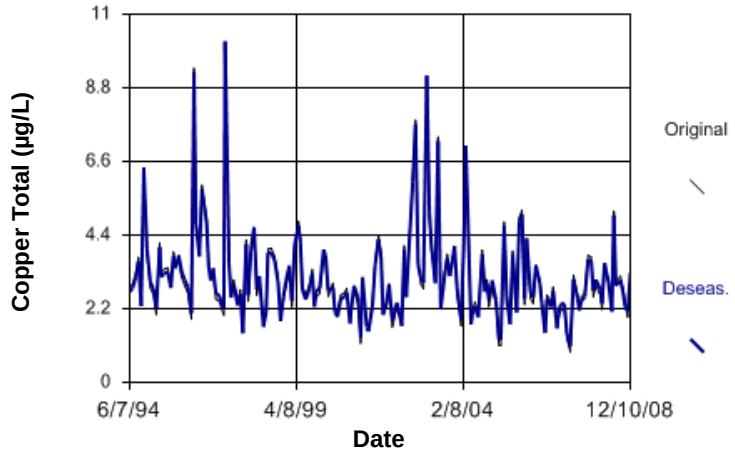


Figure E17 Battle River: Copper Total

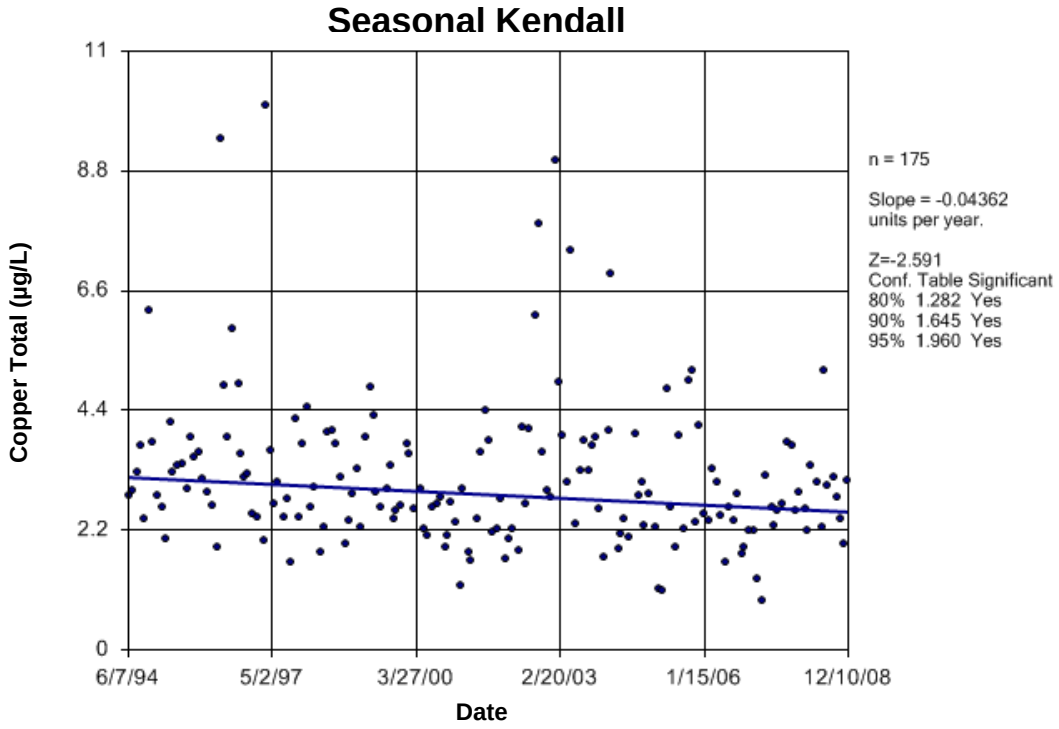


Figure E18 Battle River: Copper Total

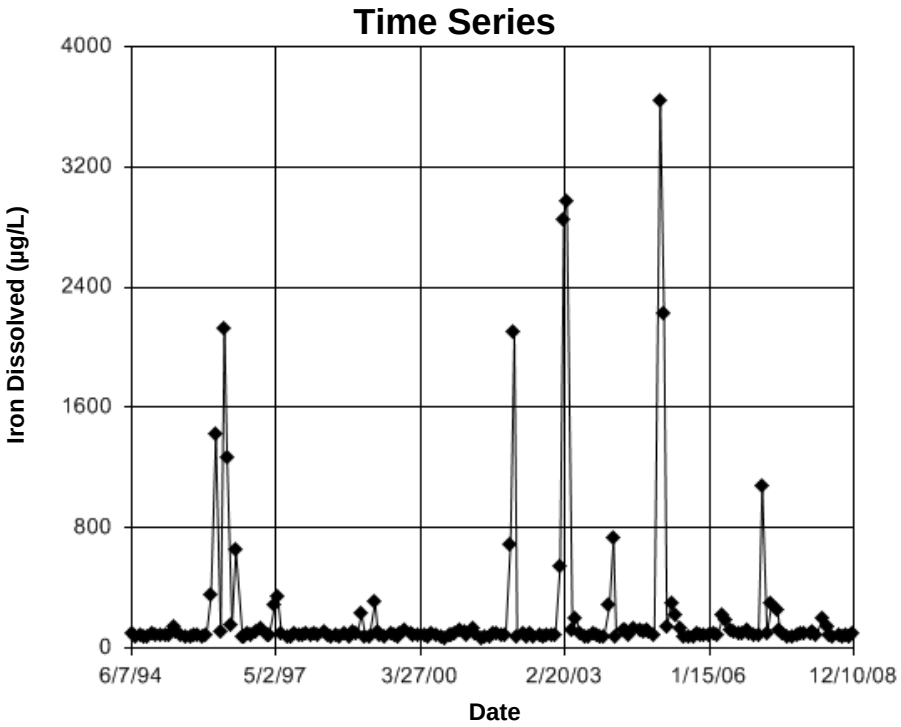


Figure E19 Battle River: Iron Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 3.179
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 3.179
Adjusted Kruskal-Wallis statistic (H') = 3.179

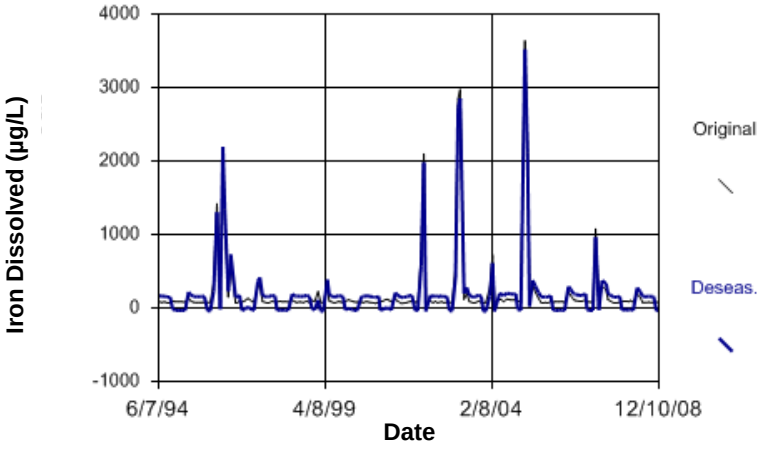


Figure E20 Battle River: Iron Dissolved

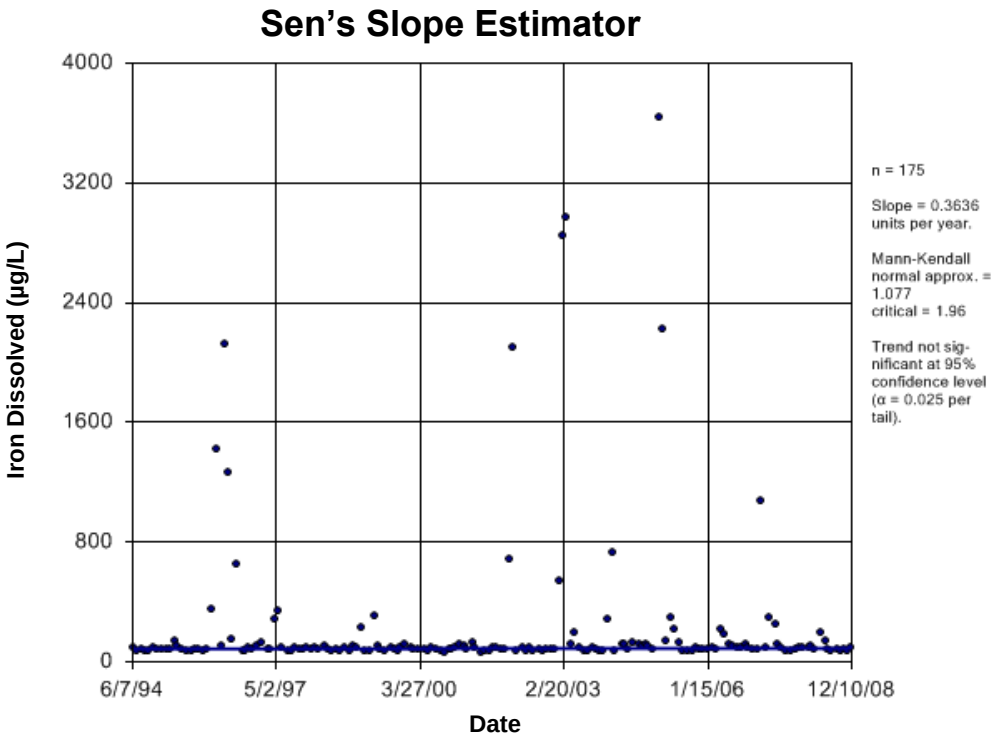


Figure E21 Battle River: Iron Dissolved

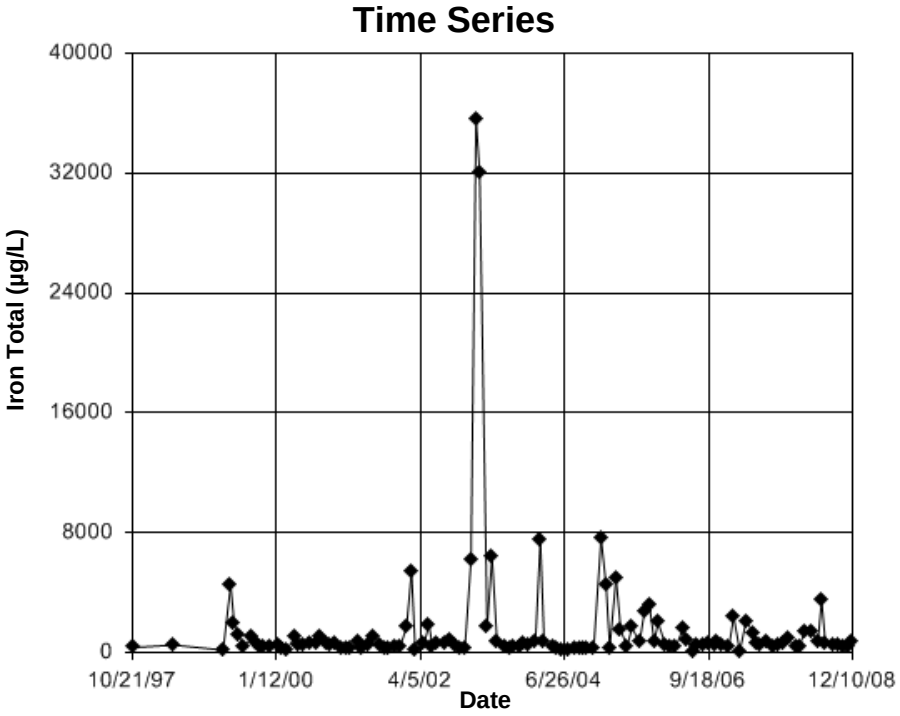


Figure E22 Battle River: Iron Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.414
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

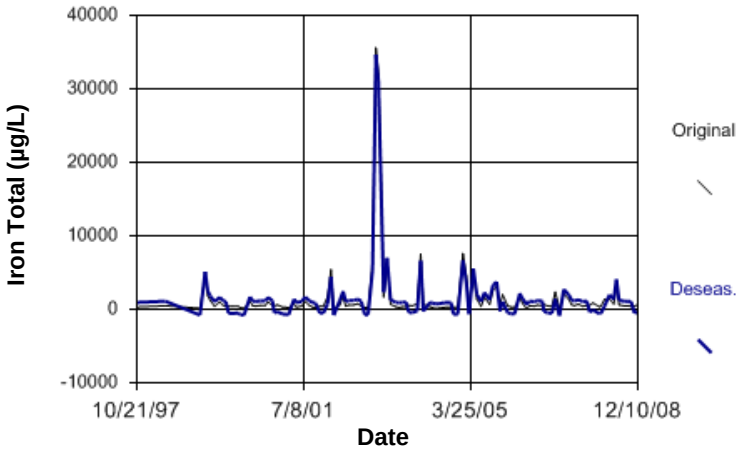


Figure E23 Battle River: Iron Total

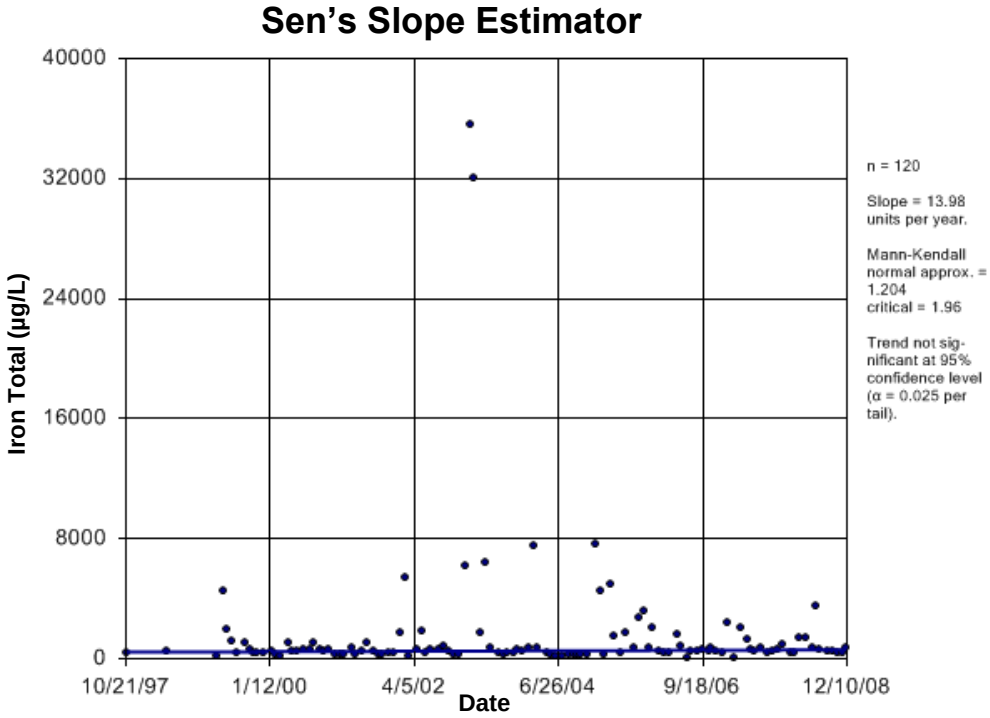


Figure E24 Battle River: Iron Total

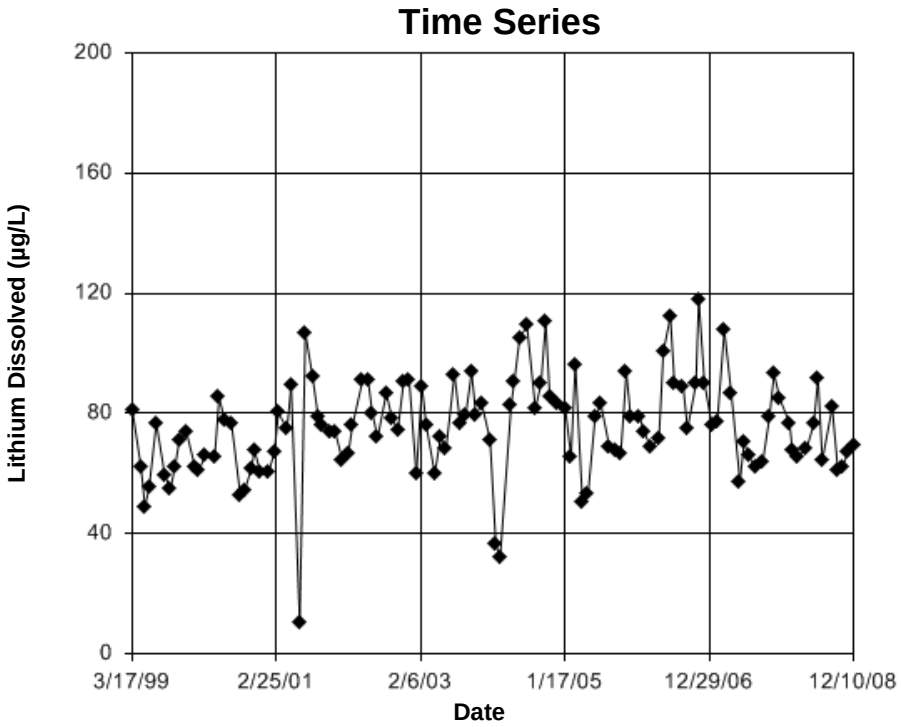


Figure E25 Battle River: Lithium Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.01261
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 5 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.01261
Adjusted Kruskal-Wallis statistic (H') = 0.01261

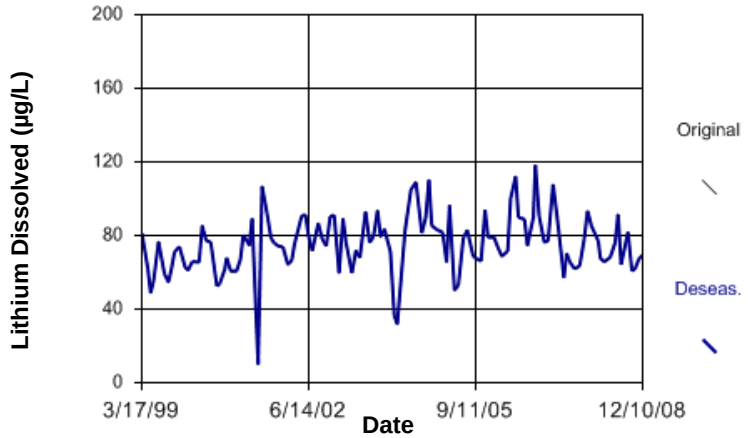


Figure E26 Battle River: Lithium Dissolved

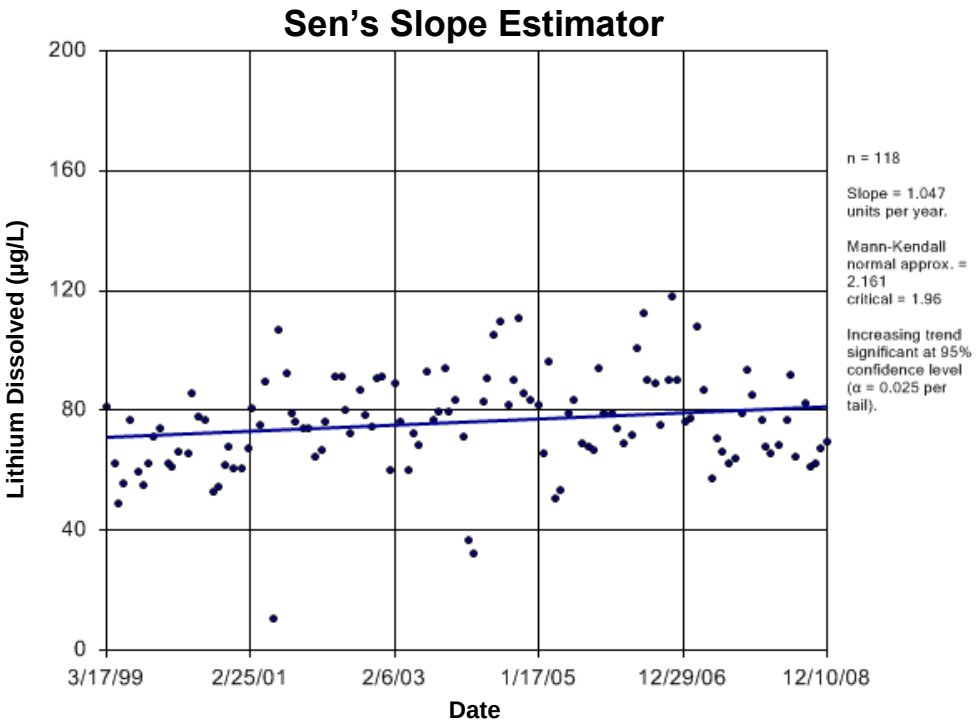


Figure E27 Battle River: Lithium Dissolved

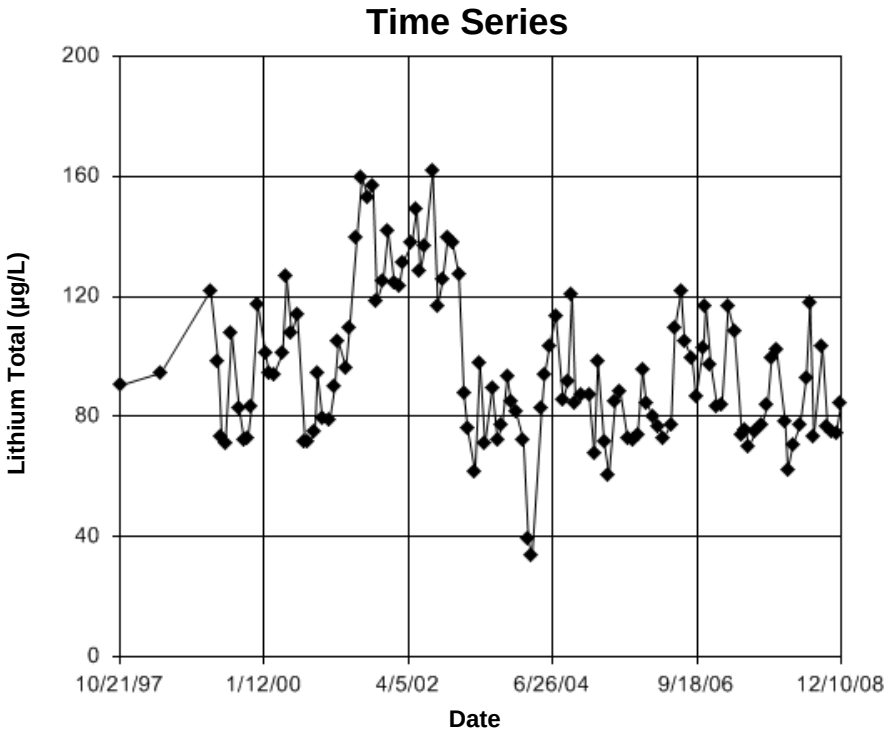


Figure E28 Battle River: Lithium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.006894
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.006894
Adjusted Kruskal-Wallis statistic (H') = 0.006894

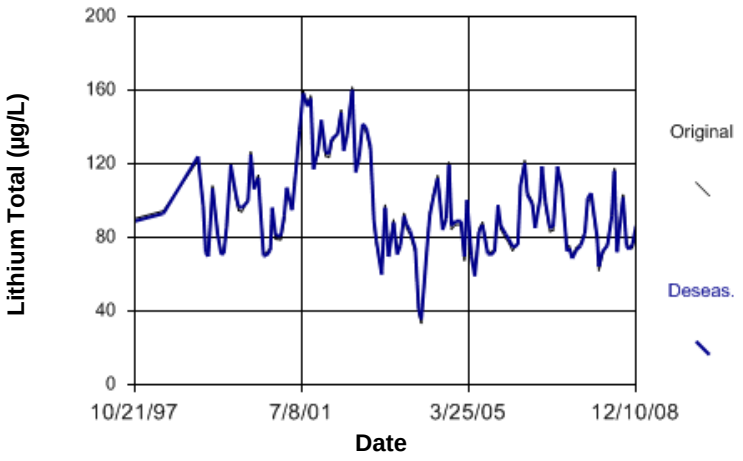


Figure E29 Battle River: Lithium Total

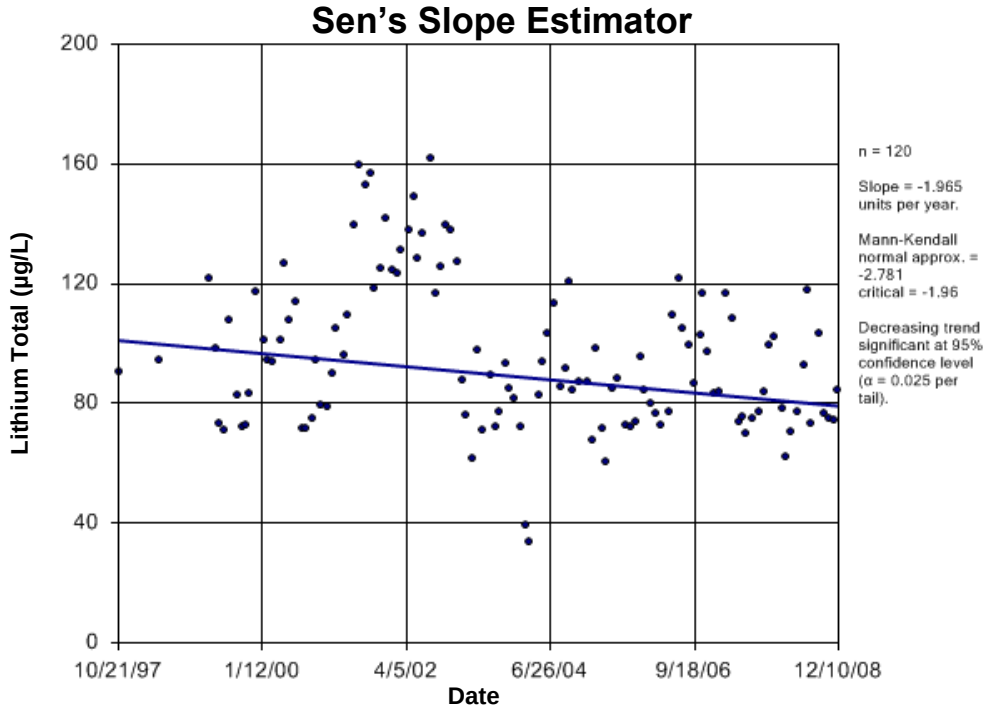


Figure E30 Battle River: Lithium Total

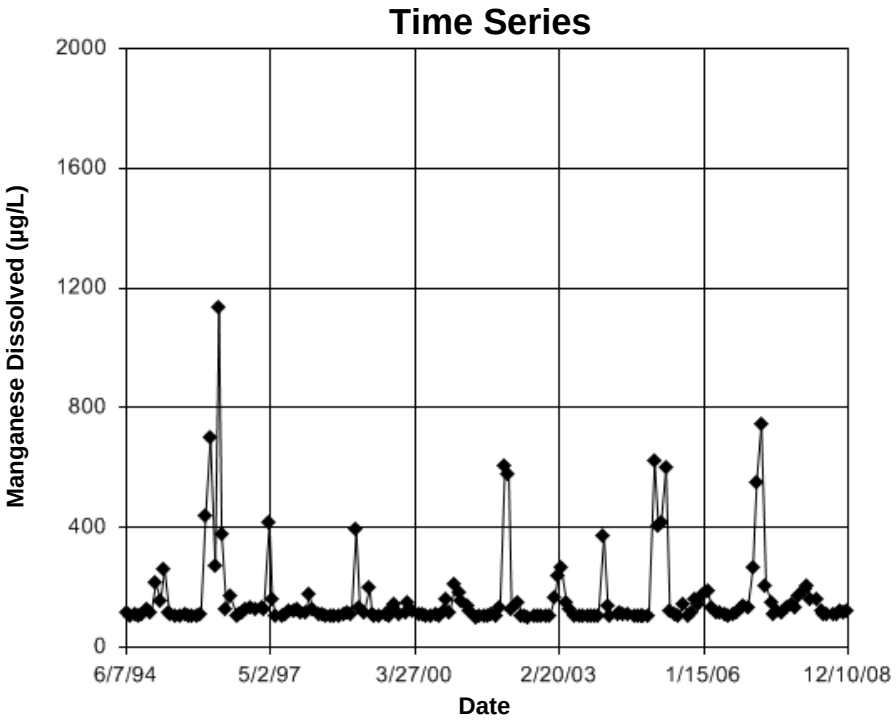


Figure E31 Battle River: Manganese Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 37.89
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 27 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 37.89
Adjusted Kruskal-Wallis statistic (H') = 37.89

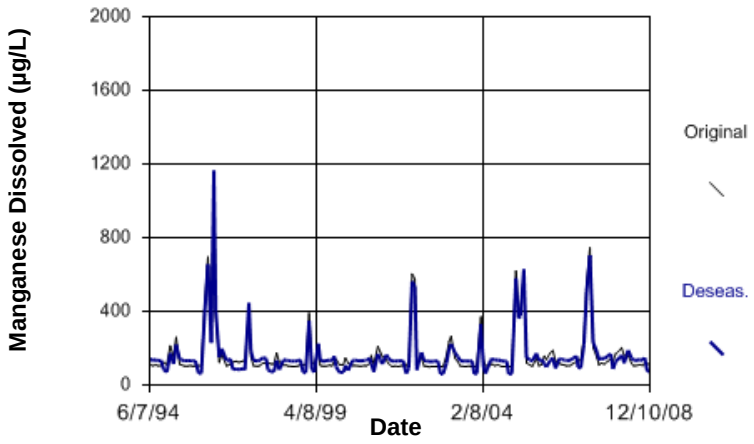


Figure E32 Battle River: Manganese Dissolved

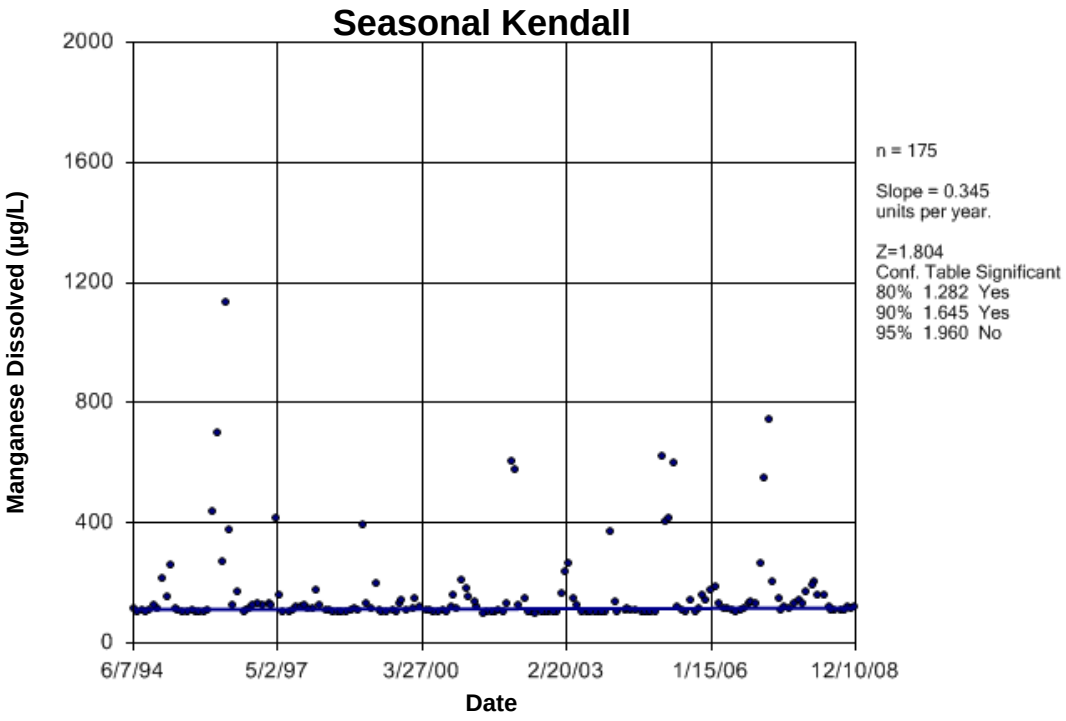


Figure E33 Battle River: Manganese Dissolved

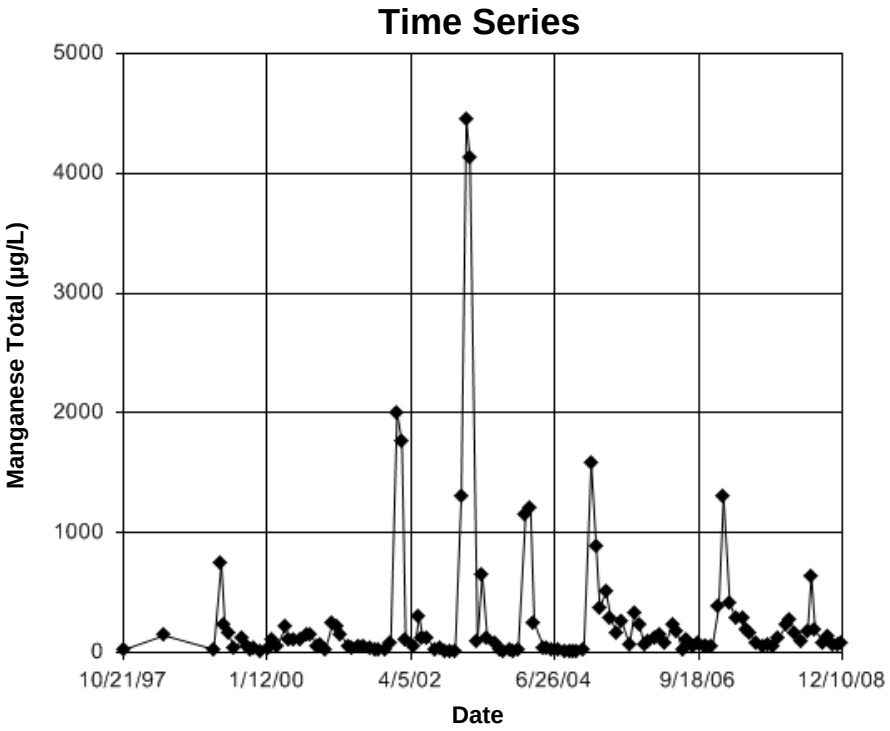


Figure E34 Battle River: Manganese Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.985
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

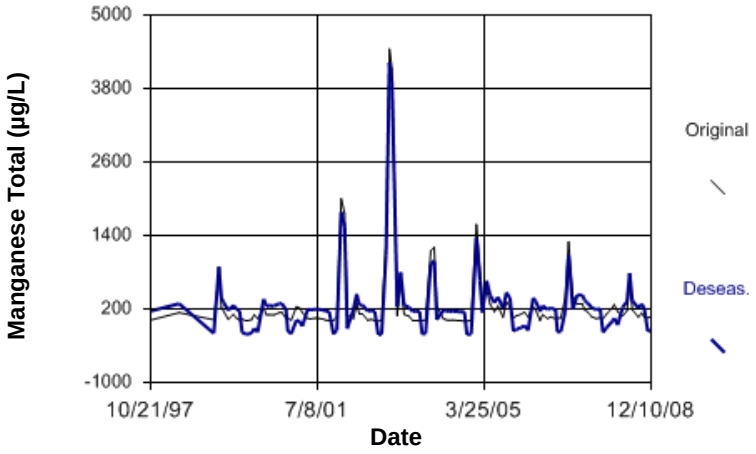


Figure E35 Battle River: Manganese Total

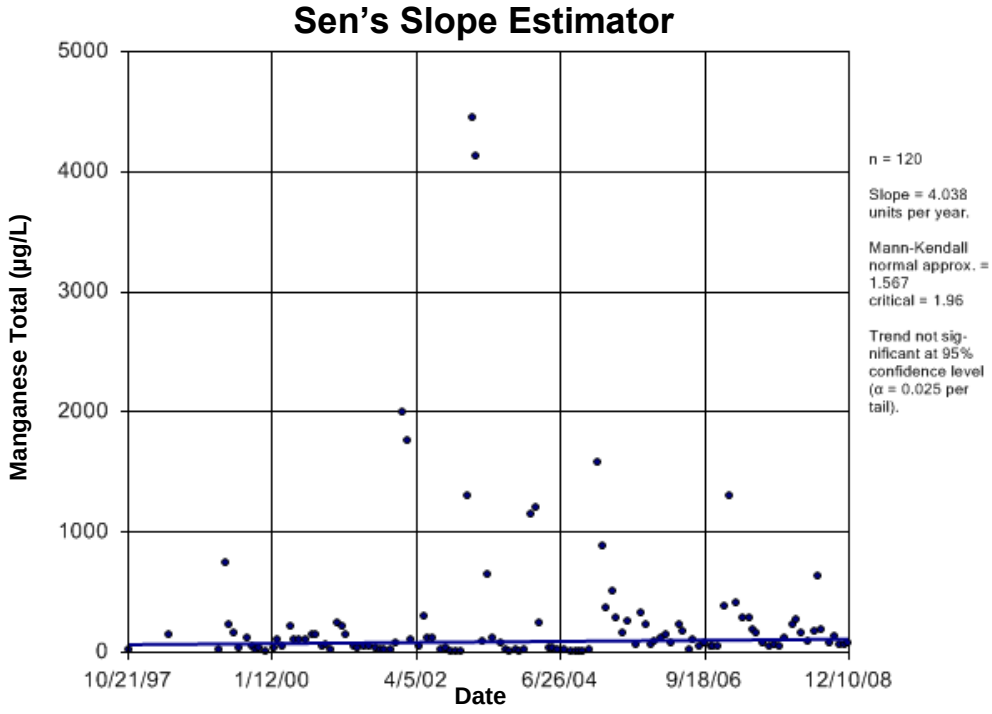


Figure E36 Battle River: Manganese Total

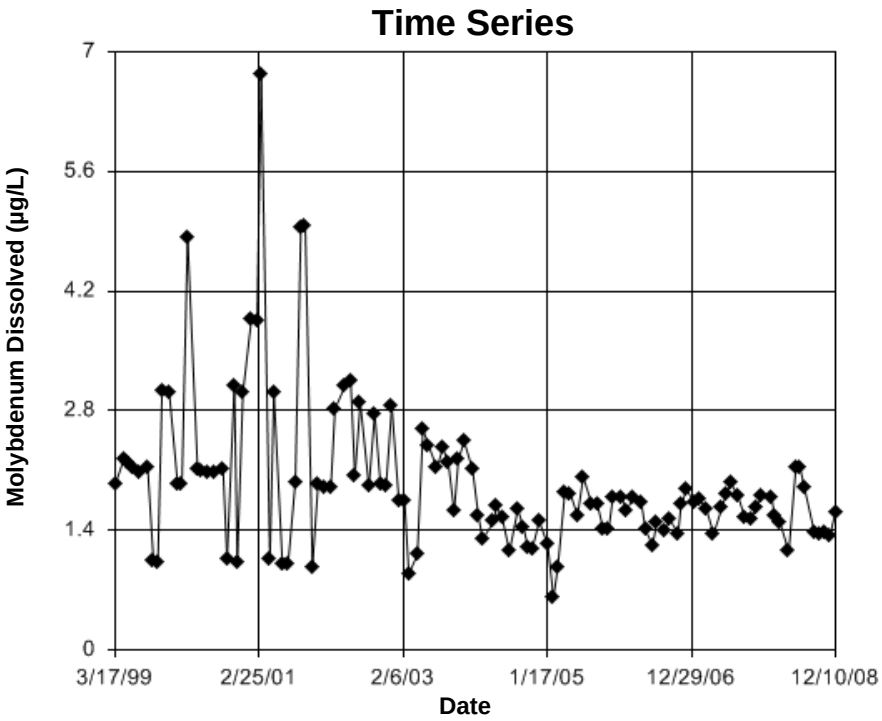


Figure E37 Battle River: Molybdenum Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.001471
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 5 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.001471
Adjusted Kruskal-Wallis statistic (H') = 0.001471

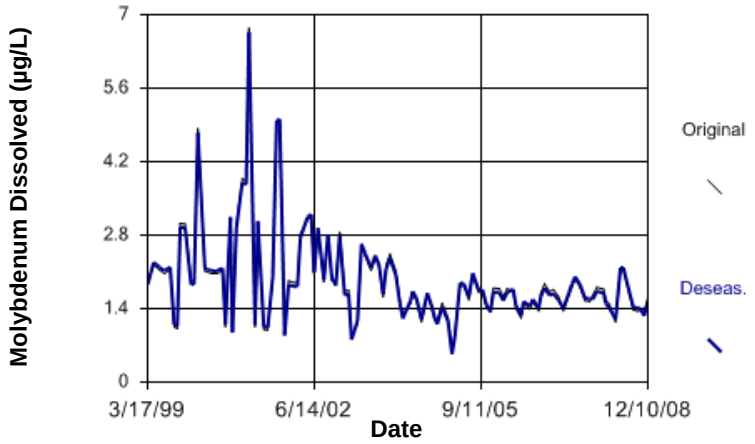


Figure E38 Battle River: Molybdenum Dissolved

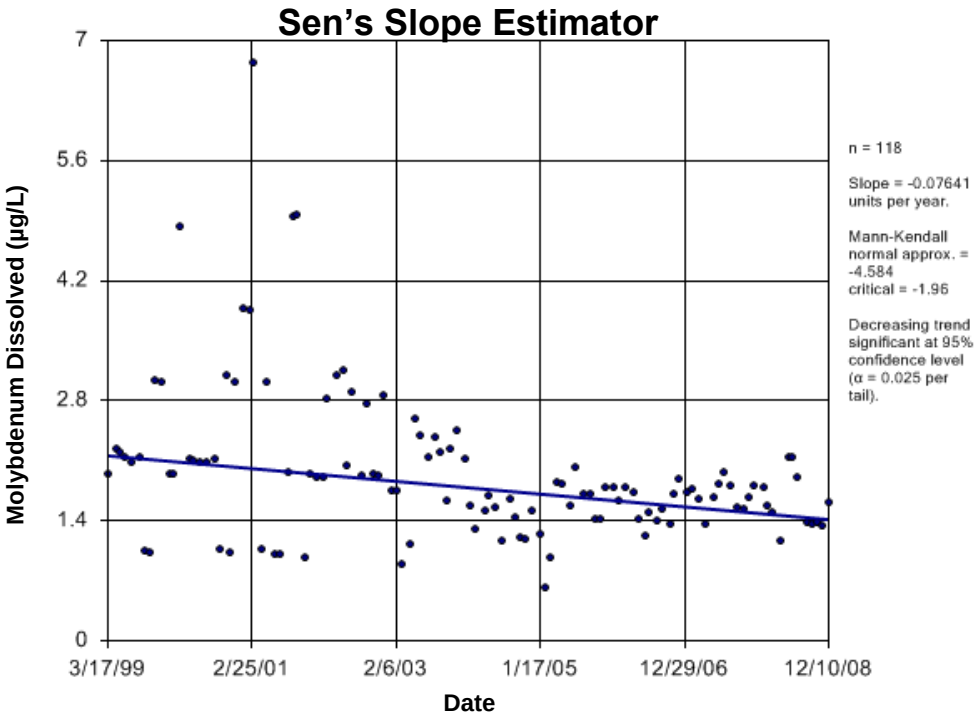


Figure E39 Battle River: Molybdenum Dissolved

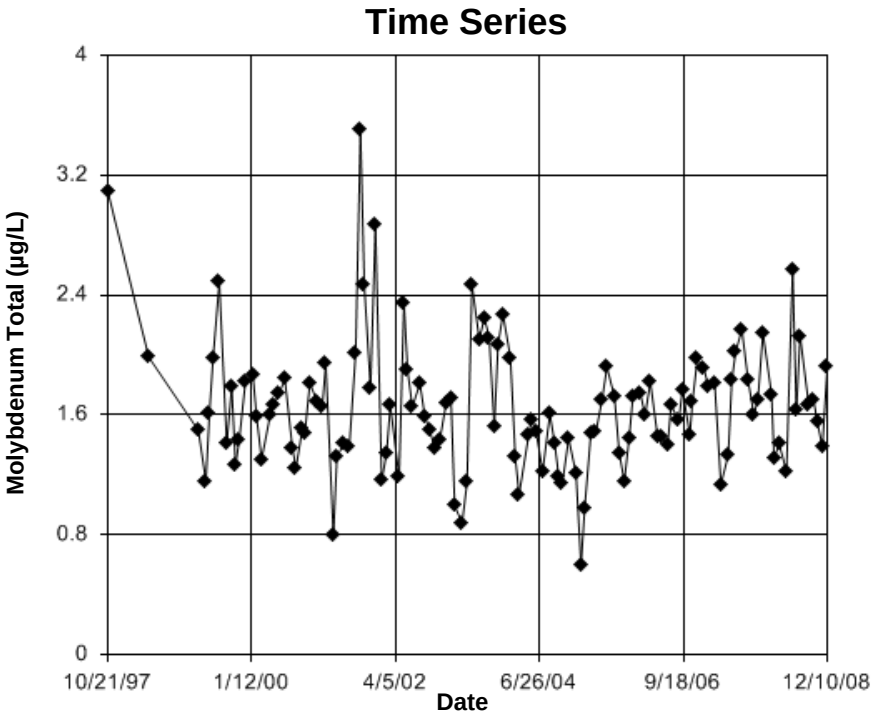


Figure E40 Battle River: Molybdenum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.08524
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 5 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.08523
Adjusted Kruskal-Wallis statistic (H') = 0.08524

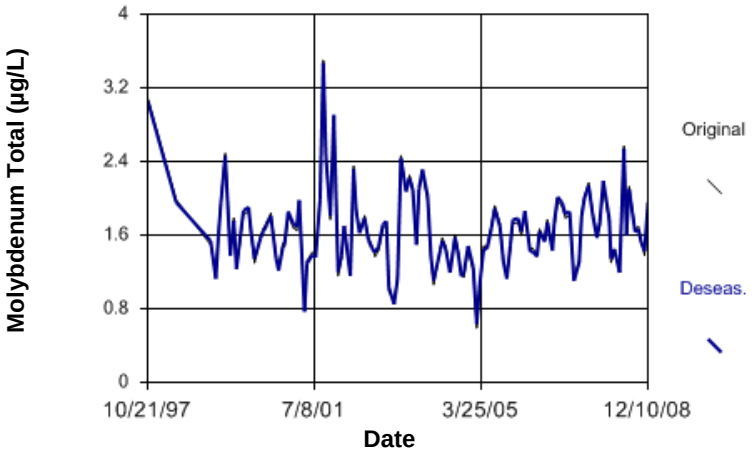


Figure E41 Battle River: Molybdenum Total

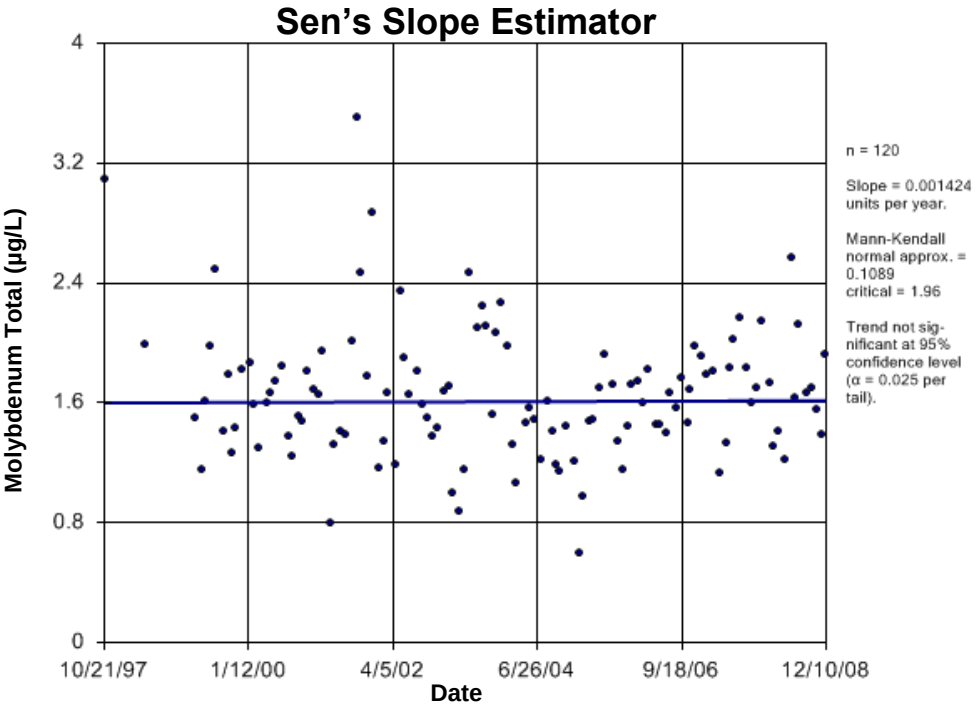


Figure E42 Battle River: Molybdenum Total

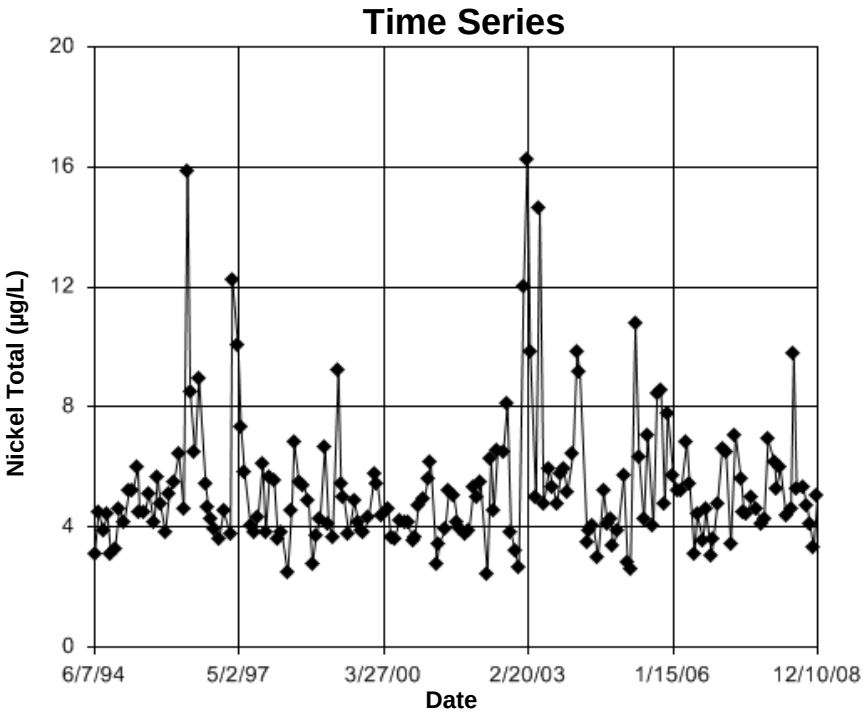


Figure E43 Battle River: Nickel Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.03146
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.03146
Adjusted Kruskal-Wallis statistic (H') = 0.03146

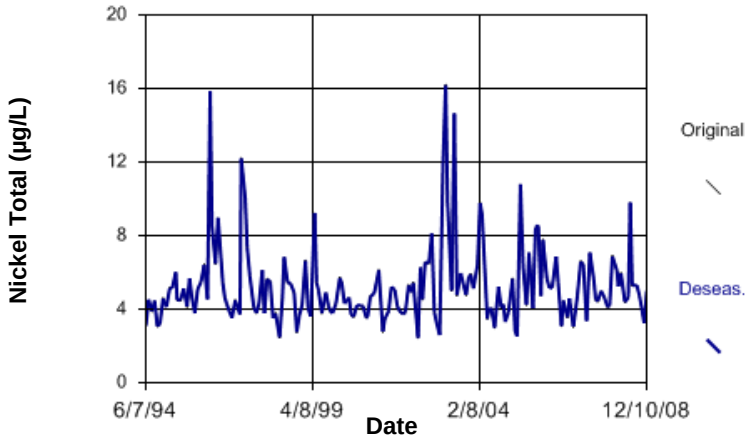


Figure E44 Battle River: Nickel Total

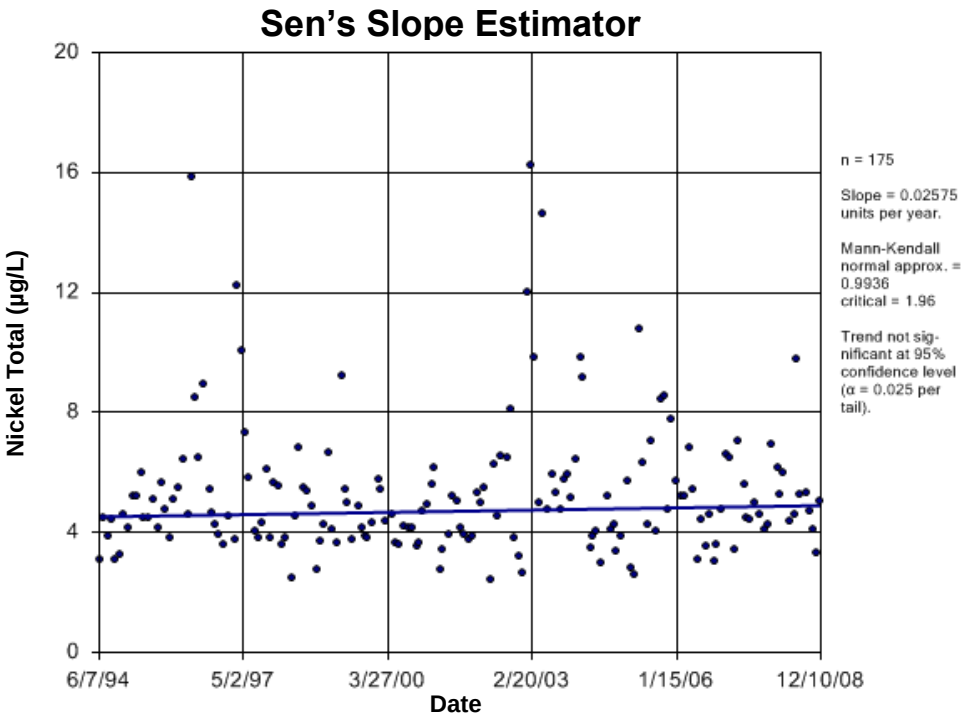


Figure E45 Battle River: Nickel Total

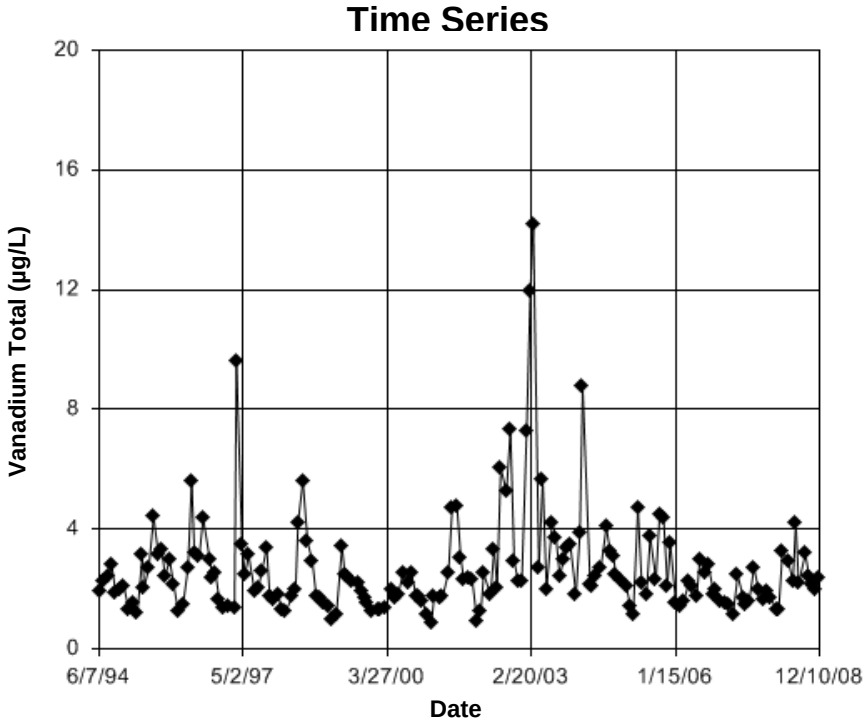


Figure E46 Battle River: Vanadium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 38.58
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 4 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 38.58
Adjusted Kruskal-Wallis statistic (H') = 38.58

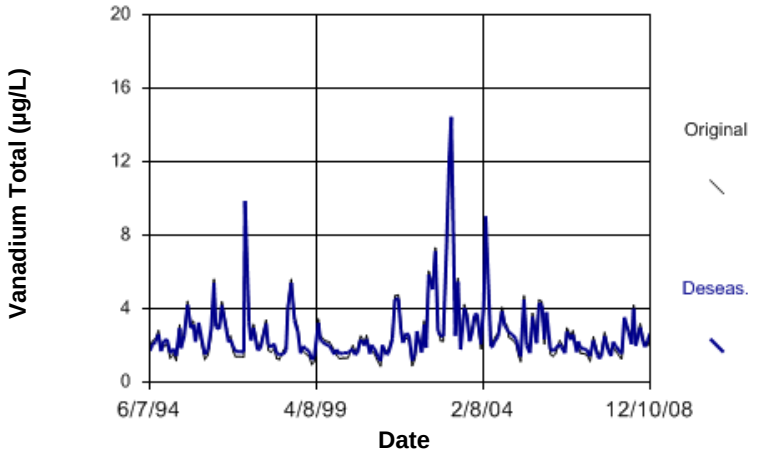


Figure E47 Battle River: Vanadium Total

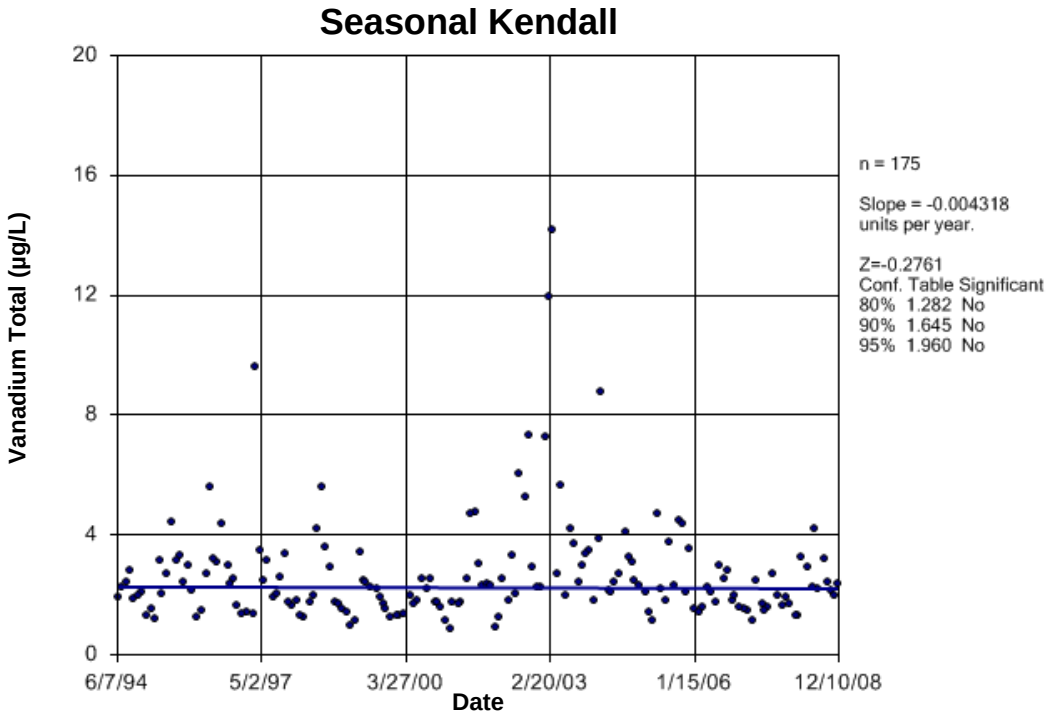


Figure E48 Battle River: Vanadium Total

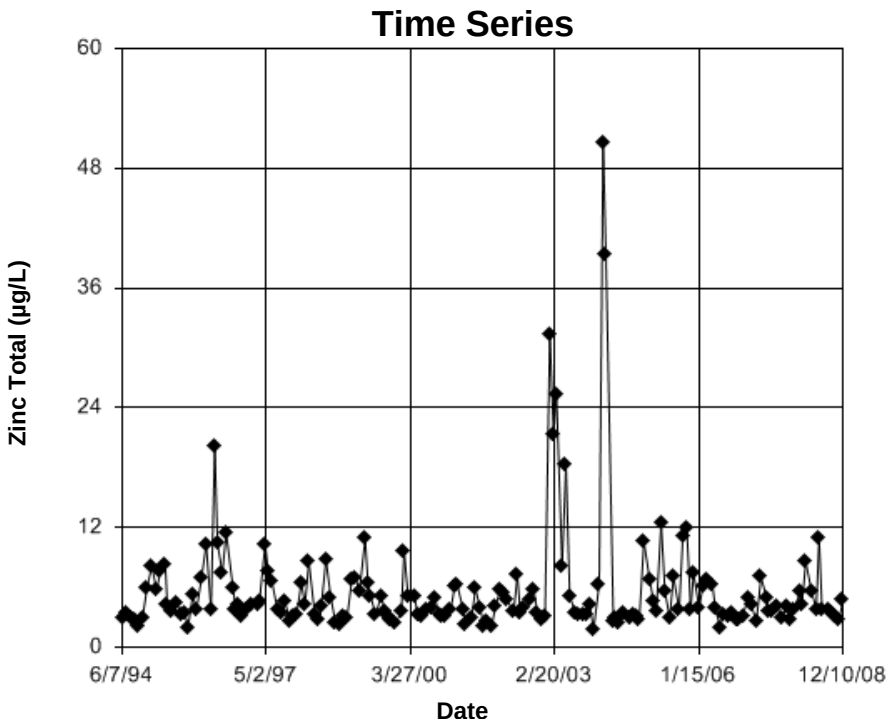


Figure E49 Battle River: Zinc Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 3.597
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 4 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 3.597
Adjusted Kruskal-Wallis statistic (H') = 3.597

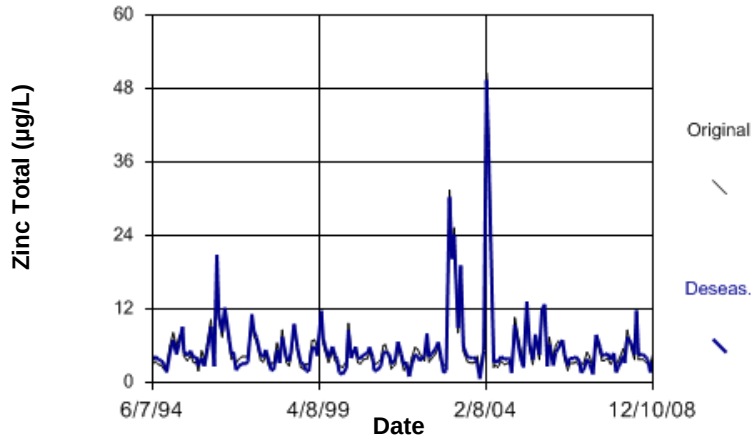


Figure E50 Battle River: Zinc Total

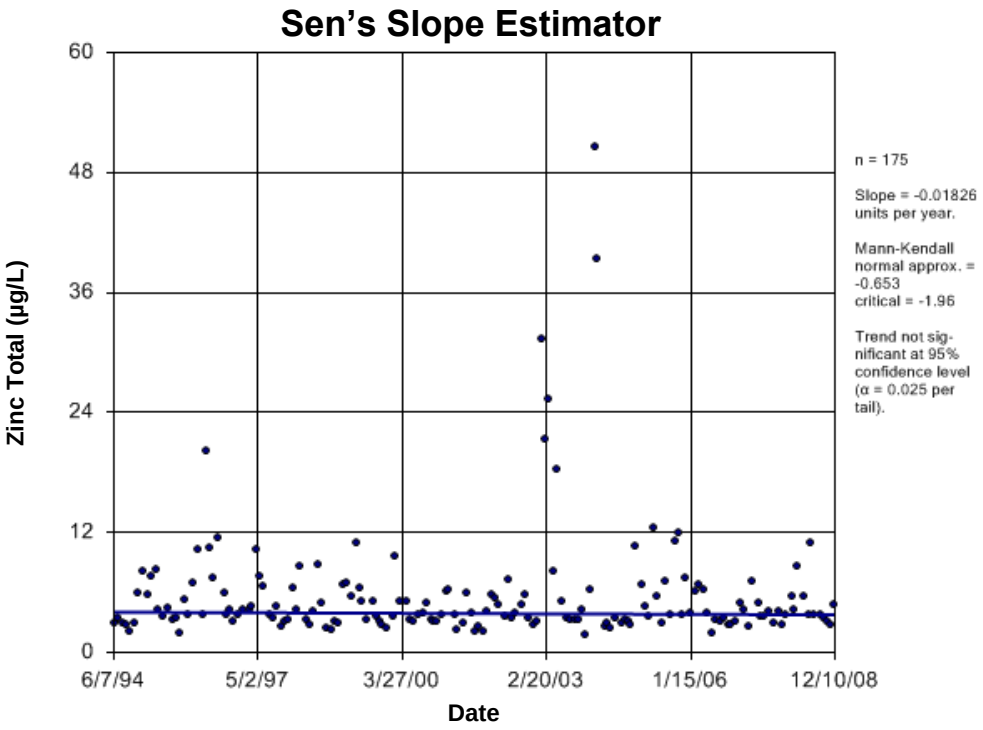


Figure E51 Battle River: Zinc Total

Beaver River

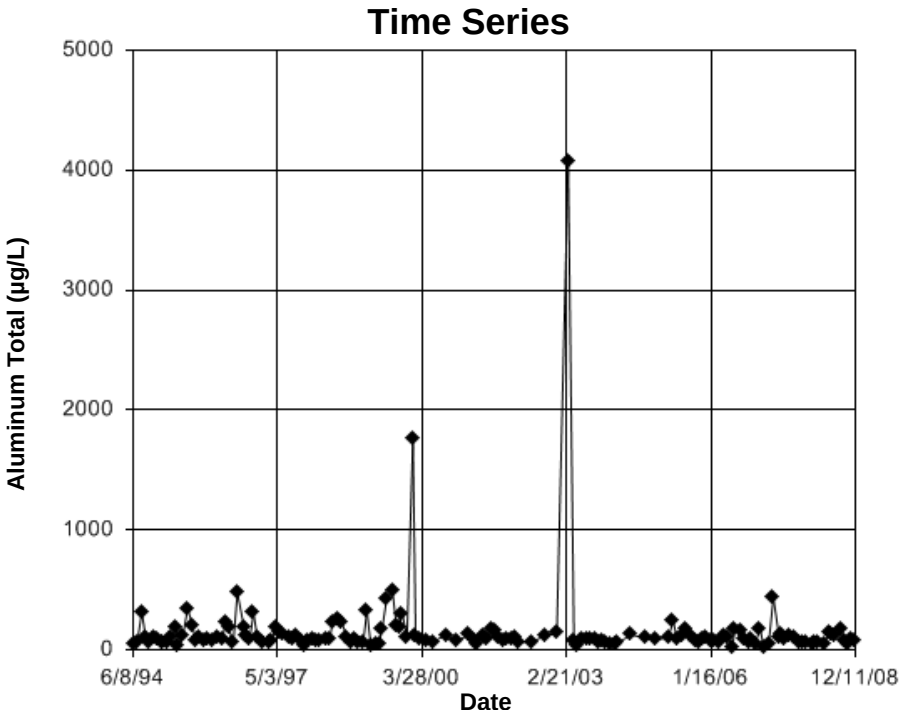


Figure E52 Beaver River: Aluminum Total

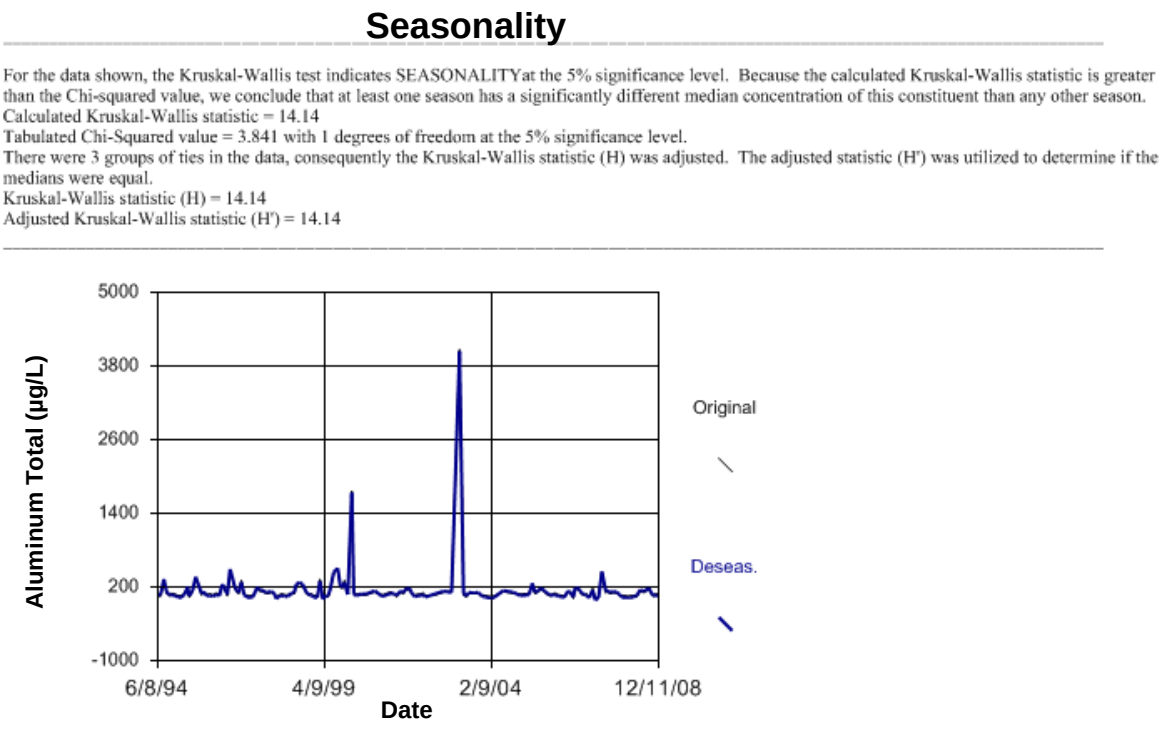


Figure E53 Beaver River: Aluminum Total

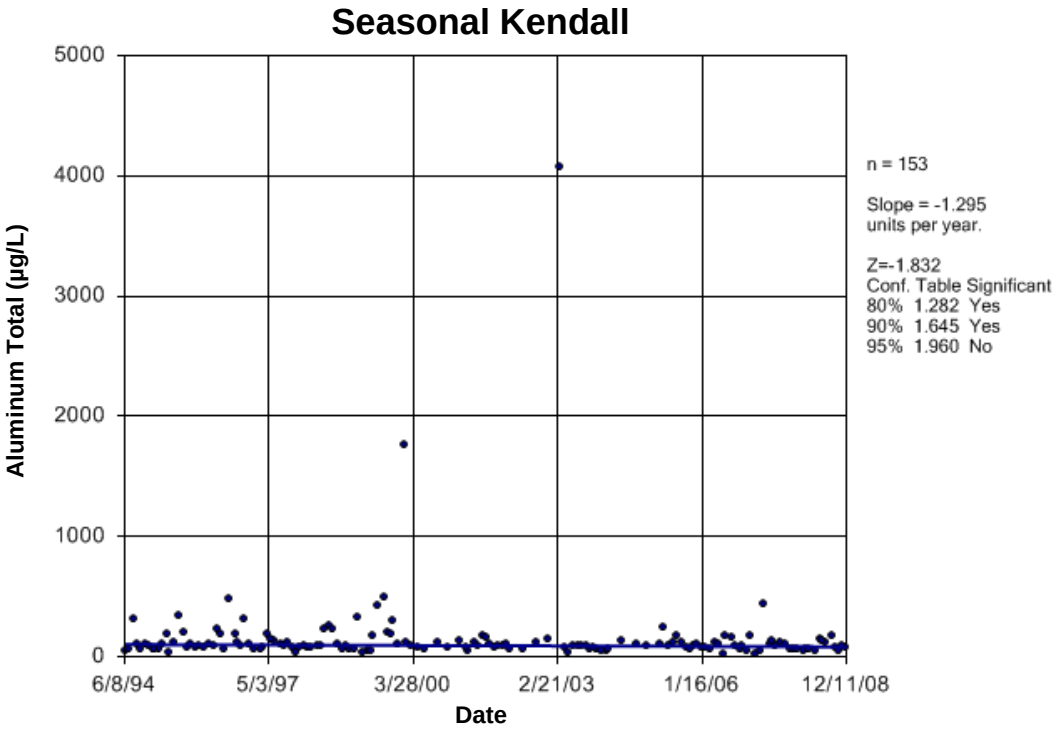


Figure E54 Beaver River: Aluminum Total

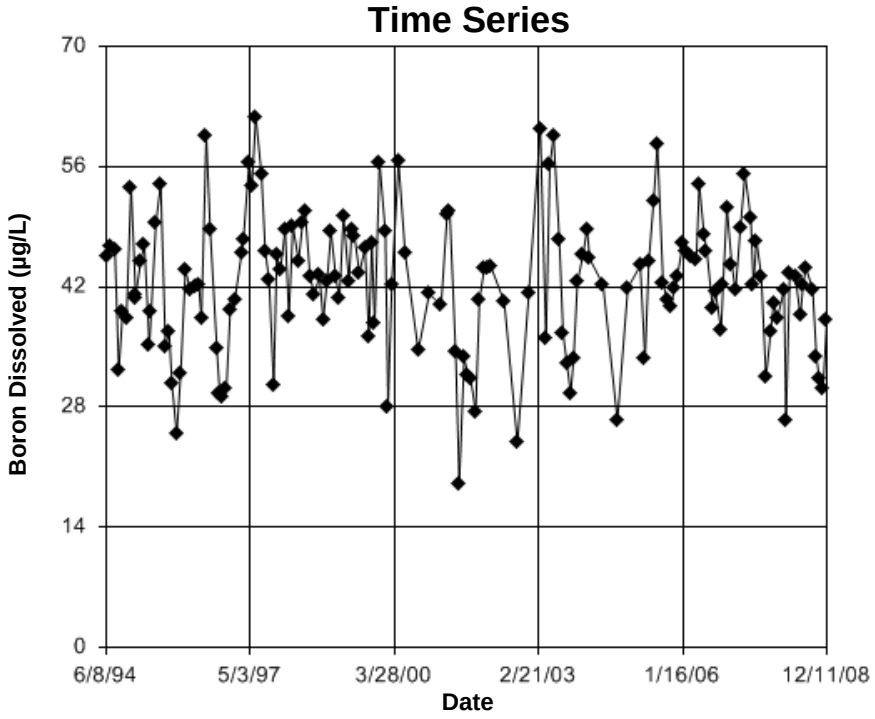


Figure E55 Beaver River: Boron Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.02134
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 5 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.02134
Adjusted Kruskal-Wallis statistic (H') = 0.02134

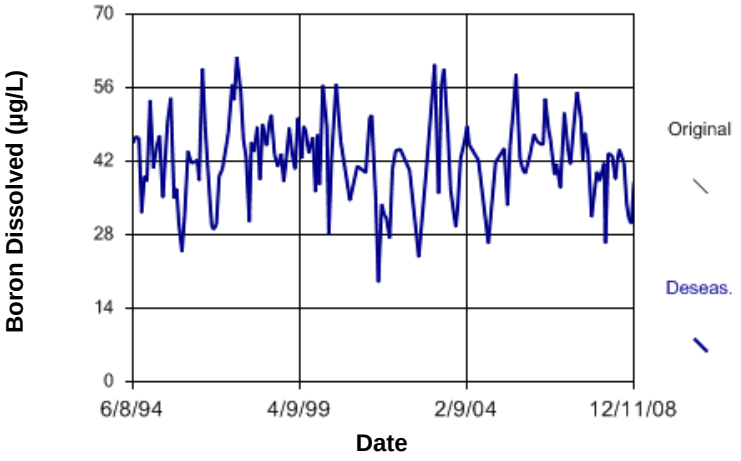


Figure E56 Beaver River: Boron Dissolved

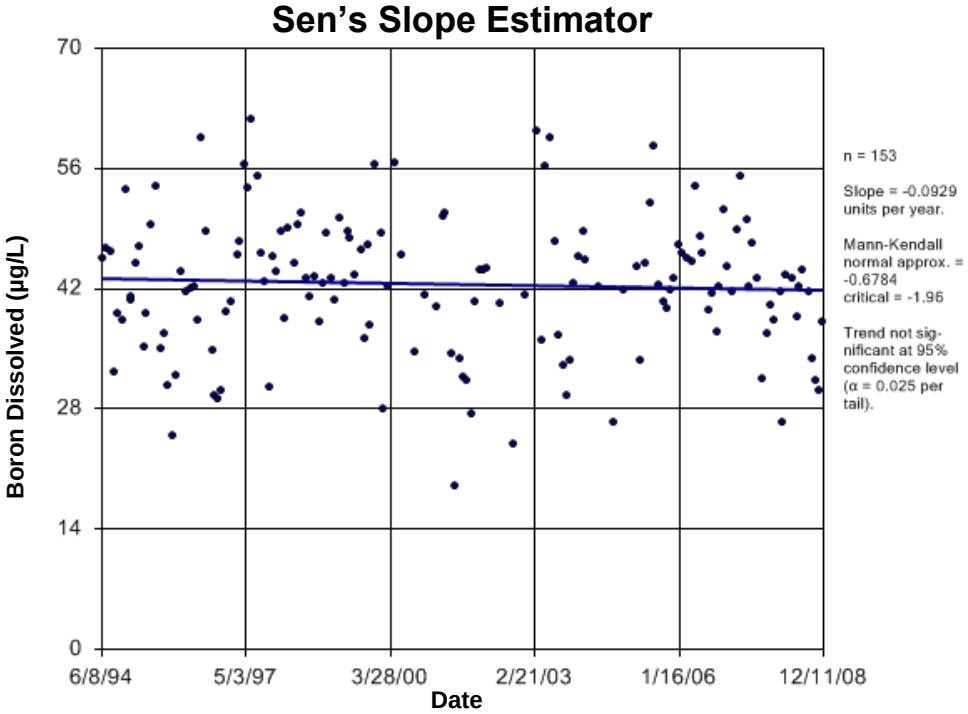


Figure E57 Beaver River: Boron Dissolved

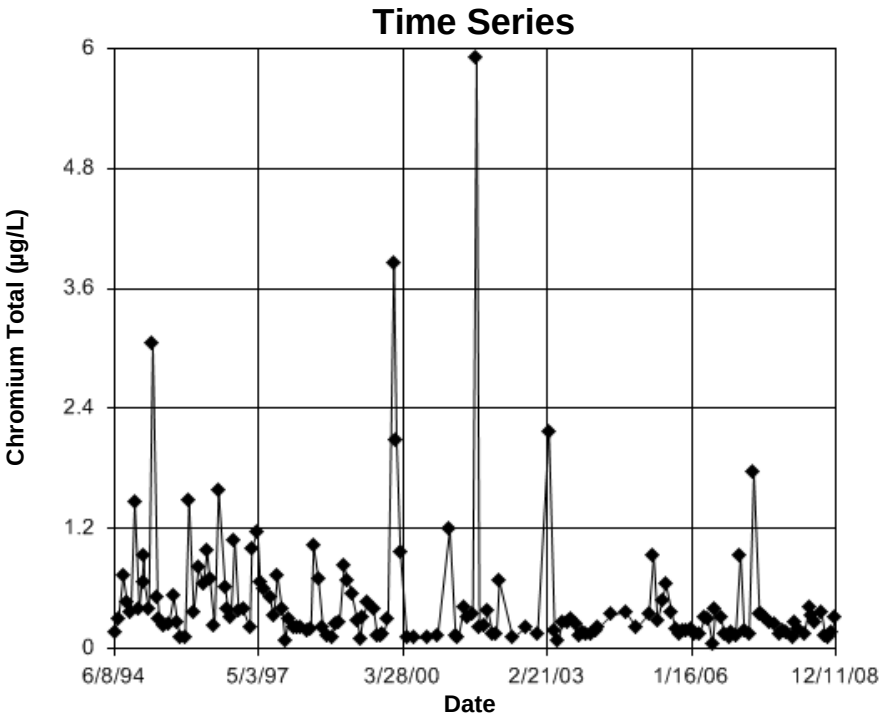


Figure E58 Beaver River: Chromium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.1108
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.1108
Adjusted Kruskal-Wallis statistic (H') = 0.1108

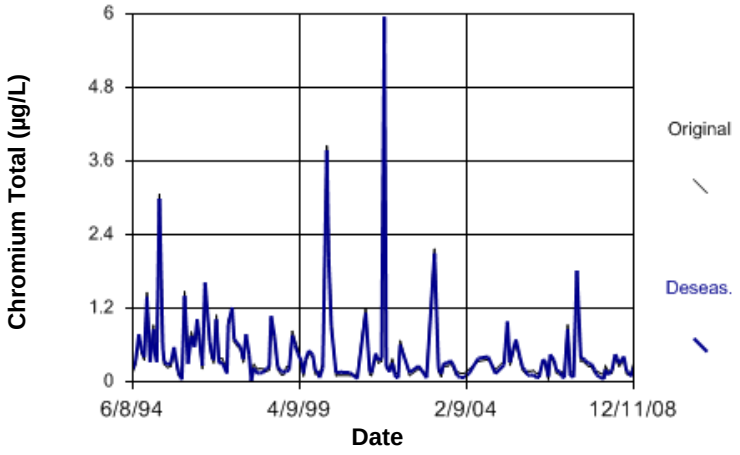


Figure E59 Beaver River: Chromium Total

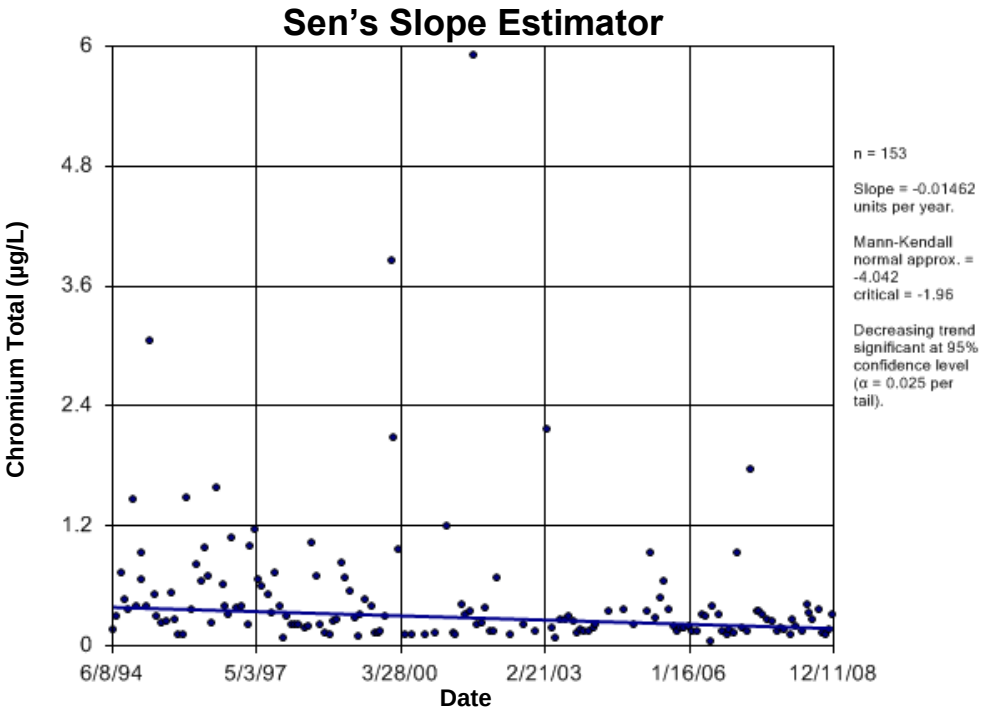


Figure E60 Beaver River: Chromium Total

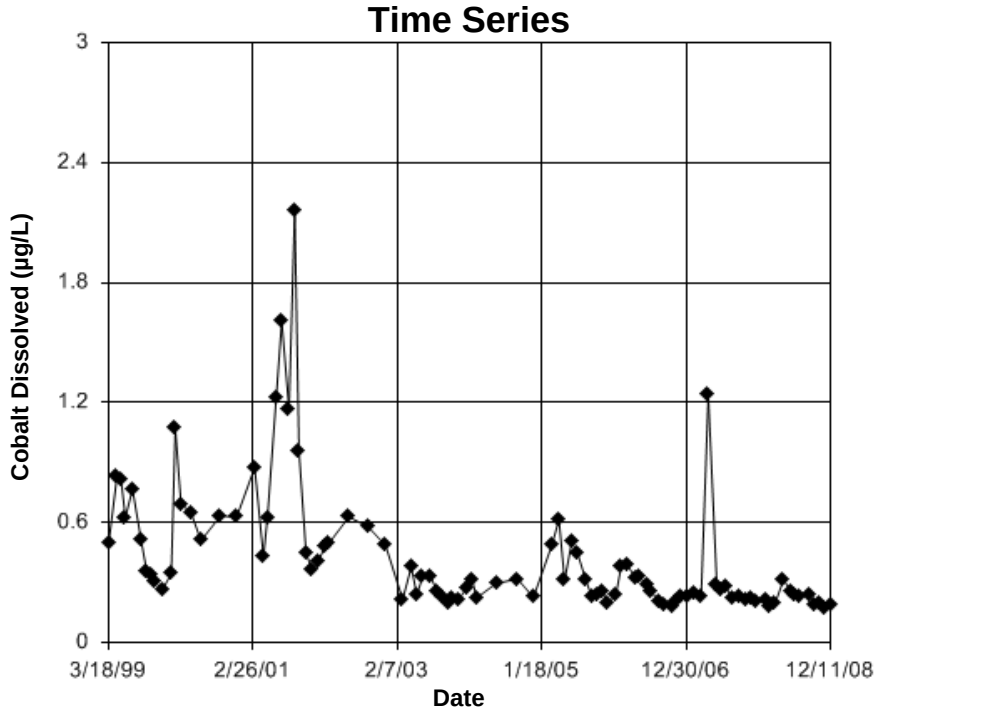


Figure E61 Beaver River: Cobalt Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 4.423
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

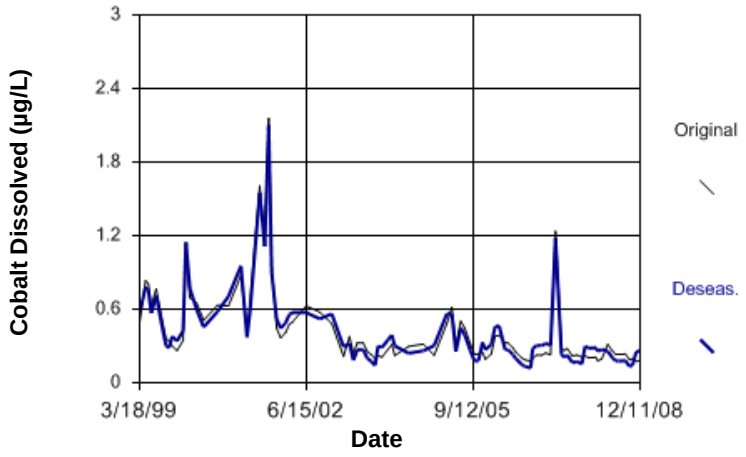


Figure E62 Beaver River: Cobalt Dissolved

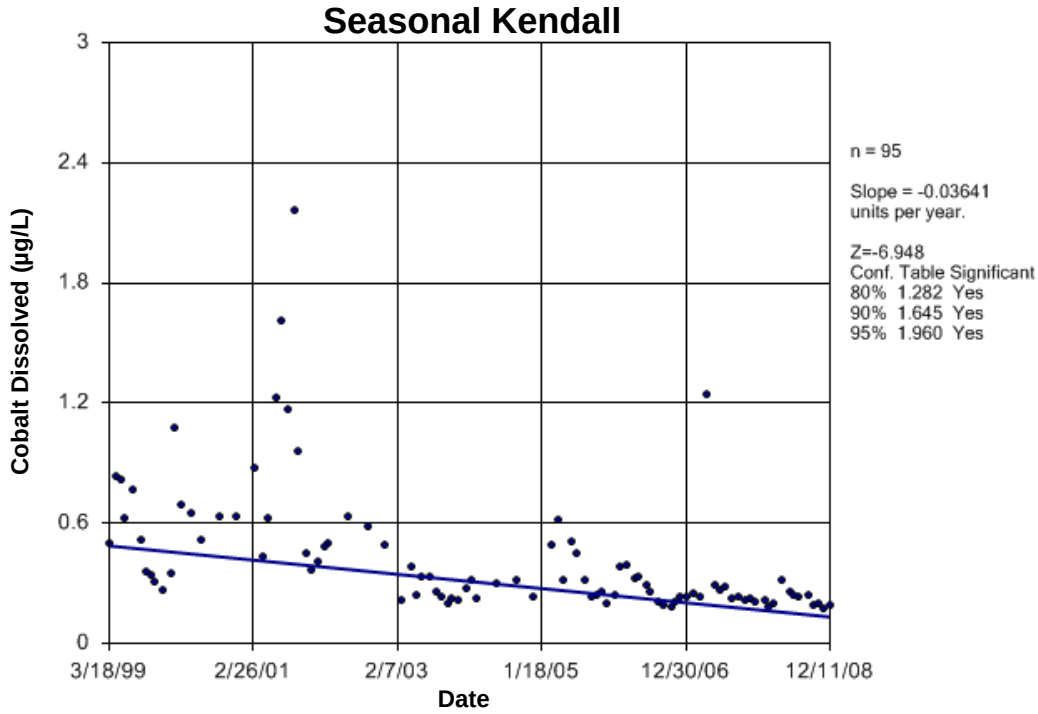


Figure E63 Beaver River: Cobalt Dissolved

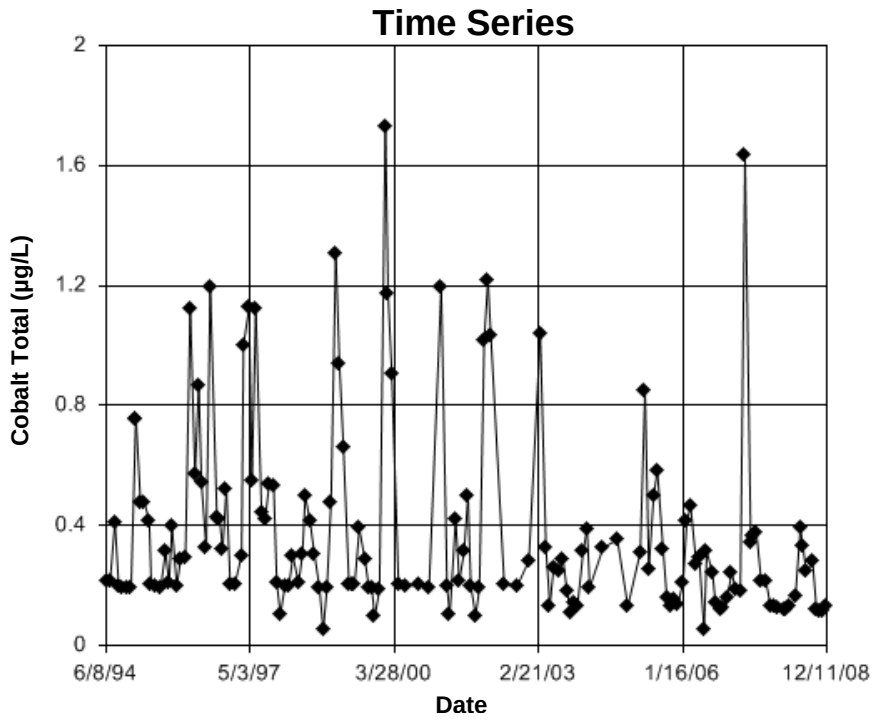


Figure E64 Beaver River: Cobalt Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.2103
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.2103
Adjusted Kruskal-Wallis statistic (H') = 0.2103

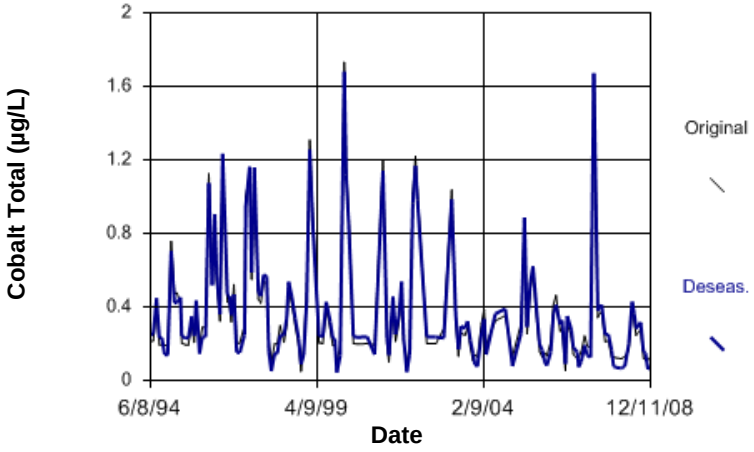


Figure E65 Beaver River: Cobalt Total

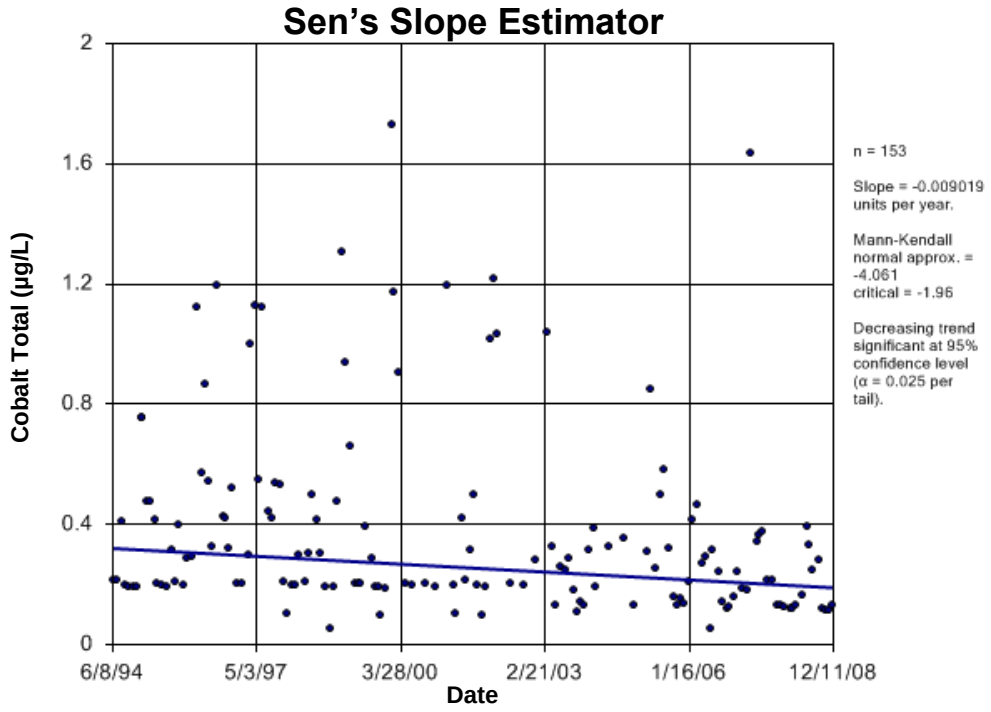


Figure E66 Beaver River: Cobalt Total

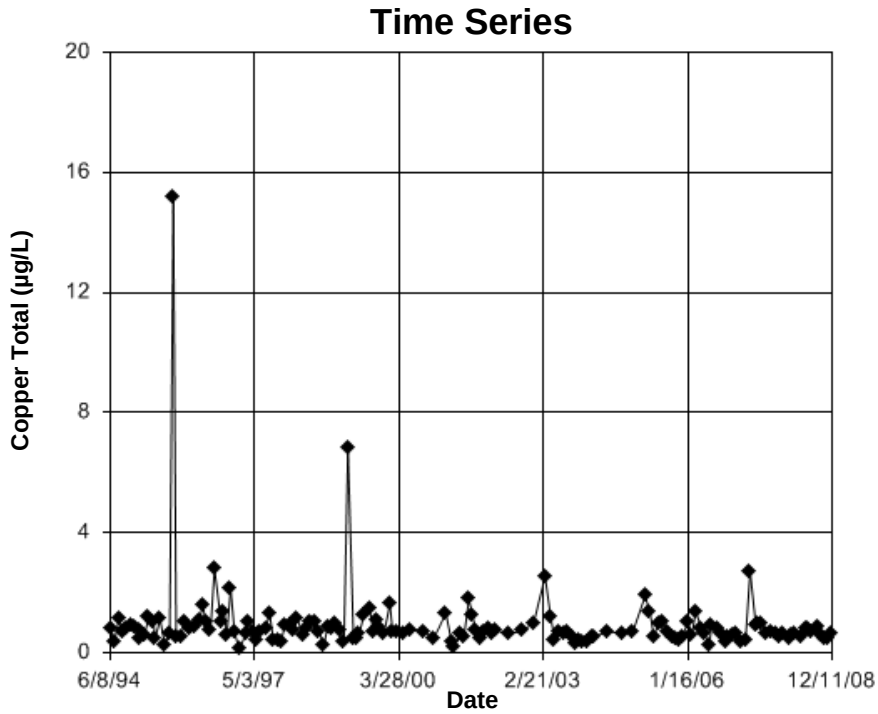


Figure E67 Beaver River: Copper Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.2549
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 4 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.2549
Adjusted Kruskal-Wallis statistic (H') = 0.2549

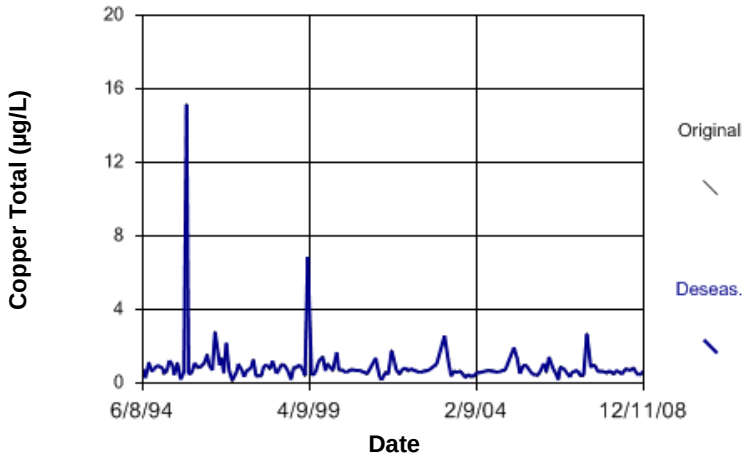


Figure E68 Beaver River: Copper Total

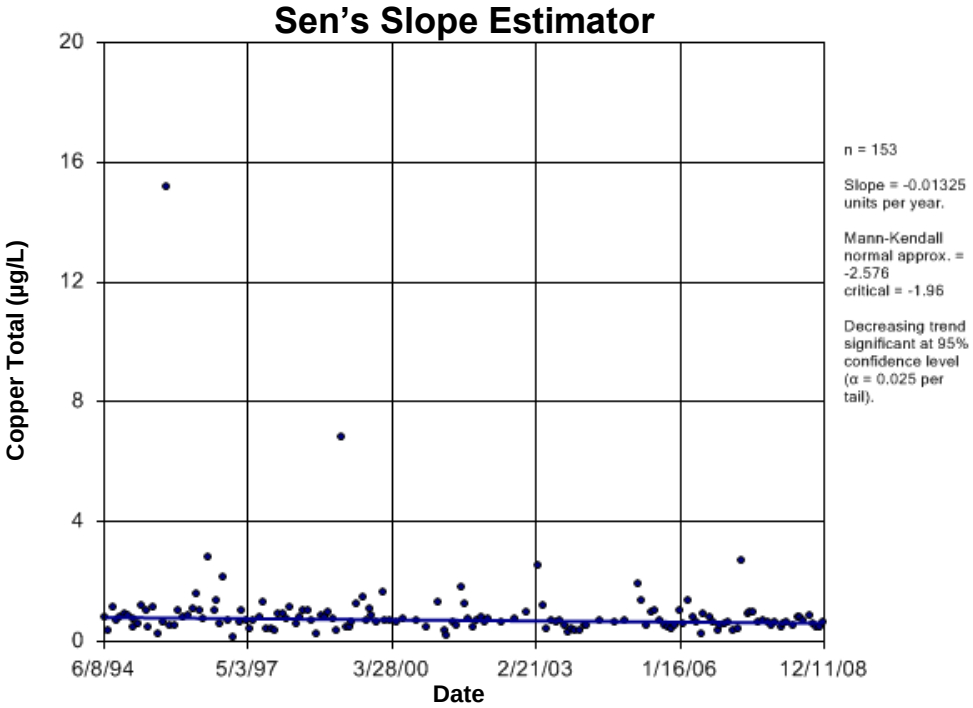


Figure E69 Beaver River: Copper Total

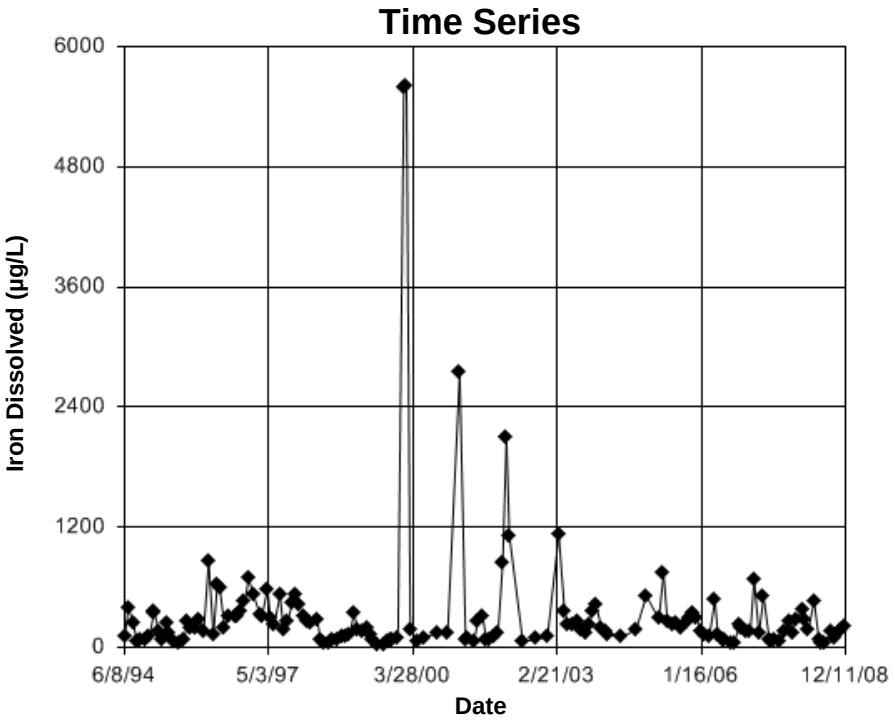


Figure E70 Beaver River: Iron Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 15.82
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 15.82
Adjusted Kruskal-Wallis statistic (H') = 15.82

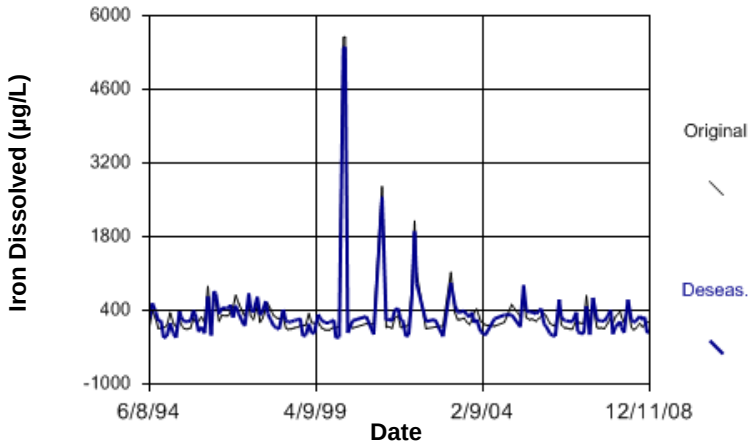


Figure E71 Beaver River: Iron Dissolved

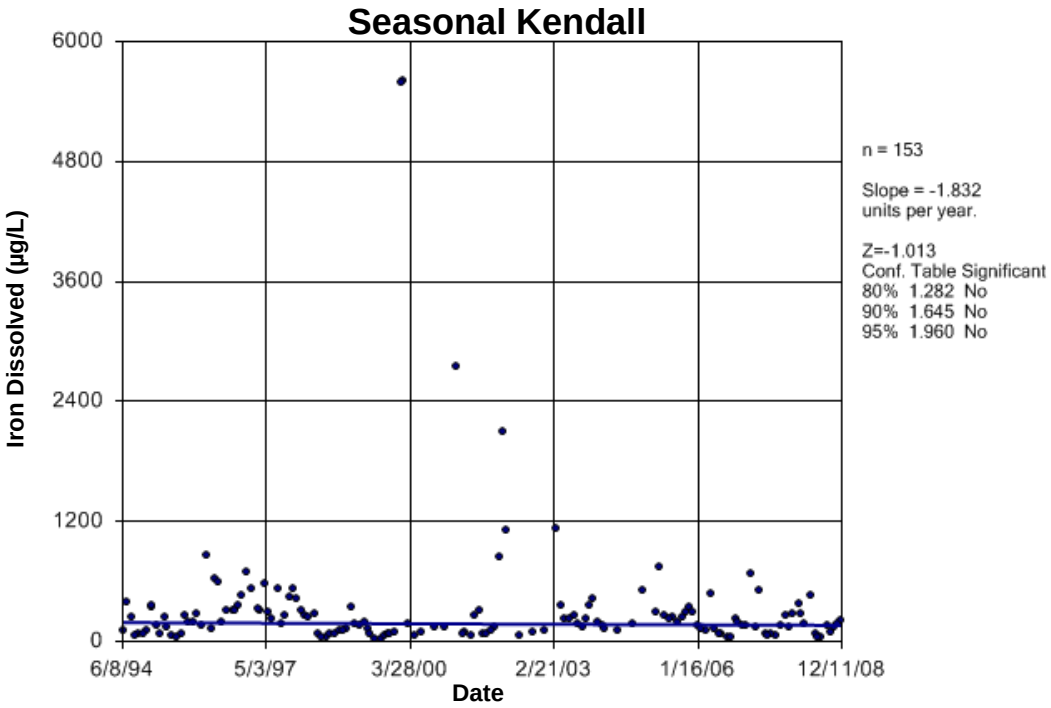


Figure E72 Beaver River: Iron Dissolved

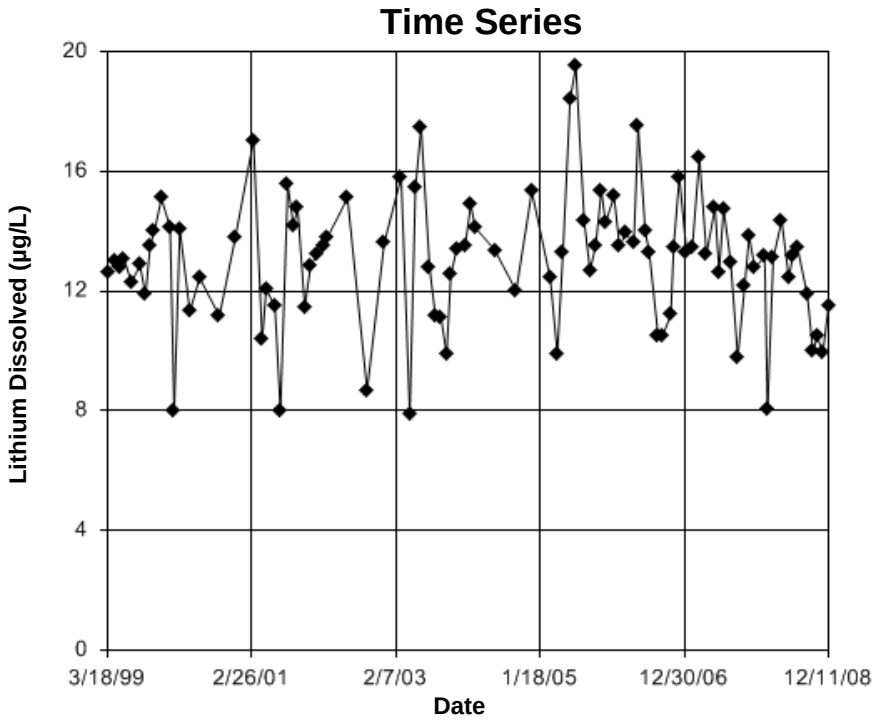


Figure E73 Beaver River: Lithium Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 6.233
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 4 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 6.233
Adjusted Kruskal-Wallis statistic (H') = 6.233

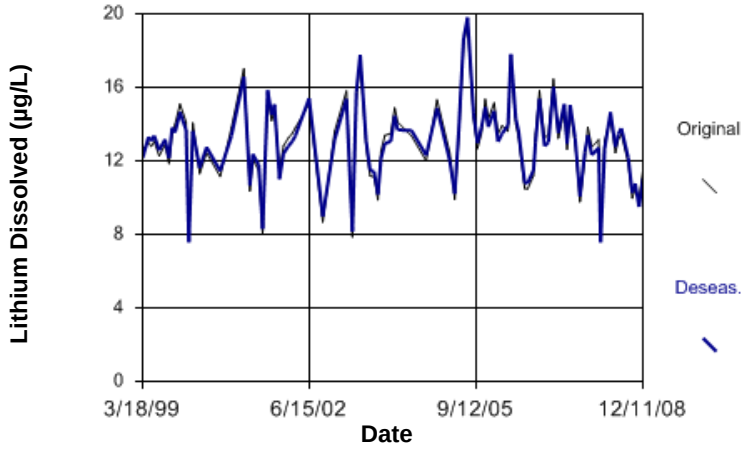


Figure E74 Beaver River: Lithium Dissolved

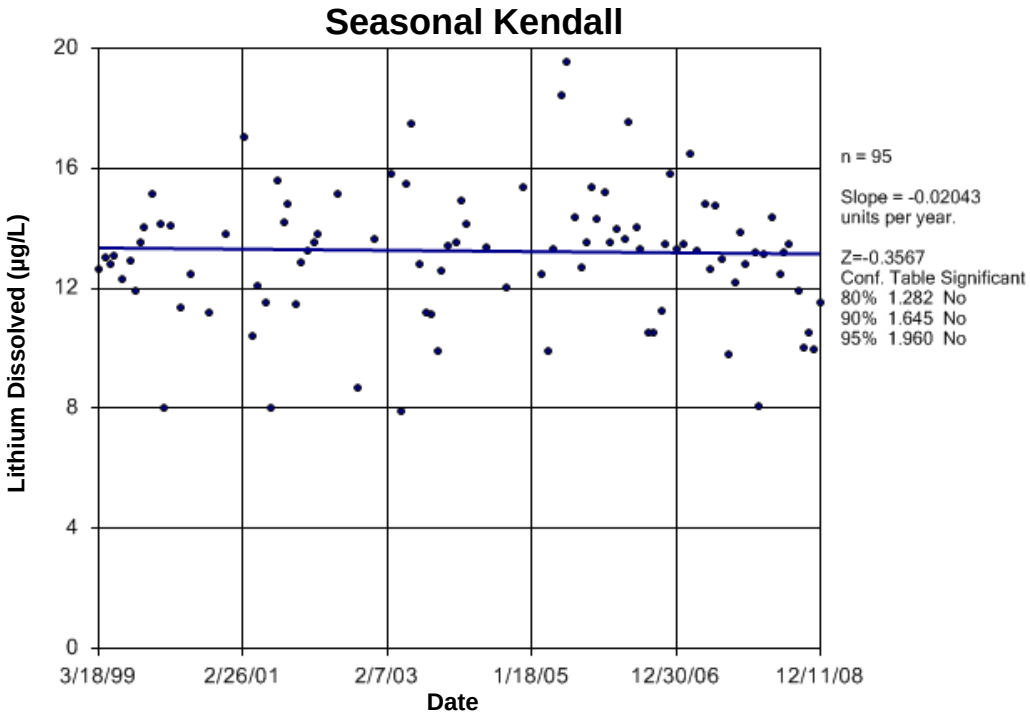


Figure E75 Beaver River: Lithium Dissolved

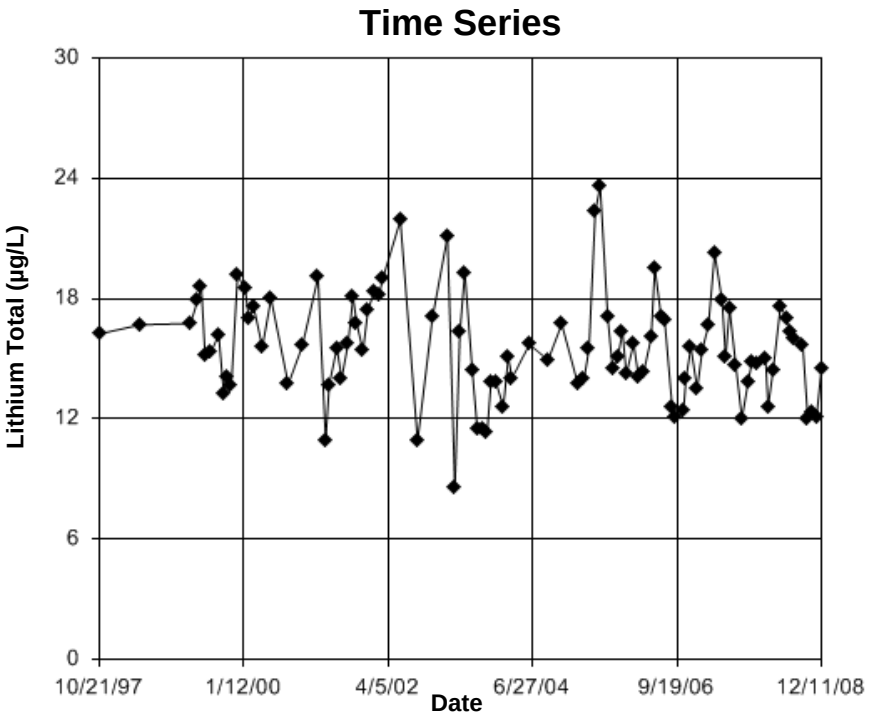


Figure E76 Beaver River: Lithium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.08446
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 5 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.08446
Adjusted Kruskal-Wallis statistic (H') = 0.08446

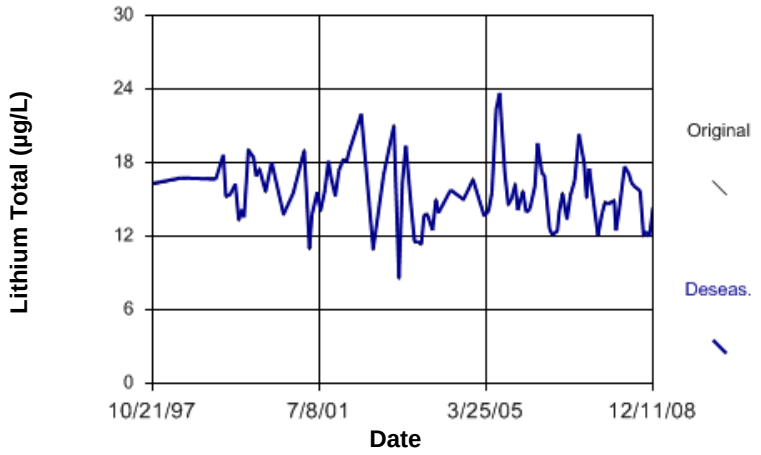


Figure E77 Beaver River: Lithium Total

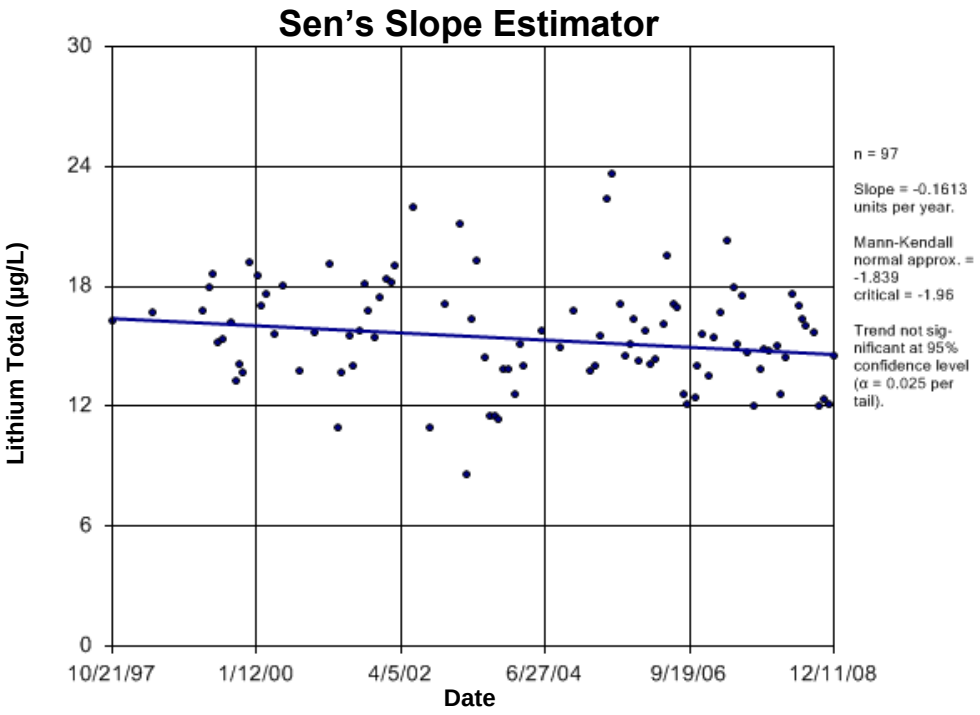


Figure E78 Beaver River: Lithium Total

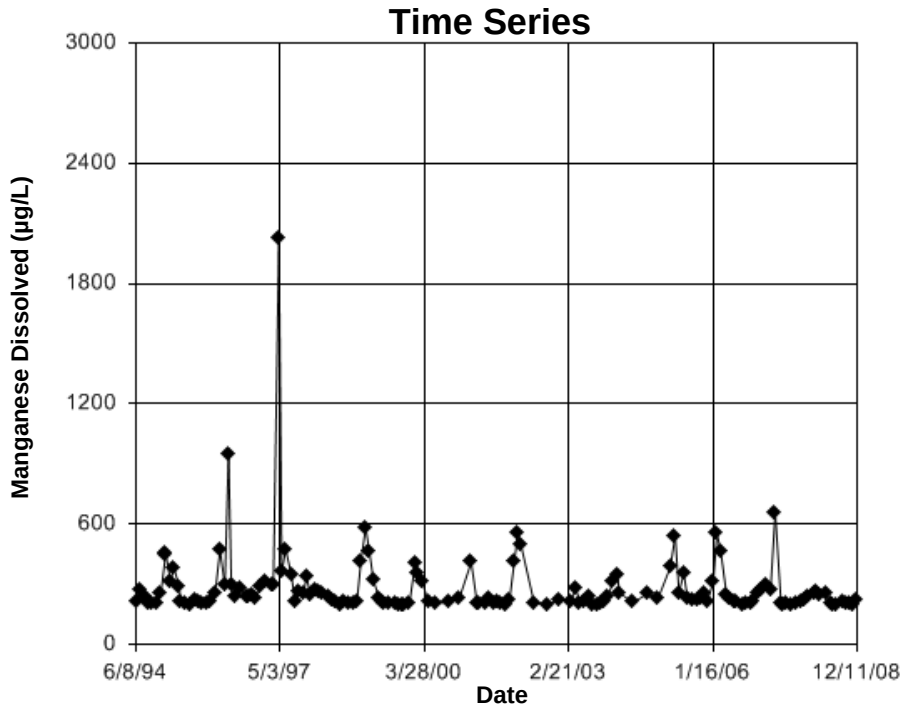


Figure E79 Beaver River: Manganese Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 30.6
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 13 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 30.6
Adjusted Kruskal-Wallis statistic (H') = 30.6

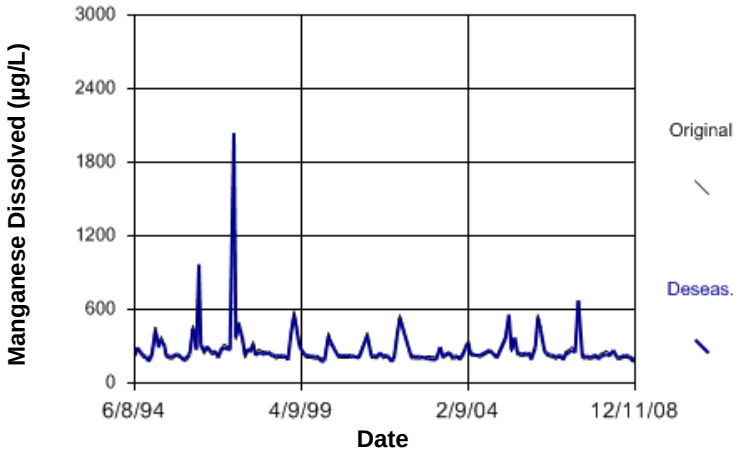


Figure E80 Beaver River: Manganese Dissolved

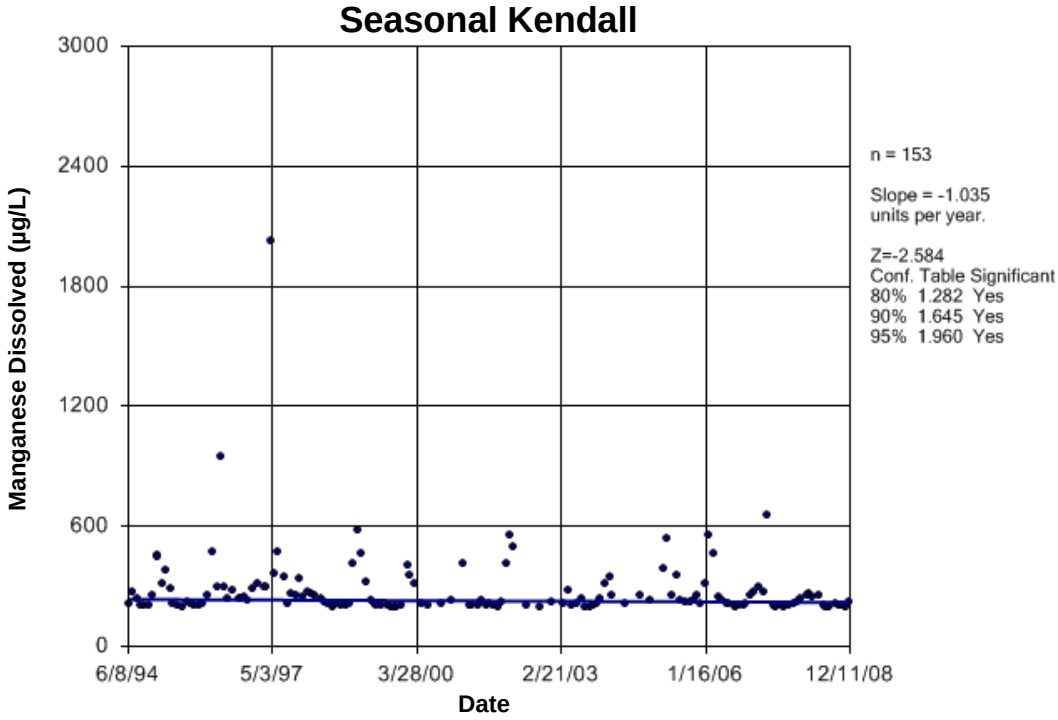


Figure E81 Beaver River: Manganese Dissolved

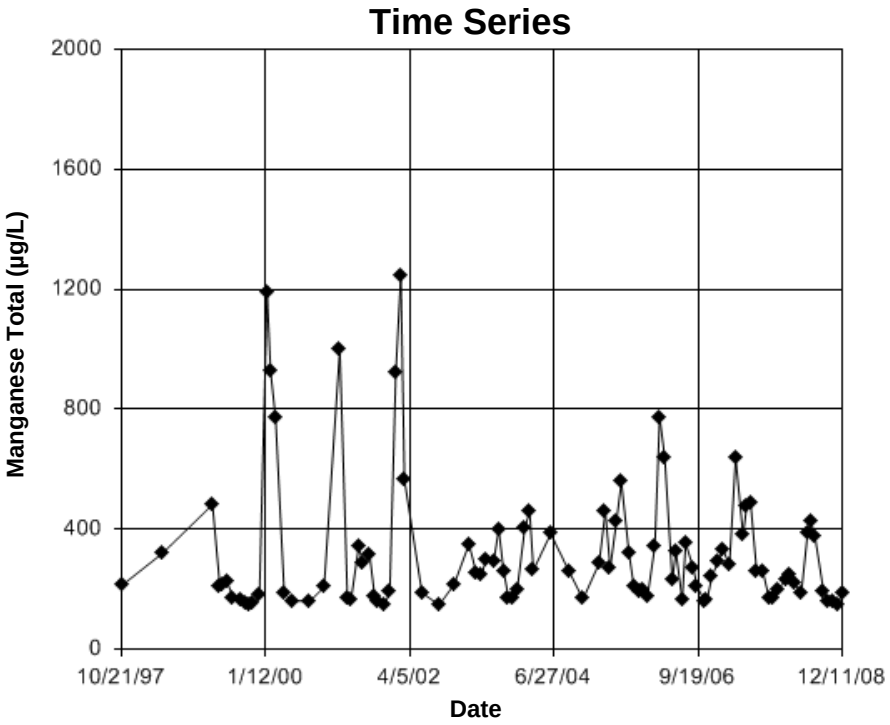


Figure E82 Beaver River: Manganese Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.873
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 1.873
Adjusted Kruskal-Wallis statistic (H') = 1.873

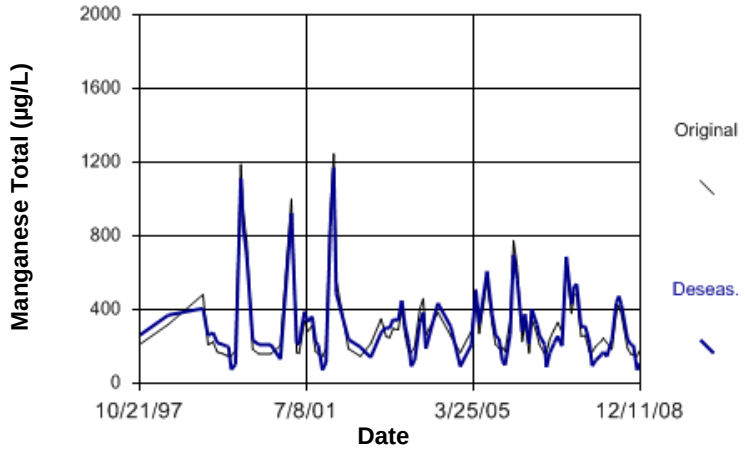


Figure E83 Beaver River: Manganese Total

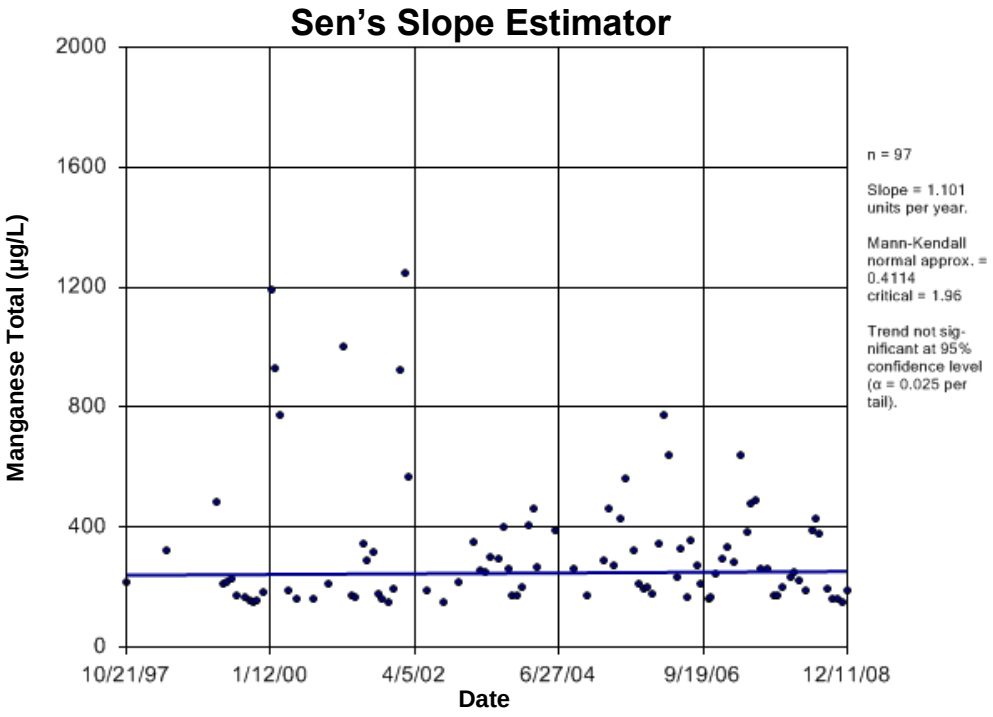


Figure E84 Beaver River: Manganese Total

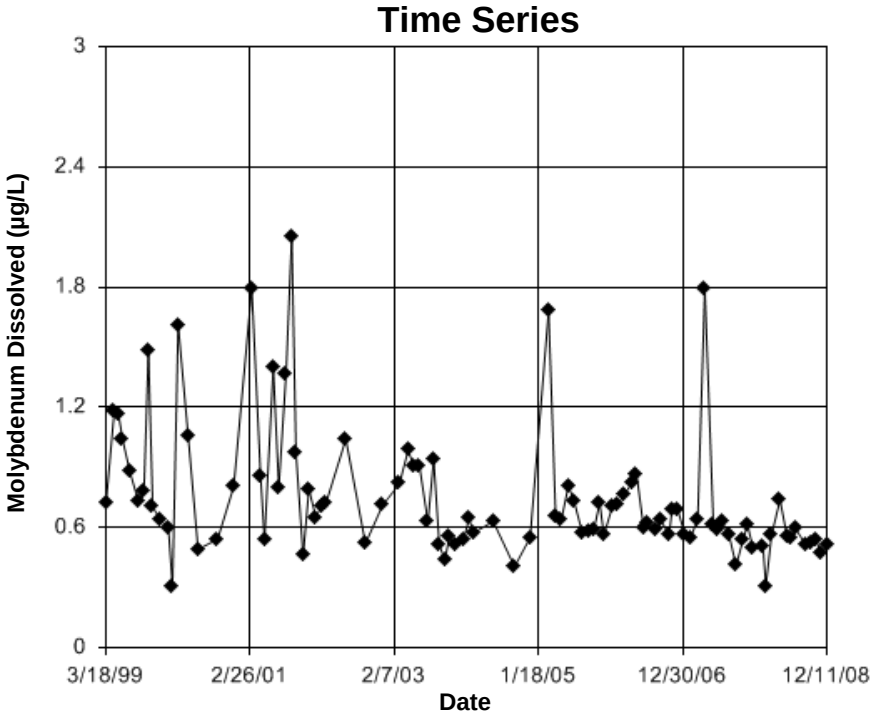


Figure E85 Beaver River: Molybdenum Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.834
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

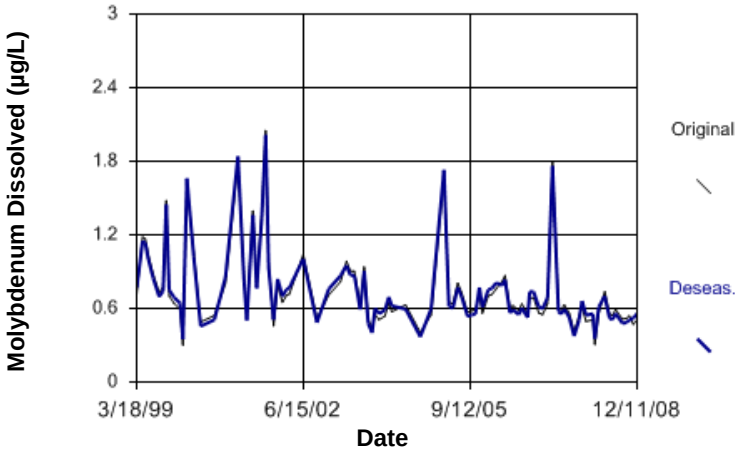


Figure E86 Beaver River: Molybdenum Dissolved

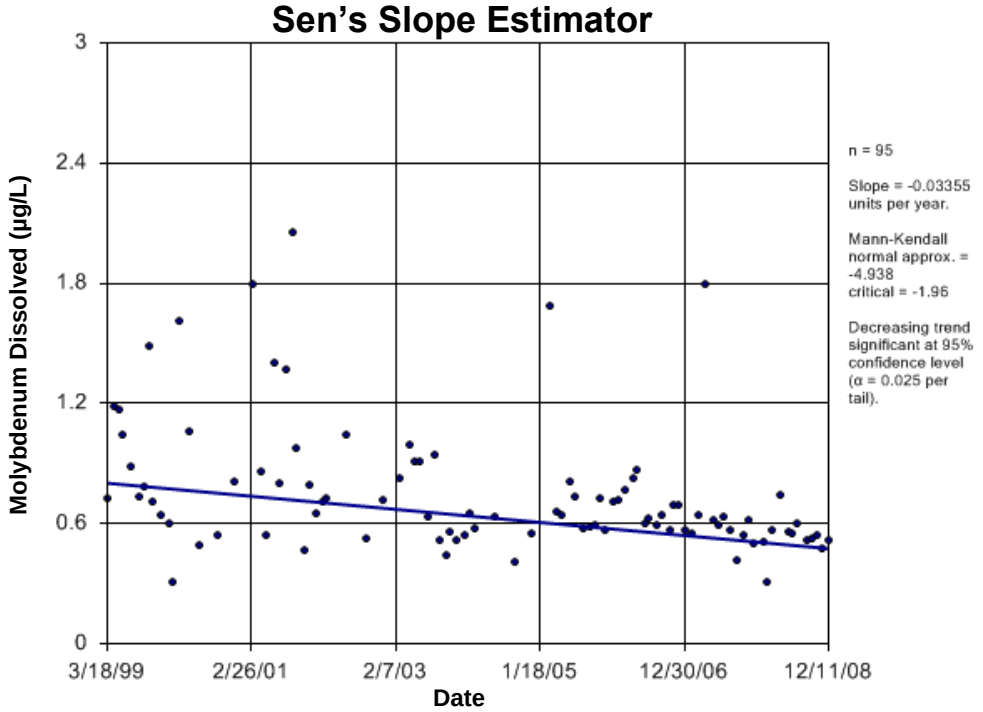


Figure E87 Beaver River: Molybdenum Dissolved

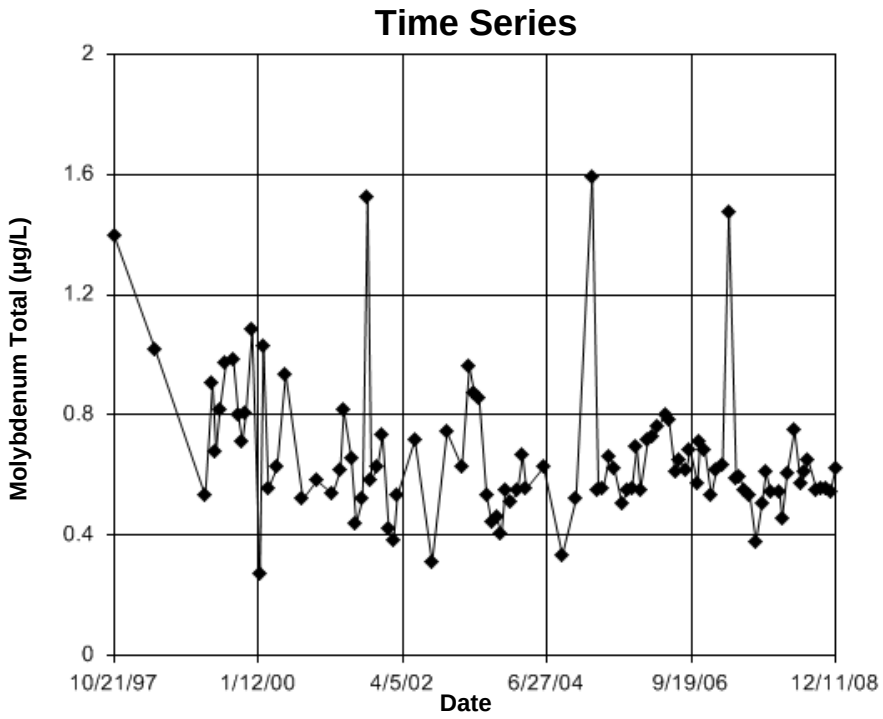


Figure E88 Beaver River: Molybdenum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.741
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.741
Adjusted Kruskal-Wallis statistic (H') = 0.741

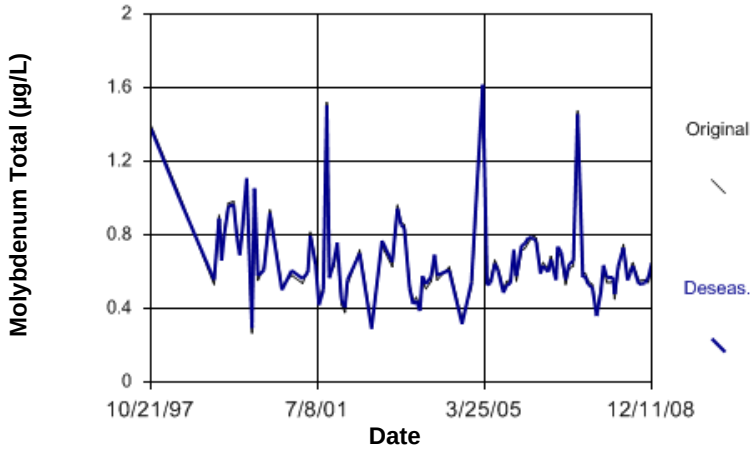


Figure E89 Beaver River: Molybdenum Total

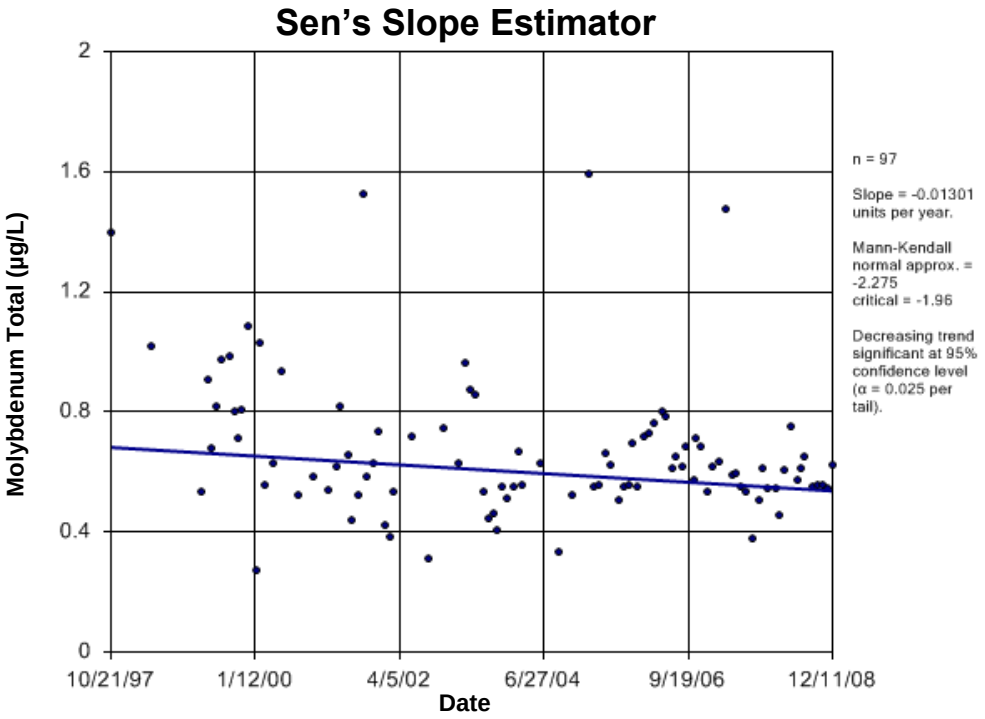


Figure E90 Beaver River: Molybdenum Total

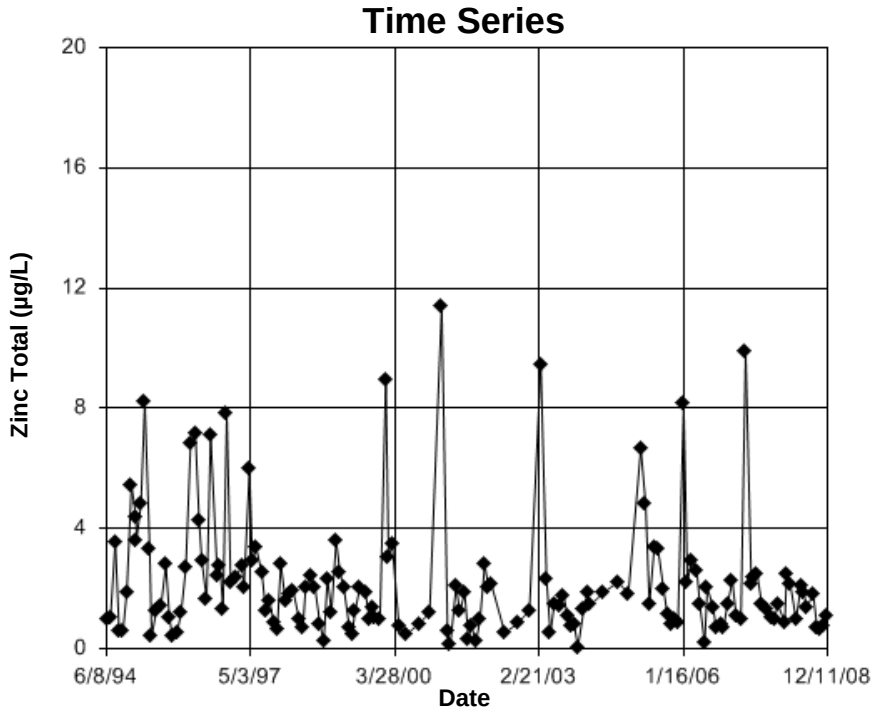


Figure E91 Beaver River: Zinc Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 8.217
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 8.217
Adjusted Kruskal-Wallis statistic (H') = 8.217

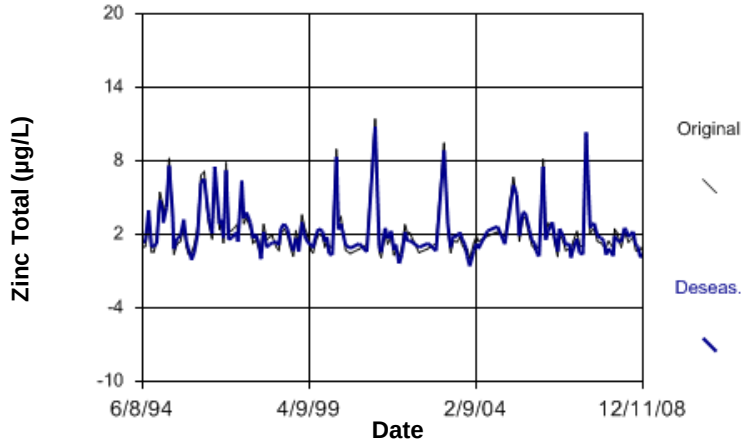


Figure E92 Beaver River: Zinc Total

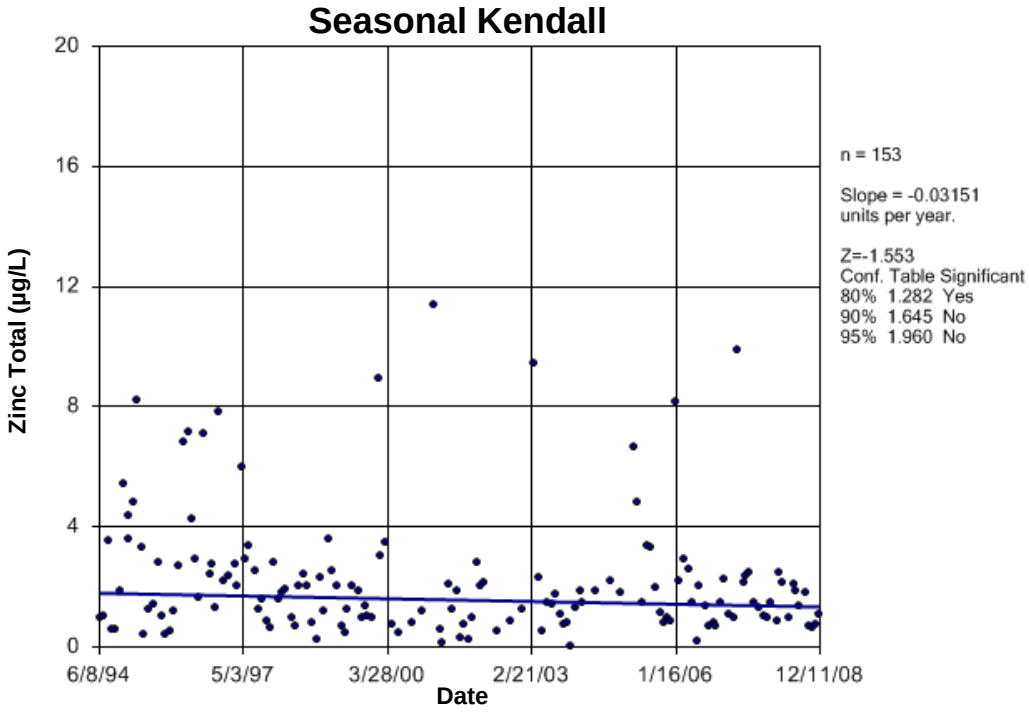


Figure E93 Beaver River: Zinc Total

Cold River

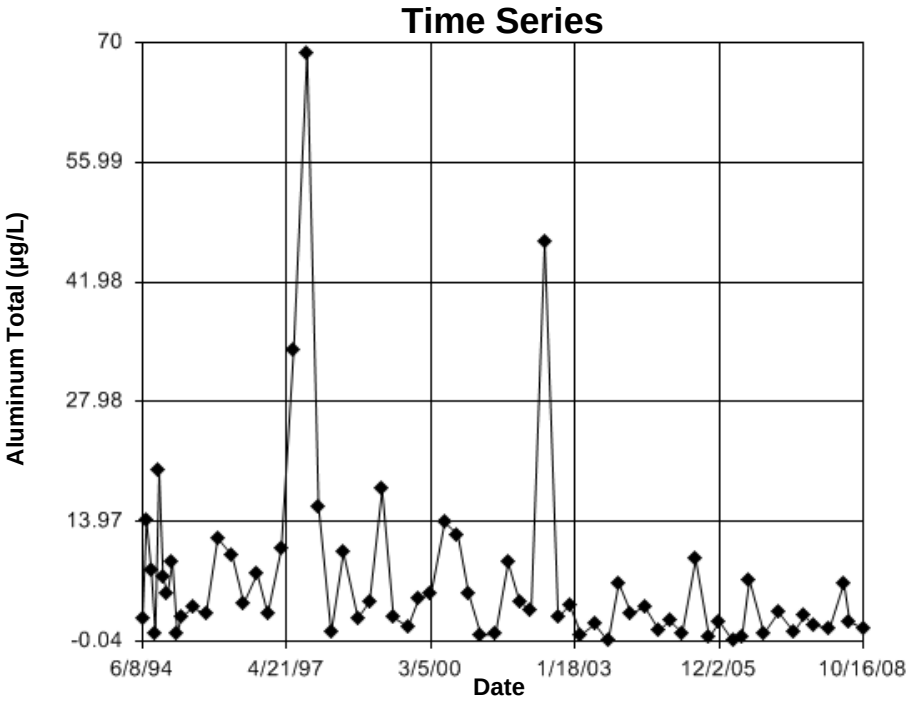


Figure E94 Cold River: Aluminum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.0001742
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

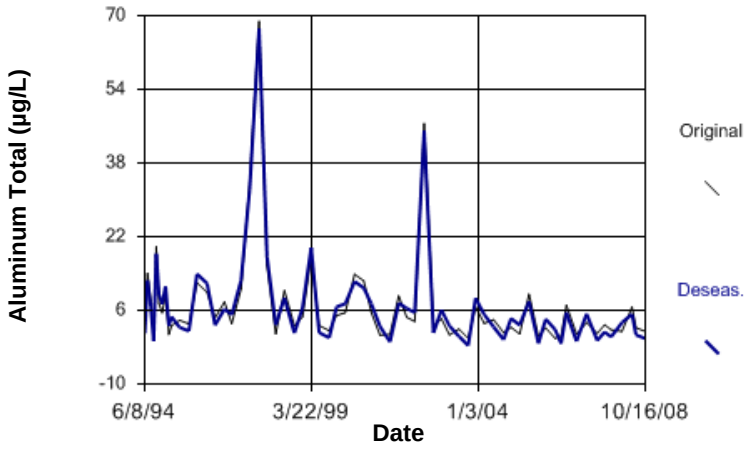


Figure E95 Cold River: Aluminum Total

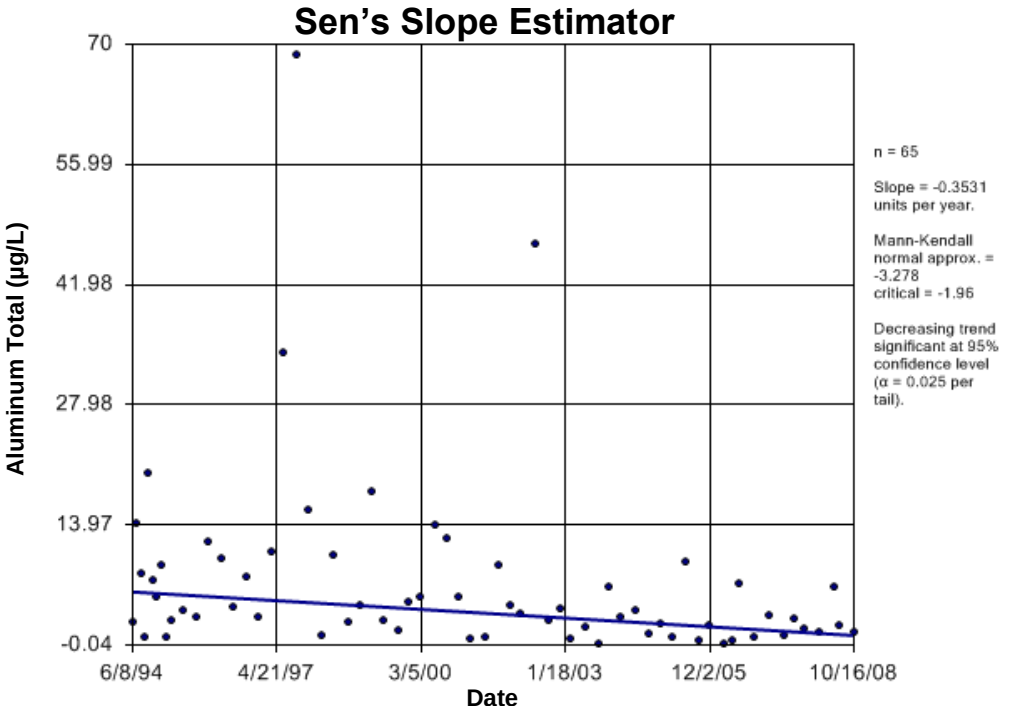


Figure E96 Cold River: Aluminum Total

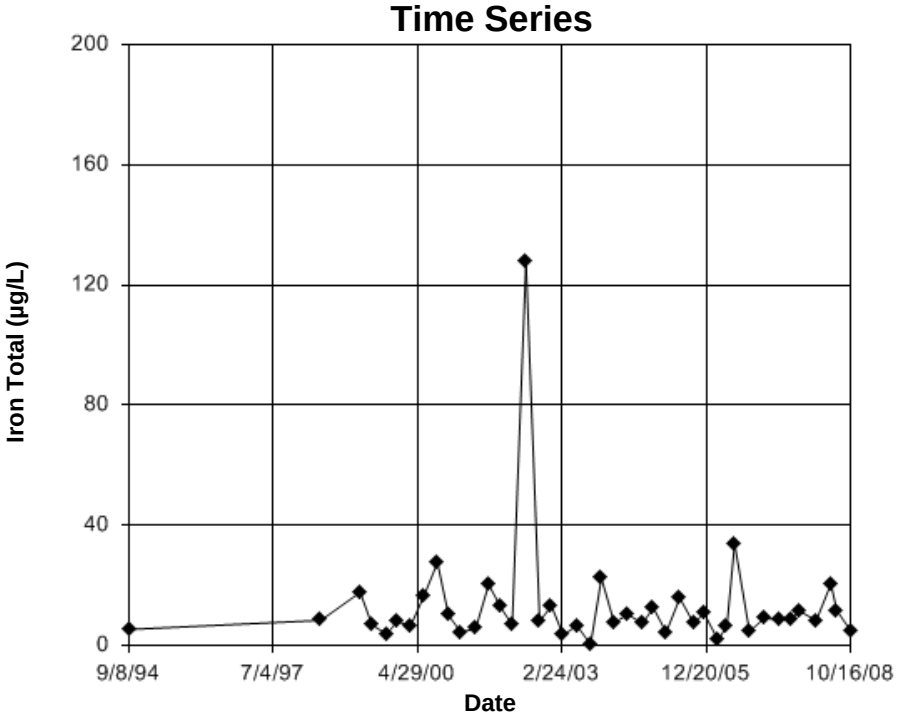


Figure E97 Cold River: Iron Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.1578
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

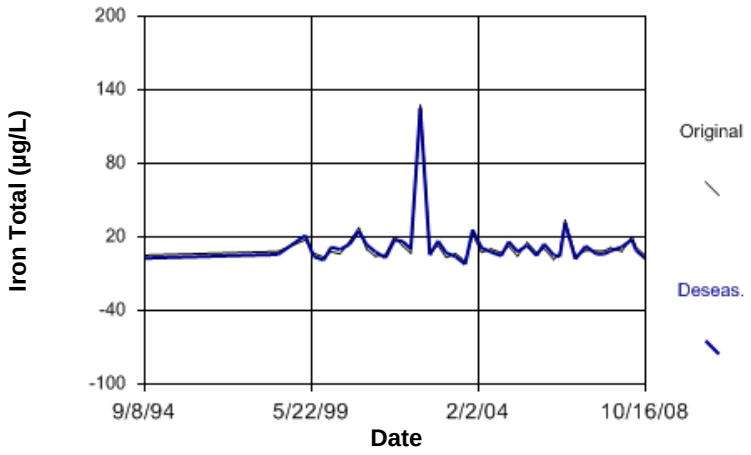


Figure E98 Cold River: Iron Total

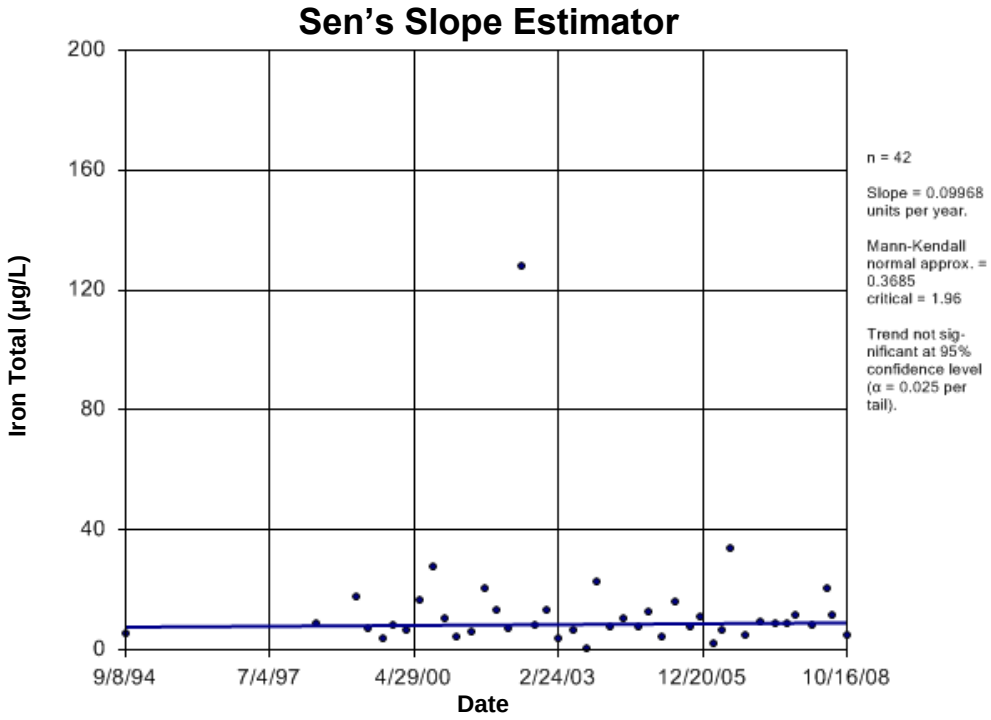


Figure E99 Cold River: Iron Total

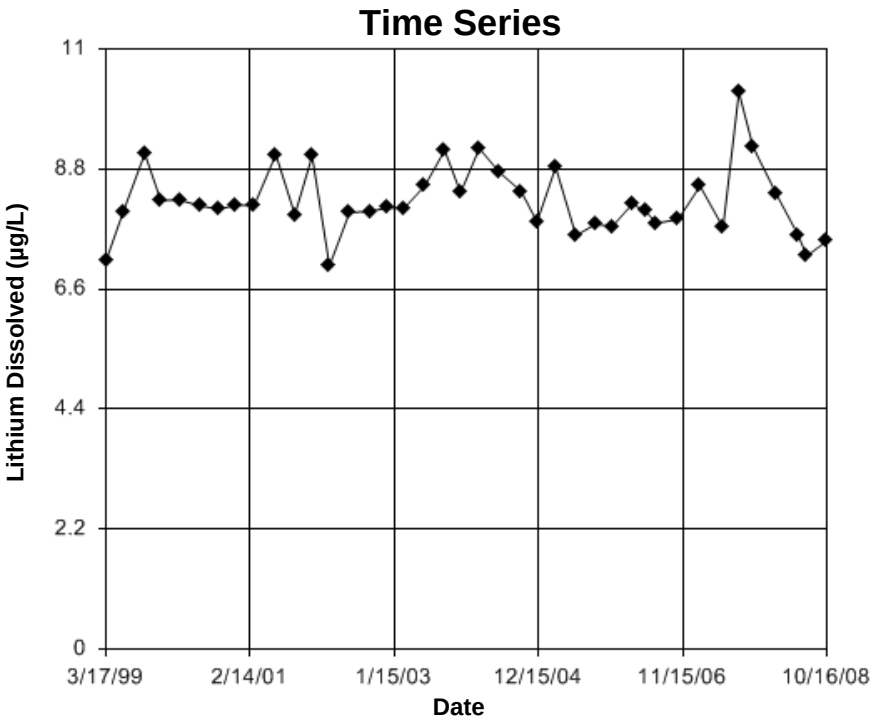


Figure E100 Cold River: Lithium Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.4134
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

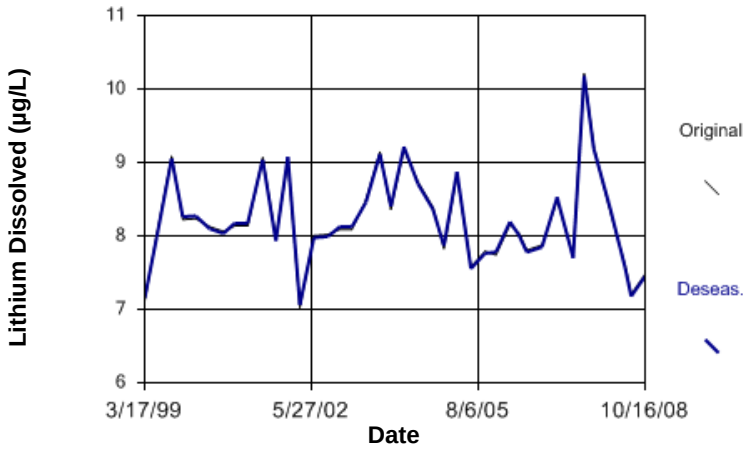


Figure E101 Cold River: Lithium Dissolved

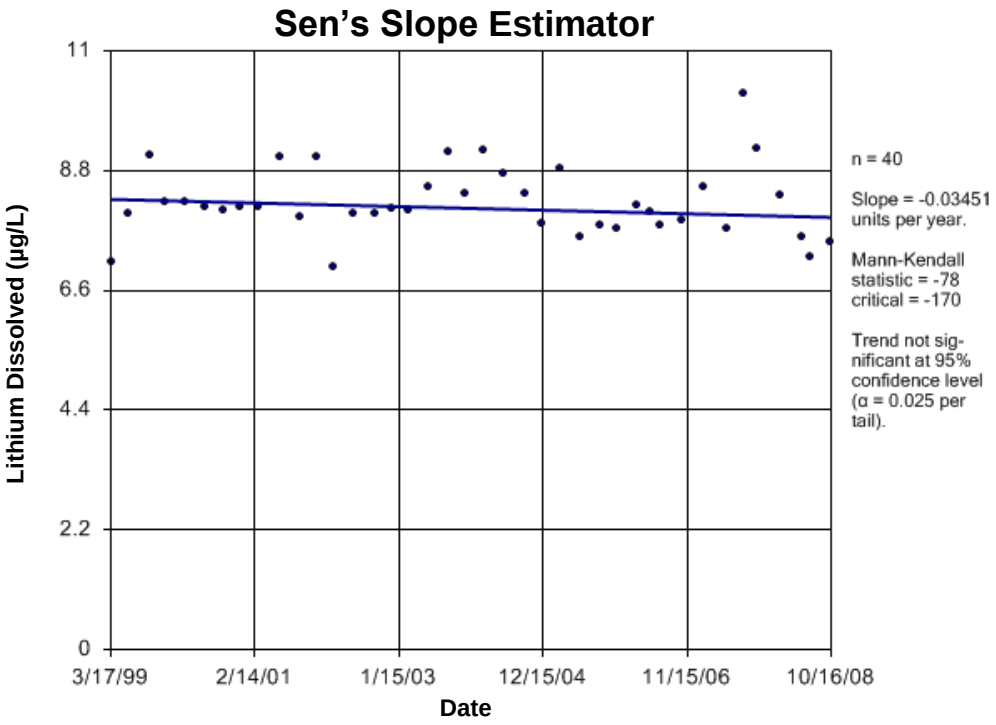


Figure E102 Cold River: Lithium Dissolved

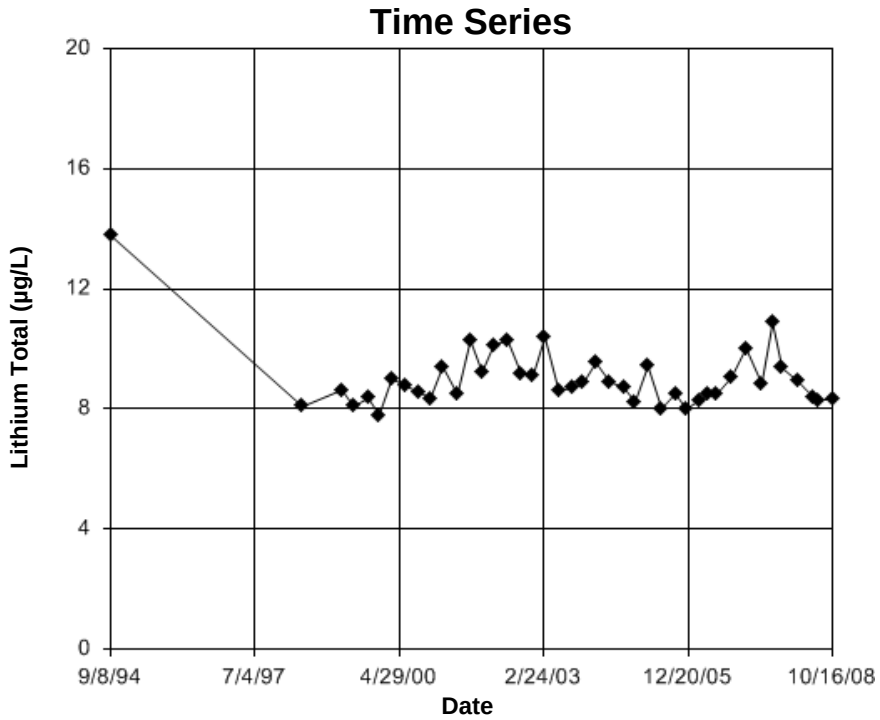


Figure E103 Cold River: Lithium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.6517
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.6515
Adjusted Kruskal-Wallis statistic (H') = 0.6517

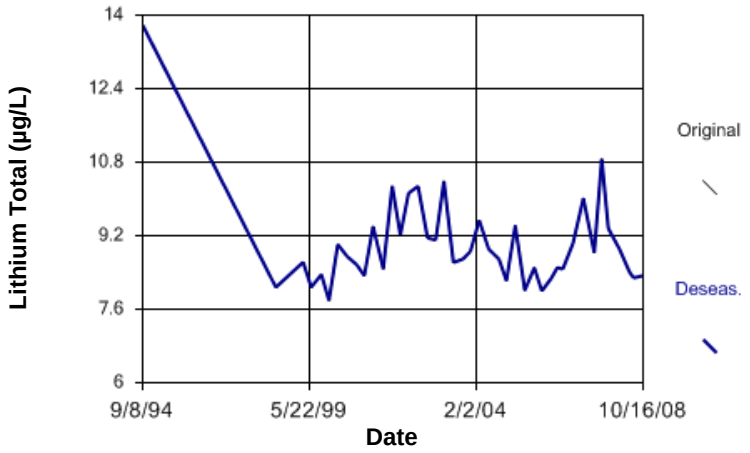


Figure E104 Cold River: Lithium Total

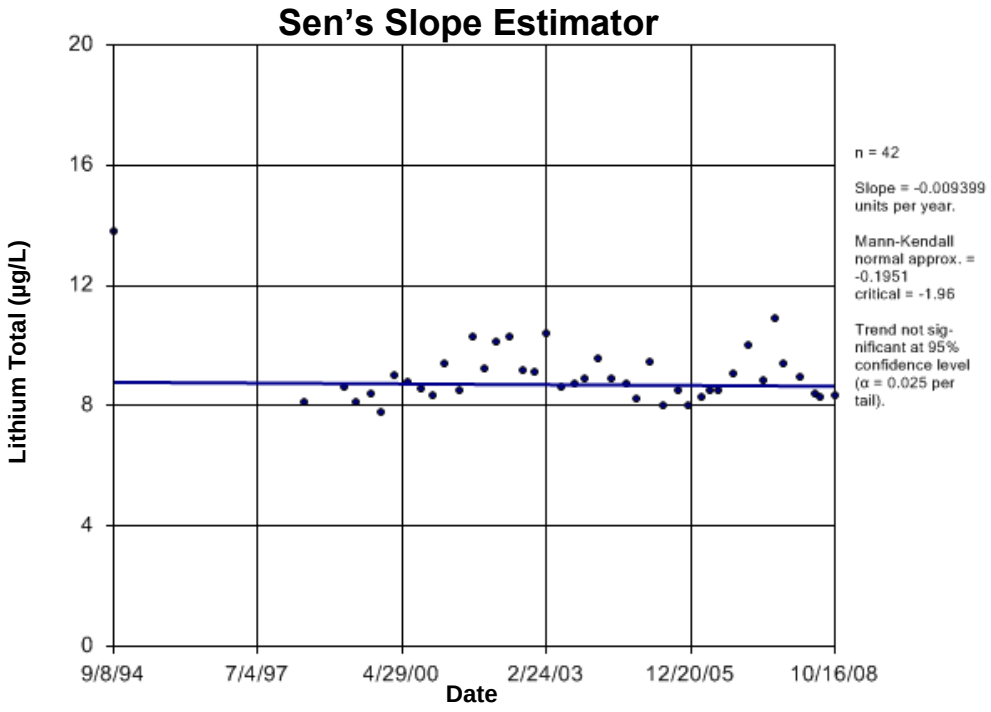


Figure E105 Cold River: Lithium Total

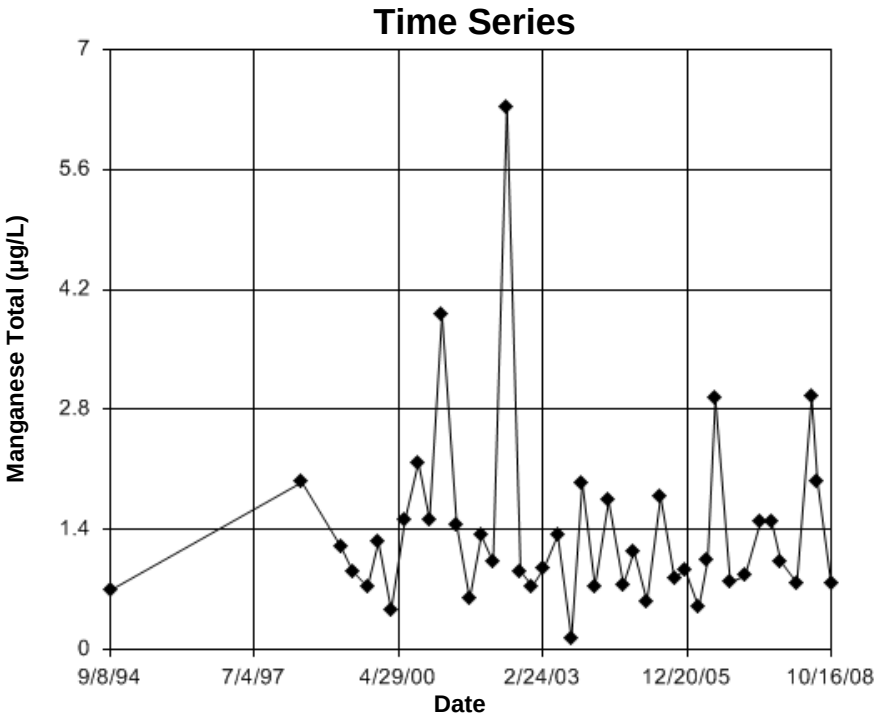


Figure E106 Cold River: Manganese Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.609
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

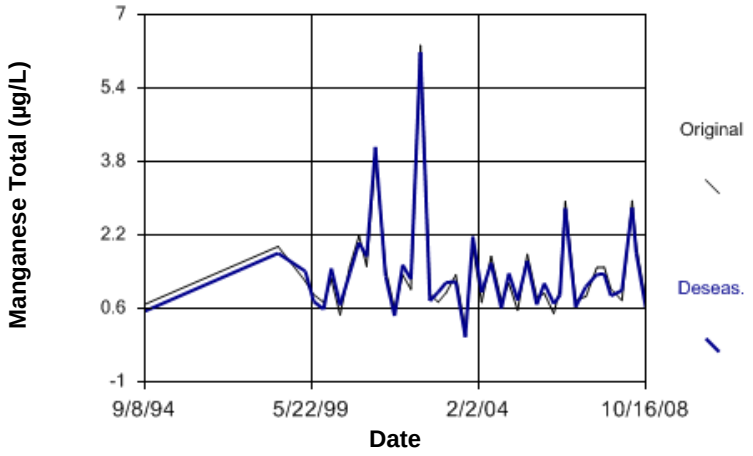


Figure E107 Cold River: Manganese Total

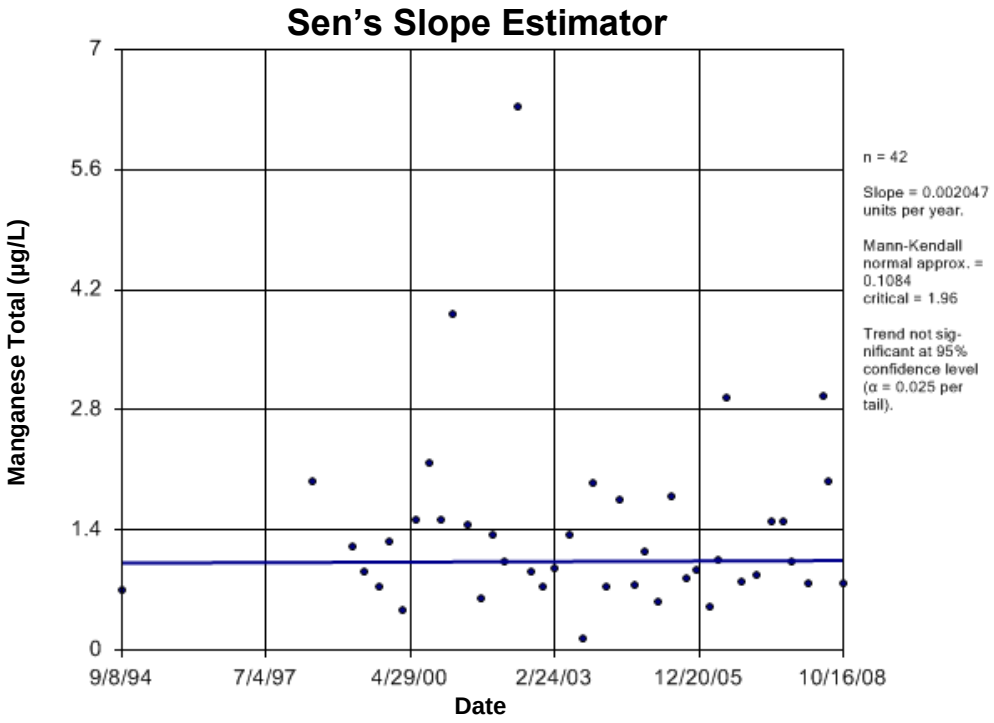


Figure E108 Cold River: Manganese Total

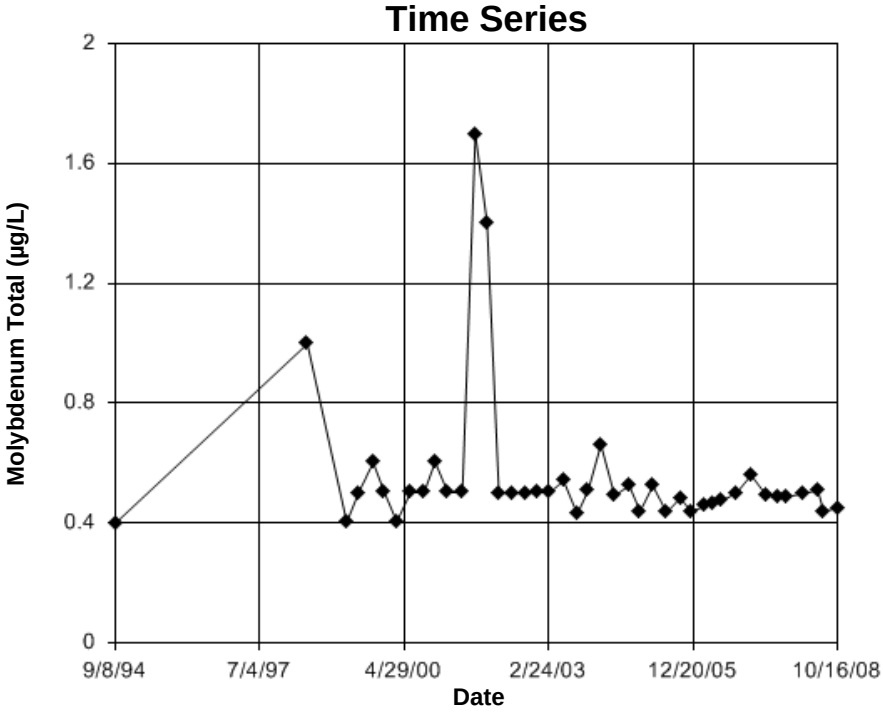


Figure E109 Cold River: Molybdenum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.8275
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

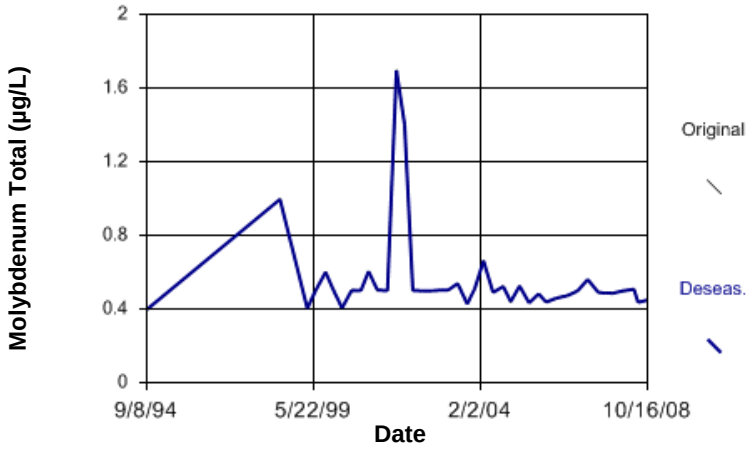


Figure E110 Cold River: Molybdenum Total

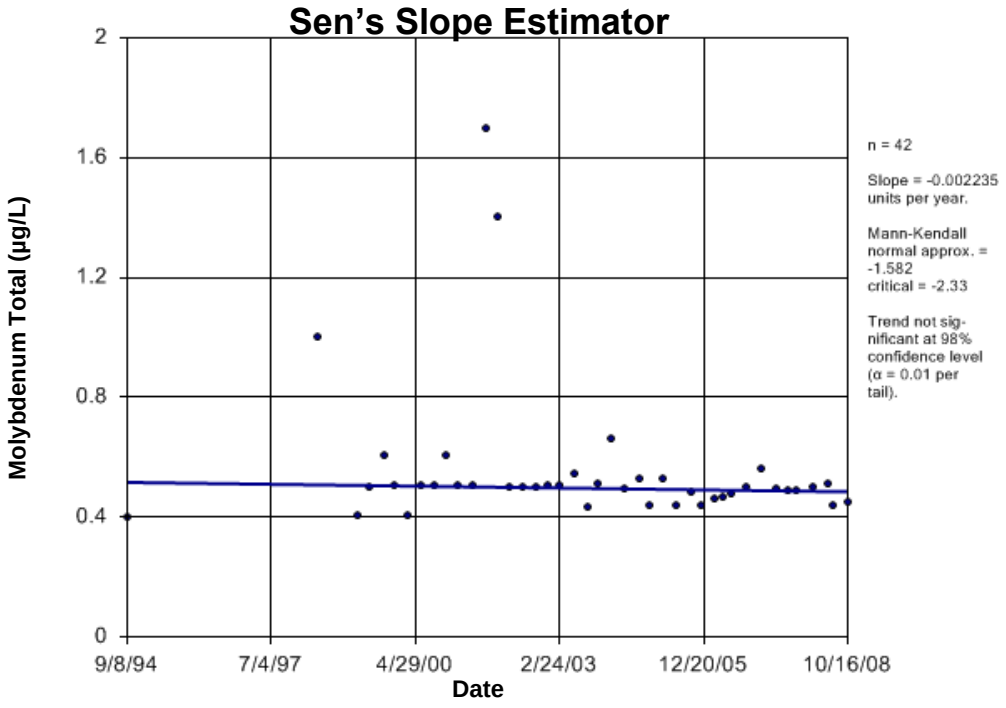


Figure E111 Cold River: Molybdenum Total

North Saskatchewan River

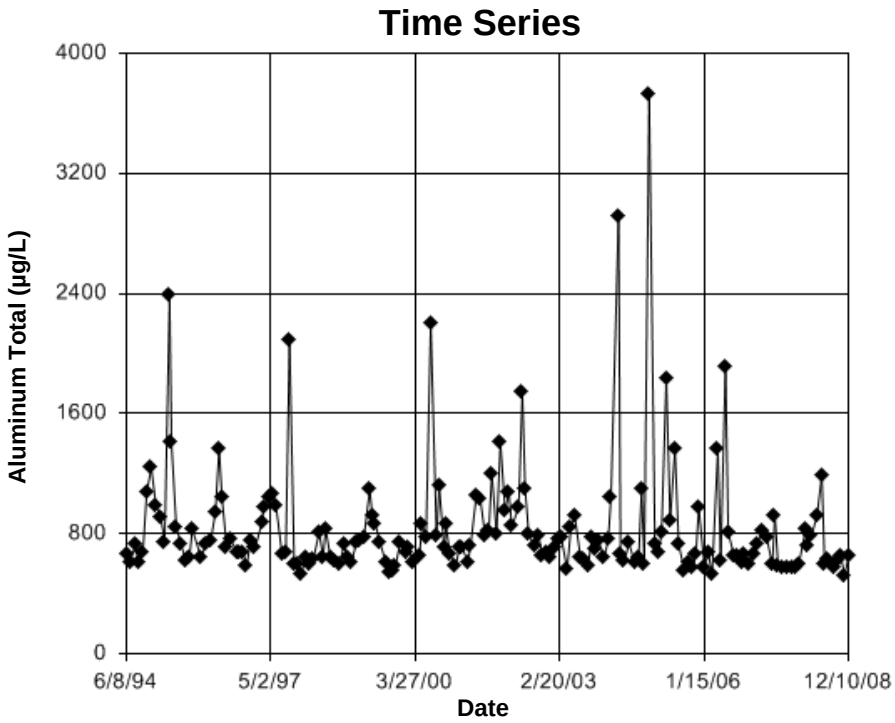


Figure E112 North Saskatchewan River: Aluminum Total

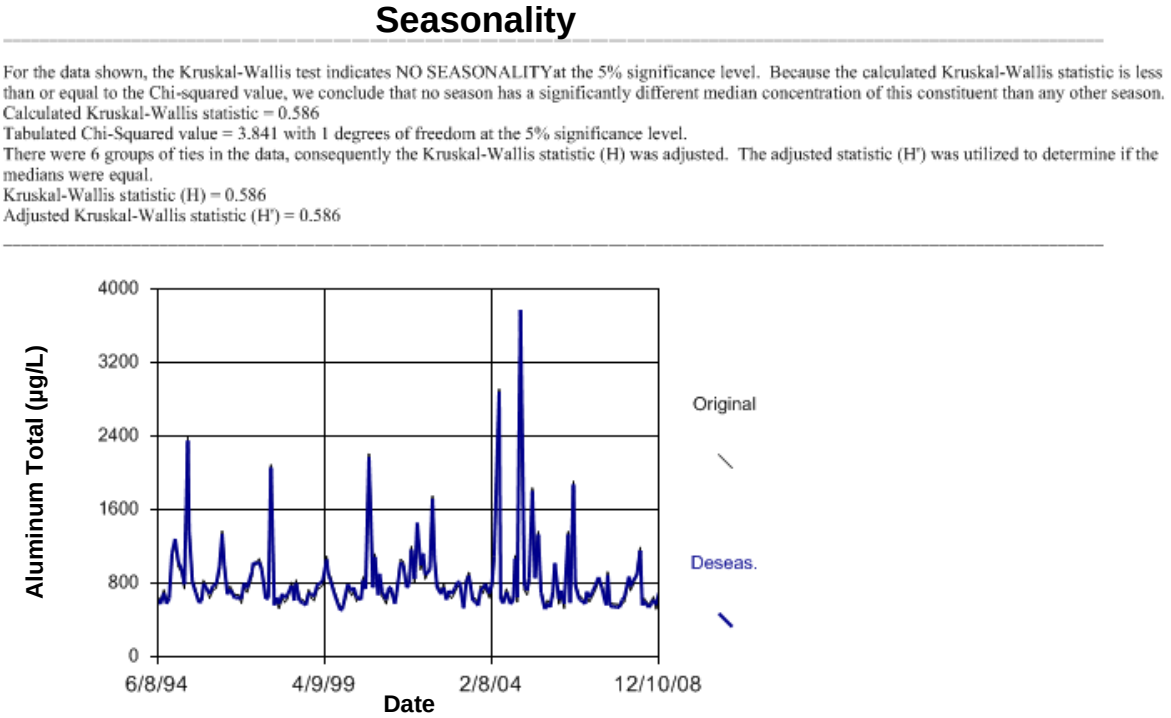


Figure E113 North Saskatchewan River: Aluminum Total

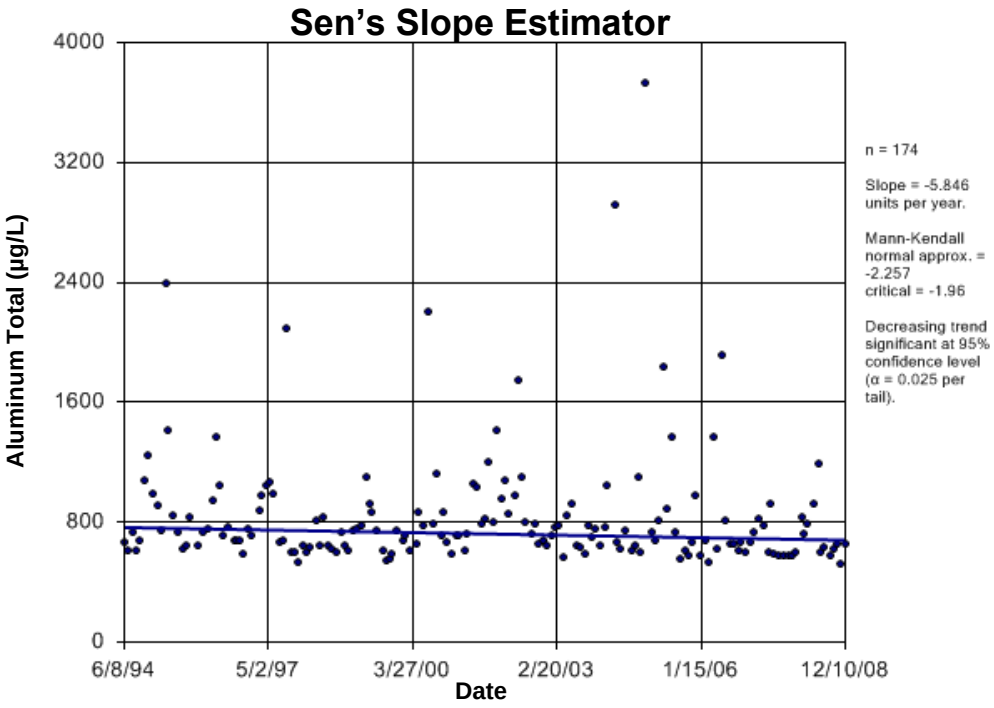


Figure E114 North Saskatchewan River: Aluminum Total

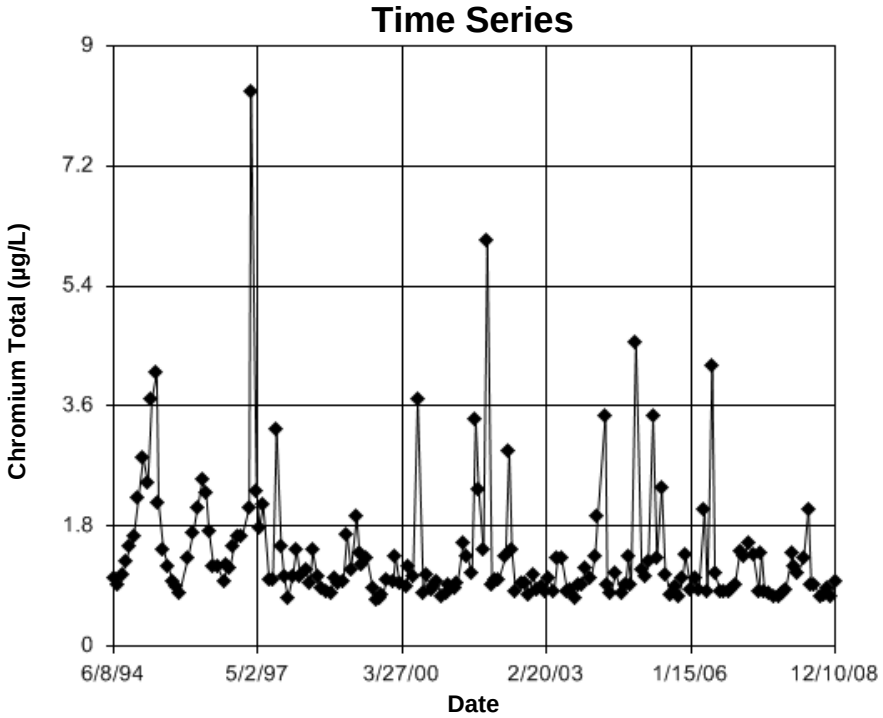


Figure E115 North Saskatchewan River: Chromium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.493
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 5 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 1.493
Adjusted Kruskal-Wallis statistic (H') = 1.493

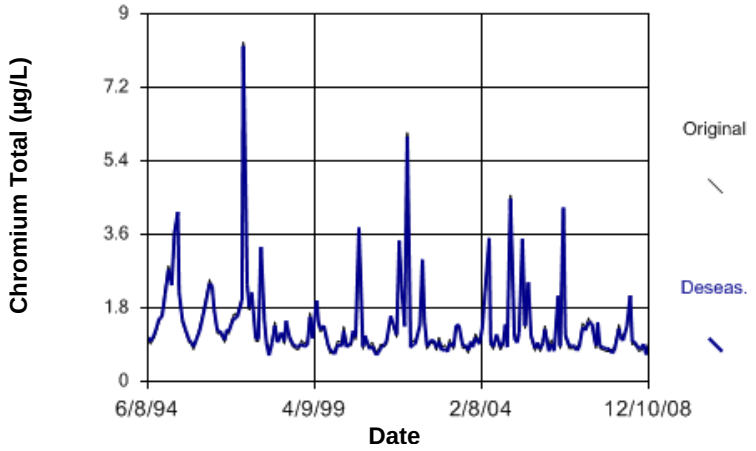


Figure E116 North Saskatchewan River: Chromium Total

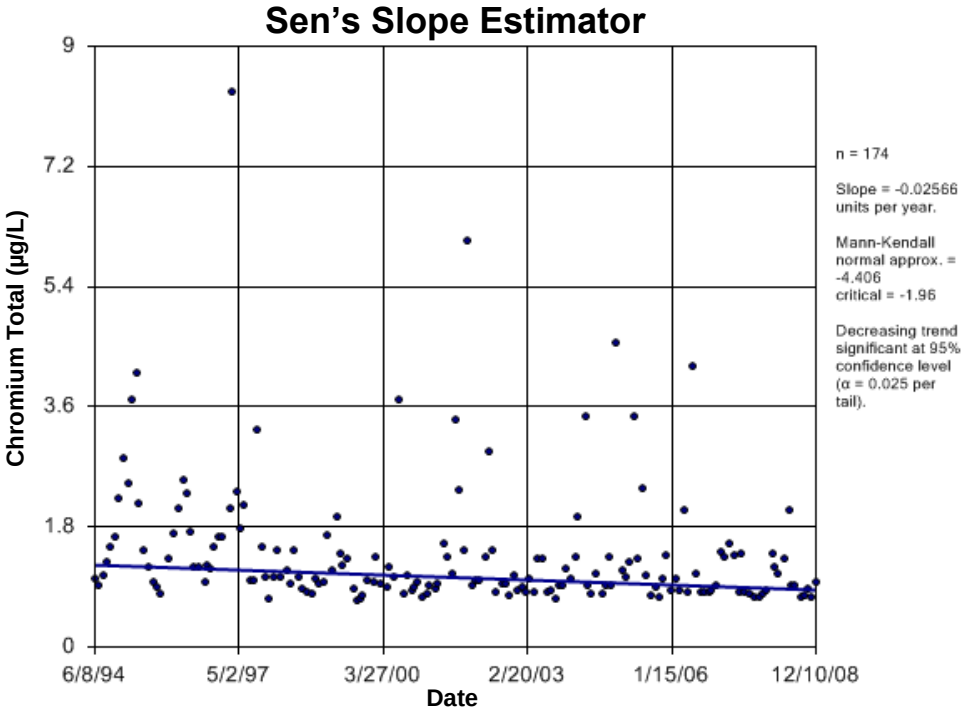


Figure E117 North Saskatchewan River: Chromium Total

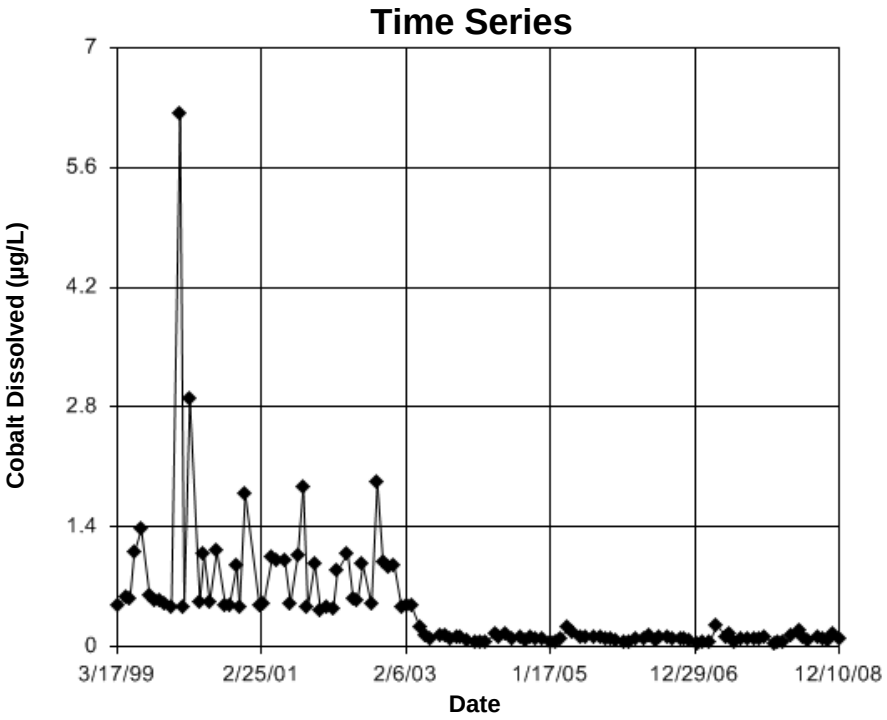


Figure E118 North Saskatchewan River: Cobalt

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 6.526
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 6.526
Adjusted Kruskal-Wallis statistic (H') = 6.526

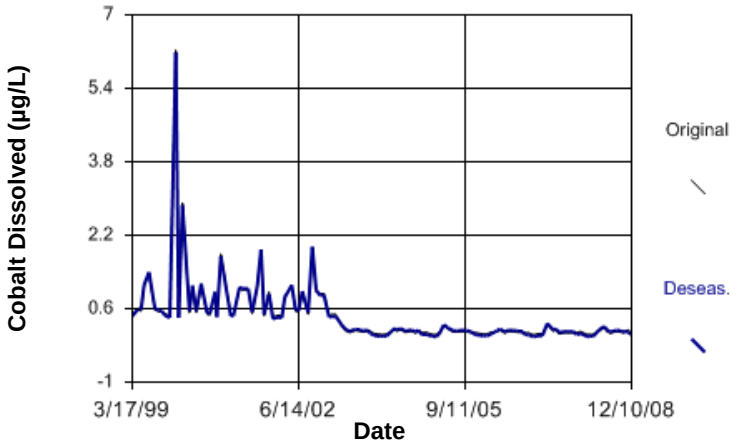


Figure E119 North Saskatchewan River: Cobalt

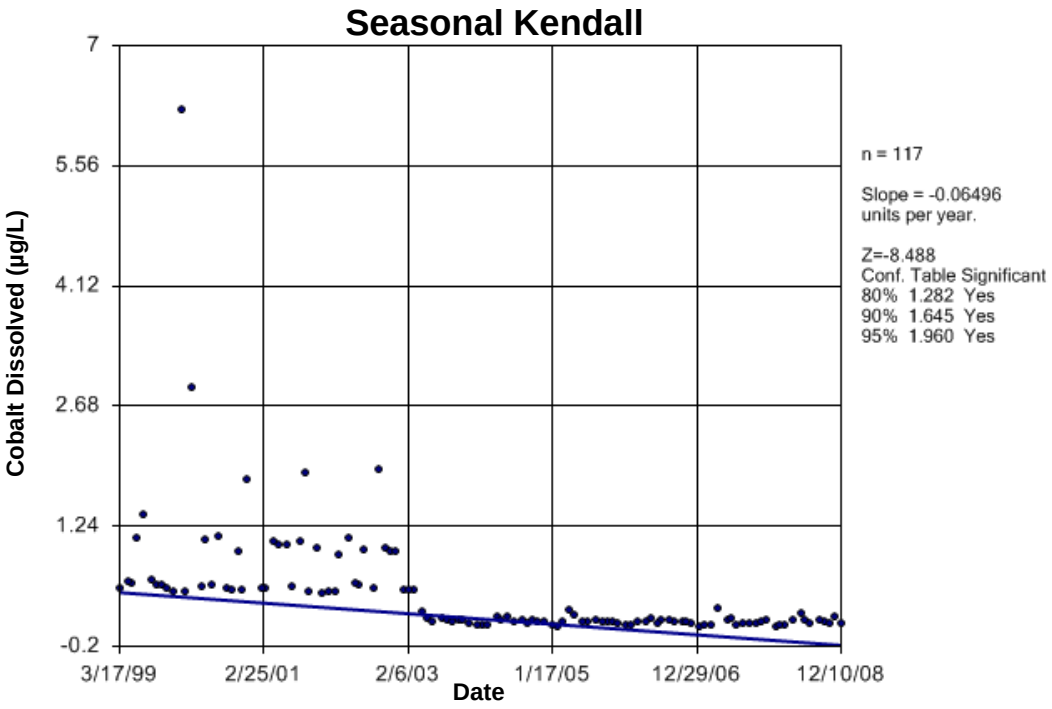


Figure E120 North Saskatchewan River: Cobalt Dissolved

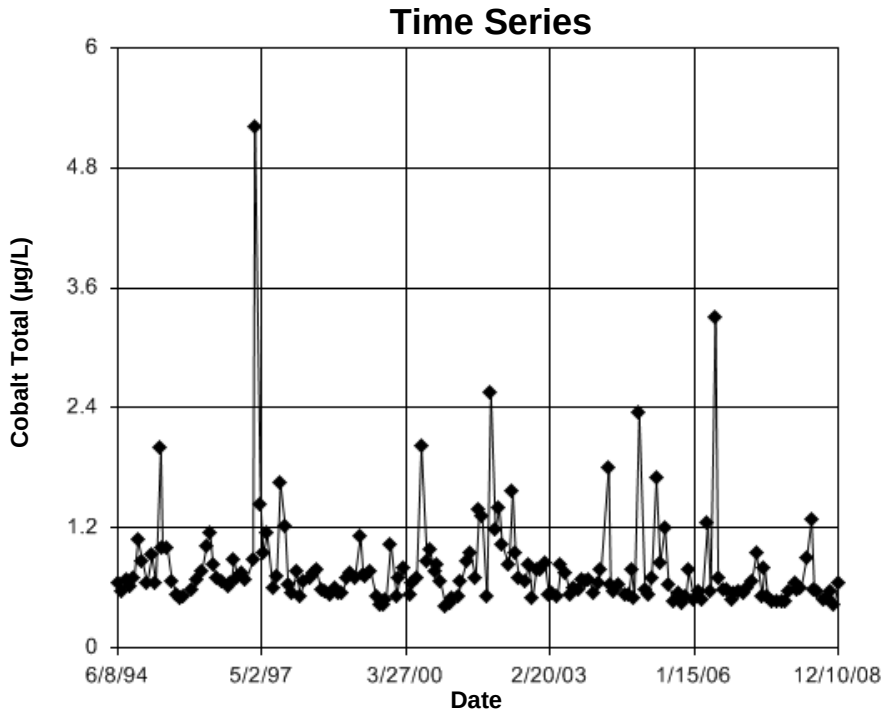


Figure E121 North Saskatchewan River: Cobalt Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.172
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 7 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 1.172
Adjusted Kruskal-Wallis statistic (H') = 1.172

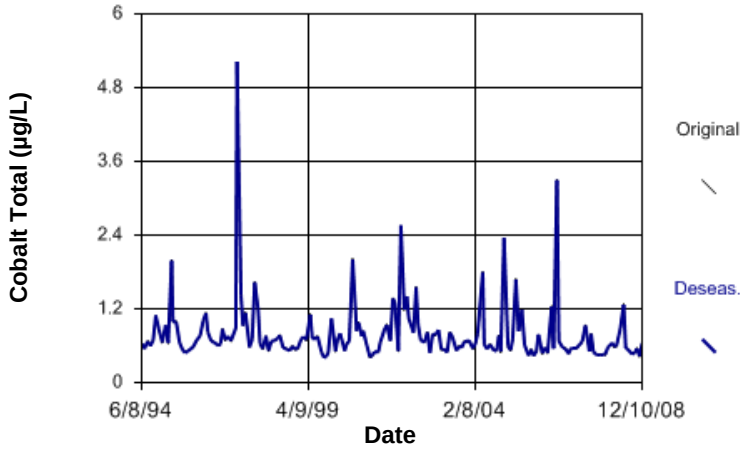


Figure E122 North Saskatchewan River: Cobalt Total

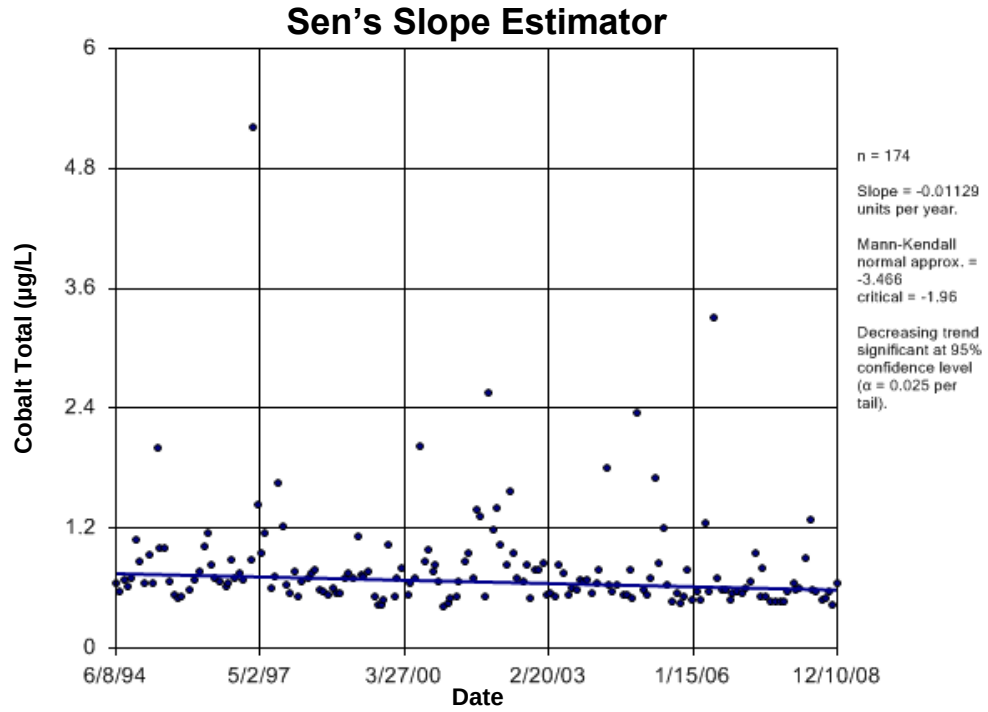


Figure E123 North Saskatchewan River: Cobalt Total

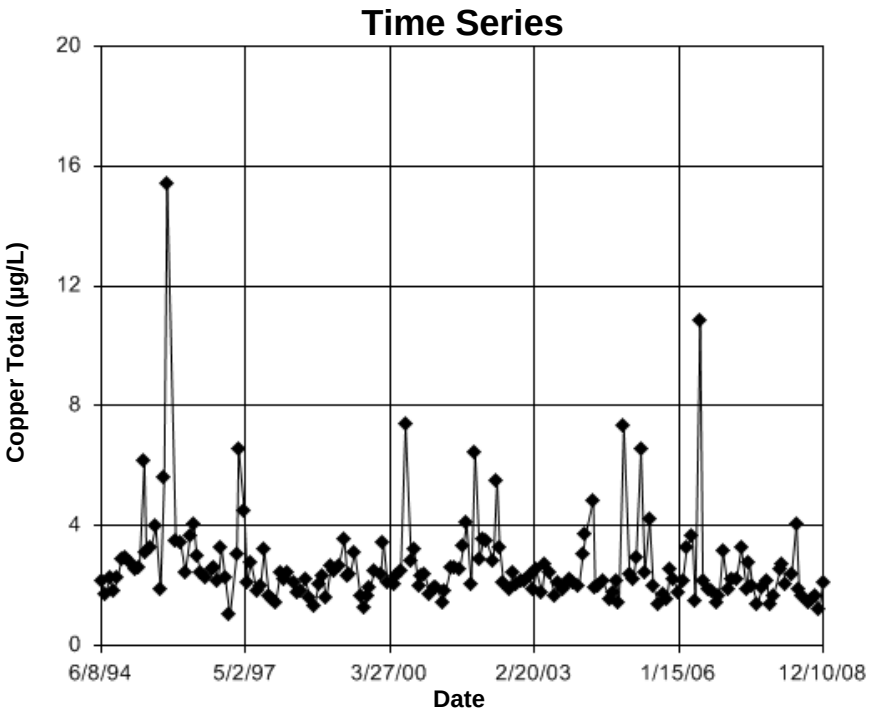


Figure E124 North Saskatchewan River: Copper Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.53
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 9 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 1.53
Adjusted Kruskal-Wallis statistic (H') = 1.53

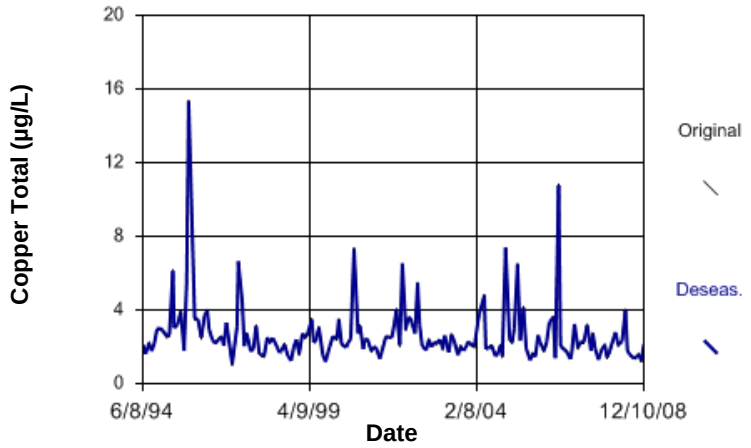


Figure E125 North Saskatchewan River: Copper Total

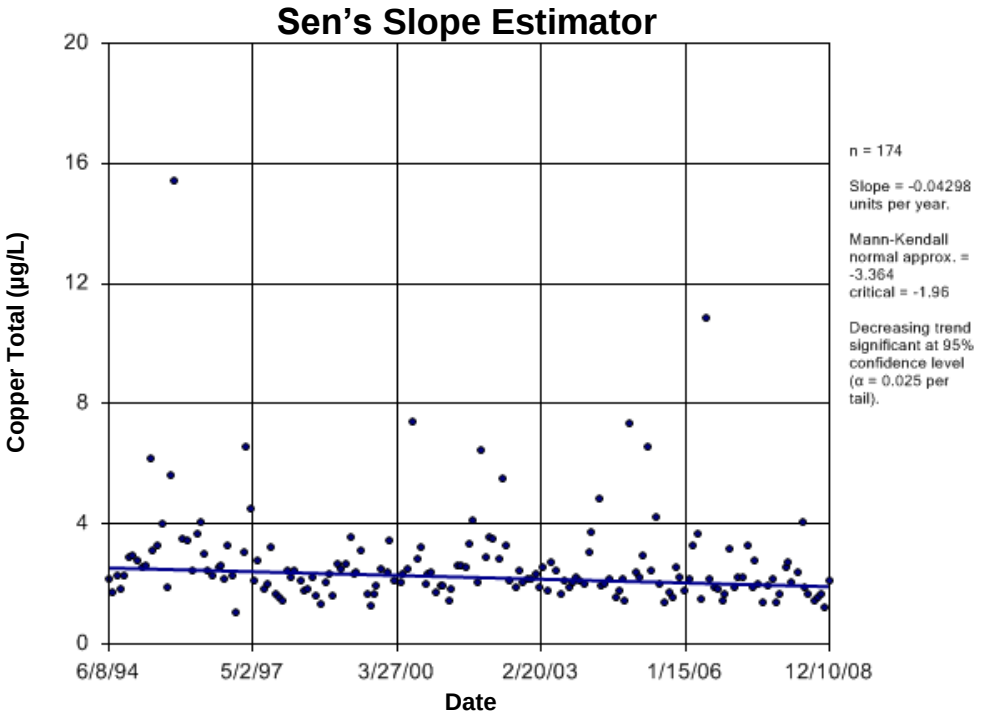


Figure E126 North Saskatchewan River: Copper Total

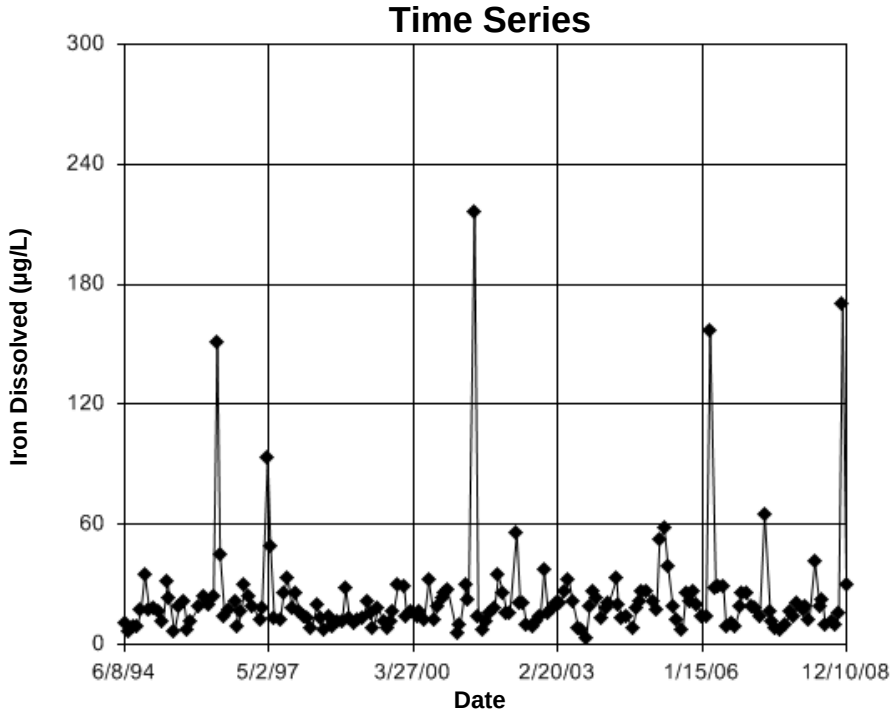


Figure E127 North Saskatchewan River: Iron Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 7.058
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 5 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 7.058
Adjusted Kruskal-Wallis statistic (H') = 7.058

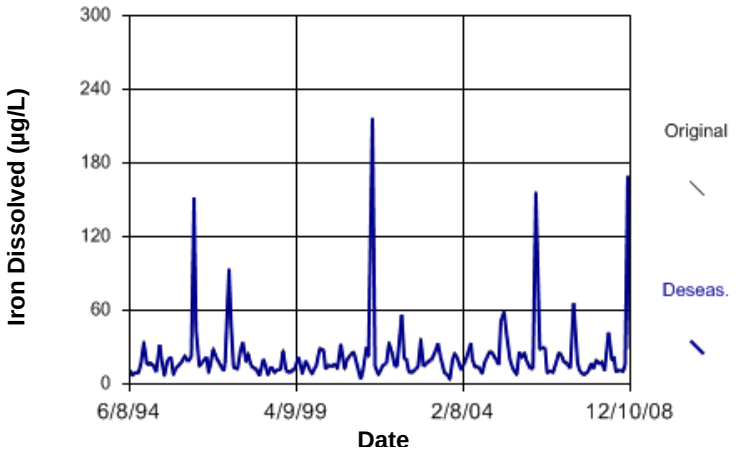


Figure E128 North Saskatchewan River: Iron Dissolved

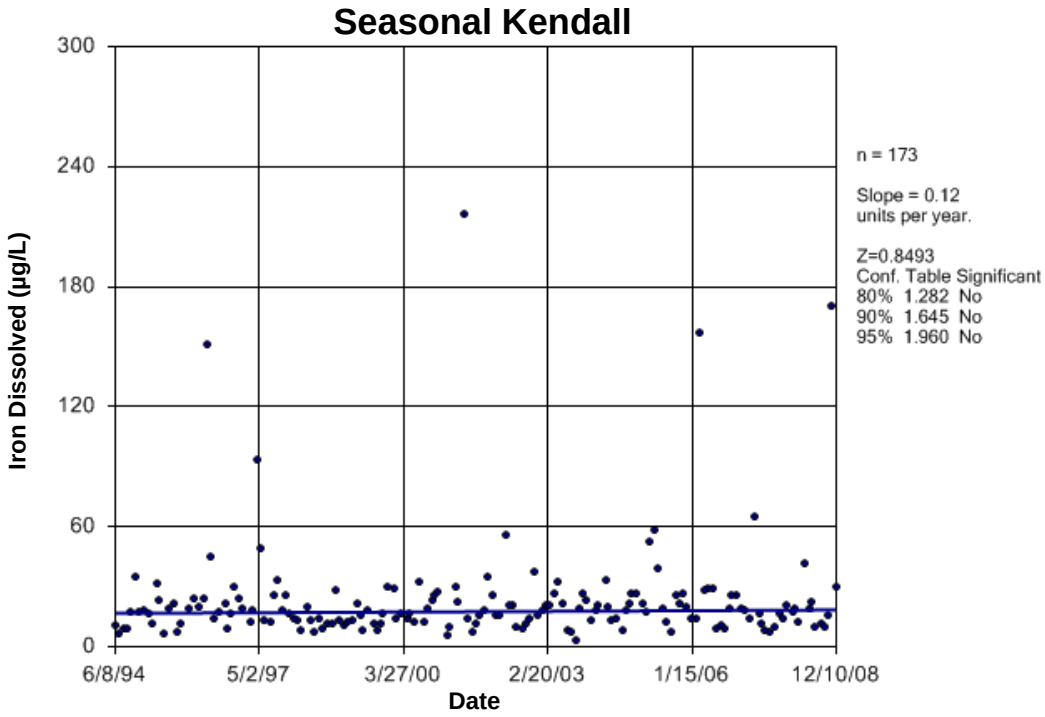


Figure E129 North Saskatchewan River: Iron Dissolved

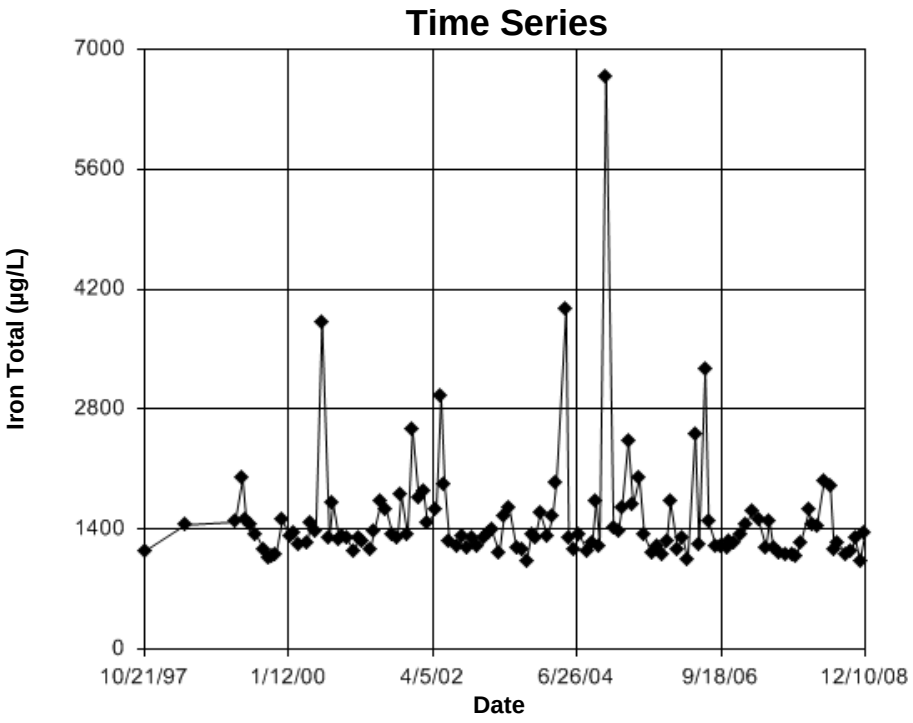


Figure E130 North Saskatchewan River: Iron Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.6117
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 5 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.6117
Adjusted Kruskal-Wallis statistic (H') = 0.6117

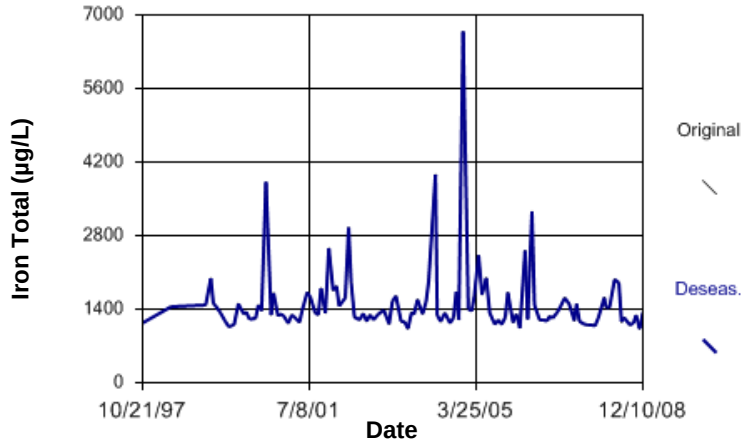


Figure E131 North Saskatchewan River: Iron Total

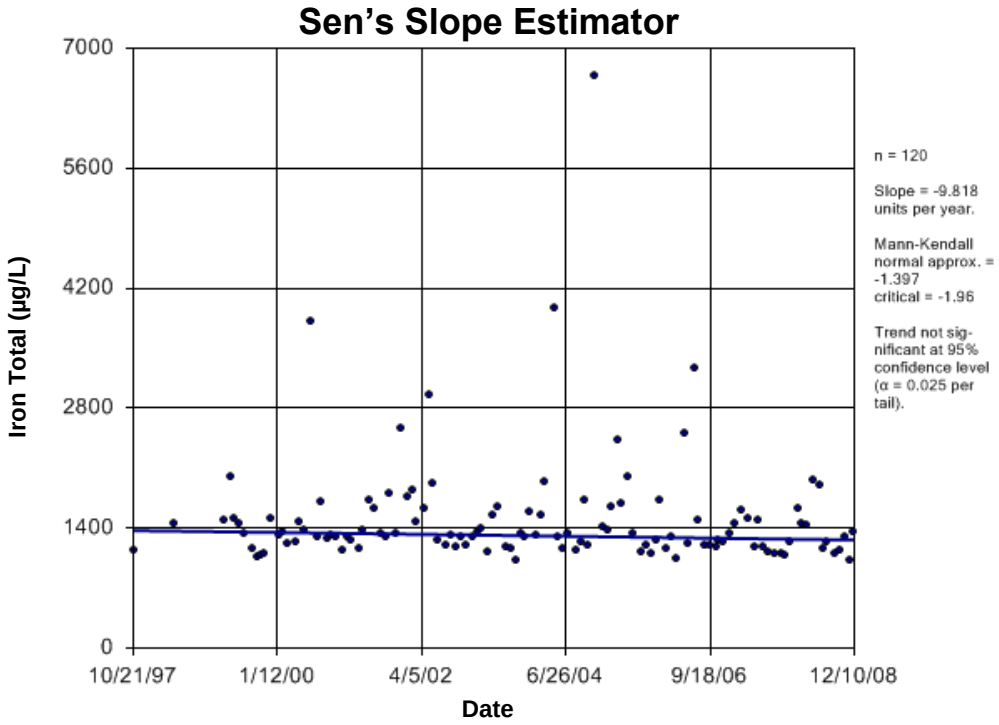


Figure E132 North Saskatchewan River: Iron Total

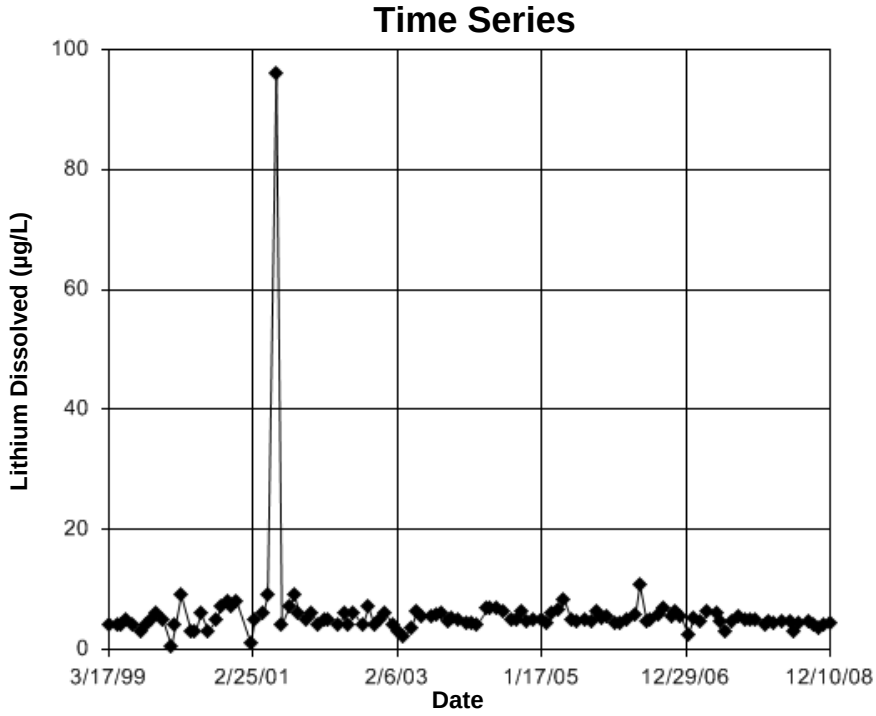


Figure E133 North Saskatchewan River: Lithium Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 2.322
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 22 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 2.321
Adjusted Kruskal-Wallis statistic (H') = 2.322

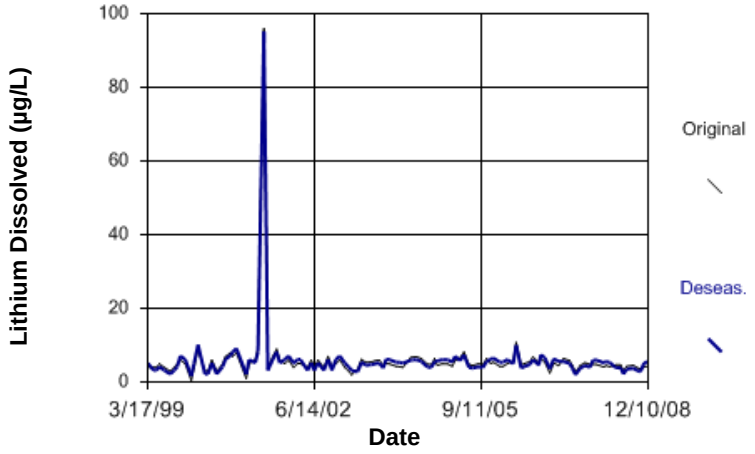


Figure E134 North Saskatchewan River: Lithium Dissolved

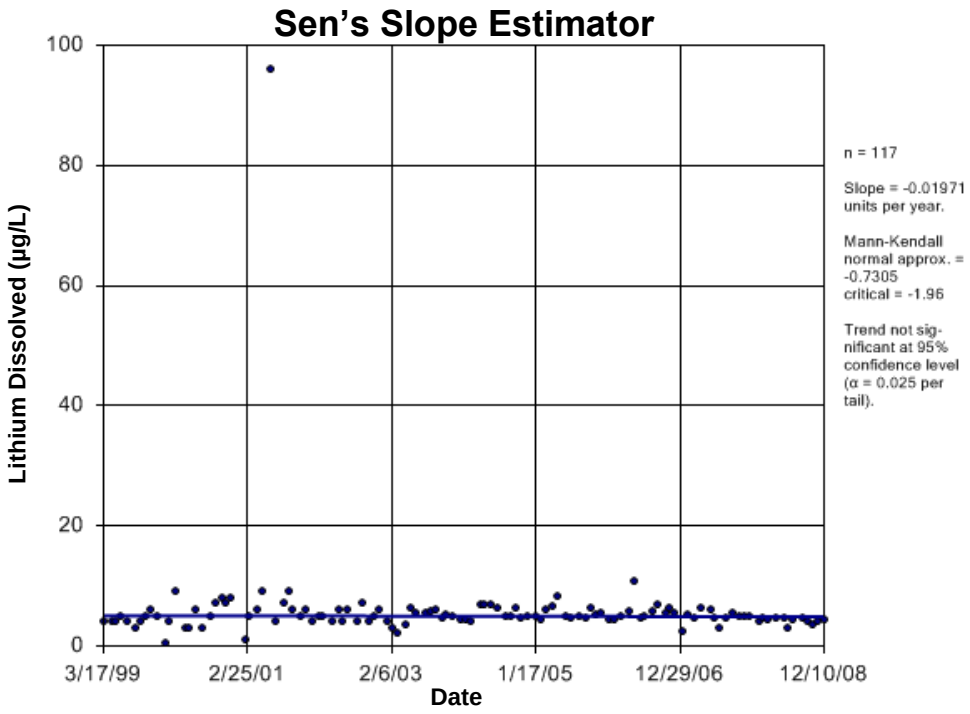


Figure E135 North Saskatchewan River: Lithium Dissolved

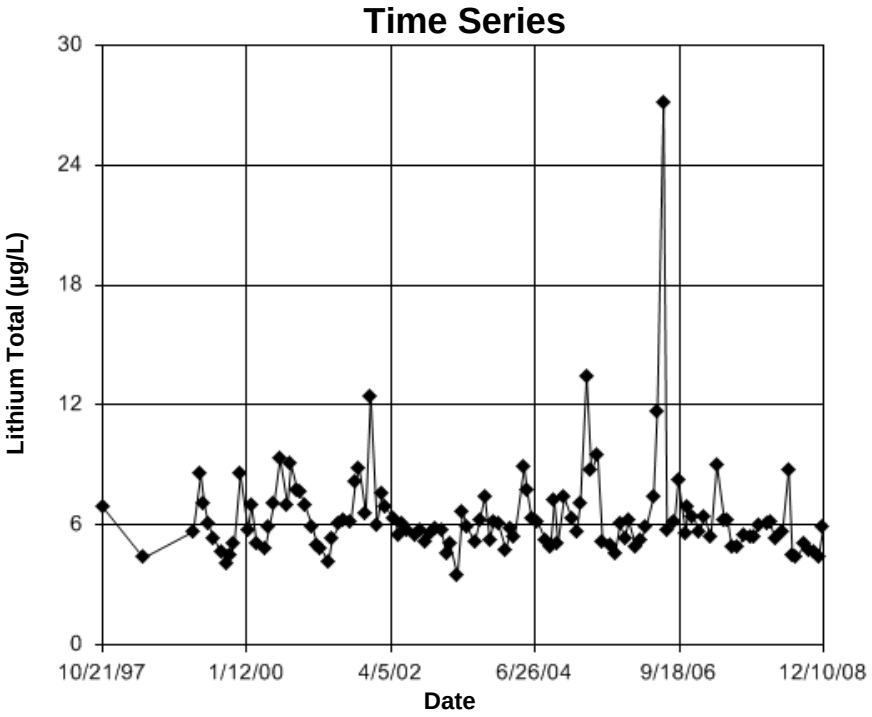


Figure E136 North Saskatchewan River: Lithium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.2672
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.2672
Adjusted Kruskal-Wallis statistic (H') = 0.2672

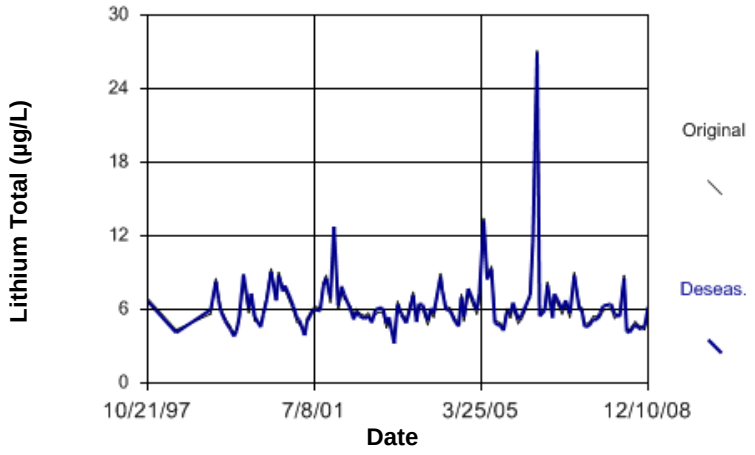


Figure E137 North Saskatchewan River: Lithium Total

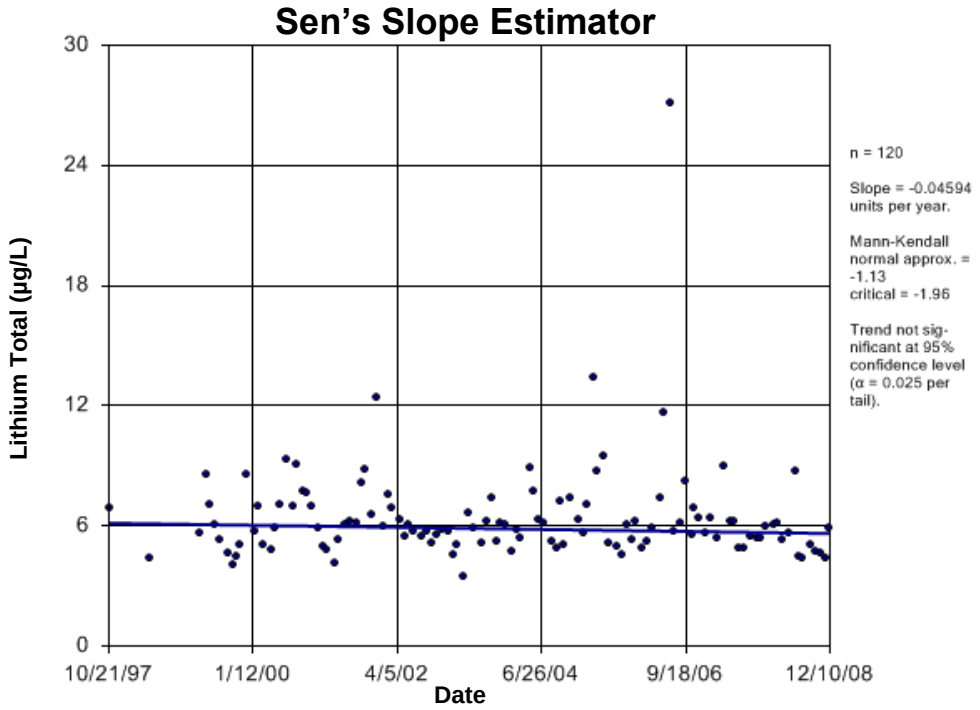


Figure E138 North Saskatchewan River: Lithium Total

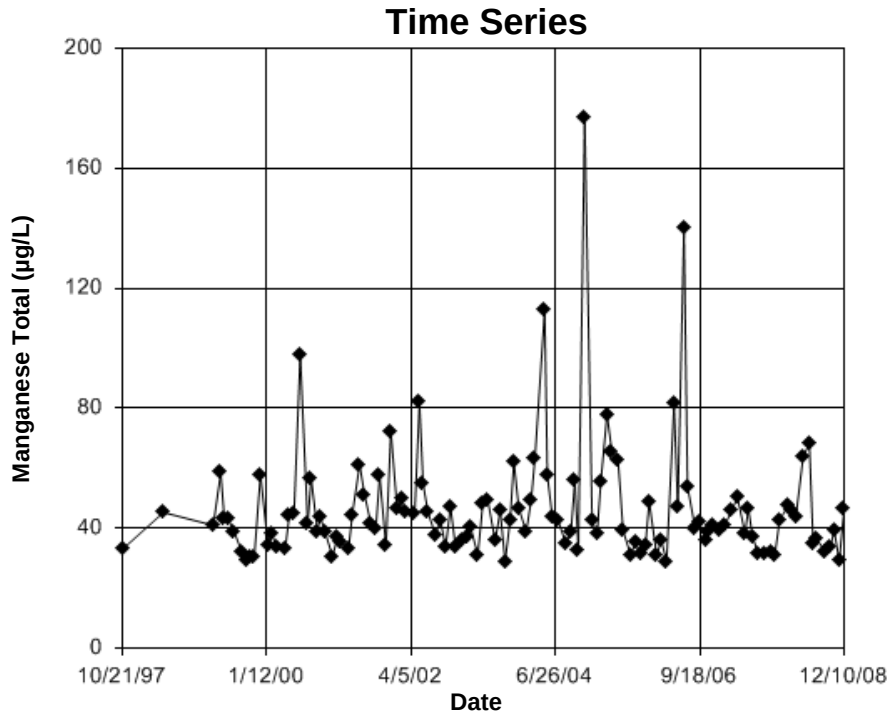


Figure E139 North Saskatchewan River: Manganese Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.7255
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.7255
Adjusted Kruskal-Wallis statistic (H') = 0.7255

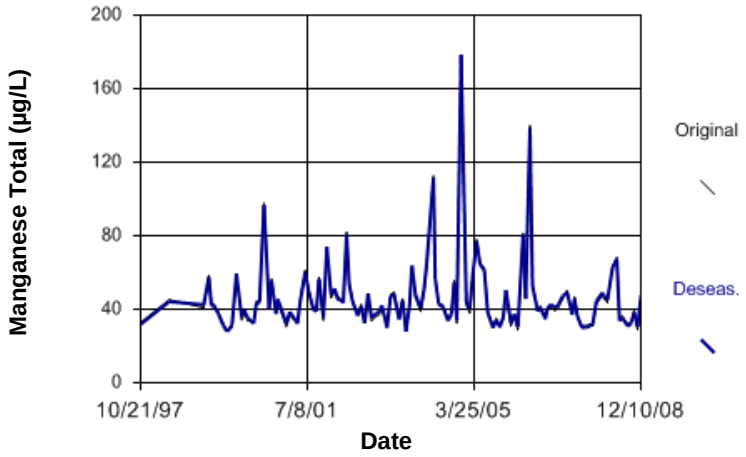


Figure E140 North Saskatchewan River: Manganese Total

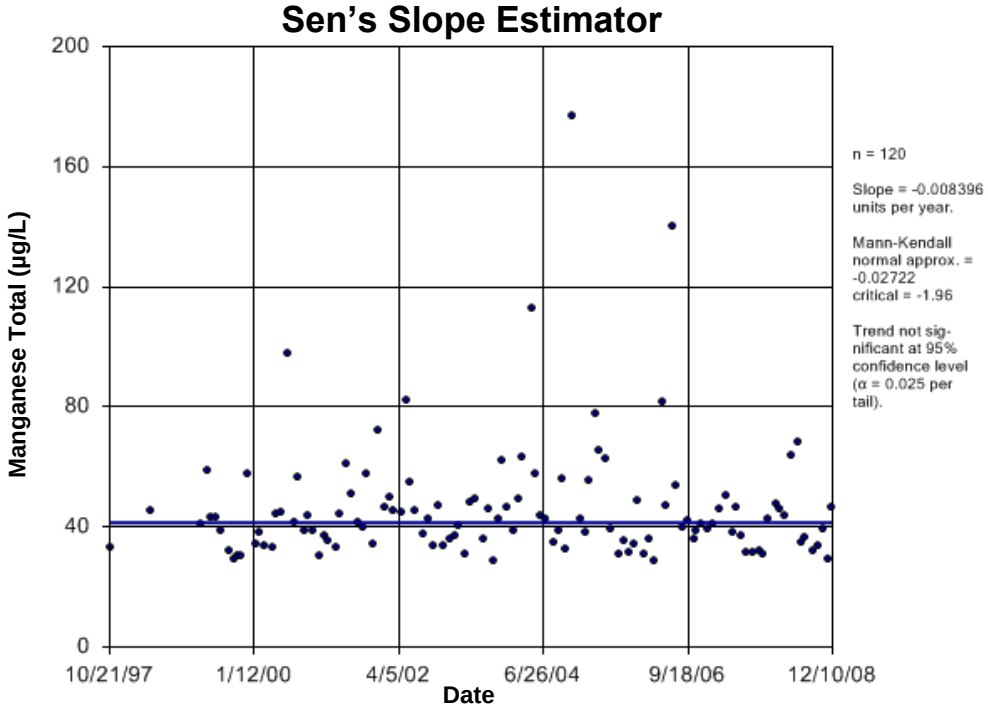


Figure E141 North Saskatchewan River: Manganese Total

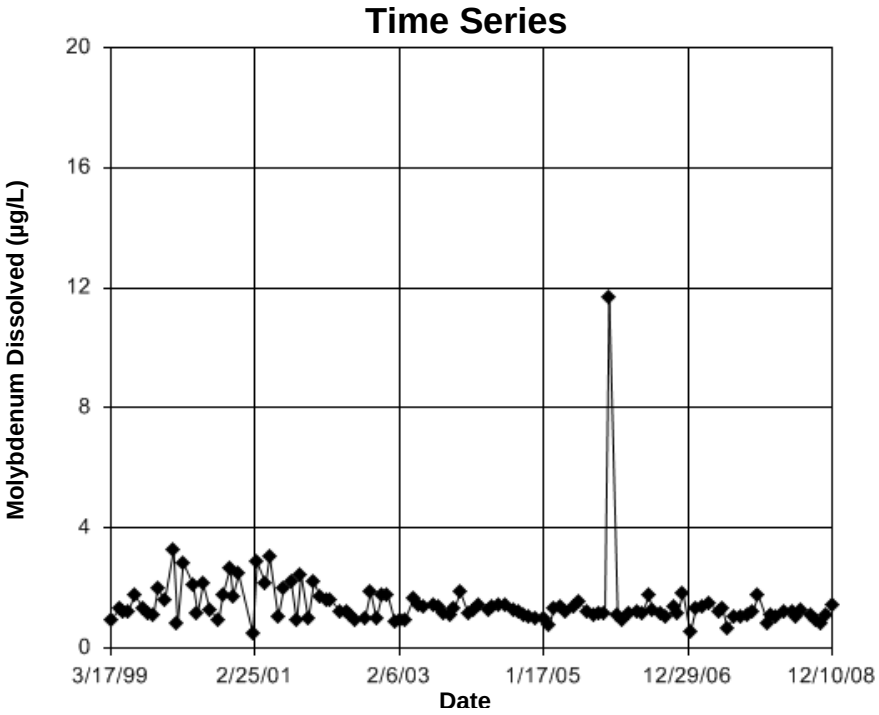


Figure E142 North Saskatchewan River: Molybdenum Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.03067
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 5 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.03067
Adjusted Kruskal-Wallis statistic (H') = 0.03067

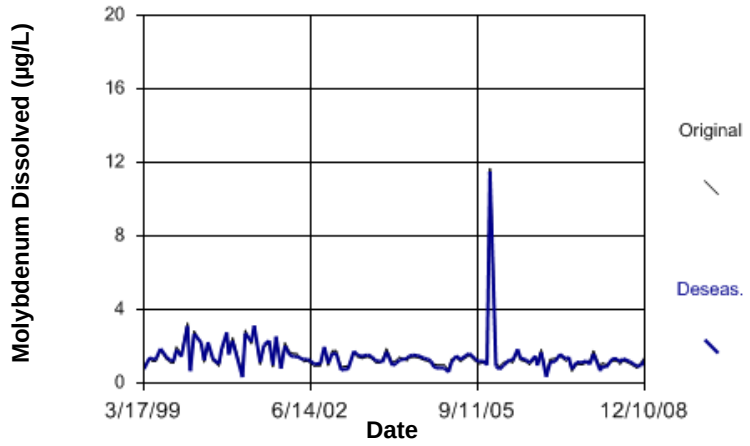


Figure E143 North Saskatchewan River: Molybdenum Dissolved

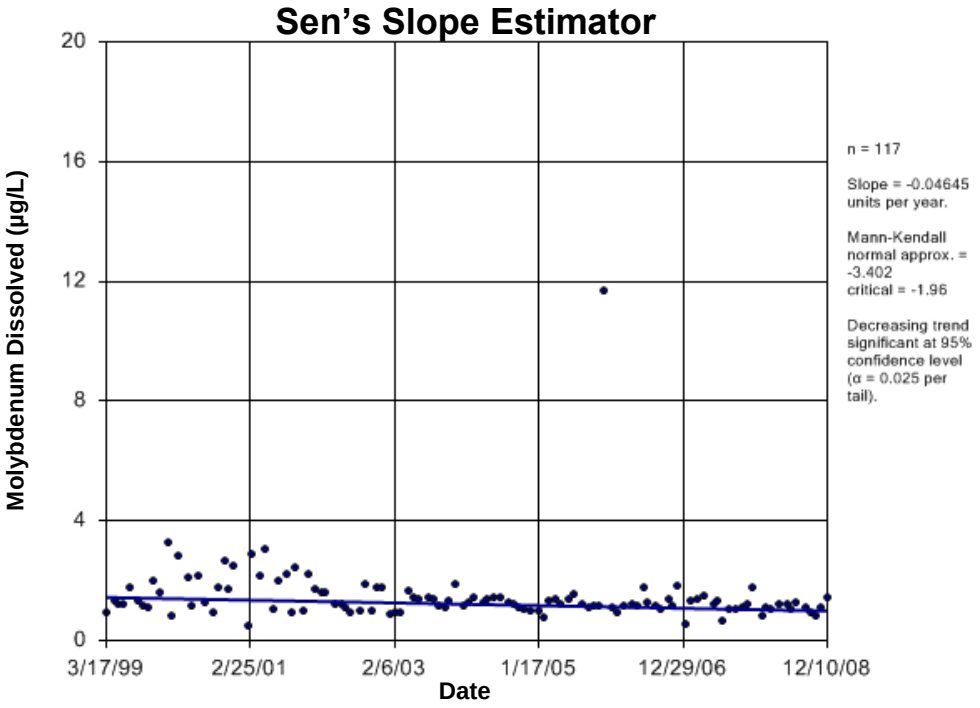


Figure E144 North Saskatchewan River: Molybdenum Dissolved

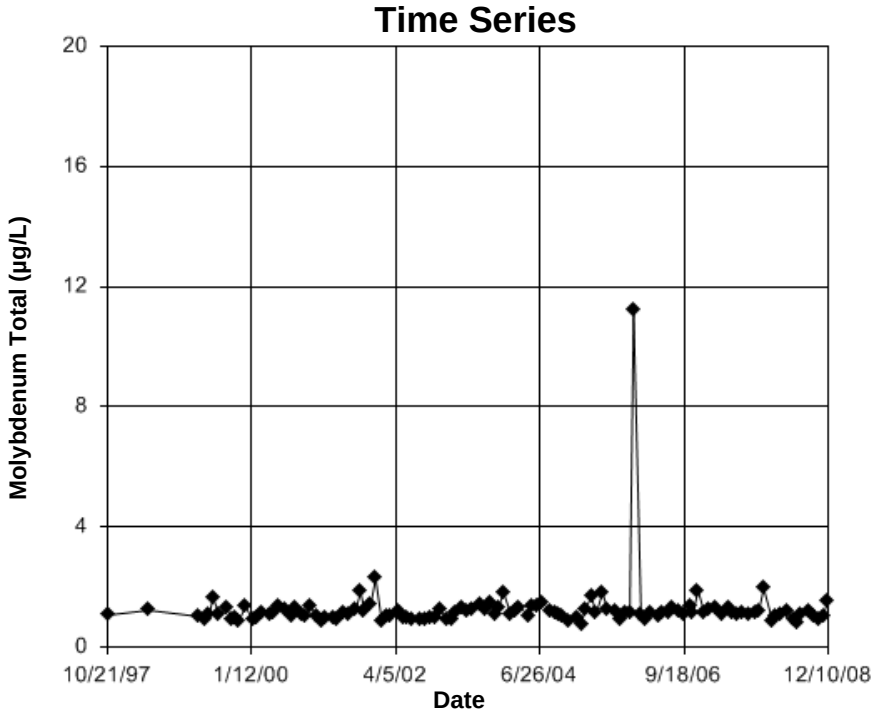


Figure E145 North Saskatchewan River: Molybdenum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.8099
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 10 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.8099
Adjusted Kruskal-Wallis statistic (H') = 0.8099

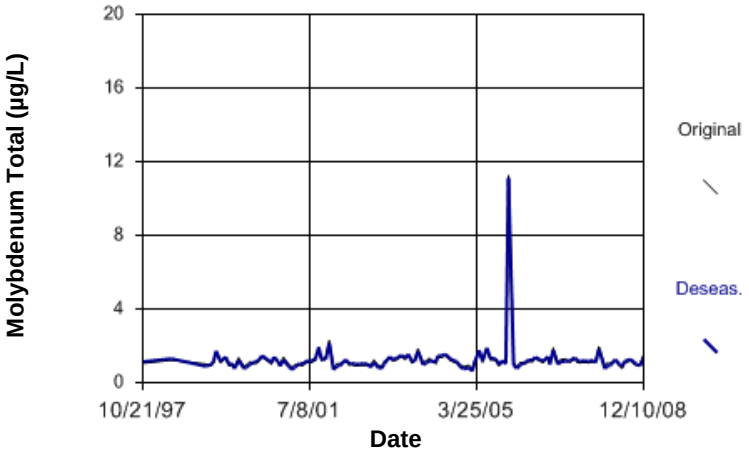


Figure E146 North Saskatchewan River: Molybdenum Total

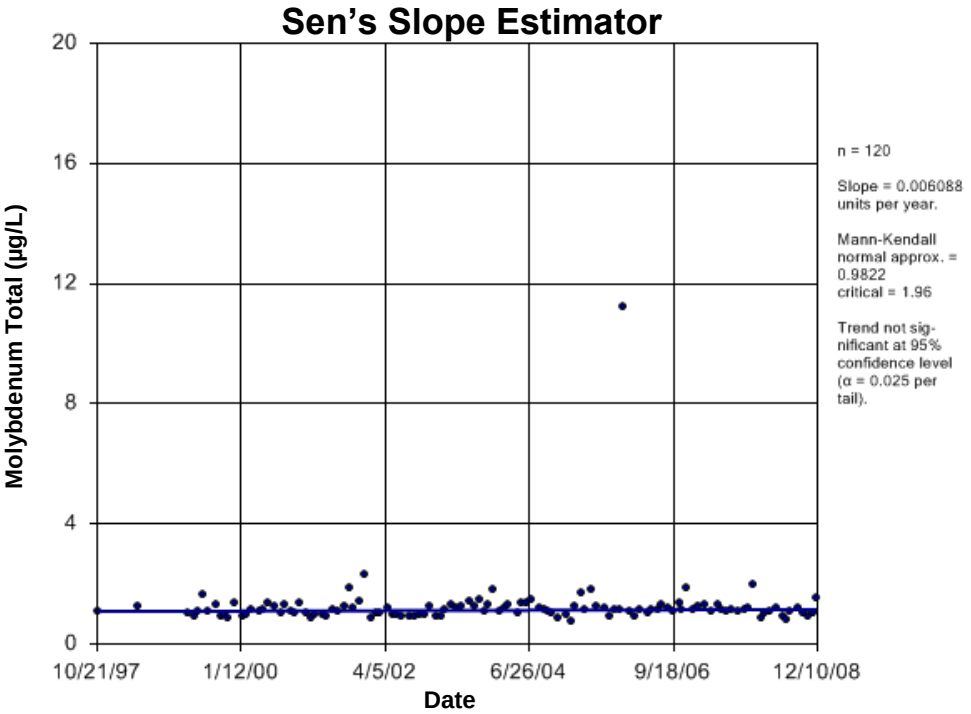


Figure E147 North Saskatchewan River: Molybdenum Total

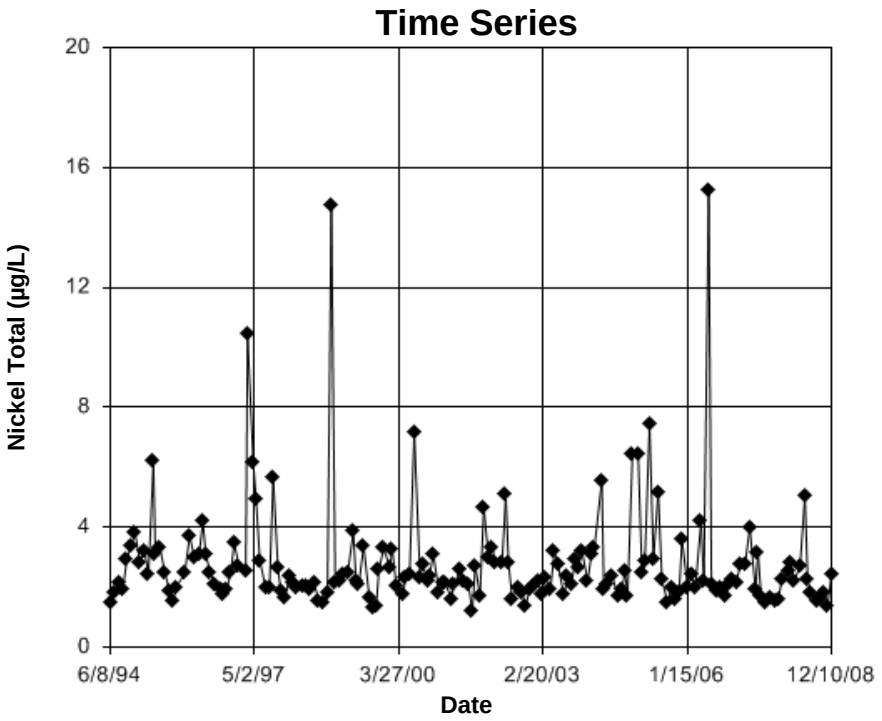


Figure E148 North Saskatchewan River: Nickel Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 8.365
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 15 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 8.365
Adjusted Kruskal-Wallis statistic (H') = 8.365

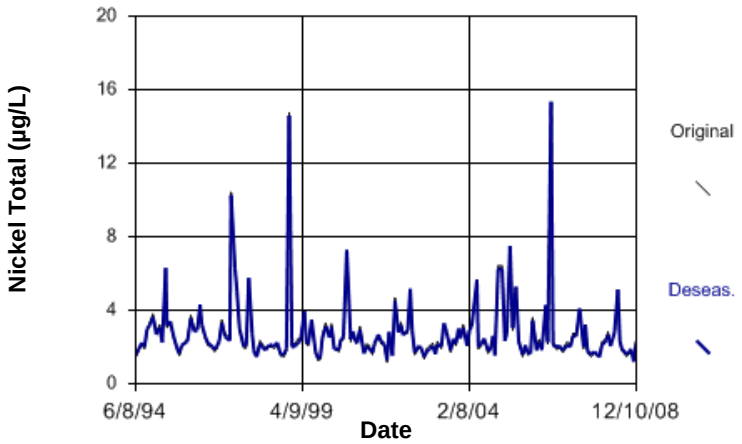


Figure E149 North Saskatchewan River: Nickel Total

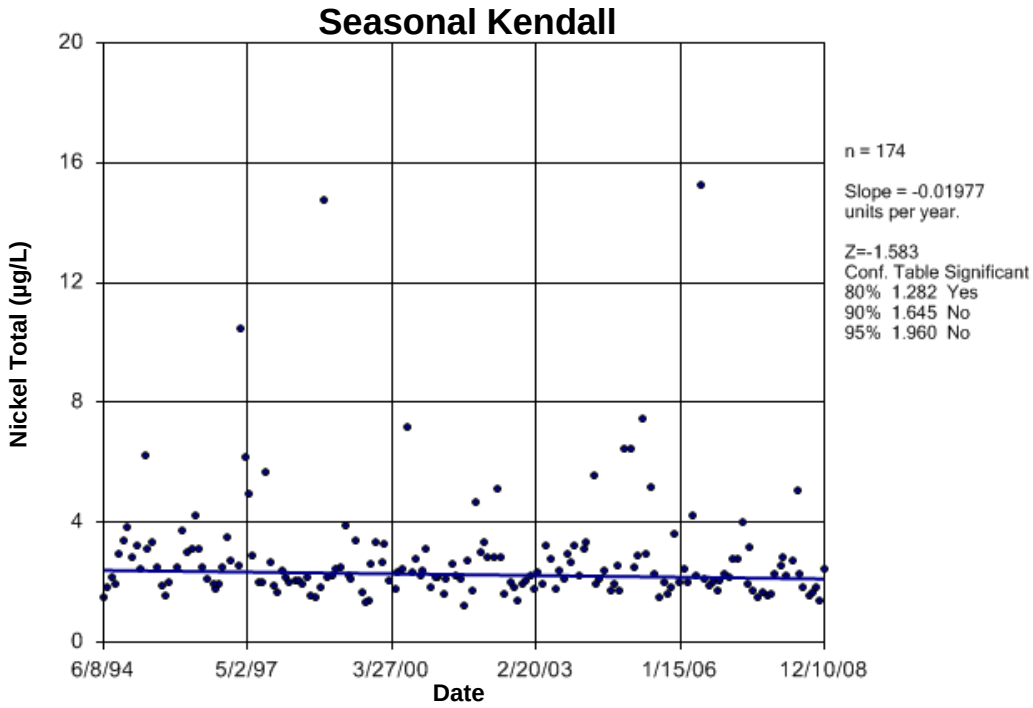


Figure E150 North Saskatchewan River: Nickel Total

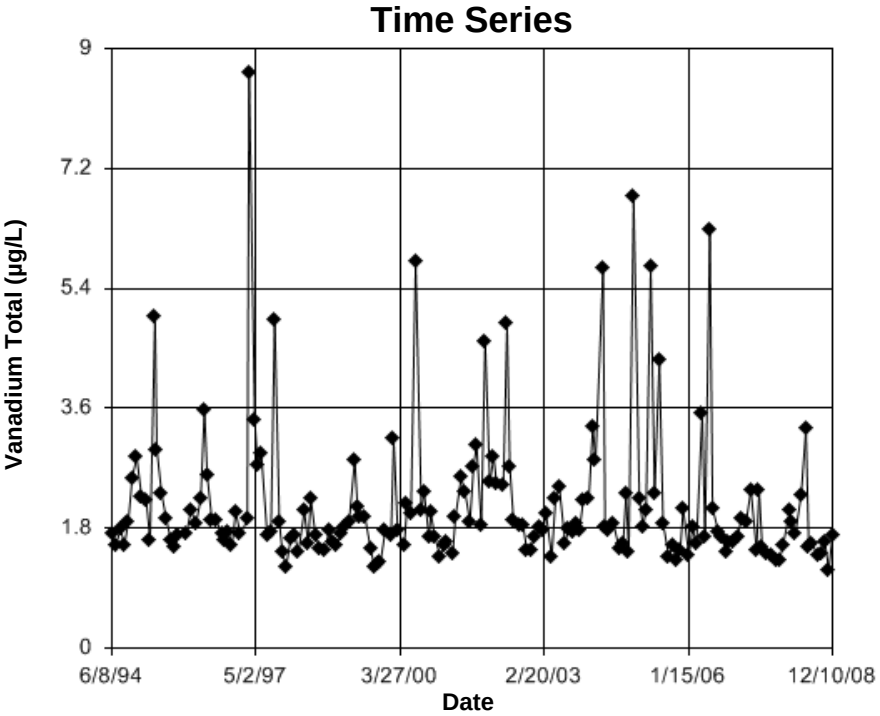


Figure E151 North Saskatchewan River: Vanadium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.681
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 8 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.681
Adjusted Kruskal-Wallis statistic (H') = 0.681

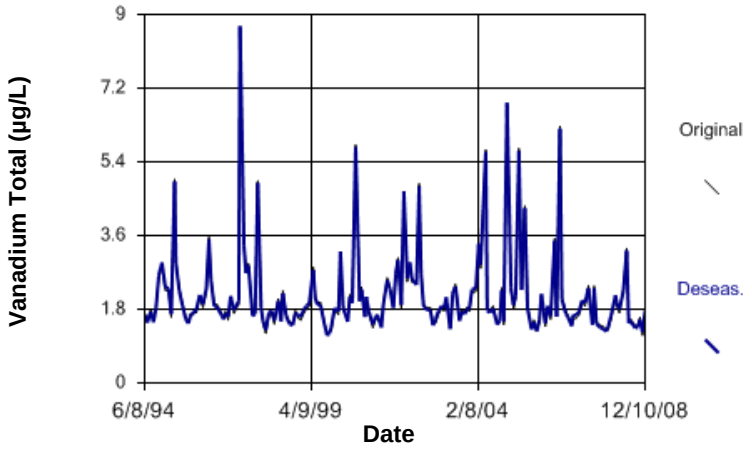


Figure E152 North Saskatchewan River: Vanadium Total

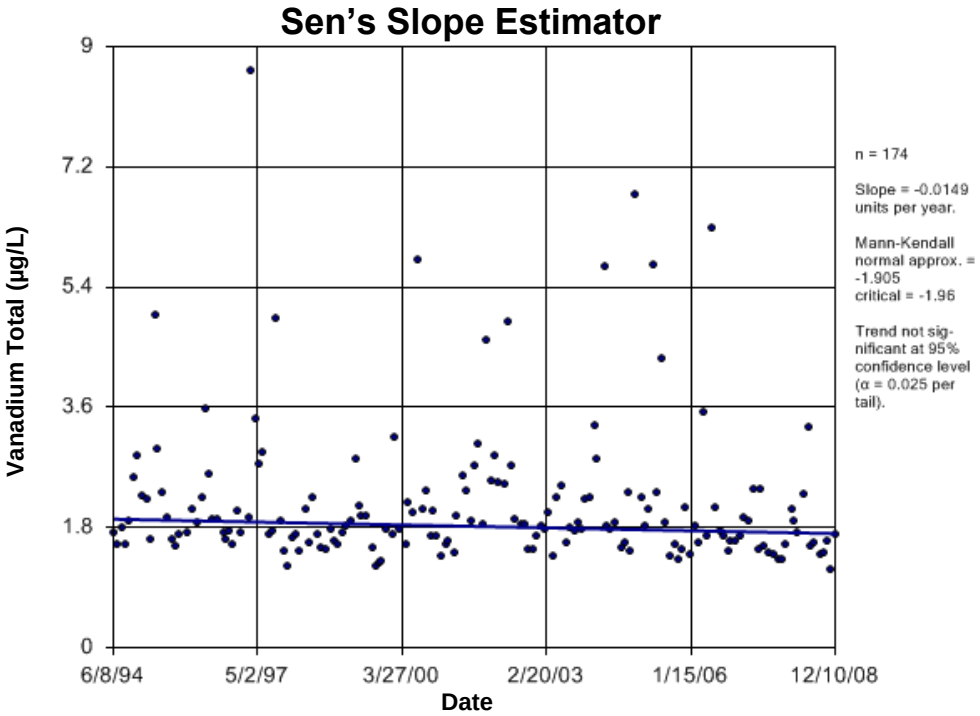


Figure E153 North Saskatchewan River: Vanadium Total

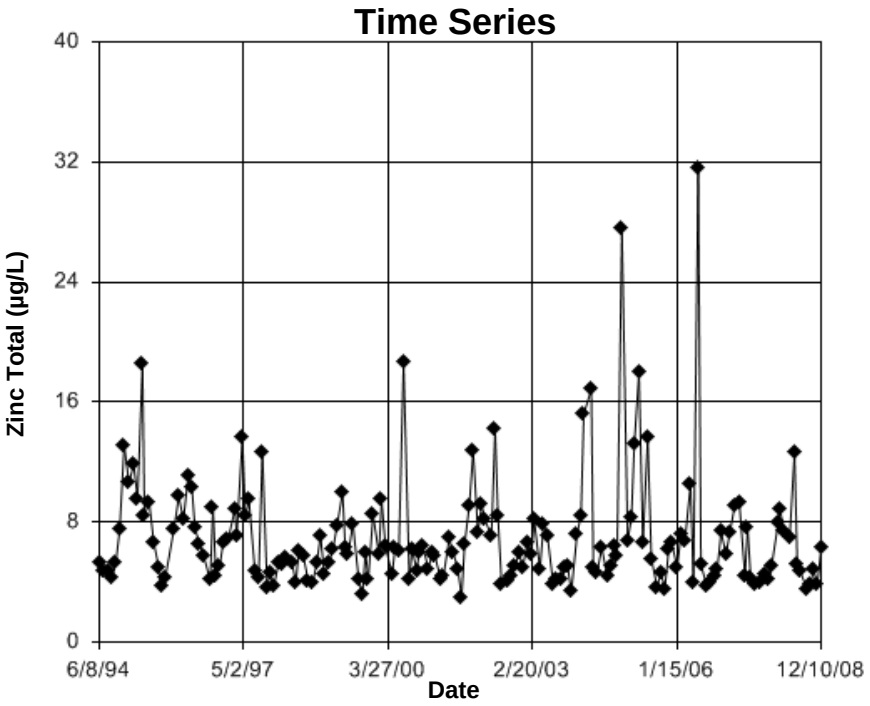


Figure E154 North Saskatchewan River: Zinc Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 14.97
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

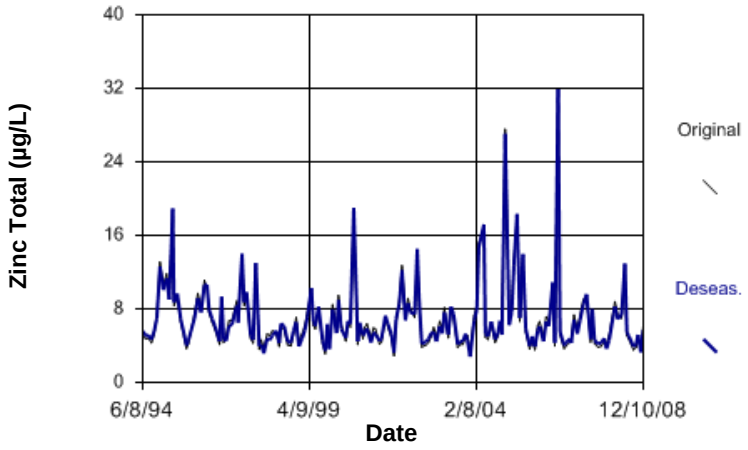


Figure E155 North Saskatchewan River: Zinc Total

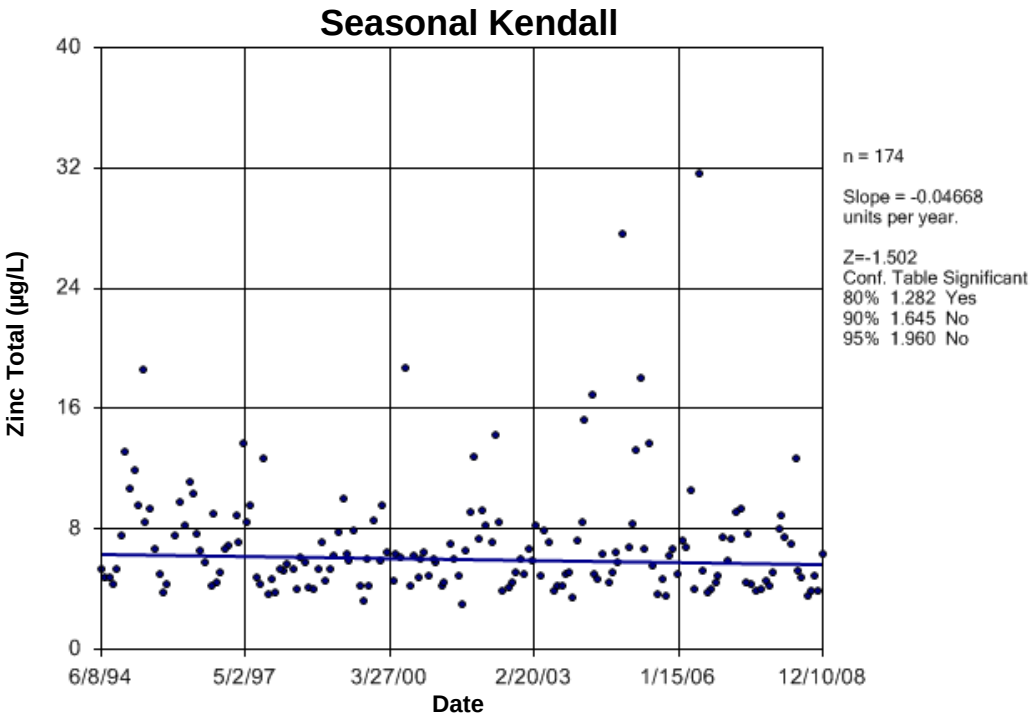


Figure E156 North Saskatchewan River: Zinc Total

Red Deer River (AB-SK)

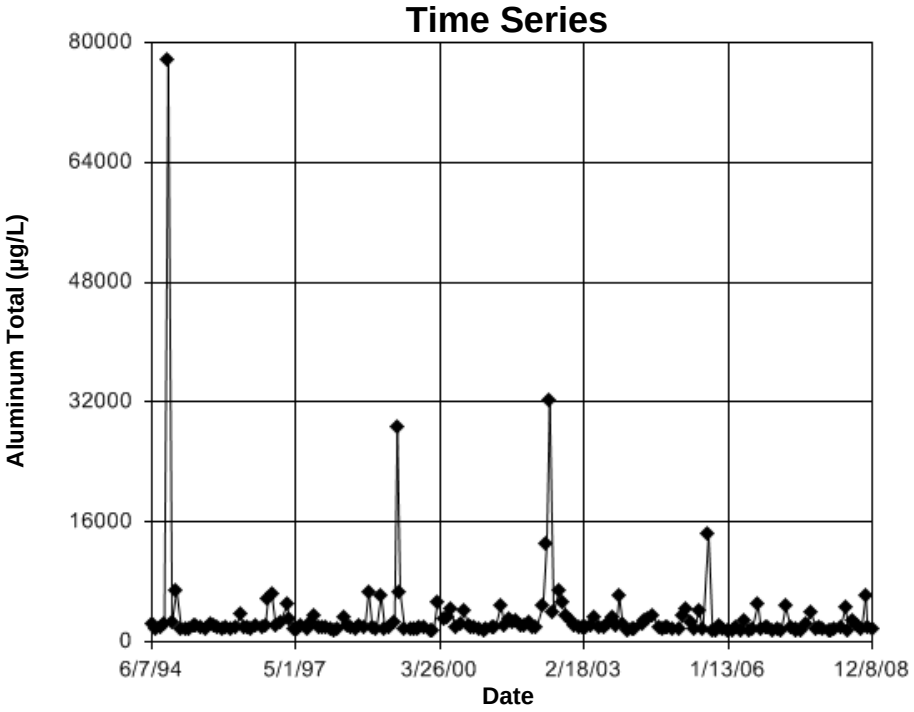


Figure E157 Red Deer River (AB-SK): Aluminum Total

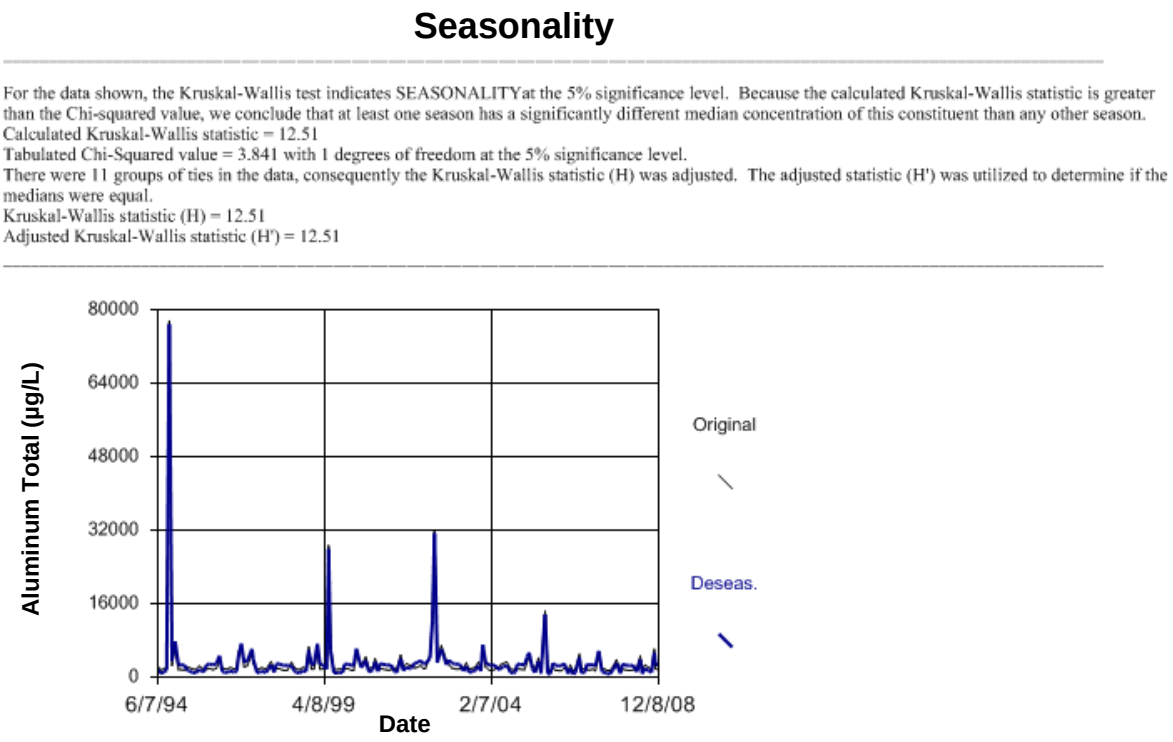


Figure E158 Red Deer River (AB-SK): Aluminum Total

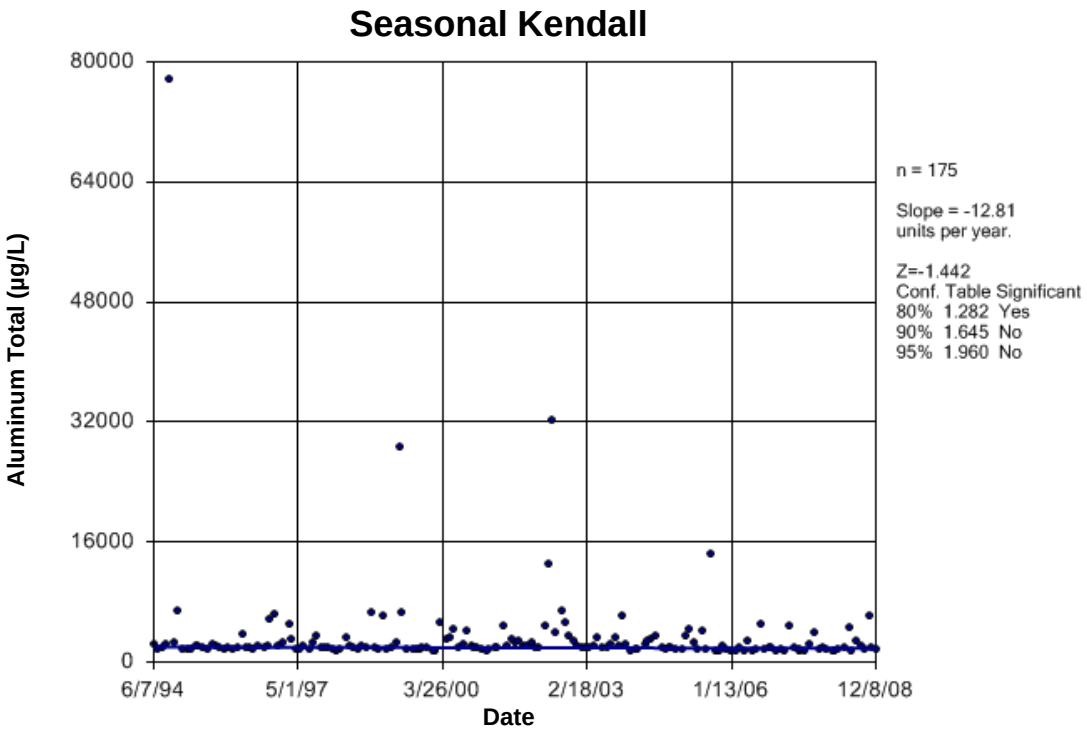


Figure E159 Red Deer River (AB-SK): Aluminum Total

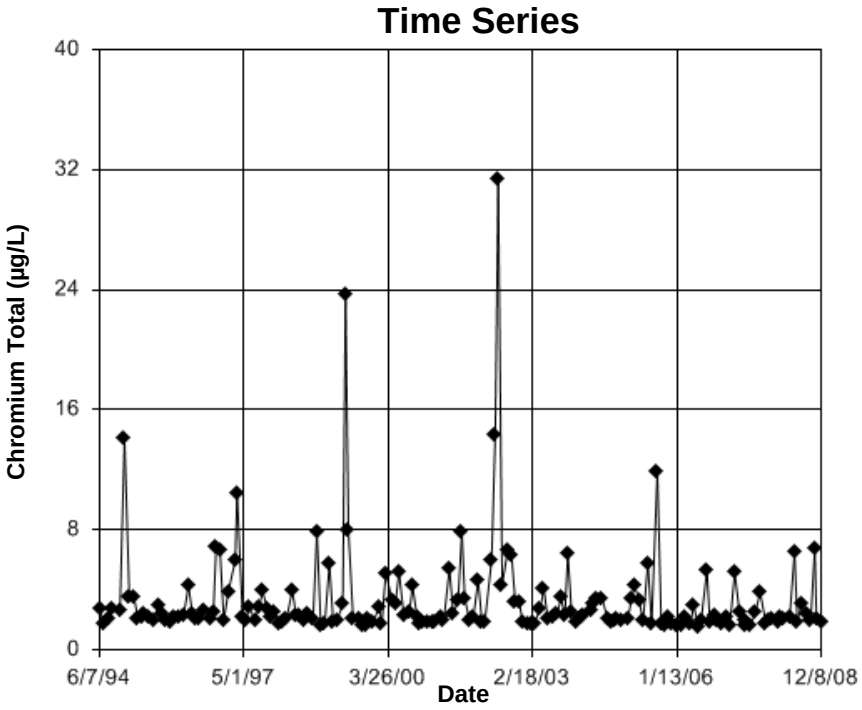


Figure E160 Red Deer River (AB-SK): Chromium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 10.09
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 11 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 10.09
Adjusted Kruskal-Wallis statistic (H') = 10.09

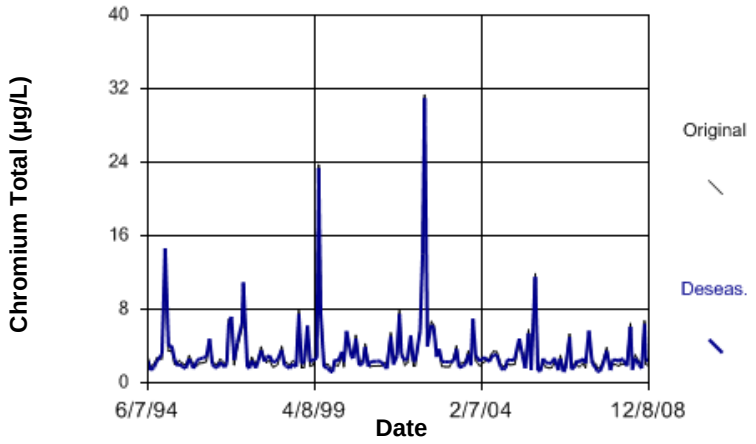


Figure E161 Red Deer River (AB-SK): Chromium Total

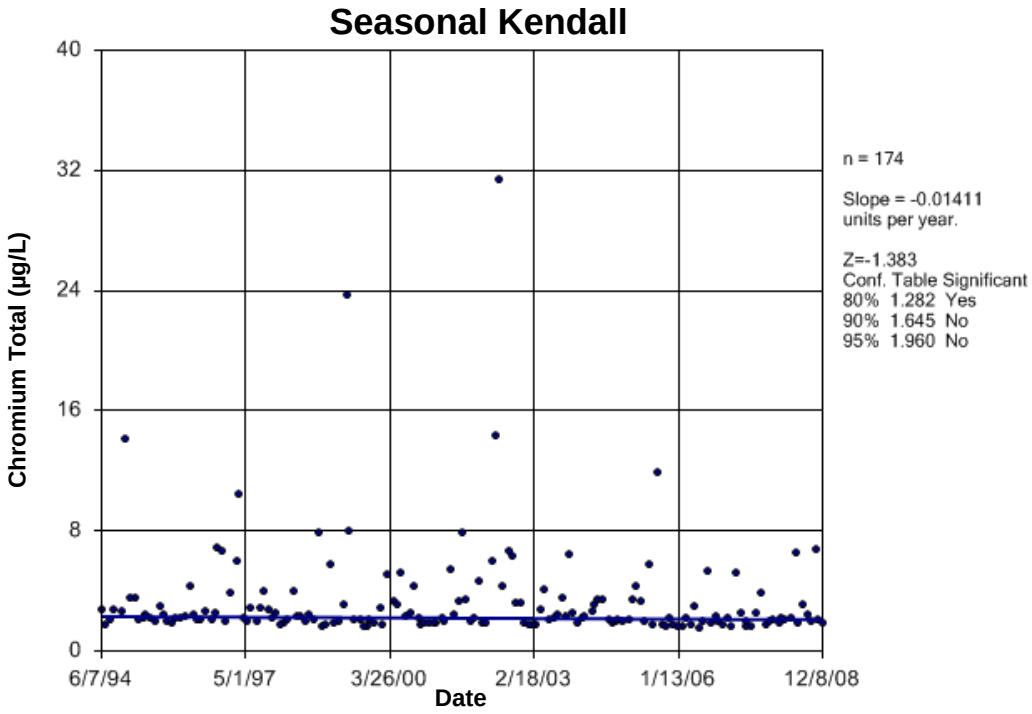


Figure E162 Red Deer River (AB-SK): Chromium Total

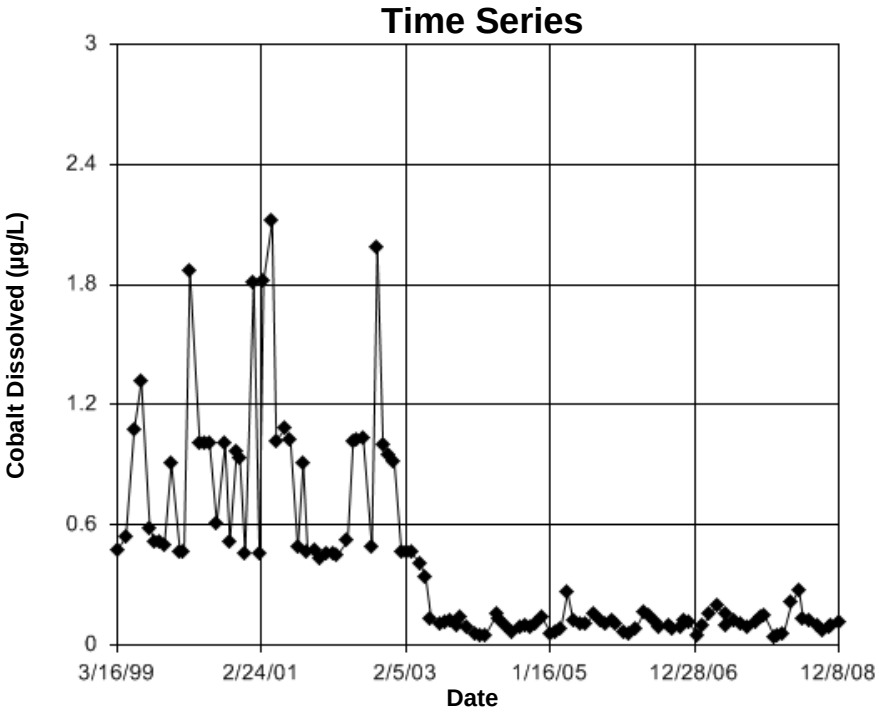


Figure E163 Red Deer River (AB-SK): Cobalt Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 3.144
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 5 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 3.144
Adjusted Kruskal-Wallis statistic (H') = 3.144

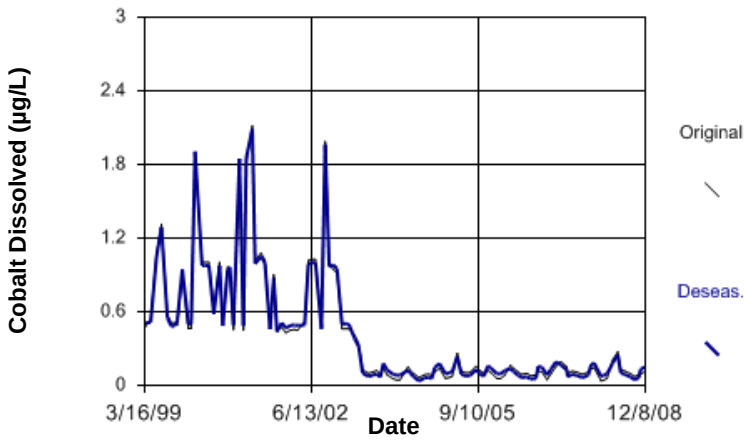


Figure E164 Red Deer River (AB-SK): Cobalt Dissolved

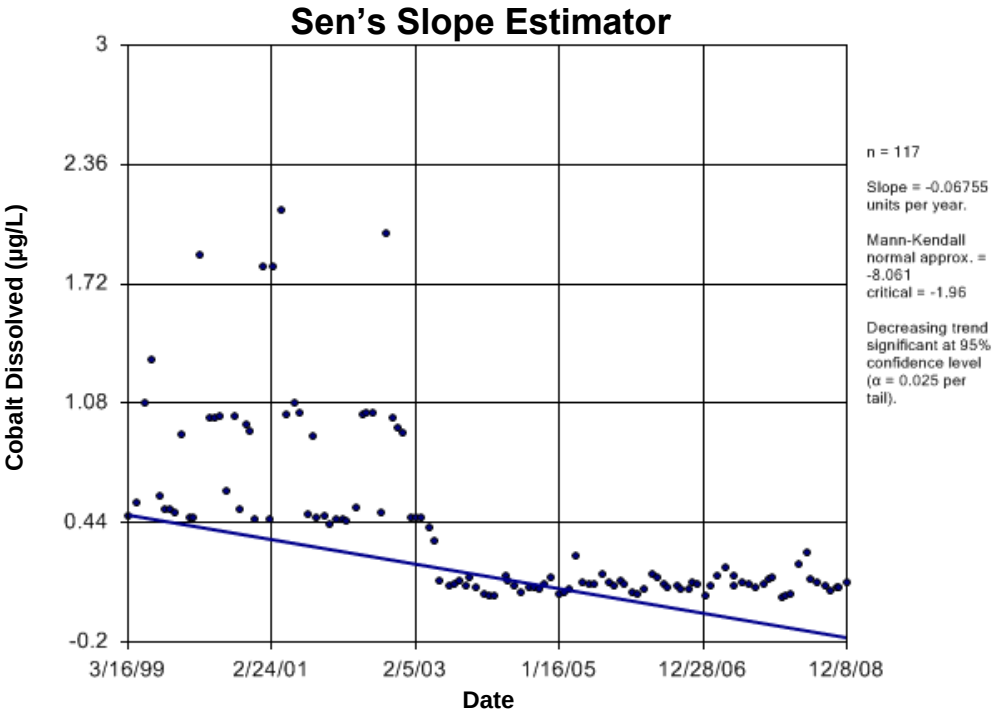


Figure E165 Red Deer River (AB-SK): Cobalt Dissolved

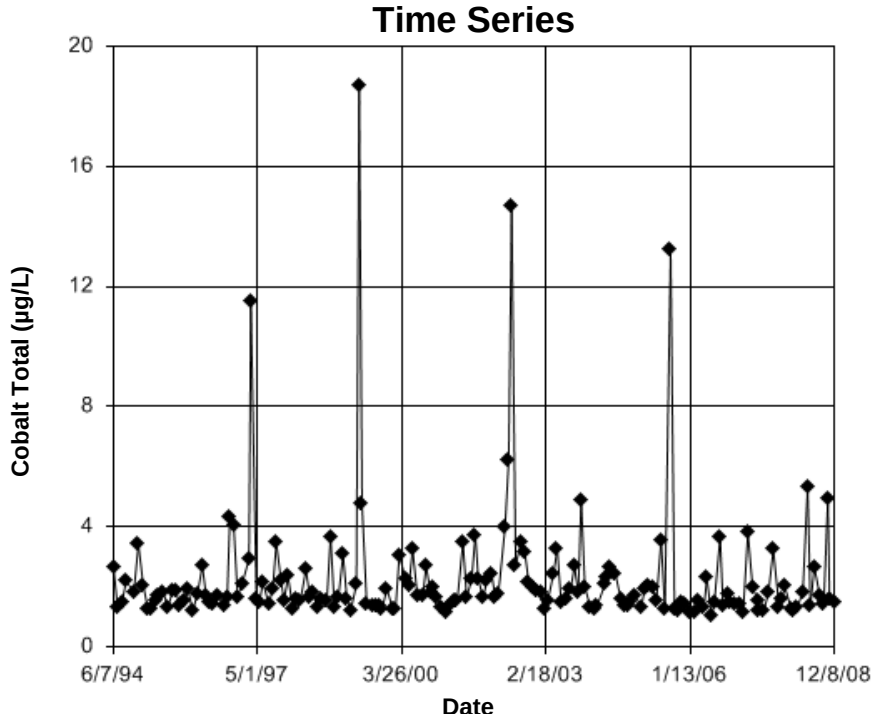


Figure E166 Red Deer River (AB-SK): Cobalt Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 8.4
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 8 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 8.4
Adjusted Kruskal-Wallis statistic (H') = 8.4

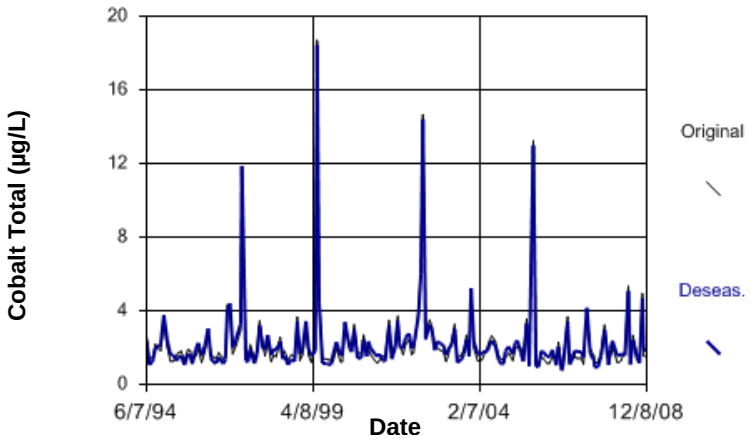


Figure E167 Red Deer River (AB-SK): Cobalt Total

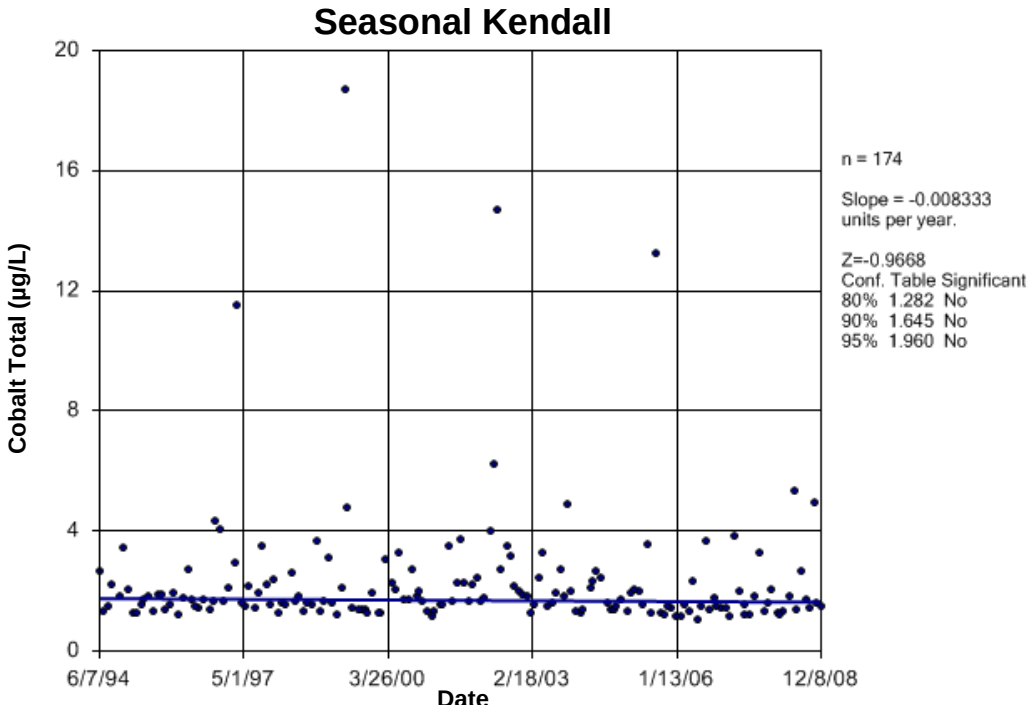


Figure E168 Red Deer River (AB-SK): Cobalt Total

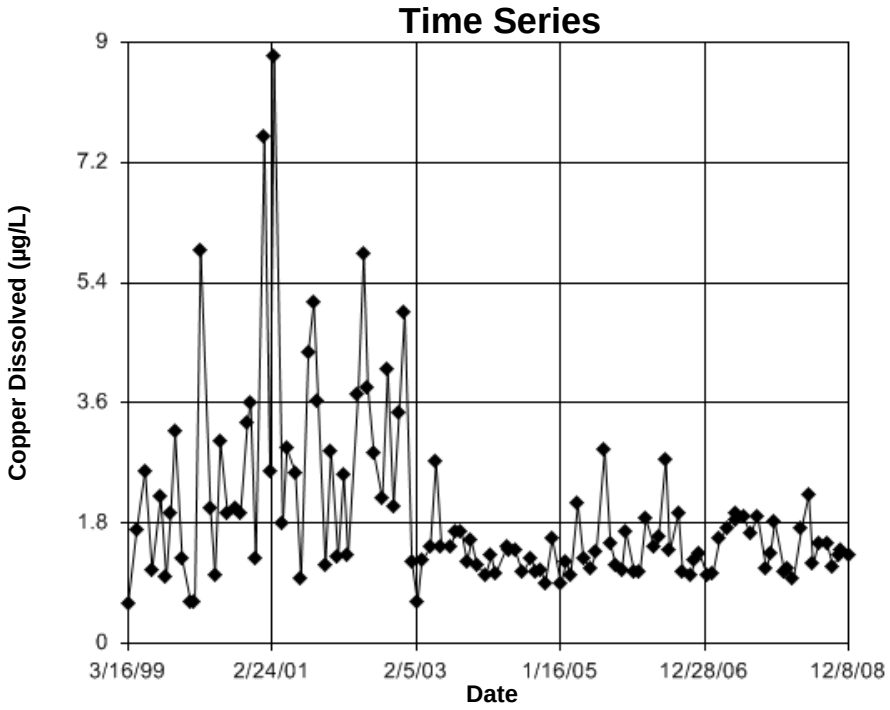


Figure E169 Red Deer River (AB-SK): Copper Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 8.838
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 9 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 8.838
Adjusted Kruskal-Wallis statistic (H') = 8.838

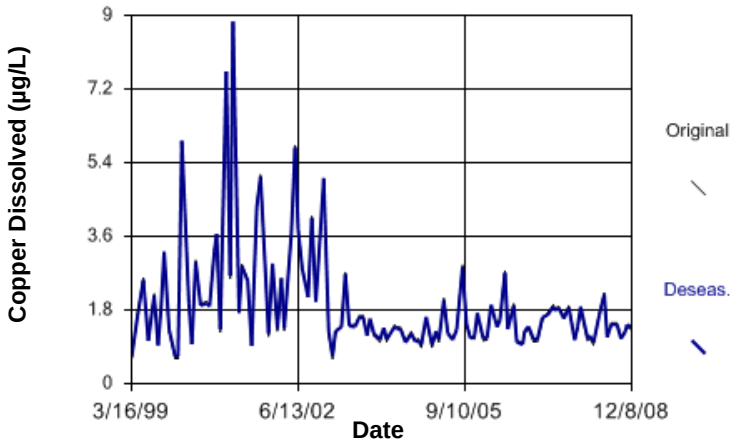


Figure E170 Red Deer River (AB-SK): Copper Dissolved

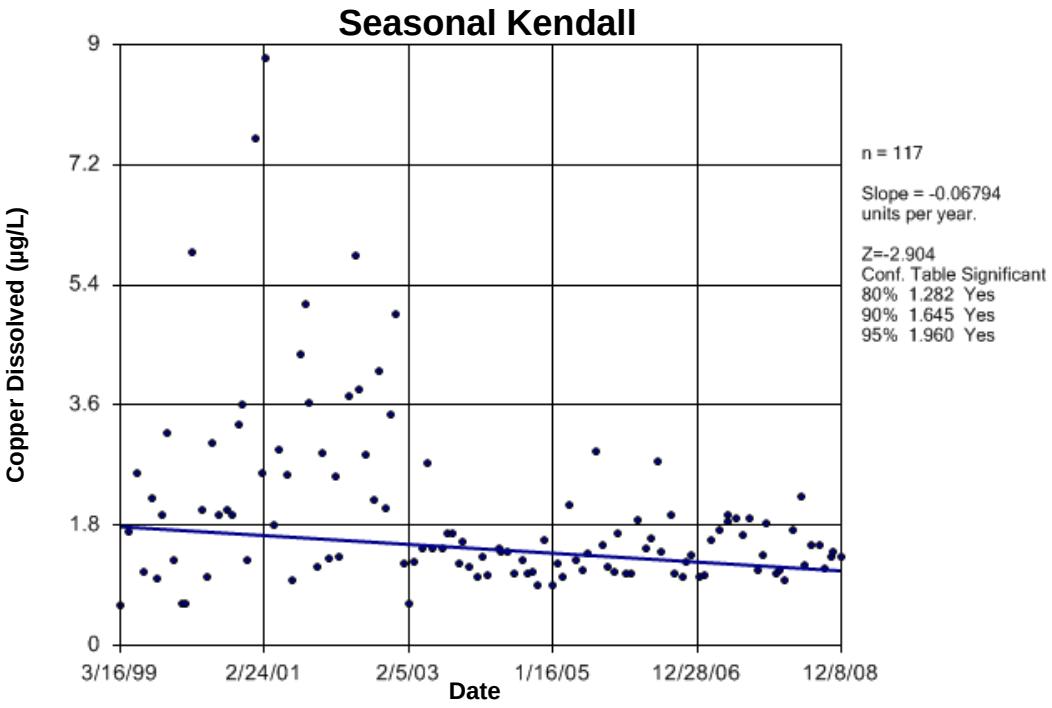


Figure E171 Red Deer River (AB-SK): Copper Dissolved

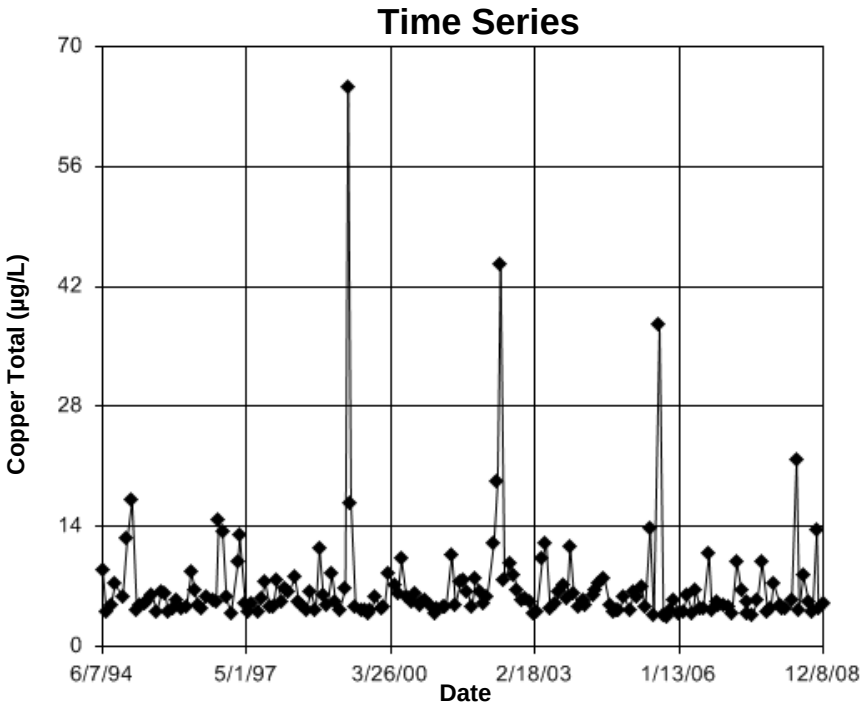


Figure E172 Red Deer River (AB-SK): Copper Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 2.251
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 2.251
Adjusted Kruskal-Wallis statistic (H') = 2.251

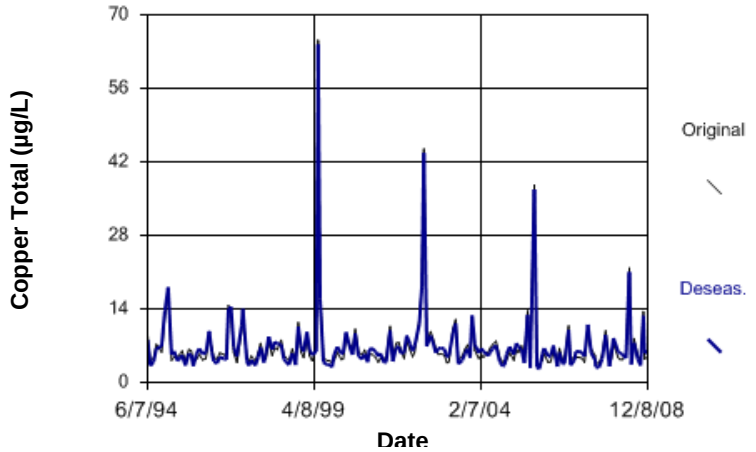


Figure E173 Red Deer River (AB-SK): Copper Total

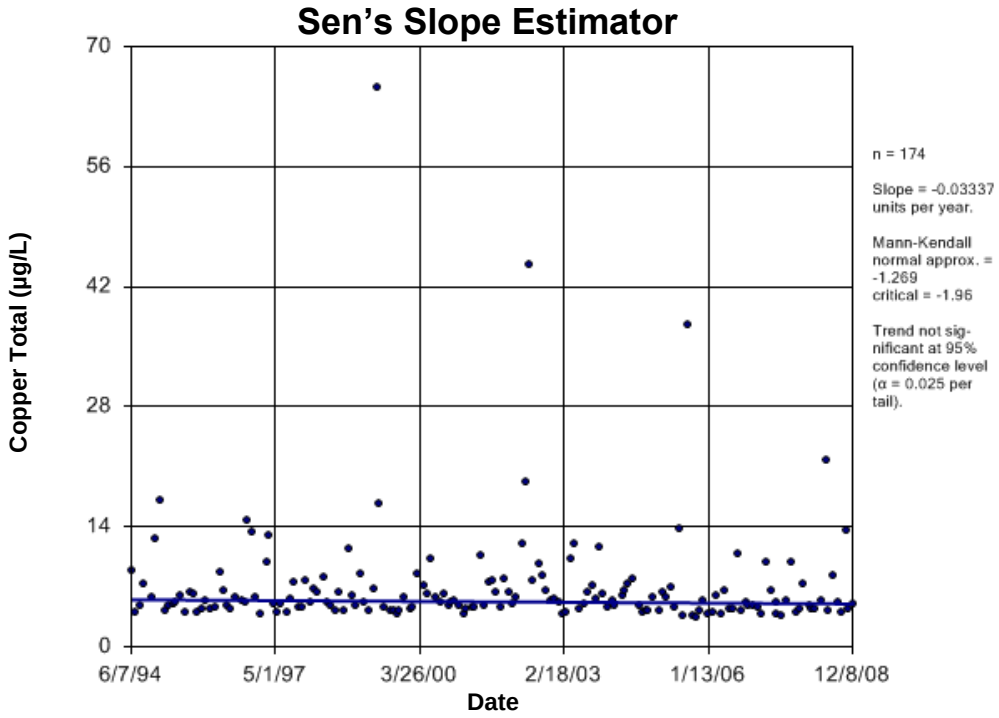


Figure E174 Red Deer River (AB-SK): Copper Total

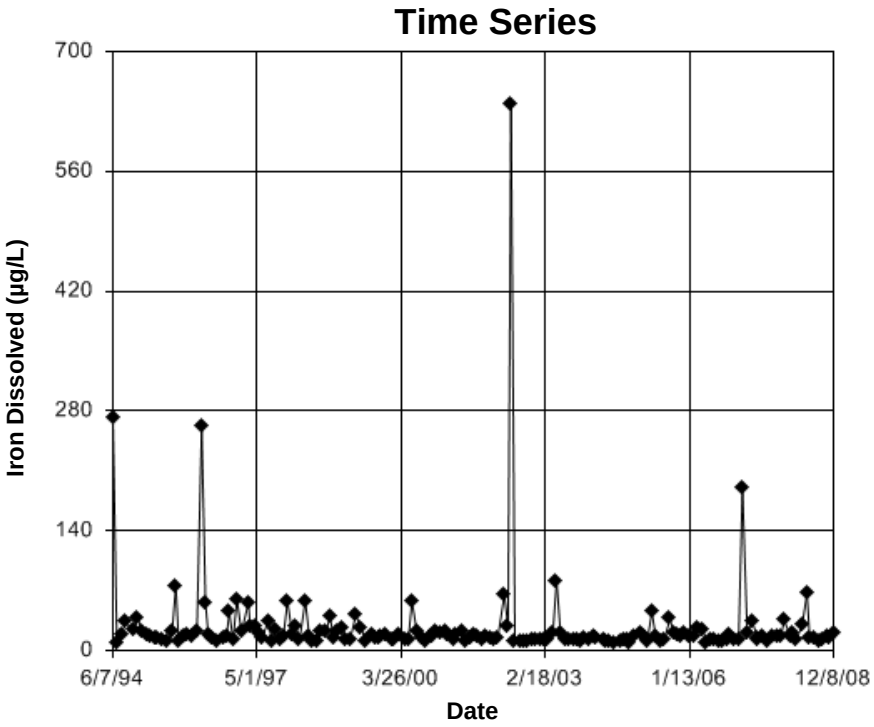


Figure E175 Red Deer River (AB-SK): Iron Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 2.357
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 13 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 2.357
Adjusted Kruskal-Wallis statistic (H') = 2.357

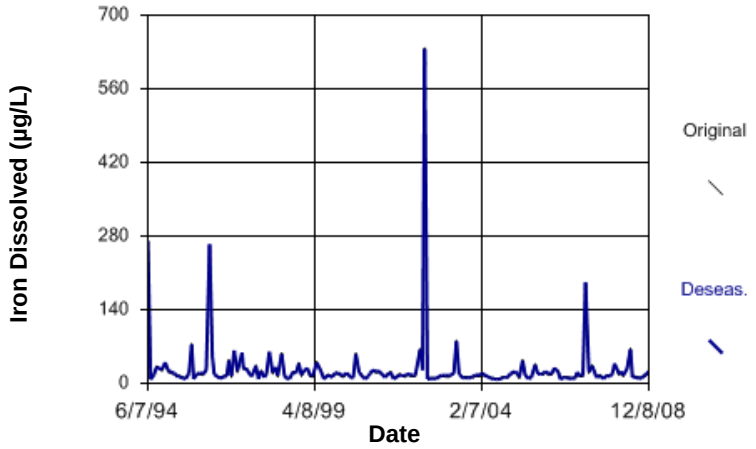


Figure E176 Red Deer River (AB-SK): Iron Dissolved

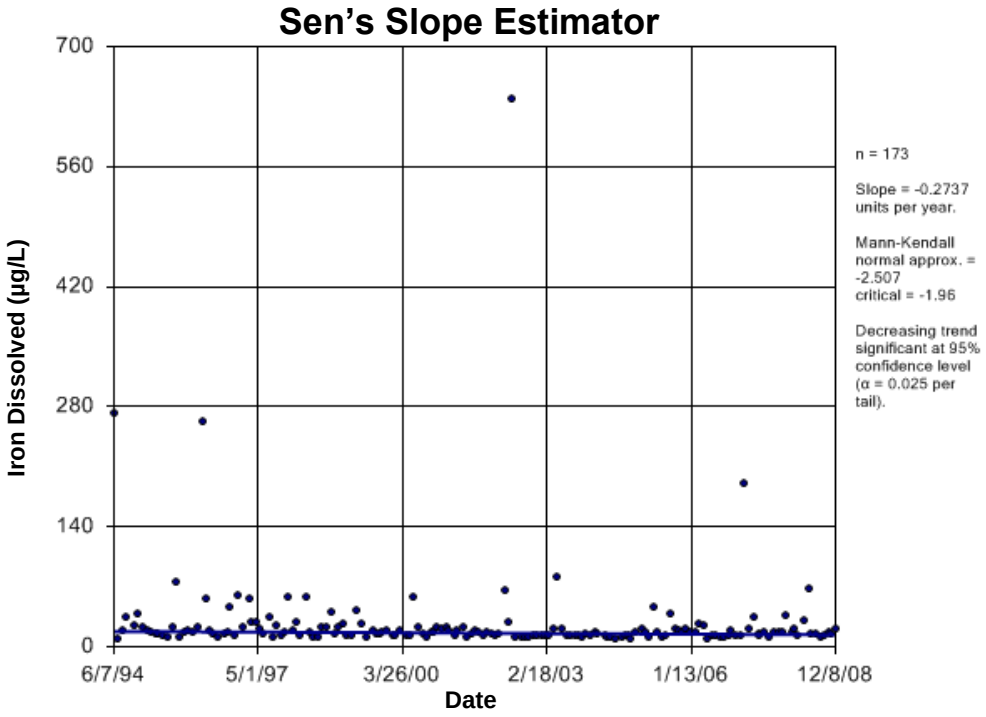


Figure E177 Red Deer River (AB-SK): Iron Dissolved

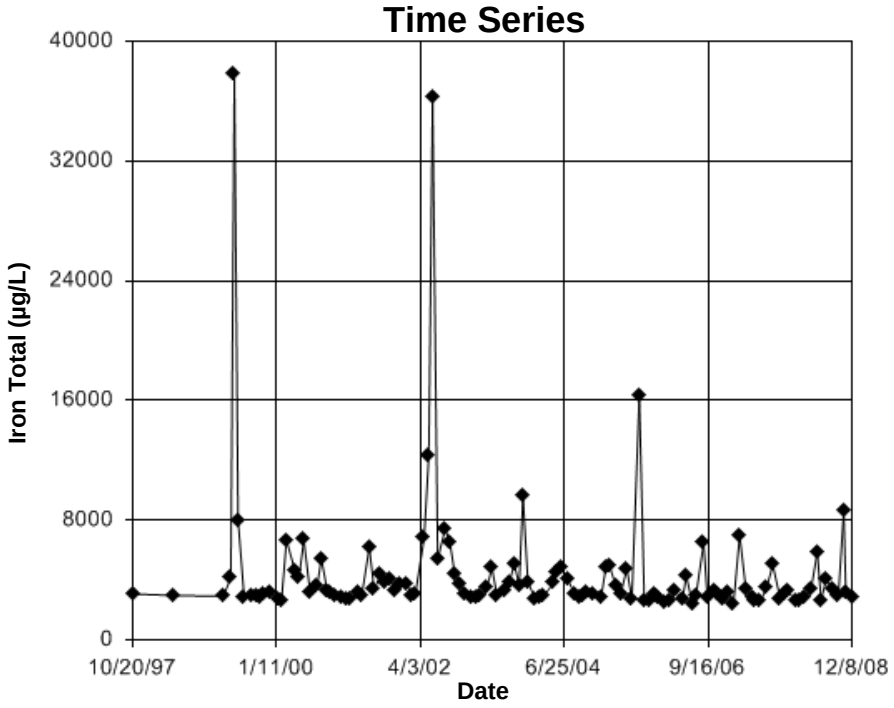


Figure E178 Red Deer River (AB-SK): Iron Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 12.6
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 12.59
Adjusted Kruskal-Wallis statistic (H') = 12.6

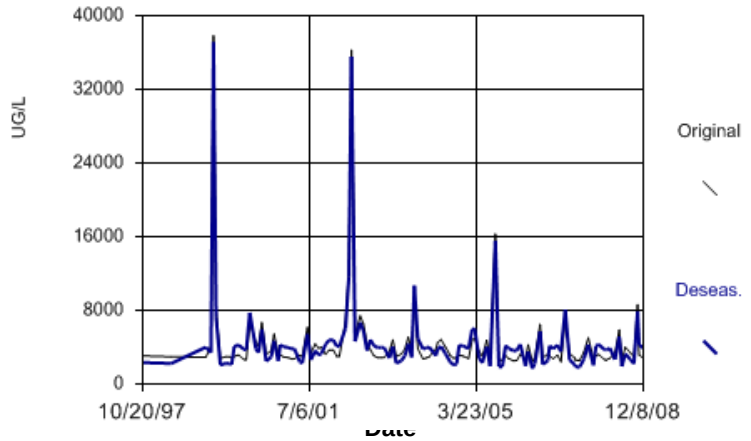


Figure E179 Red Deer River (AB-SK): Iron Total

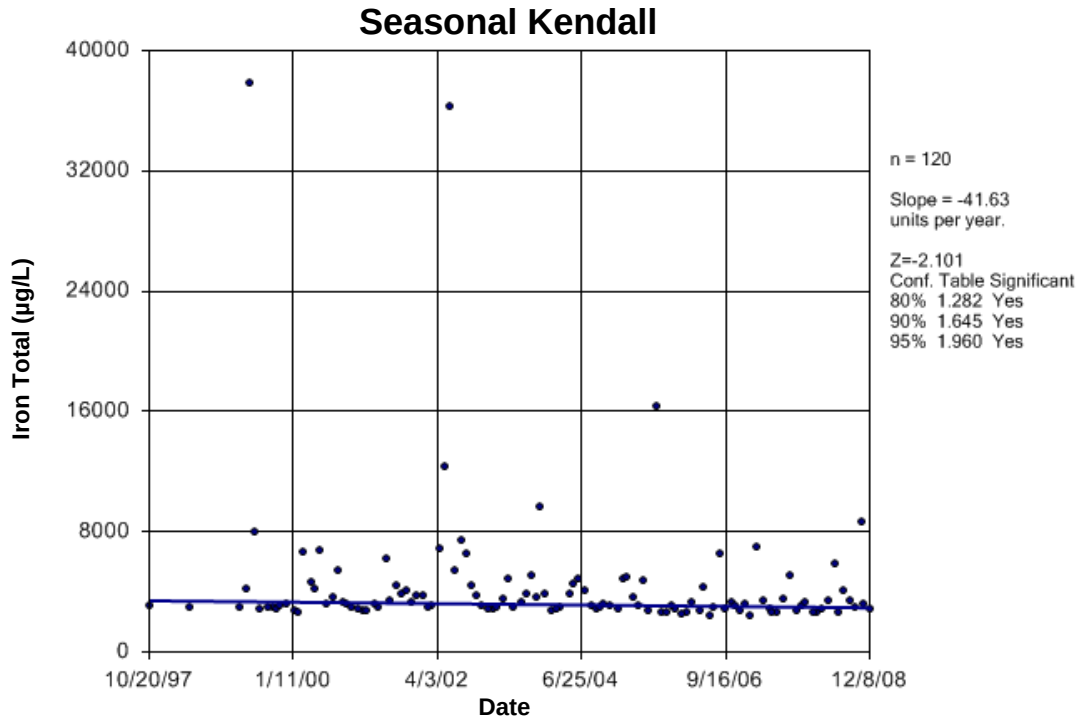


Figure E180 Red Deer River (AB-SK): Iron Total

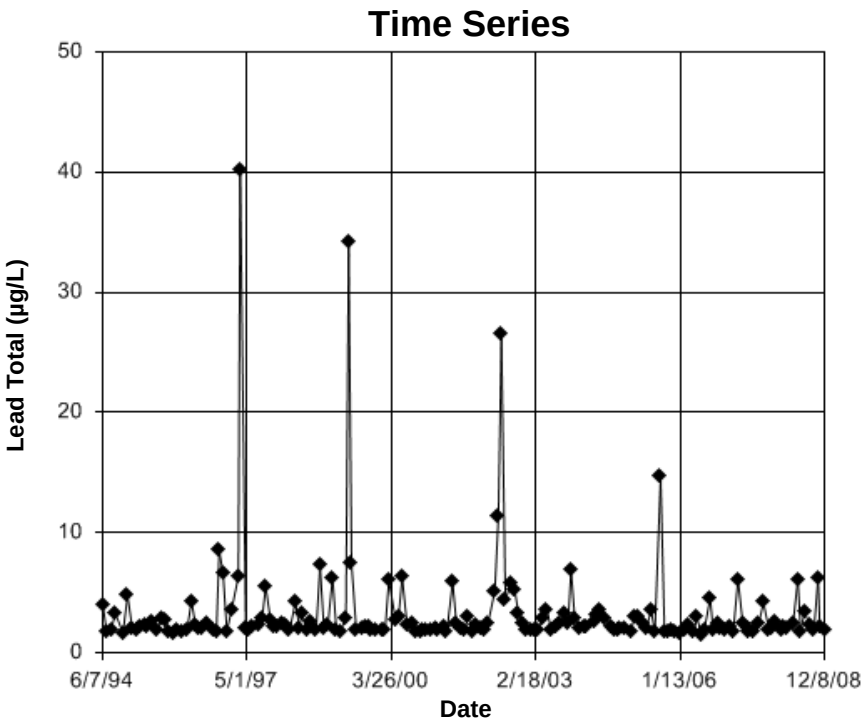


Figure E181 Red Deer River (AB-SK): Lead Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 8.995
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 12 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 8.995
Adjusted Kruskal-Wallis statistic (H') = 8.995

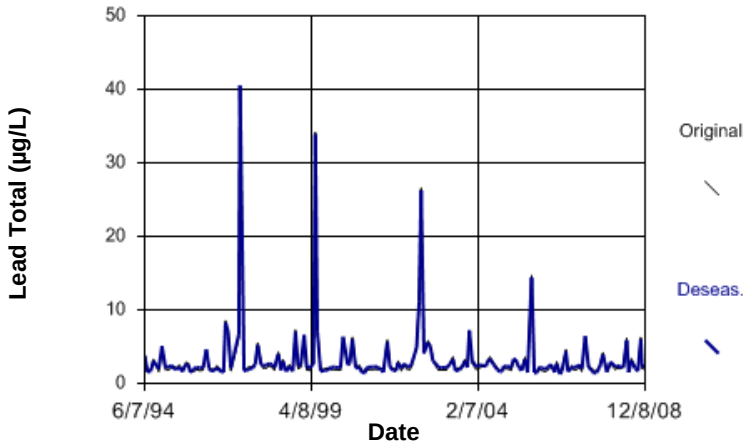


Figure E182 Red Deer River (AB-SK): Lead Total

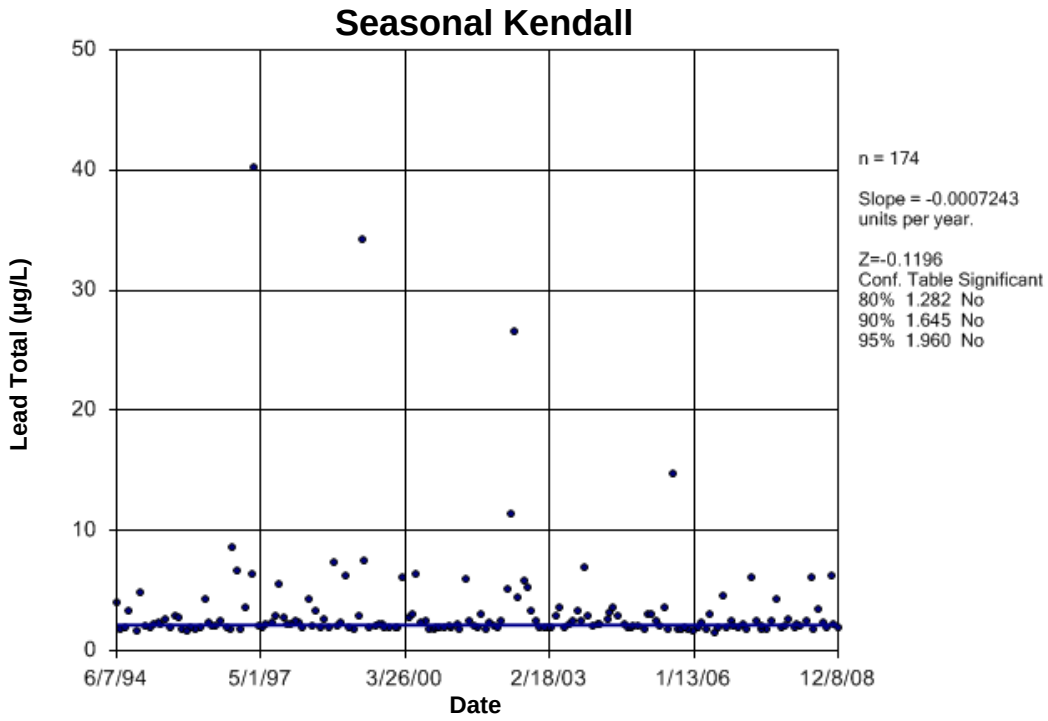


Figure E183 Red Deer River (AB-SK): Lead Total

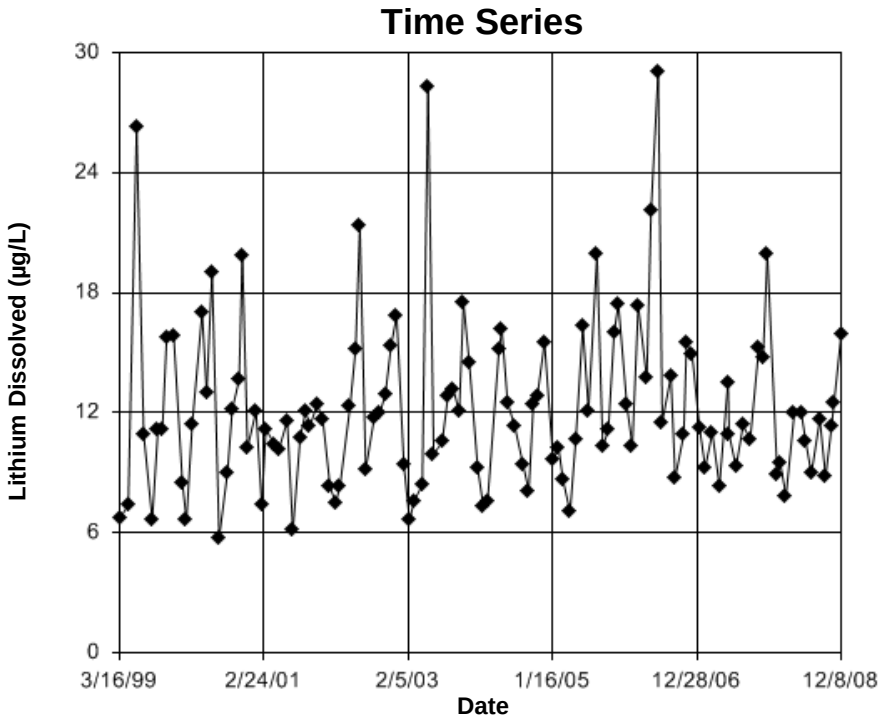


Figure E184 Red Deer River (AB-SK): Lithium Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.4061
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.4061
Adjusted Kruskal-Wallis statistic (H') = 0.4061

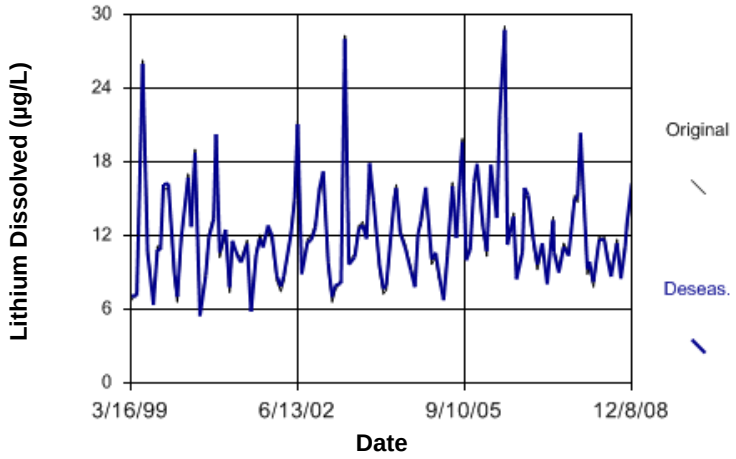


Figure E185 Red Deer River (AB-SK): Lithium Dissolved

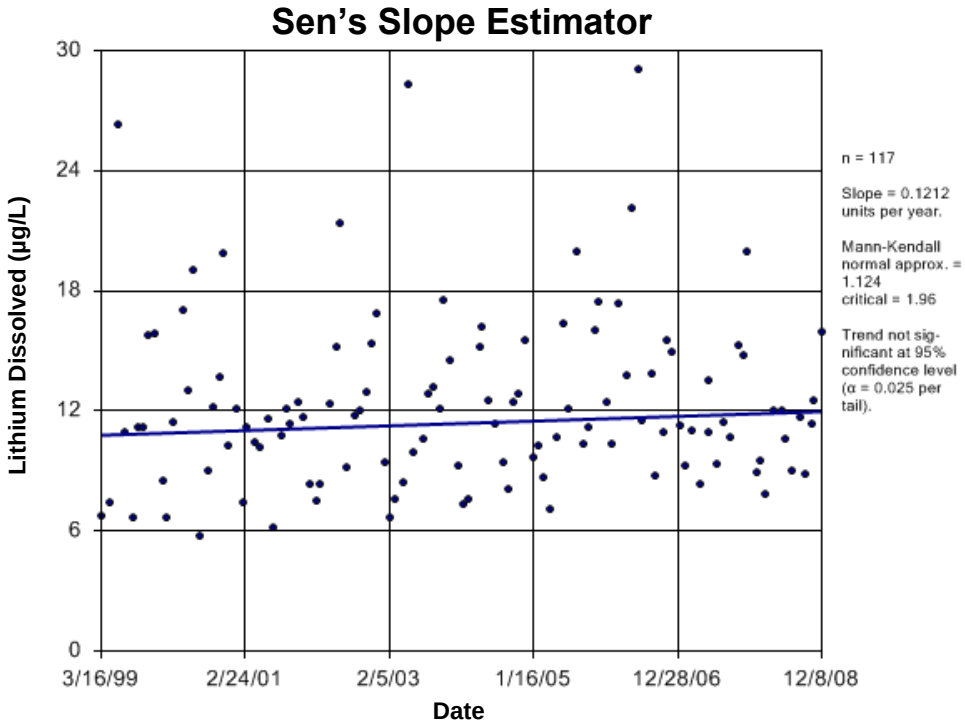


Figure E186 Red Deer River (AB-SK): Lithium Dissolved

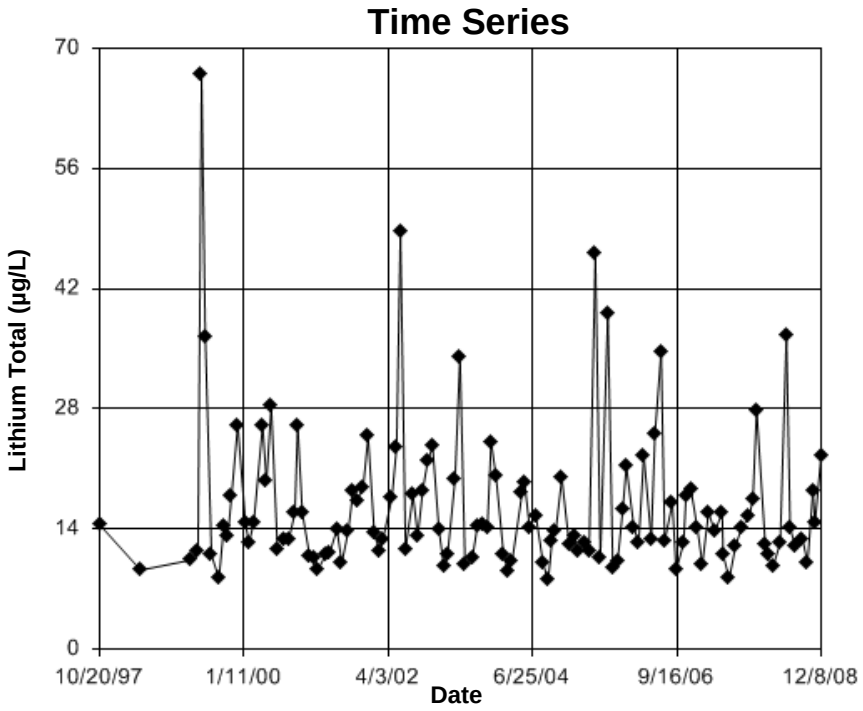


Figure E187 Red Deer River (AB-SK): Lithium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.05811
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.05811
Adjusted Kruskal-Wallis statistic (H') = 0.05811

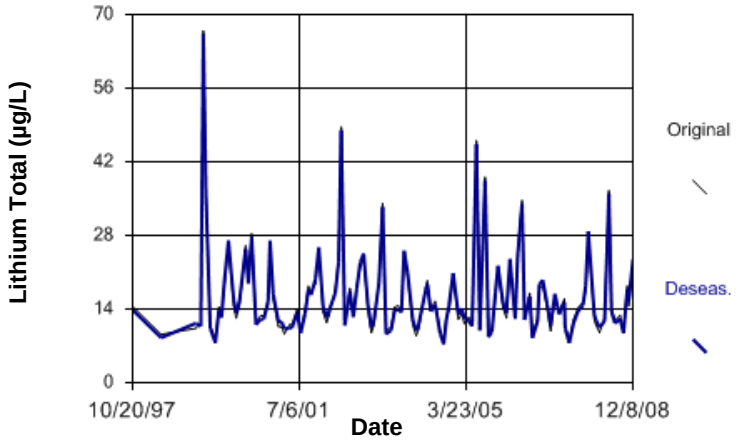


Figure E188 Red Deer River (AB-SK): Lithium Total

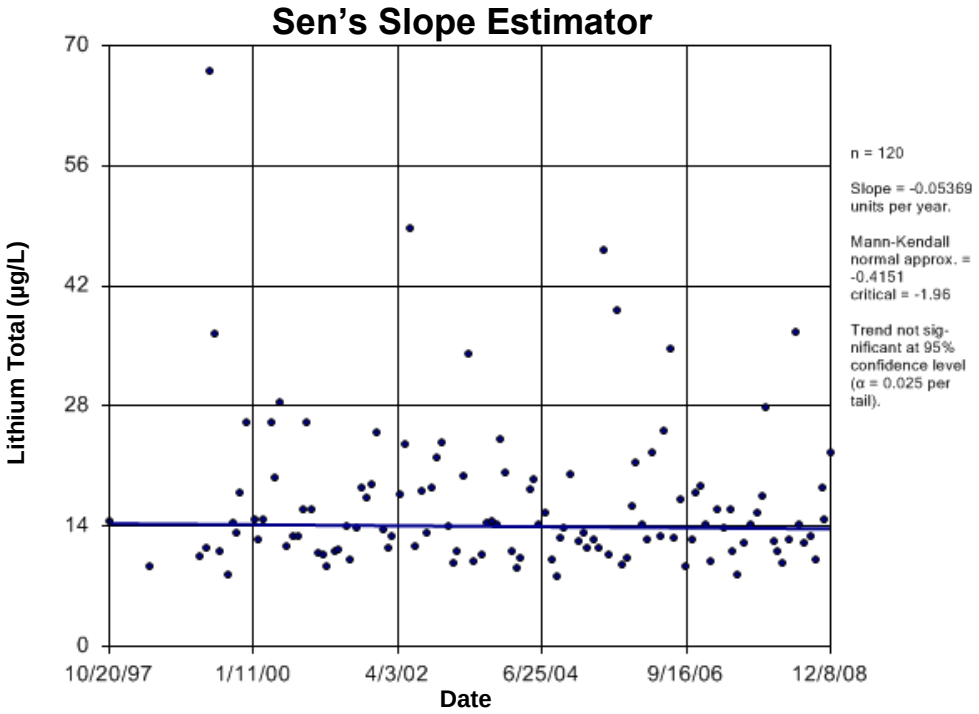


Figure E189 Red Deer River (AB-SK): Lithium Total

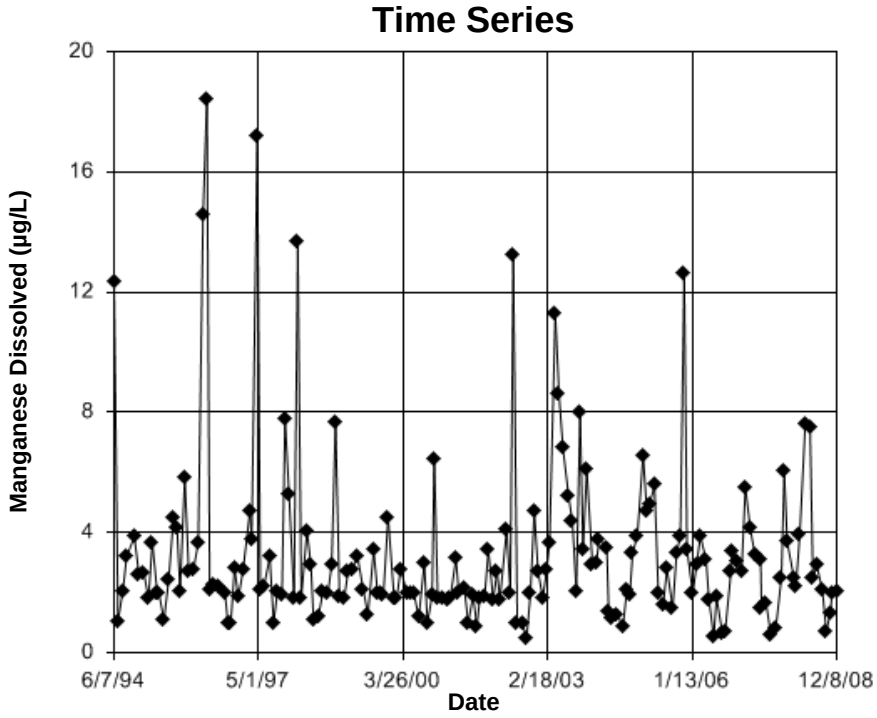


Figure E190 Red Deer River (AB-SK): Manganese Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 14.39
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 6 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 14.39
Adjusted Kruskal-Wallis statistic (H') = 14.39

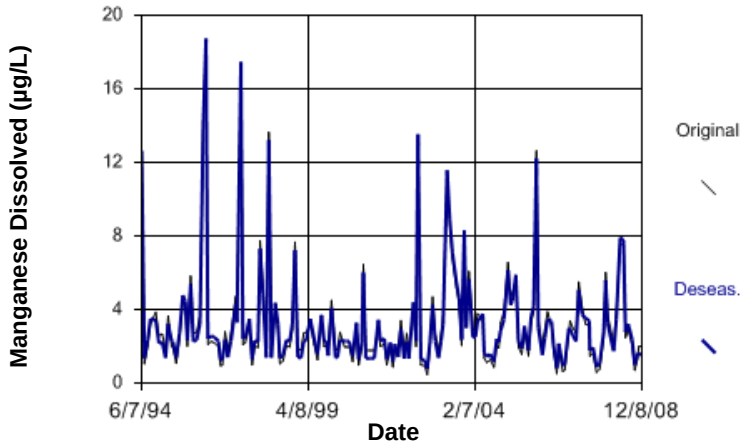


Figure E191 Red Deer River (AB-SK): Manganese Dissolved

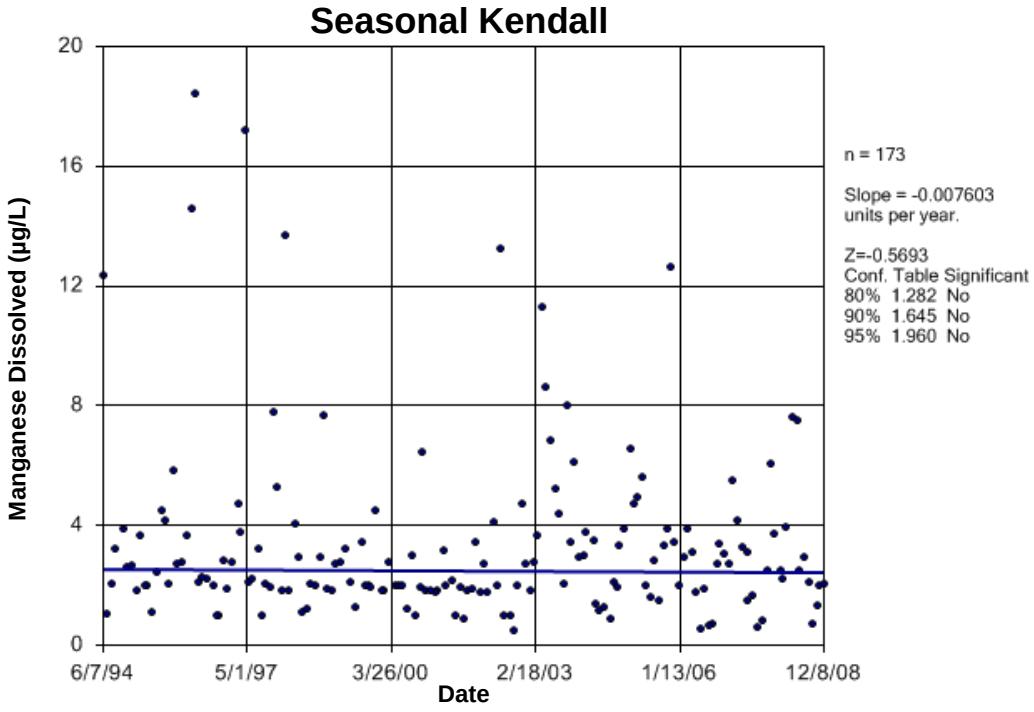


Figure E192 Red Deer River (AB-SK): Manganese Dissolved

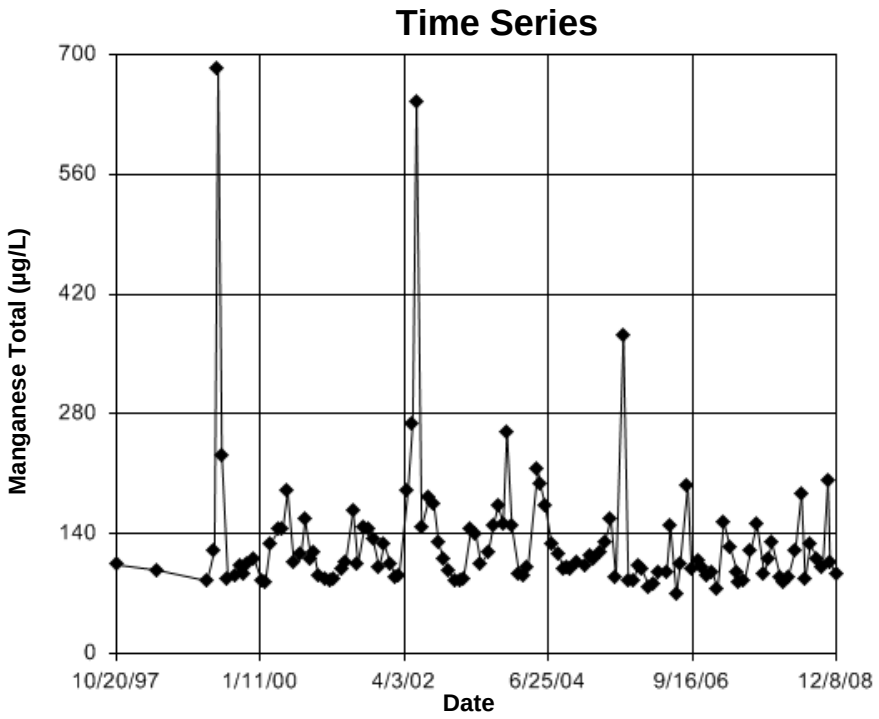


Figure E193 Red Deer River (AB-SK): Manganese Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 22.53
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 22.53
Adjusted Kruskal-Wallis statistic (H') = 22.53

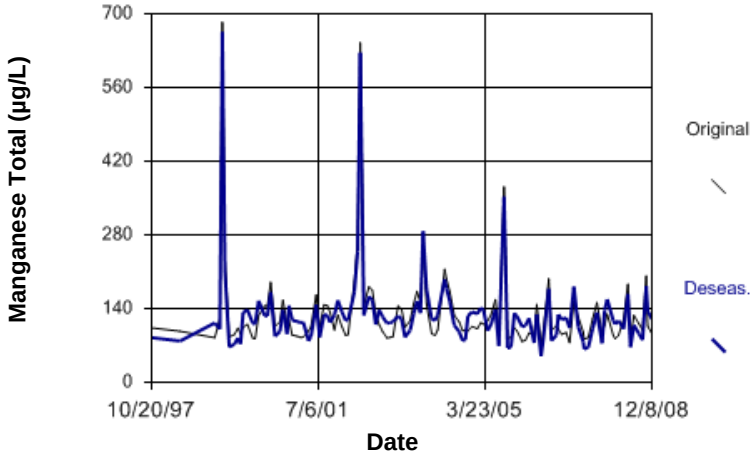


Figure E194 Red Deer River (AB-SK): Manganese Total

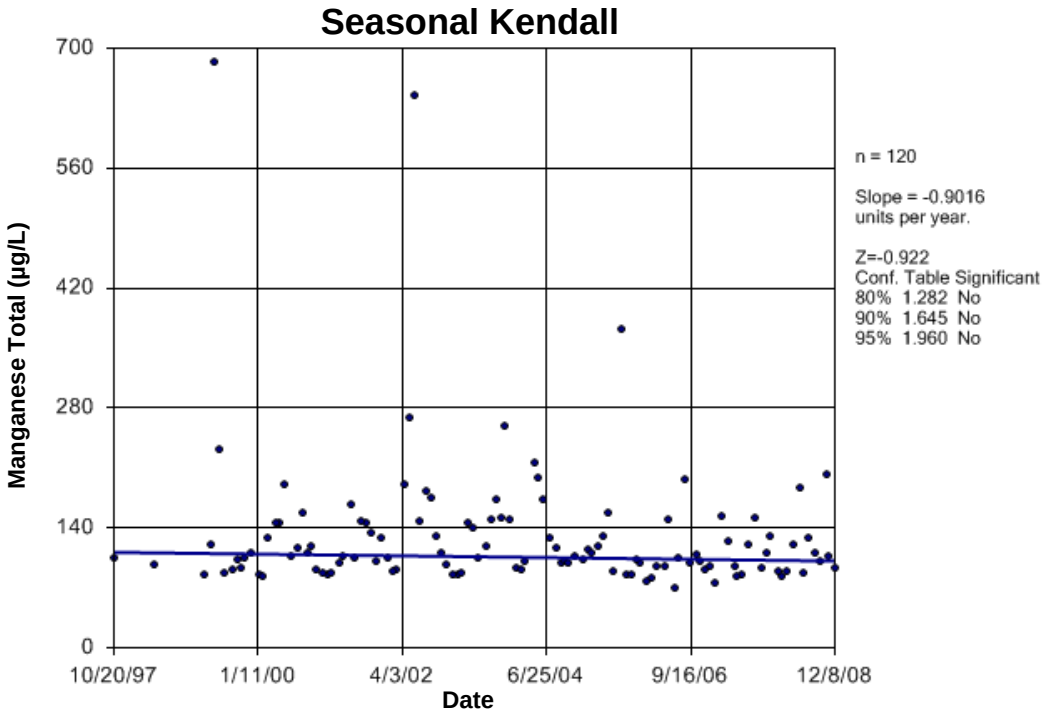


Figure E195 Red Deer River (AB-SK): Manganese Total

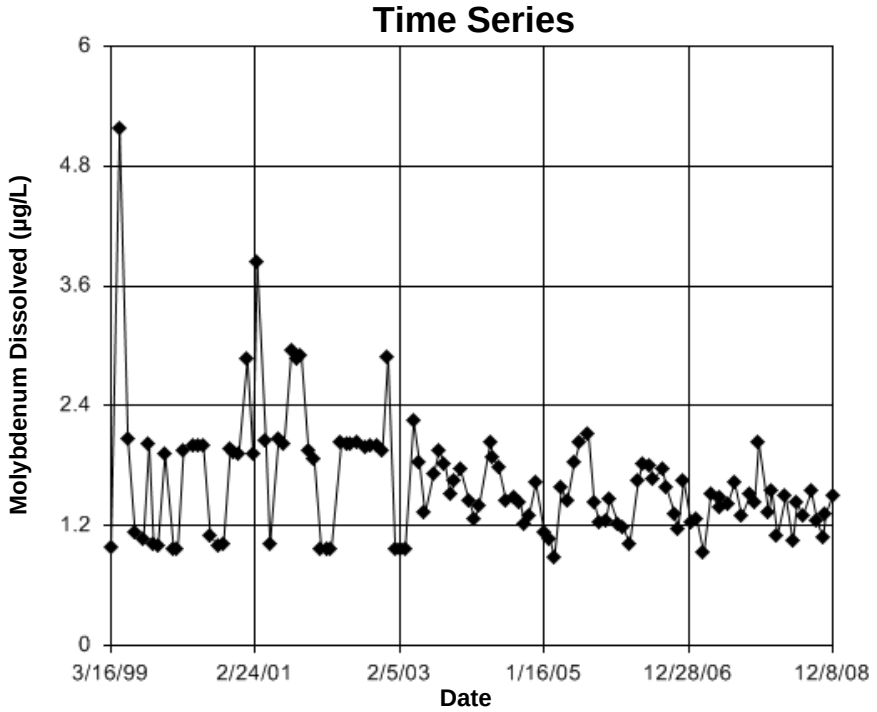


Figure E196 Red Deer River (AB-SK): Molybdenum Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 12.26
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 7 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 12.26
Adjusted Kruskal-Wallis statistic (H') = 12.26

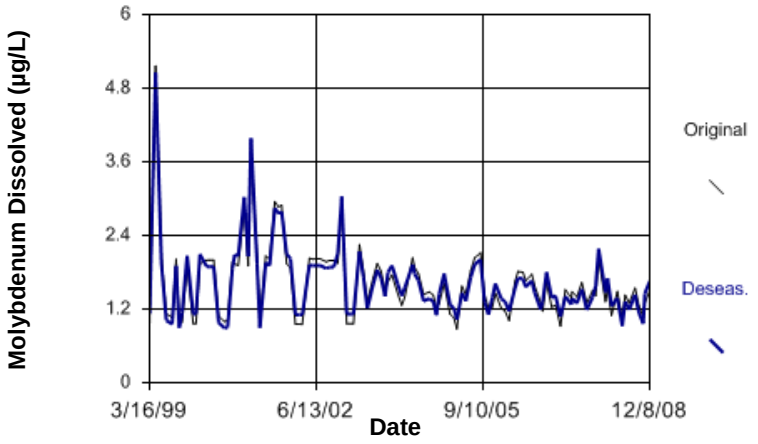


Figure E197 Red Deer River (AB-SK): Molybdenum Dissolved

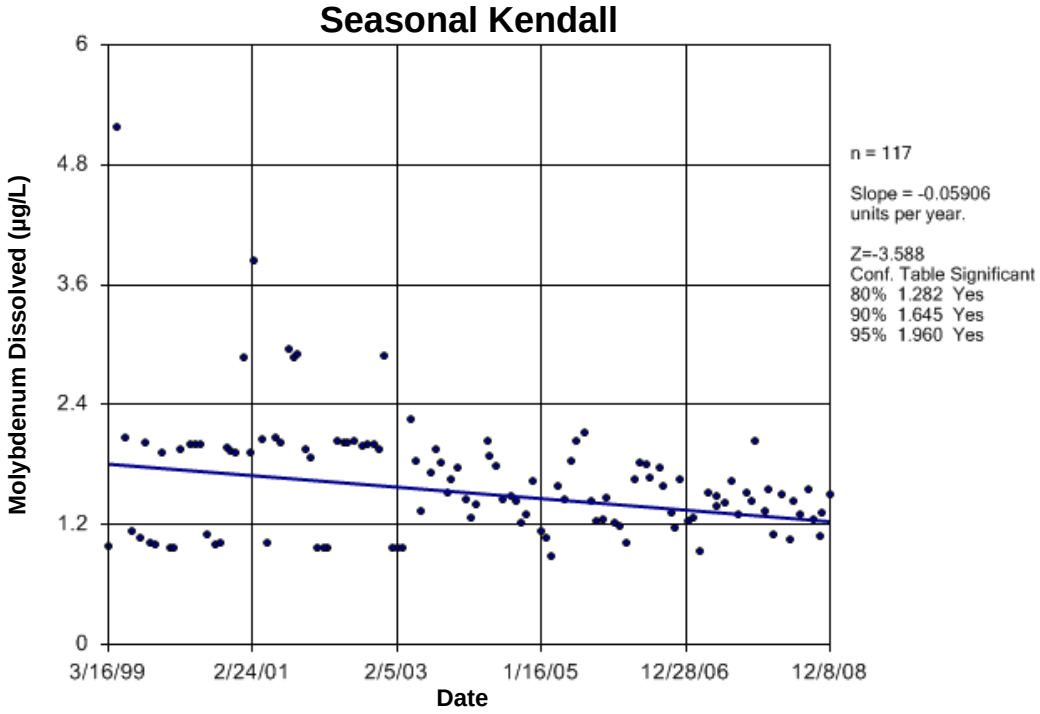


Figure E198 Red Deer River (AB-SK): Molybdenum Dissolved

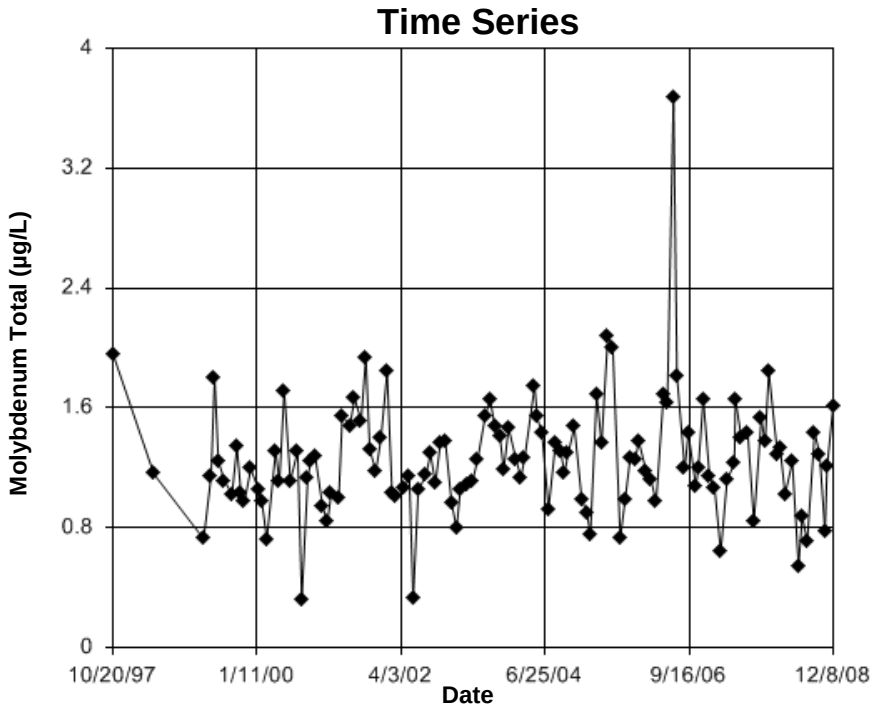


Figure E199 Red Deer River (AB-SK): Molybdenum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 5.902
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 9 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 5.902
Adjusted Kruskal-Wallis statistic (H') = 5.902

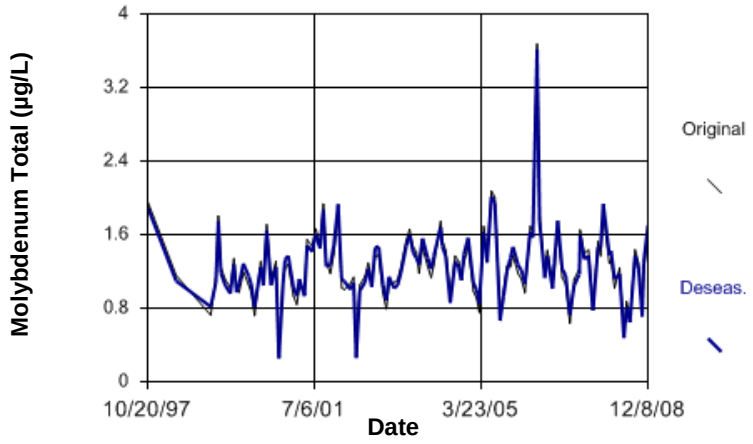


Figure E200 Red Deer River (AB-SK): Molybdenum Total

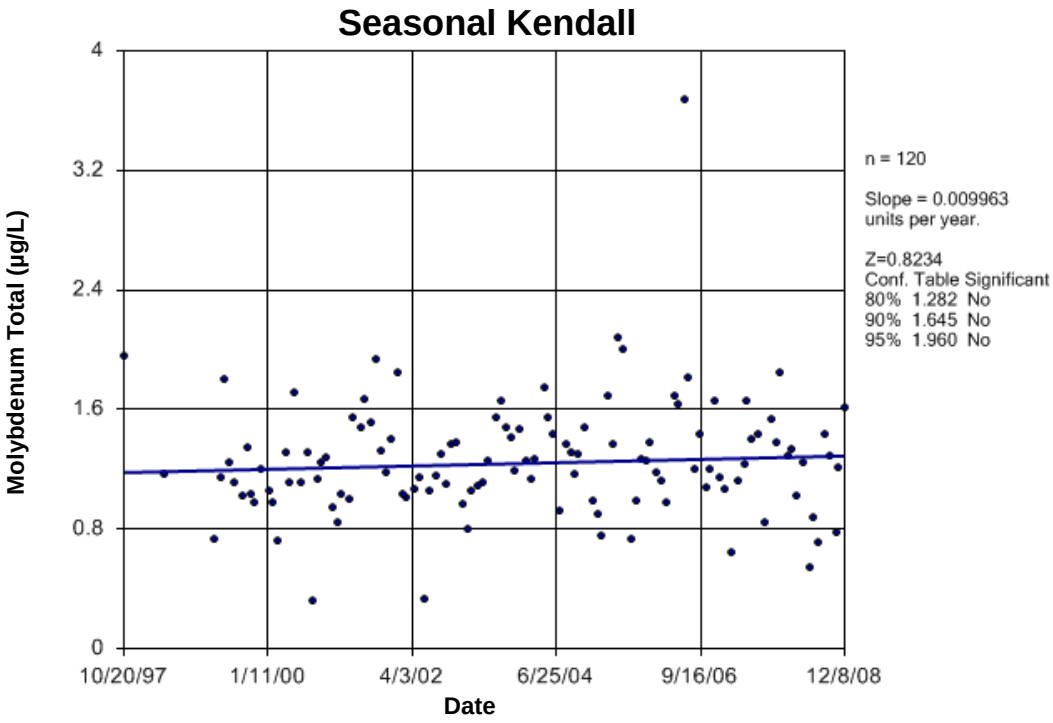


Figure E201 Red Deer River (AB-SK): Molybdenum Total

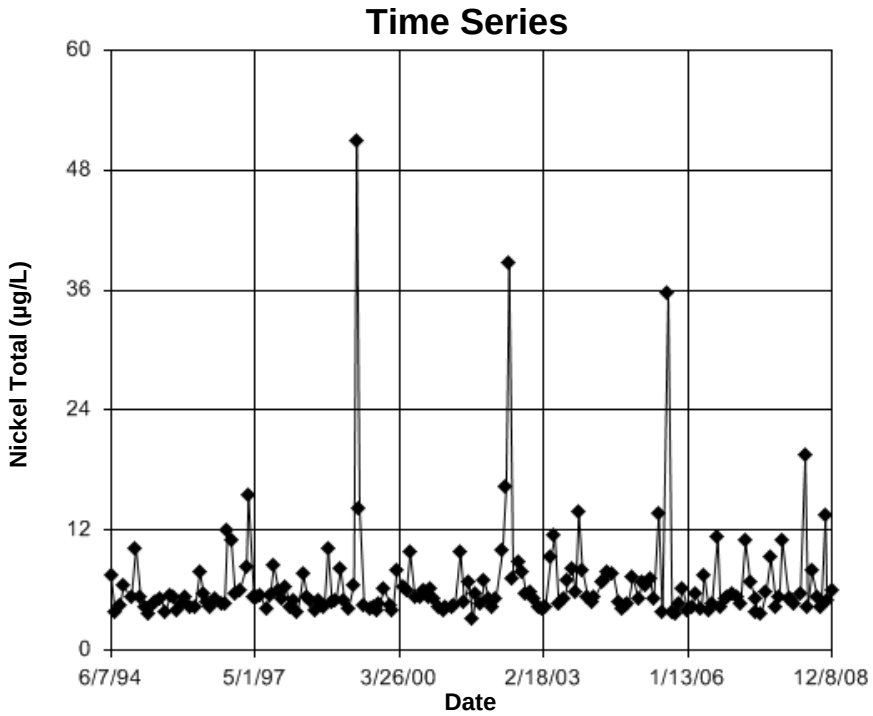


Figure E202 Red Deer River (AB-SK): Nickel Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.108
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 6 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 1.108
Adjusted Kruskal-Wallis statistic (H') = 1.108

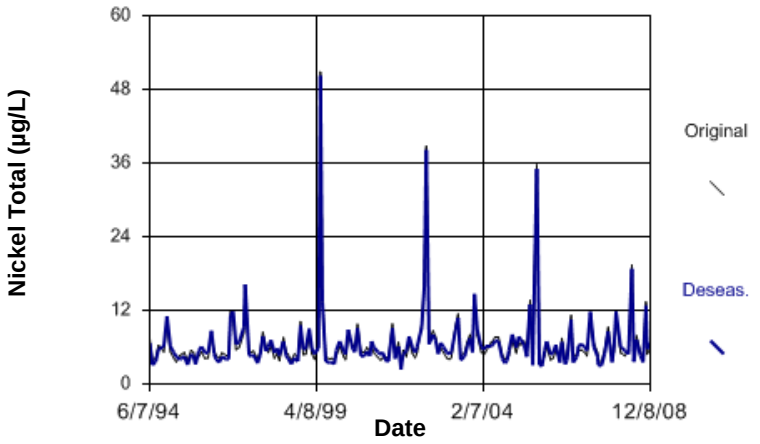


Figure E203 Red Deer River (AB-SK): Nickel Total

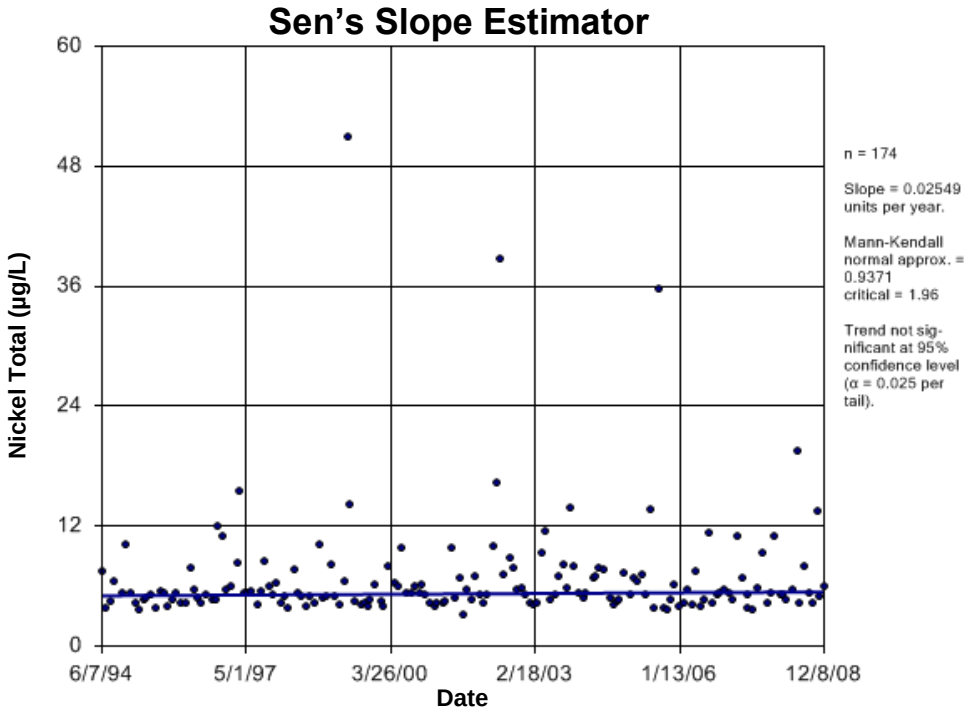


Figure E204 Red Deer River (AB-SK): Nickel Total

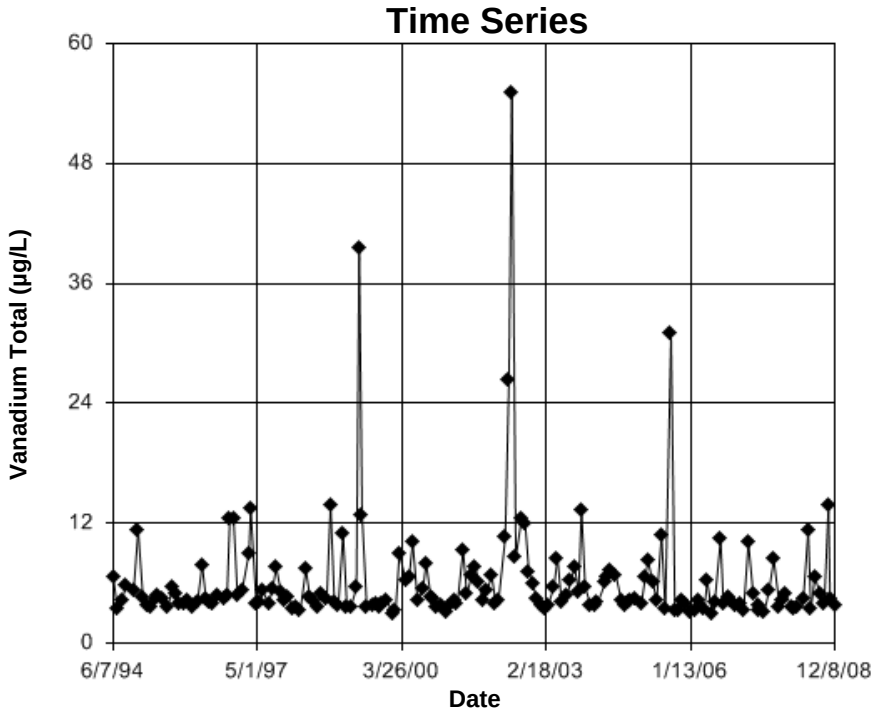


Figure E205 Red Deer River (AB-SK): Vanadium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 13.1
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 6 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 13.1
Adjusted Kruskal-Wallis statistic (H') = 13.1

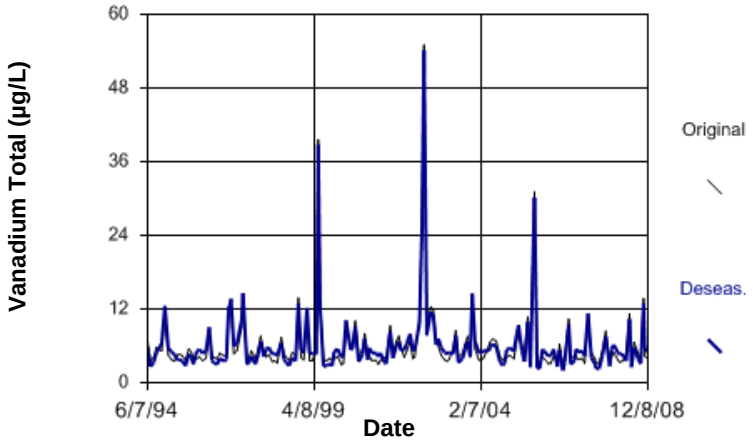


Figure E206 Red Deer River (AB-SK): Vanadium Total

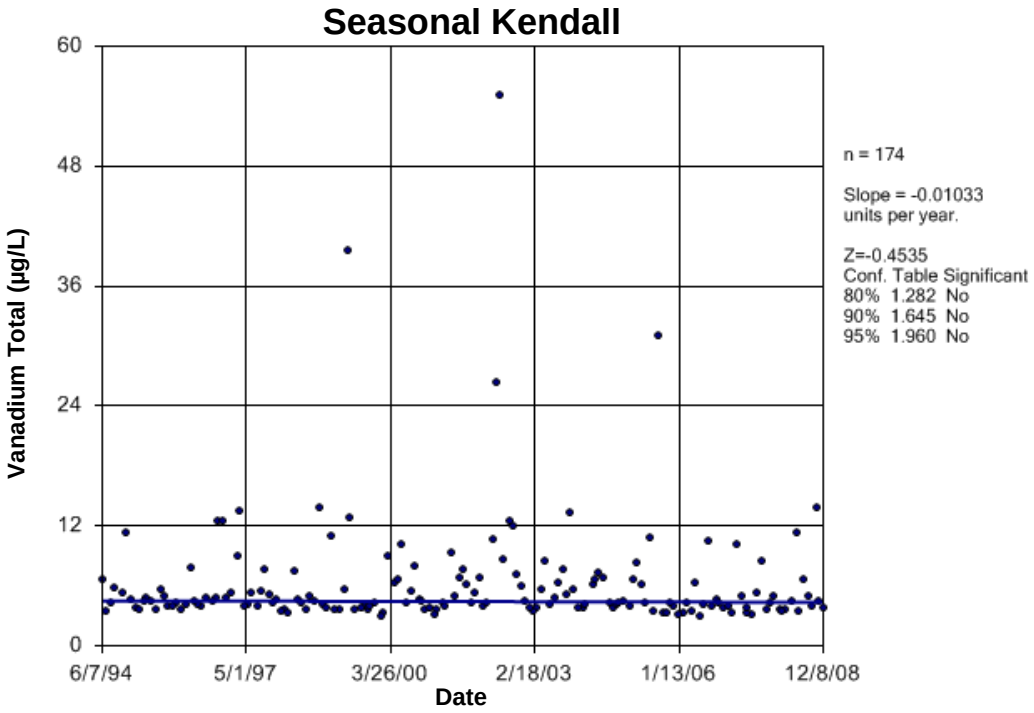


Figure E207 Red Deer River (AB-SK): Vanadium Total

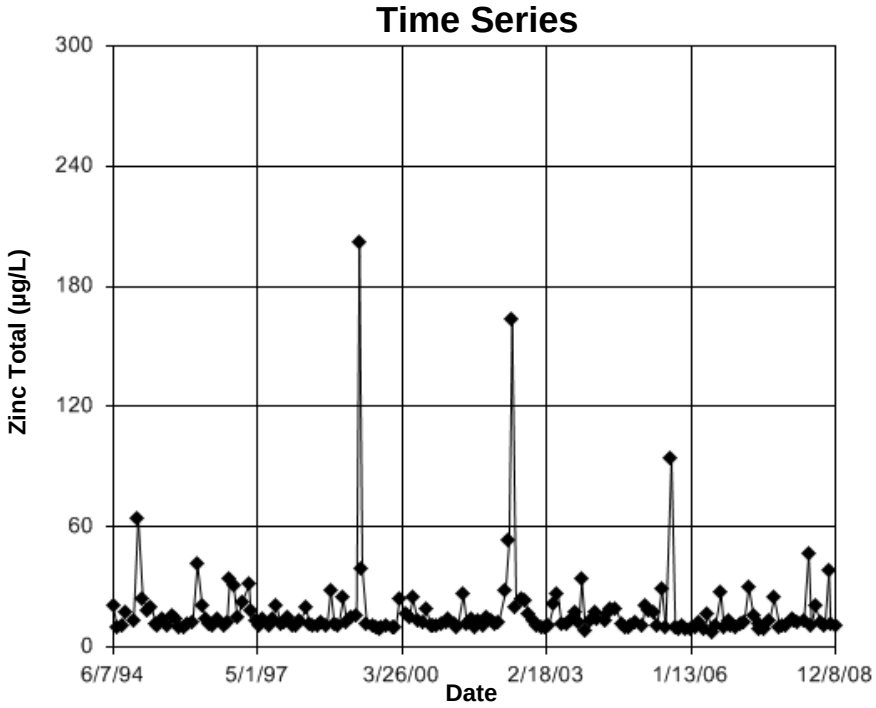


Figure E208 Red Deer River (AB-SK): Zinc Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.9741
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 8 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.9741
Adjusted Kruskal-Wallis statistic (H') = 0.9741

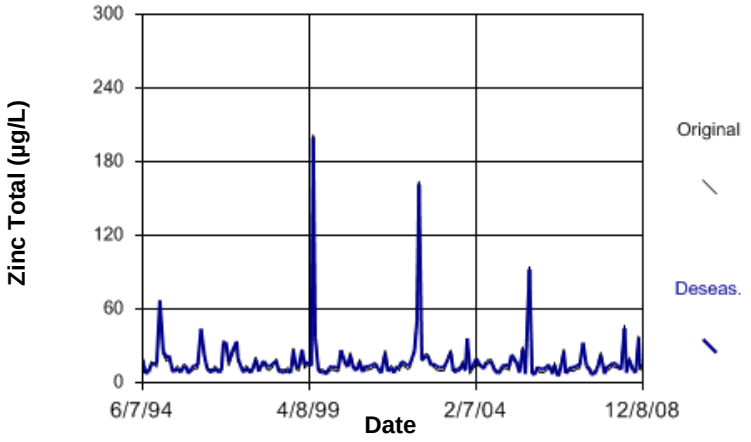


Figure E209 Red Deer River (AB-SK): Zinc Total

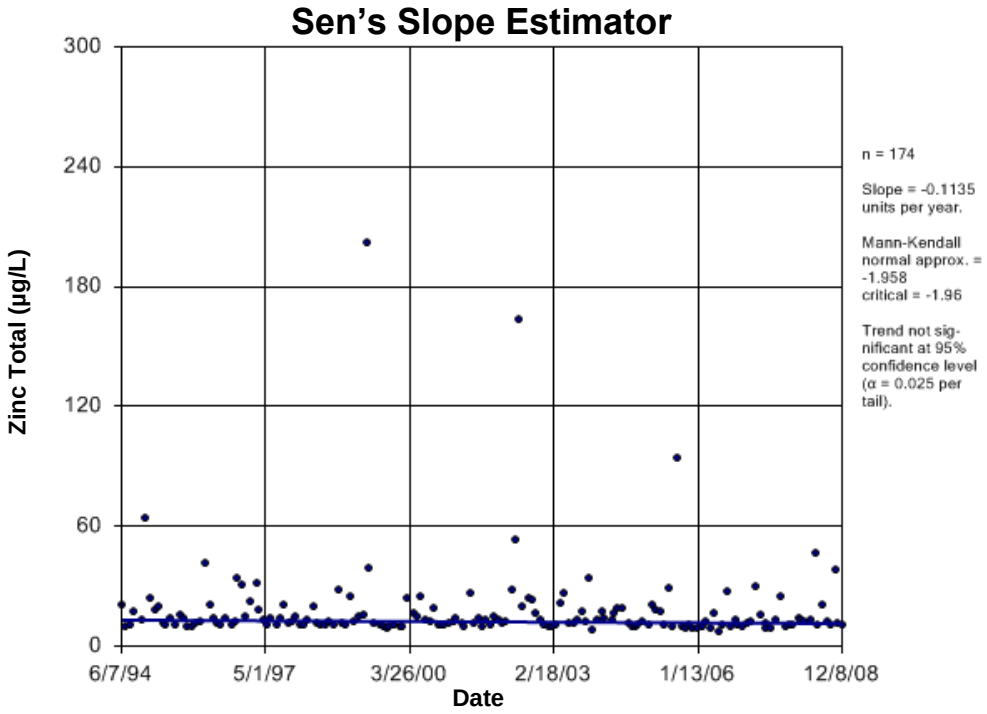


Figure E210 Red Deer River (AB-SK): Zinc Total

South Saskatchewan River

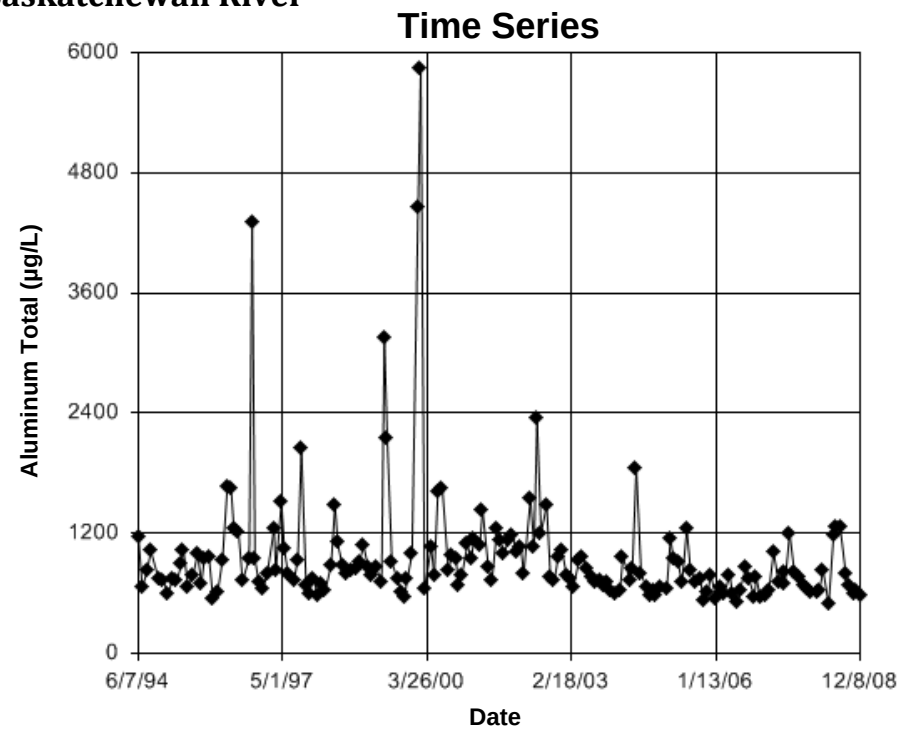
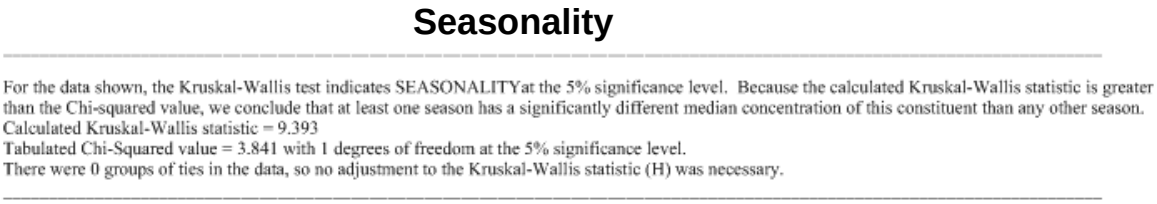


Figure E211 South Saskatchewan River: Aluminum Total



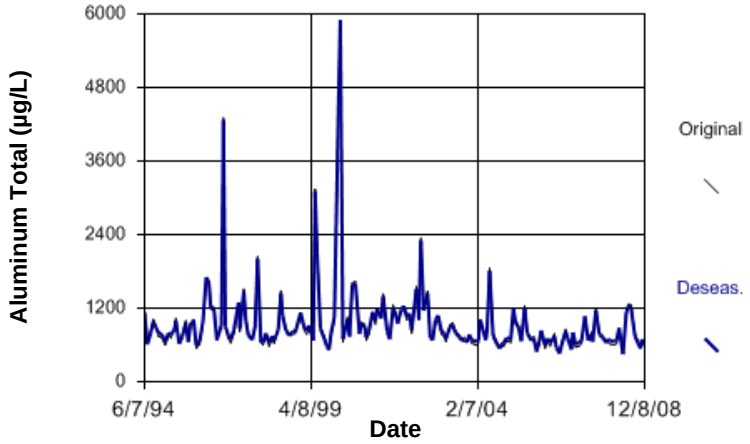


Figure E212 South Saskatchewan River: Aluminum Total

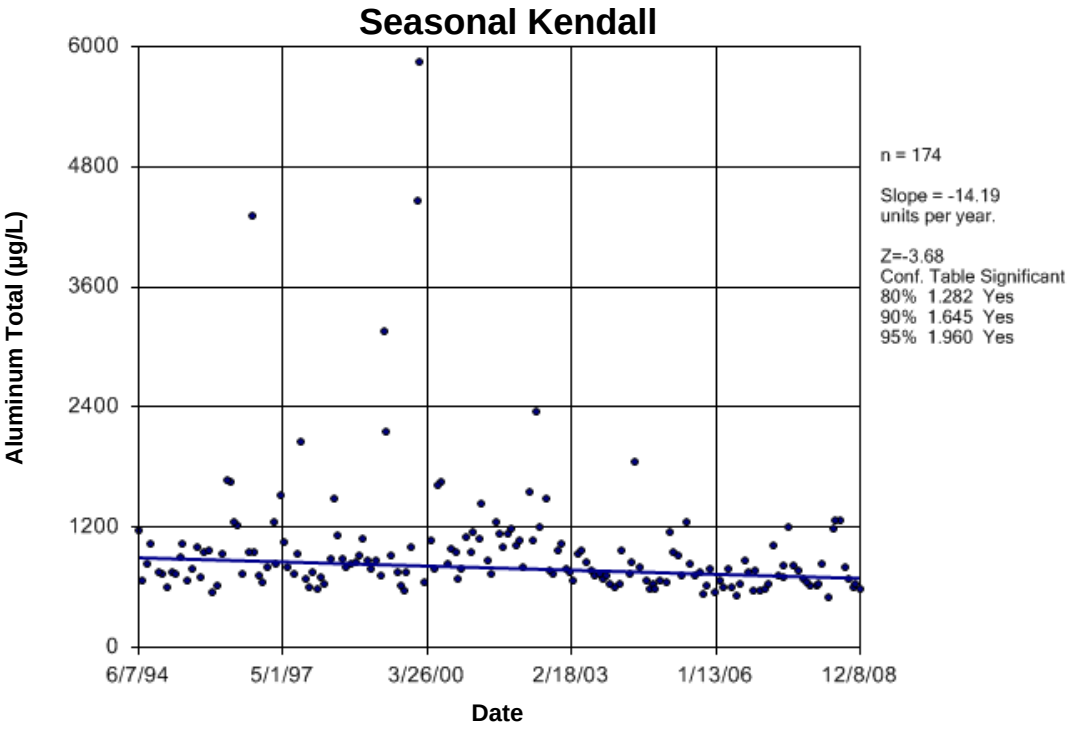


Figure E213 South Saskatchewan River: Aluminum Total

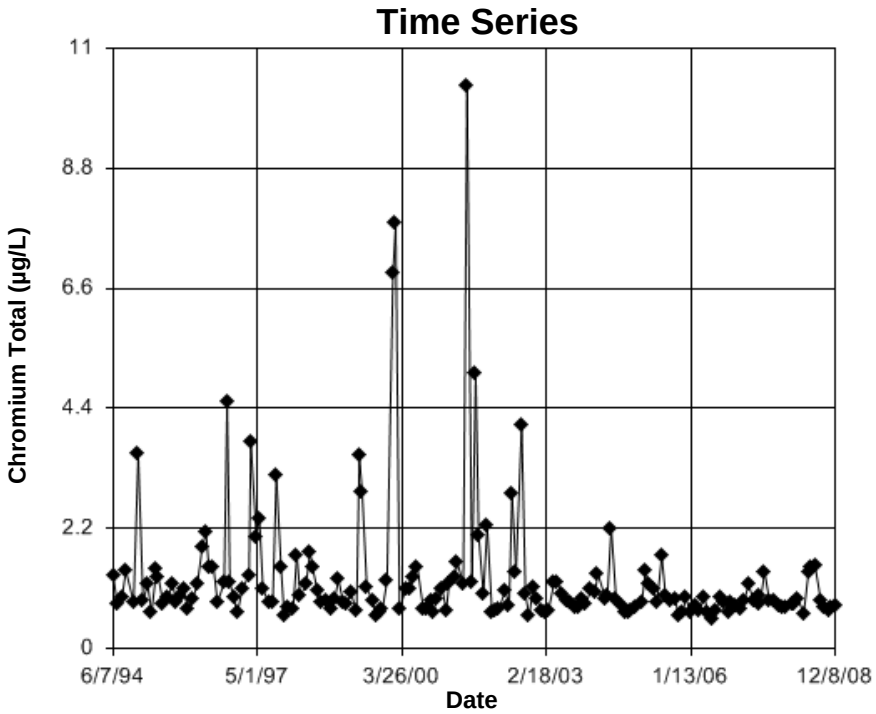


Figure E214 South Saskatchewan River: Chromium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 6.37
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 6.37
Adjusted Kruskal-Wallis statistic (H') = 6.37

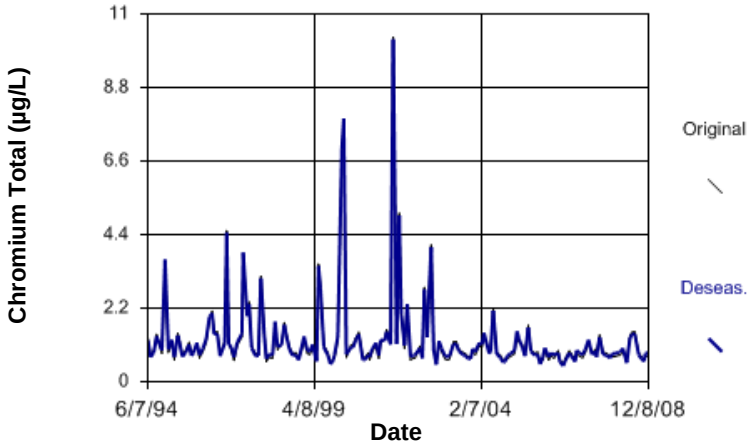


Figure E215 South Saskatchewan River: Chromium Total

Seasonal Kendall

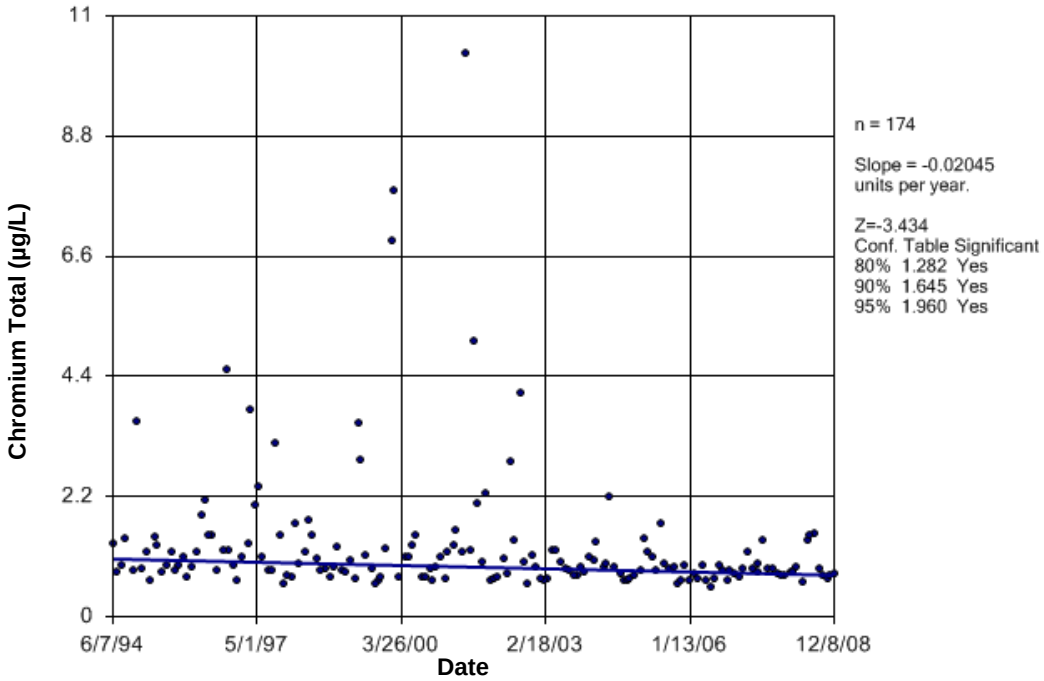


Figure E216 South Saskatchewan River: Chromium Total

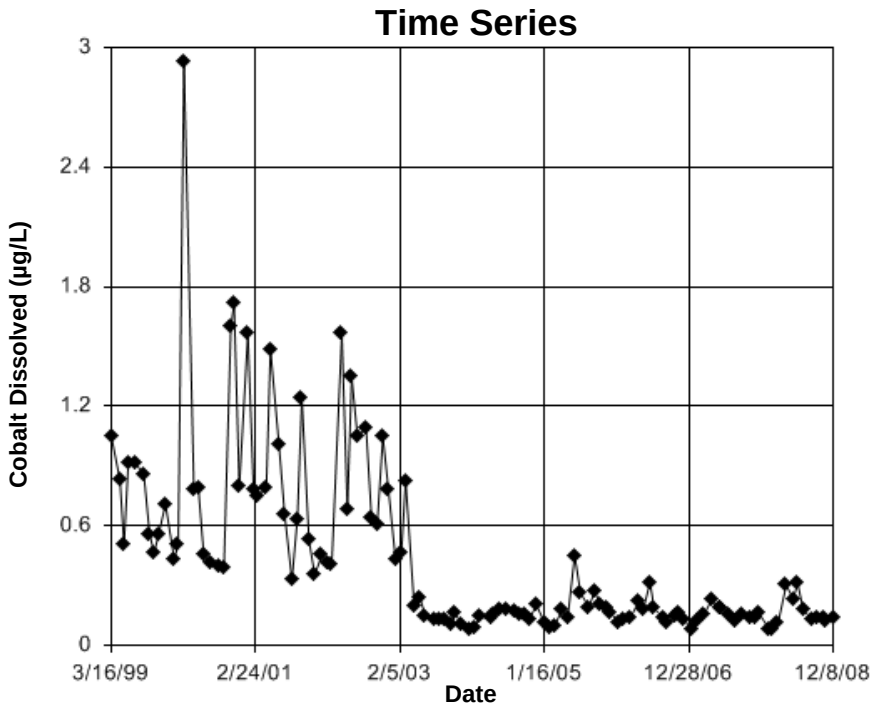


Figure E217 South Saskatchewan River: Cobalt Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 3.092
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 3.092
Adjusted Kruskal-Wallis statistic (H') = 3.092

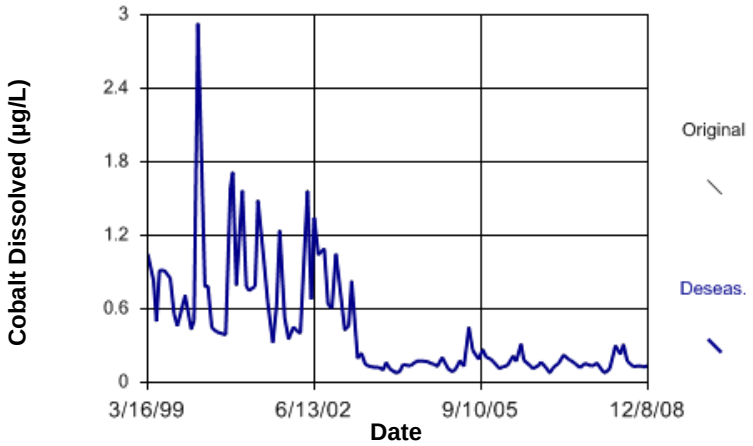


Figure E218 South Saskatchewan River: Cobalt Dissolved

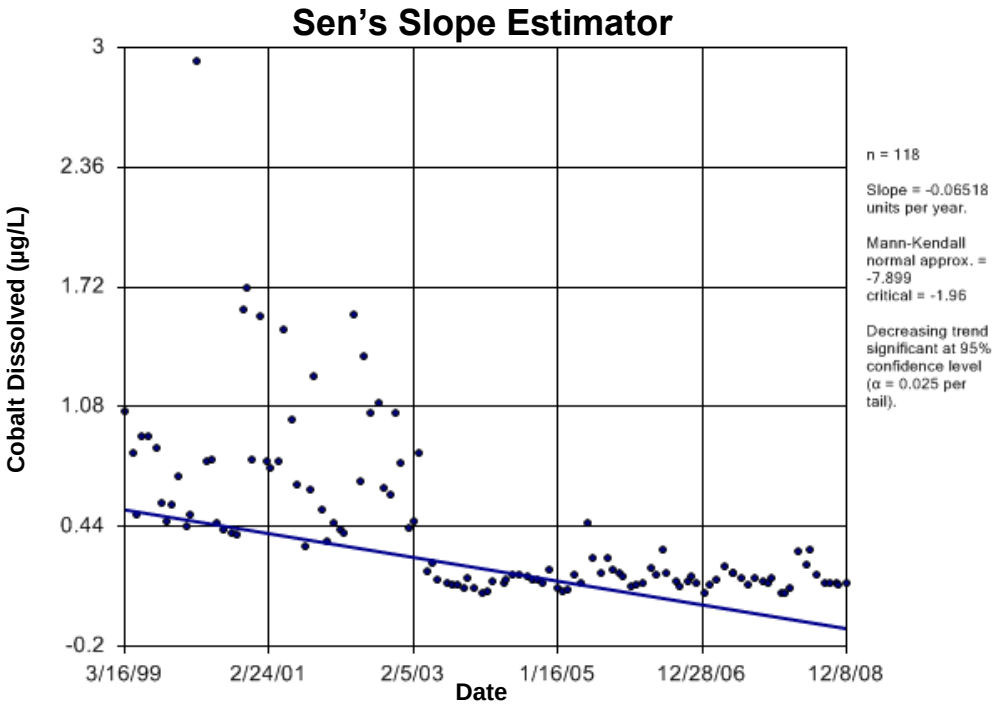


Figure E219 South Saskatchewan River: Cobalt Dissolved

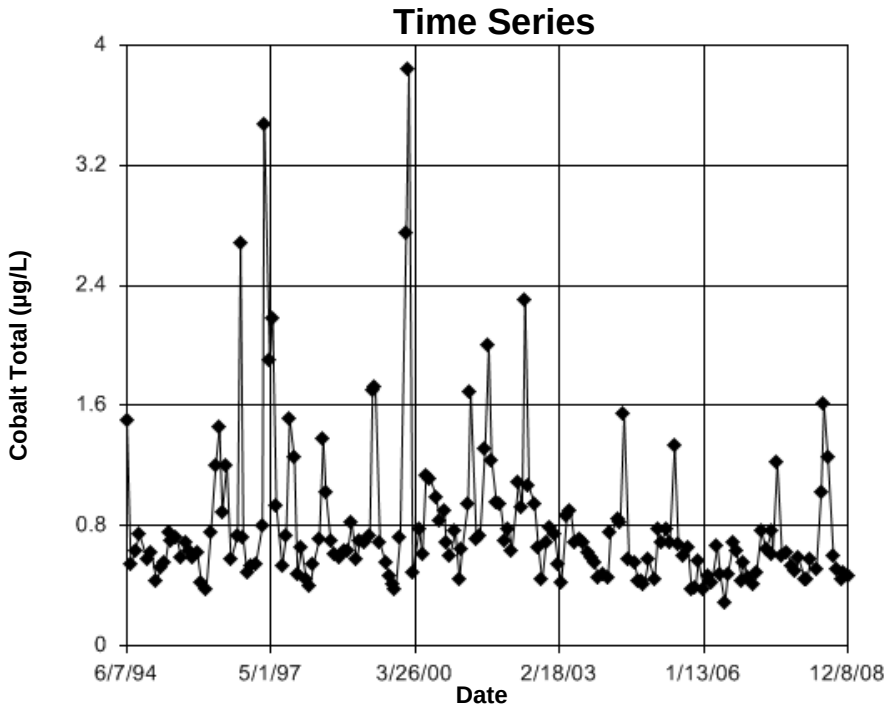


Figure E220 South Saskatchewan River: Cobalt Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 22.64
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 4 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 22.64
Adjusted Kruskal-Wallis statistic (H') = 22.64

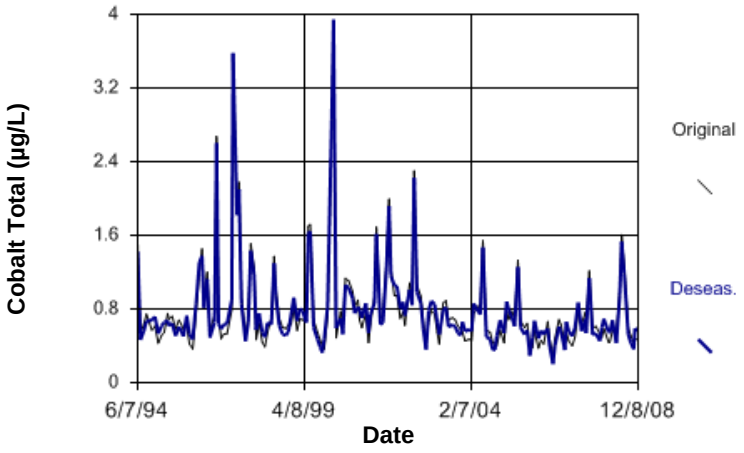


Figure E221 South Saskatchewan River: Cobalt Total

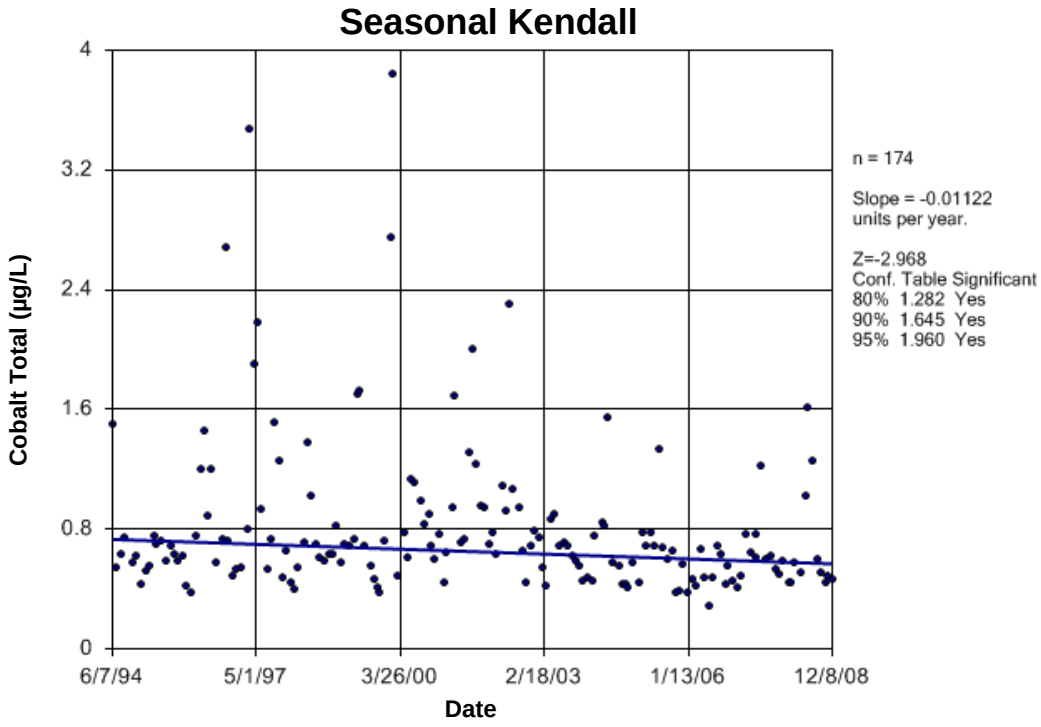


Figure E222 South Saskatchewan River: Cobalt Total

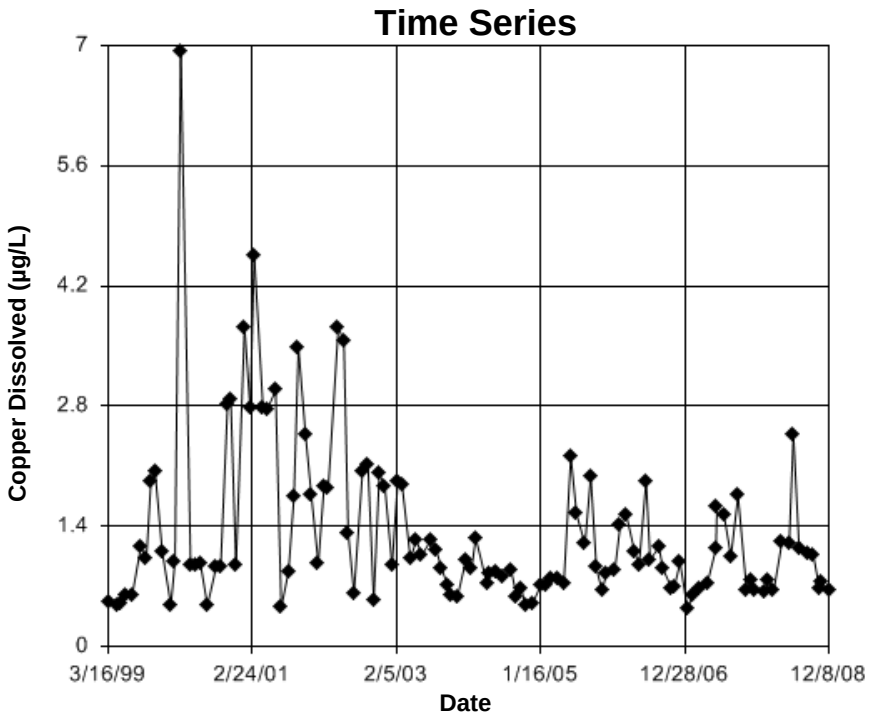


Figure E223 South Saskatchewan River: Copper Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.011
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 1.011
Adjusted Kruskal-Wallis statistic (H') = 1.011

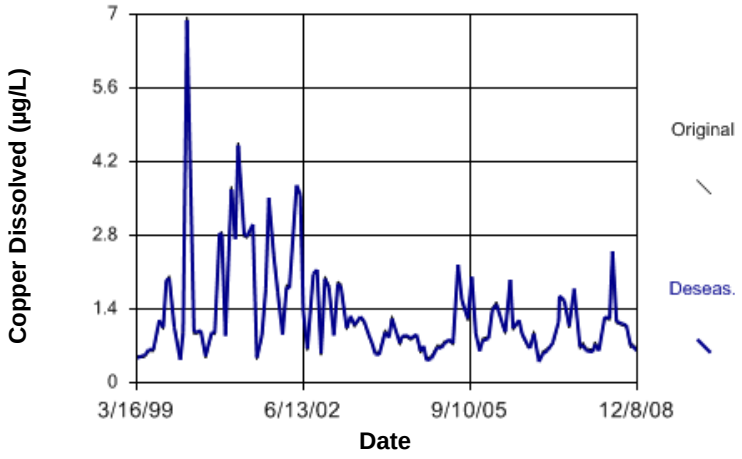


Figure E224 South Saskatchewan River: Copper Dissolved

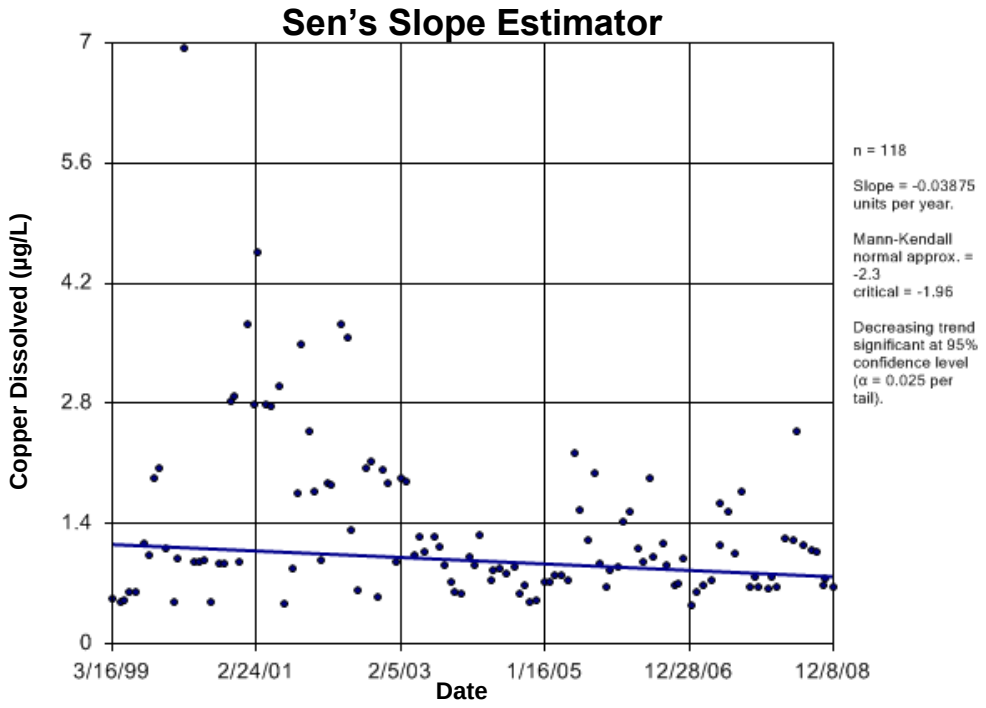


Figure E225 South Saskatchewan River: Copper Dissolved

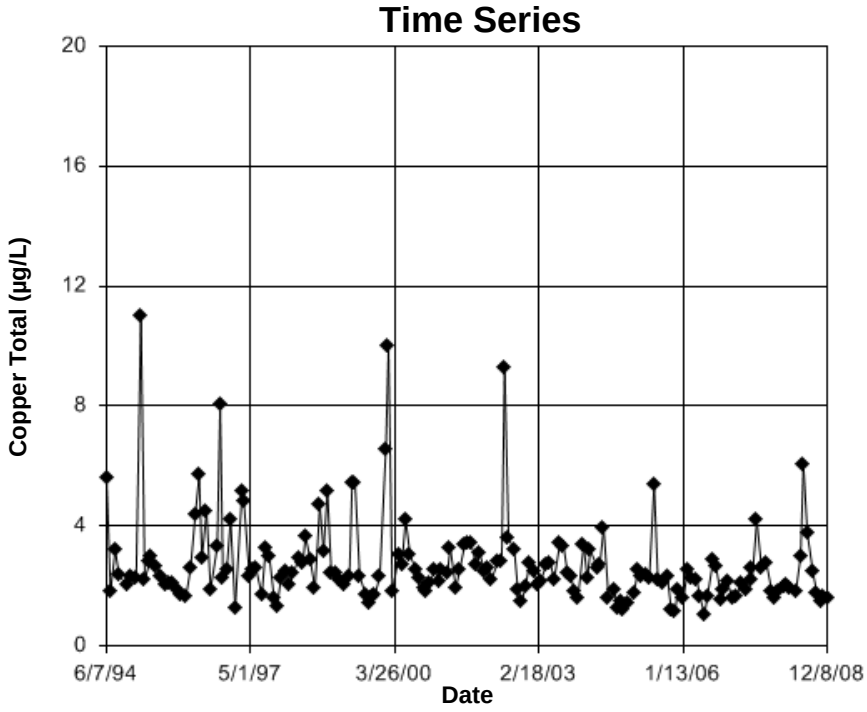


Figure E226 South Saskatchewan River: Copper Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 8.329
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 8.329
Adjusted Kruskal-Wallis statistic (H') = 8.329

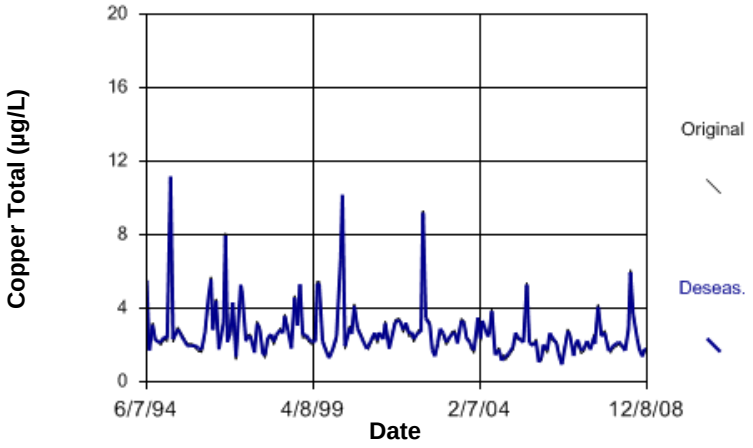


Figure E227 South Saskatchewan River: Copper Total

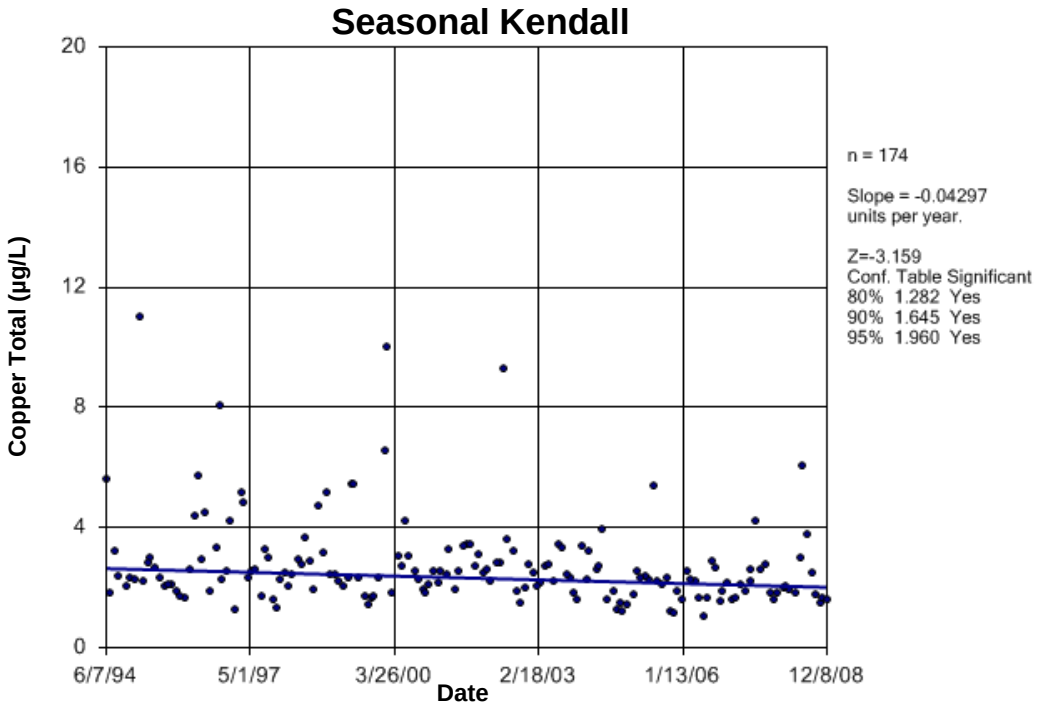


Figure E228 South Saskatchewan River: Copper Total

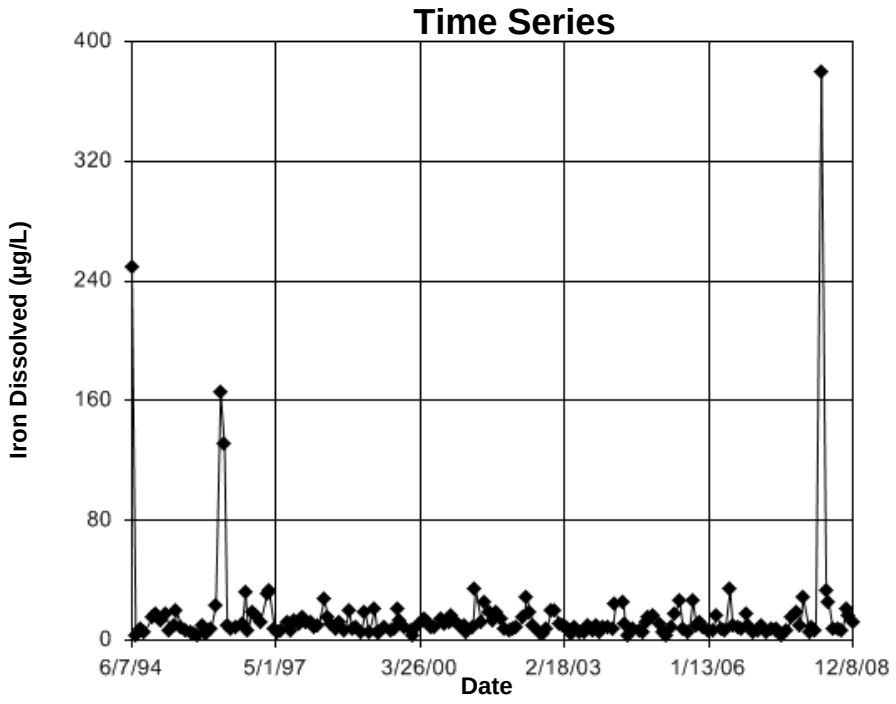


Figure E229 South Saskatchewan River: Iron Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.06986
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.06986
Adjusted Kruskal-Wallis statistic (H') = 0.06986

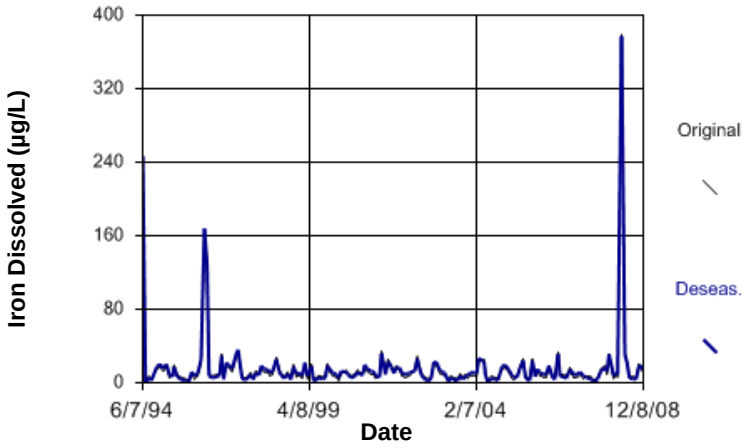


Figure E230 South Saskatchewan River: Iron Dissolved

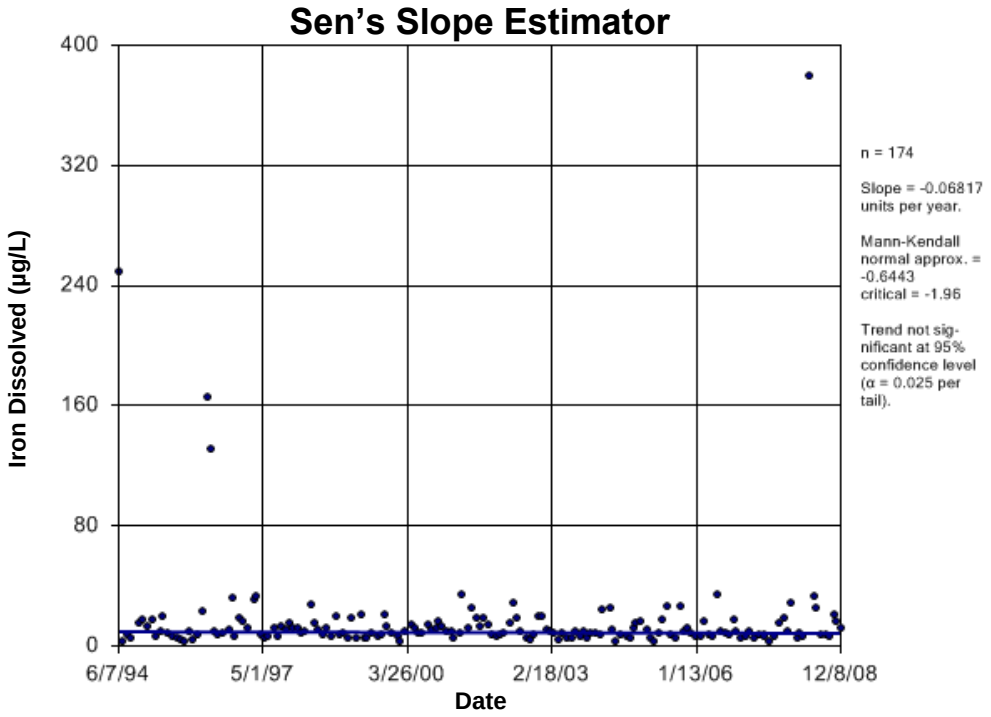


Figure E231 South Saskatchewan River: Iron Dissolved

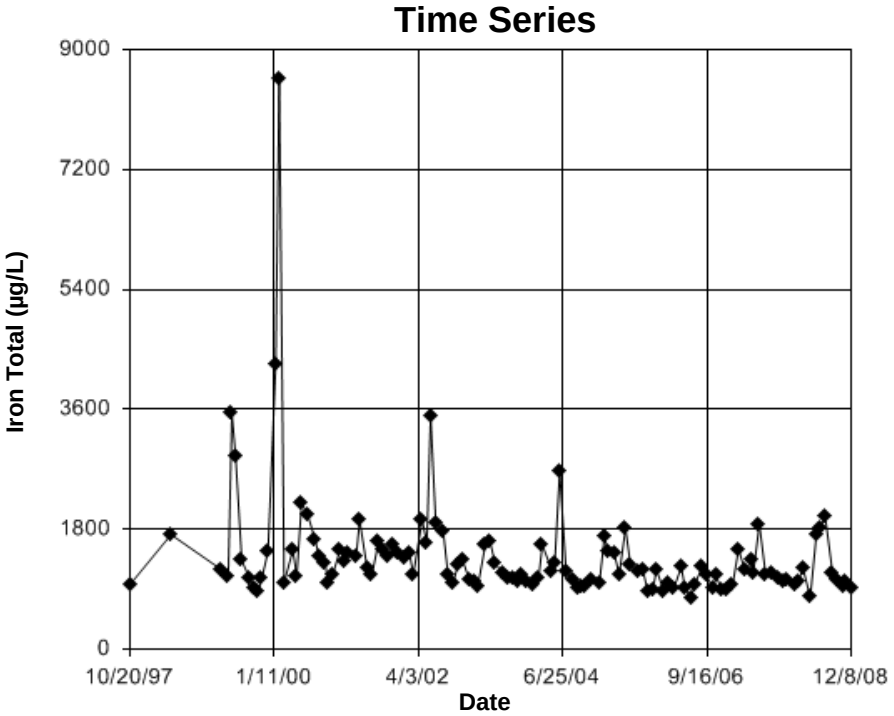


Figure E232 South Saskatchewan River: Iron Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 5.147
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 7 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 5.147
Adjusted Kruskal-Wallis statistic (H') = 5.147

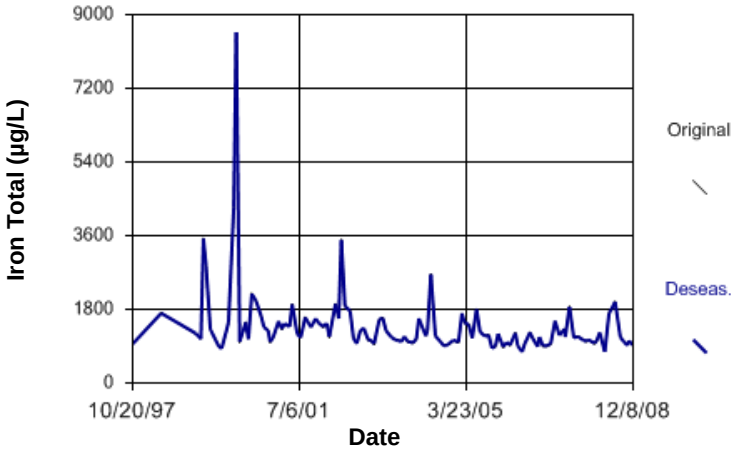


Figure E233 South Saskatchewan River: Iron Total

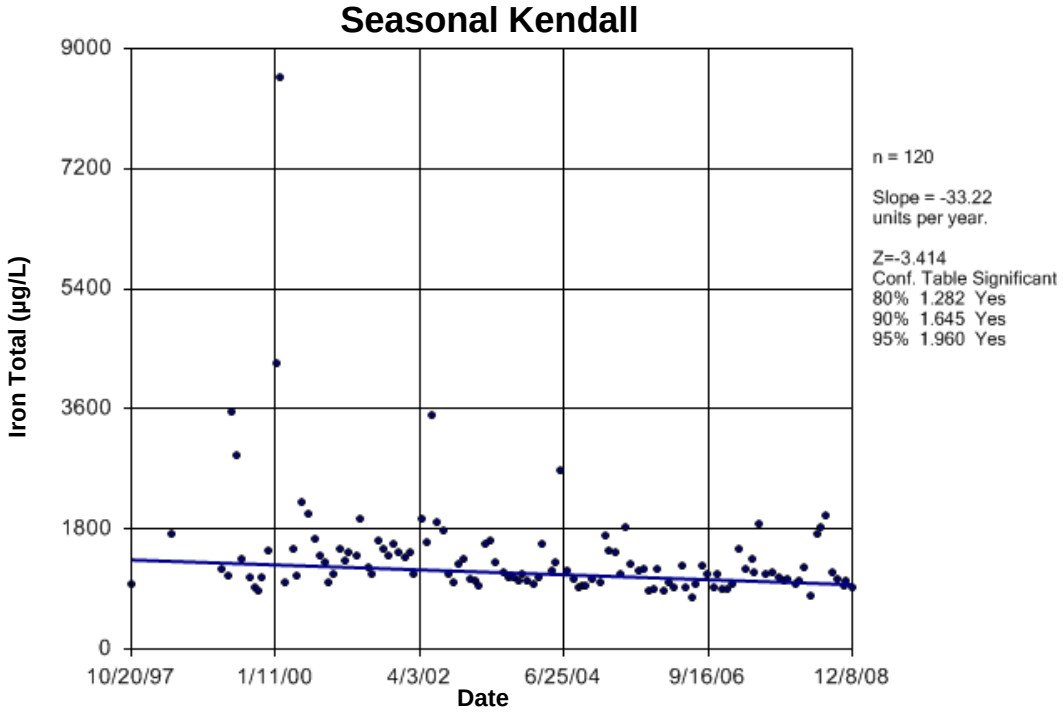


Figure E234 South Saskatchewan River: Iron Total

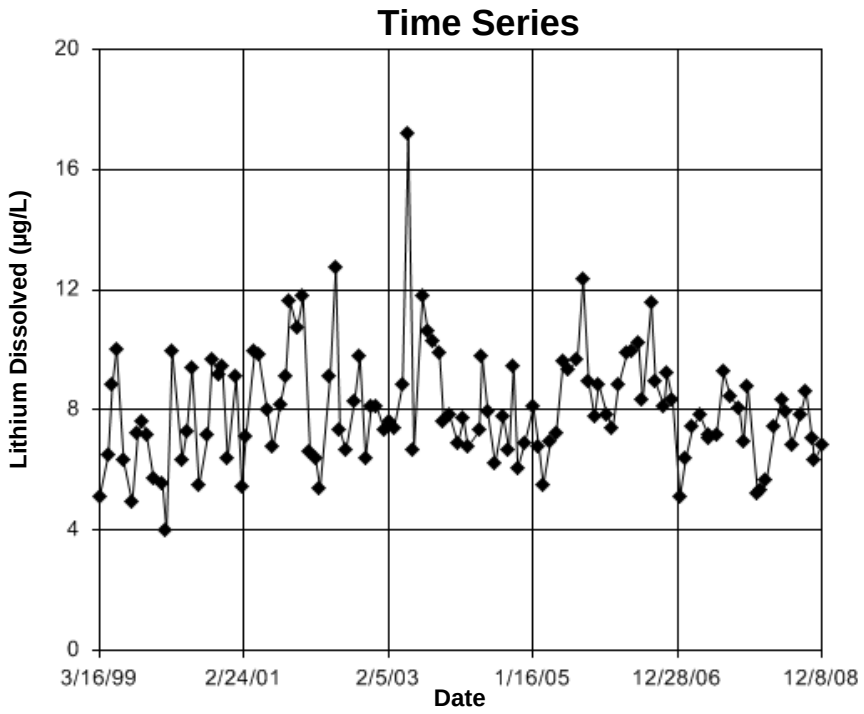


Figure E235 South Saskatchewan River: Lithium Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 15.26
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 5 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 15.26
Adjusted Kruskal-Wallis statistic (H') = 15.26

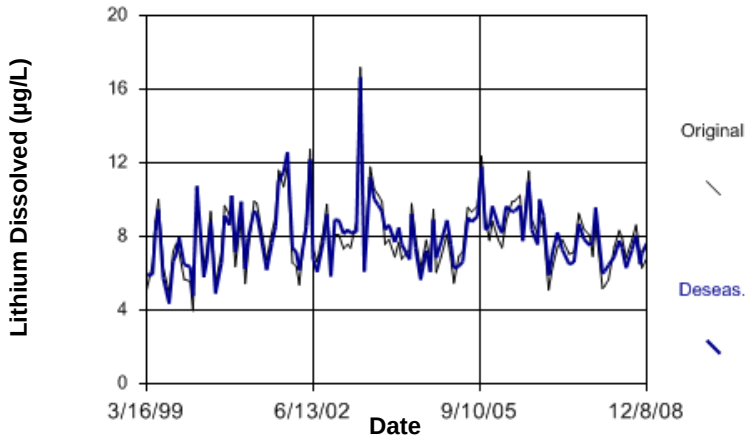


Figure E236 South Saskatchewan River: Lithium Dissolved

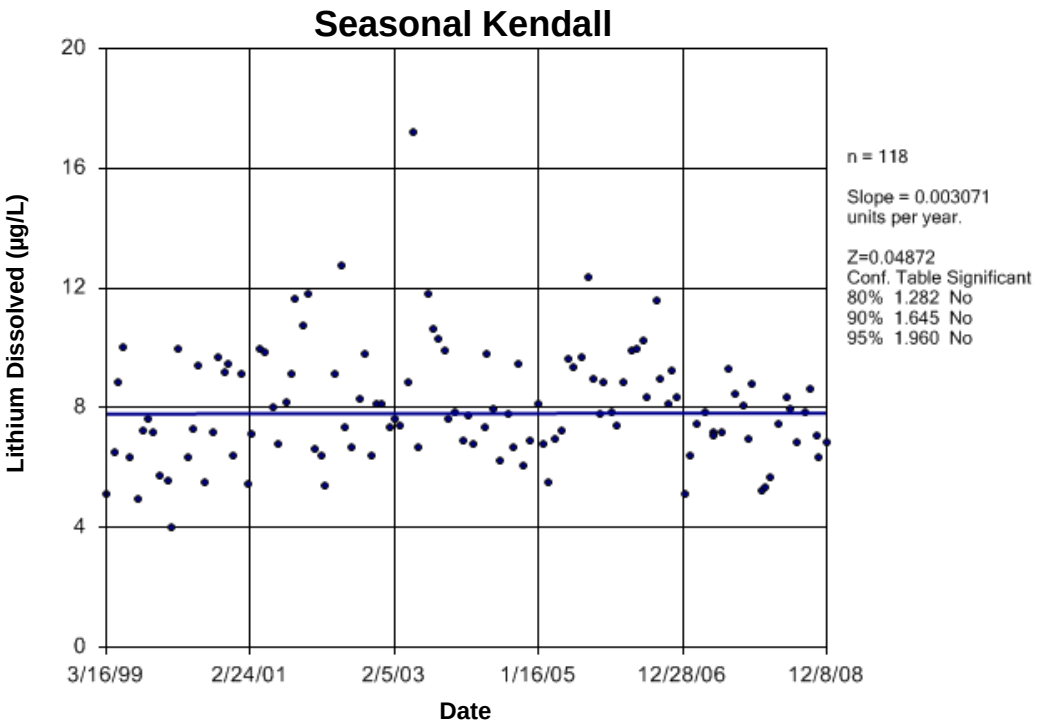


Figure E237 South Saskatchewan River: Lithium Dissolved

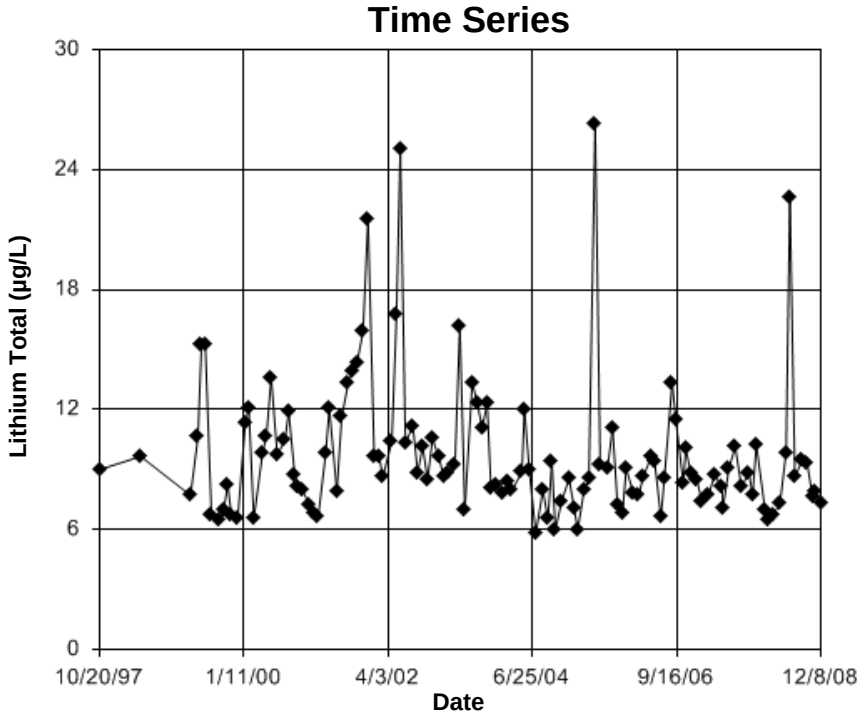


Figure E238 South Saskatchewan River: Lithium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 18.32
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

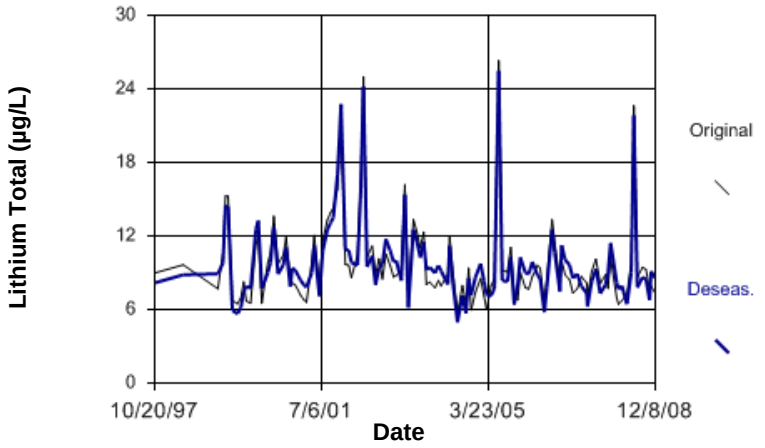


Figure E239 South Saskatchewan River: Lithium Total

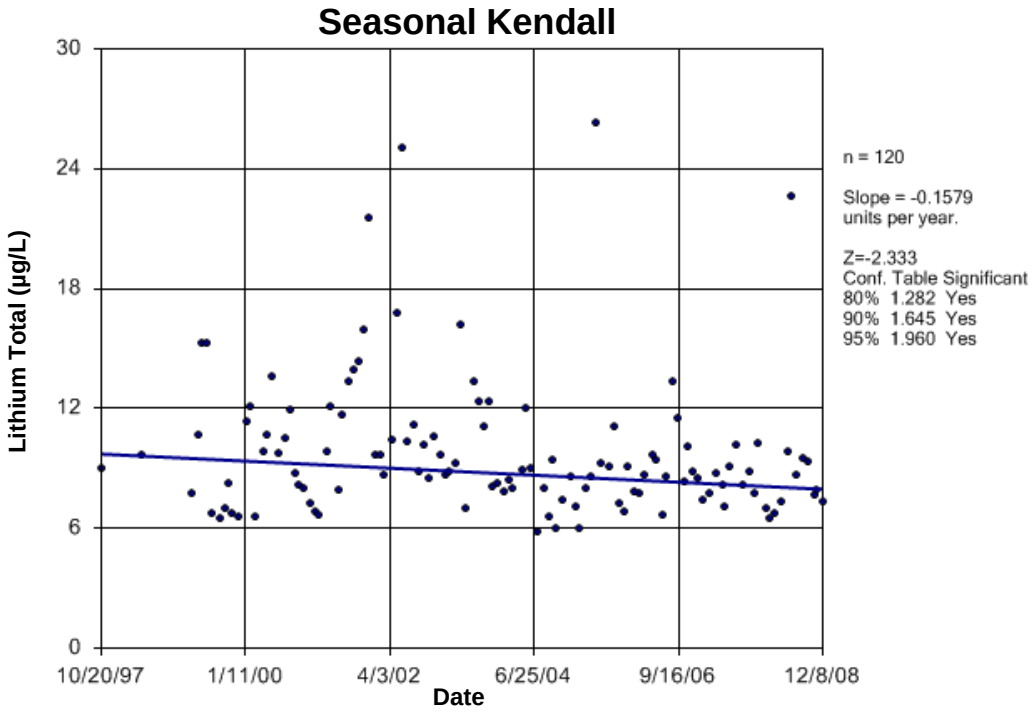


Figure E240 South Saskatchewan River: Lithium Total

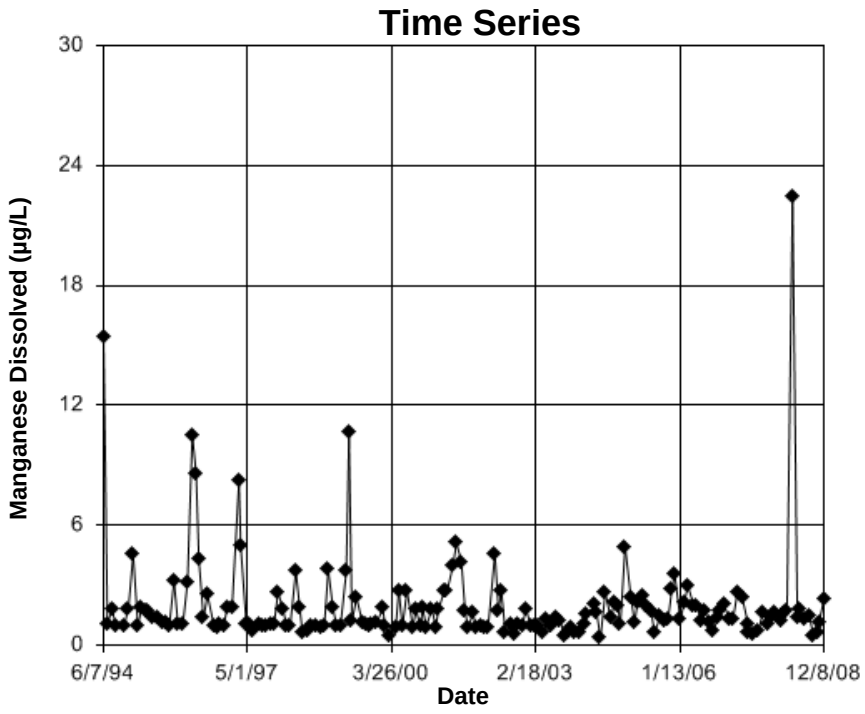
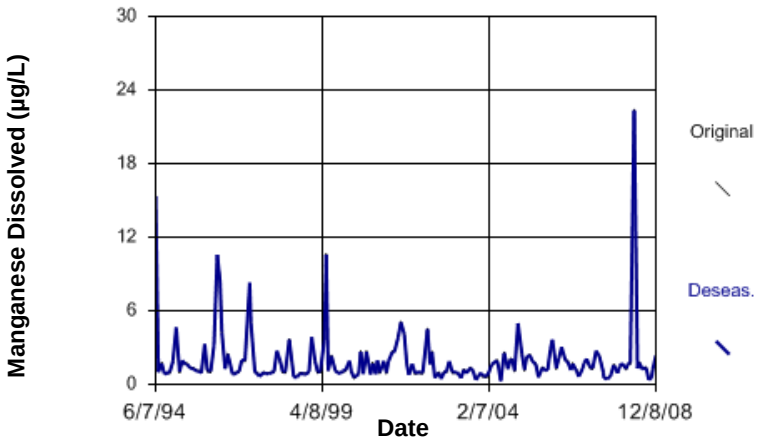


Figure E241 South Saskatchewan River: Manganese Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.7853
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 5 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.7852
Adjusted Kruskal-Wallis statistic (H') = 0.7853



2Figure E242 South Saskatchewan River: Manganese Dissolved

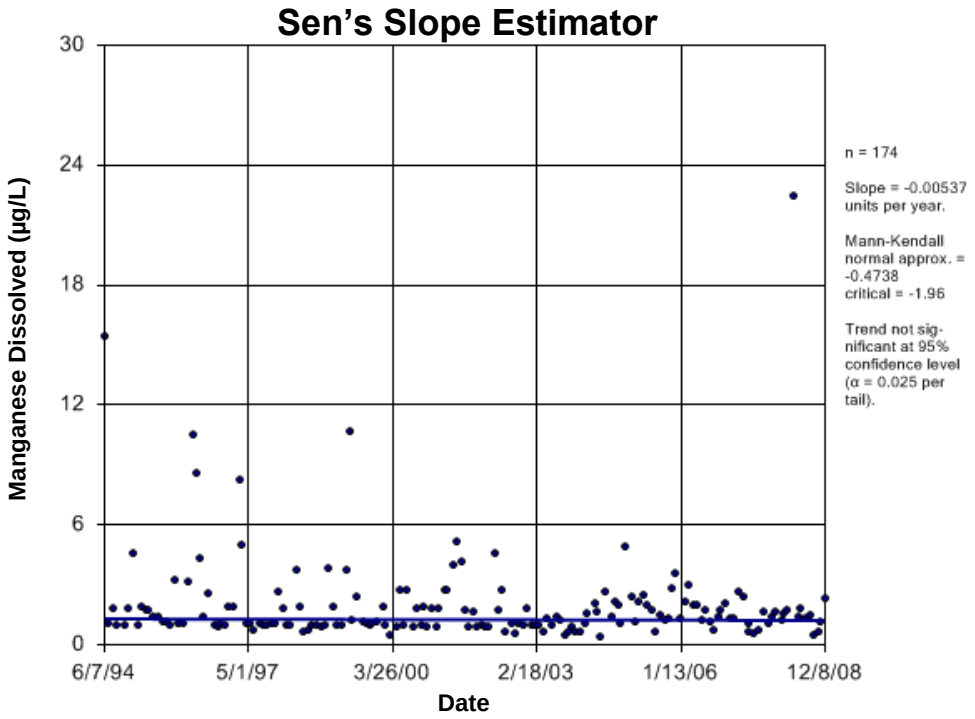


Figure E243 South Saskatchewan River: Manganese Dissolved

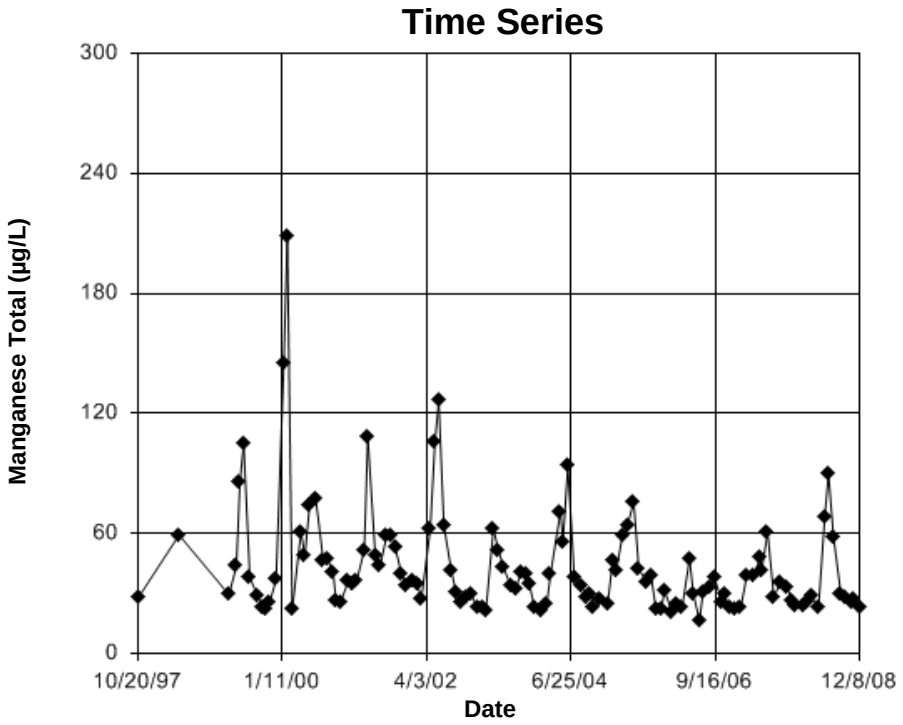


Figure E244 South Saskatchewan River: Manganese Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 29.36
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 29.36
Adjusted Kruskal-Wallis statistic (H') = 29.36

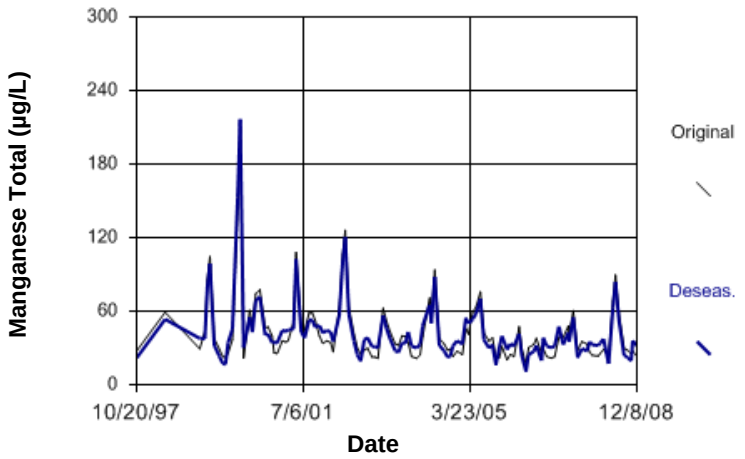


Figure E245 South Saskatchewan River: Manganese Total

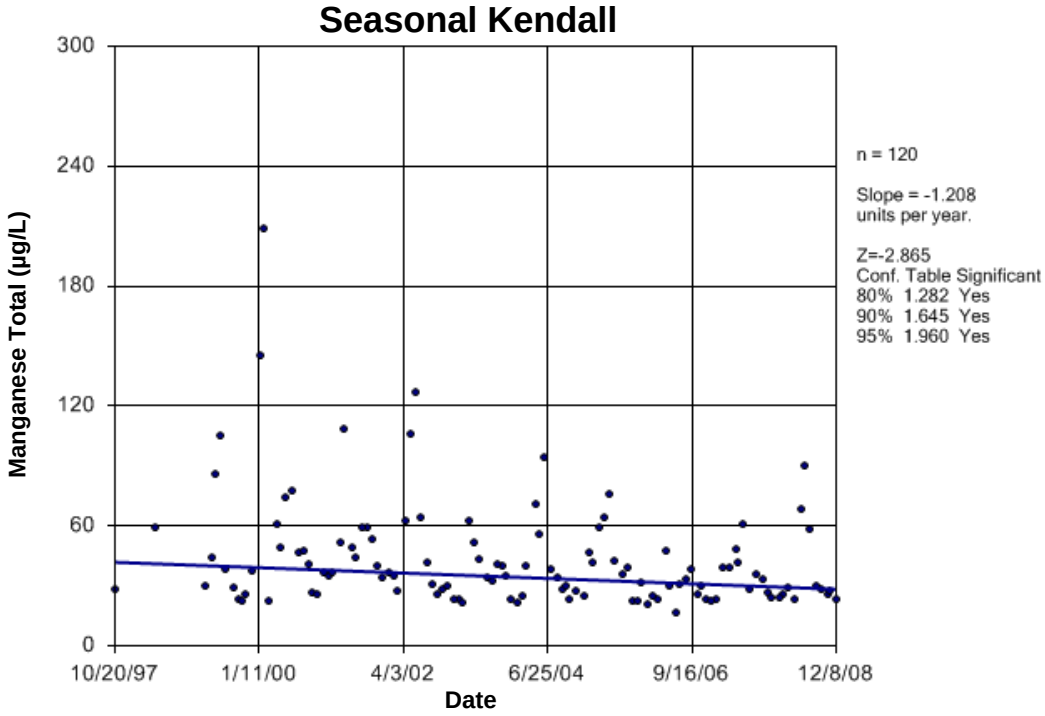


Figure E246 South Saskatchewan River: Manganese Total

Time Series

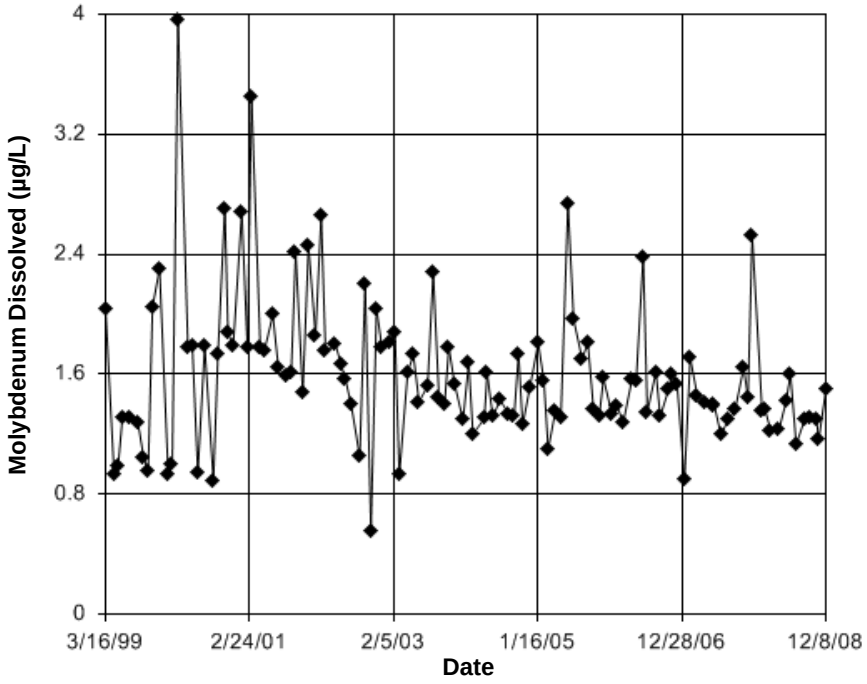


Figure E247 South Saskatchewan River: Molybdenum Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 2.421
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 2.421
Adjusted Kruskal-Wallis statistic (H') = 2.421

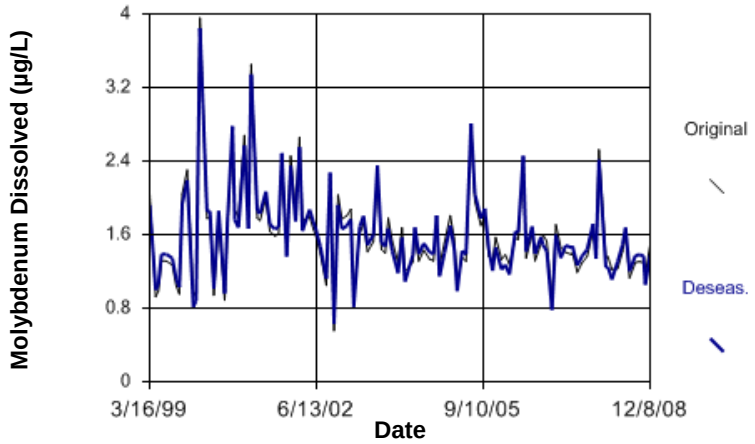


Figure E248 South Saskatchewan River: Molybdenum Dissolved

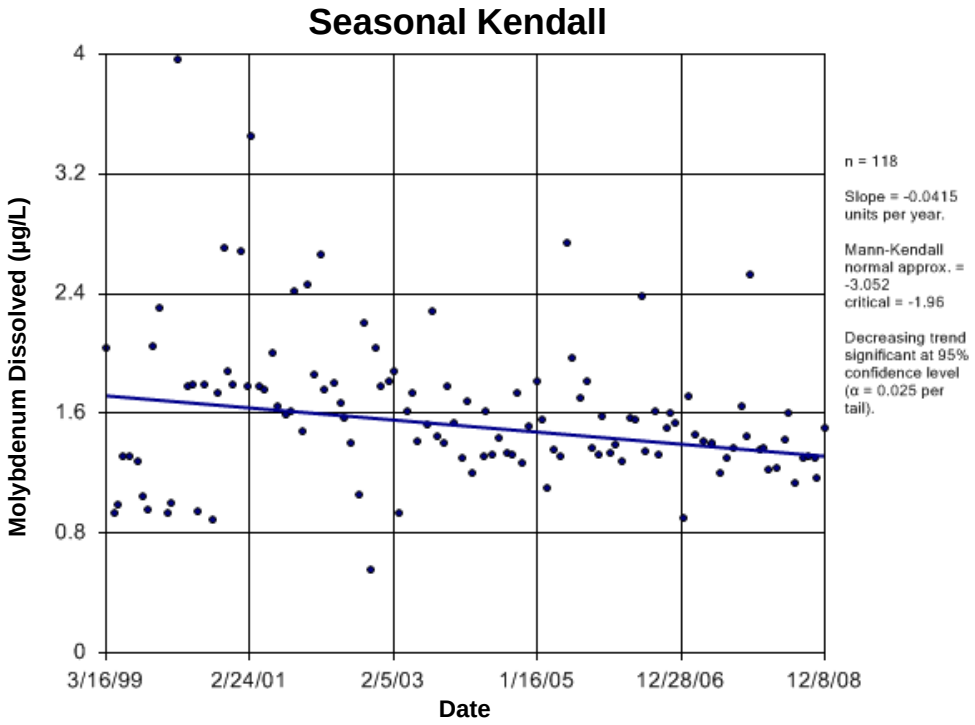


Figure E249 South Saskatchewan River: Molybdenum Dissolved

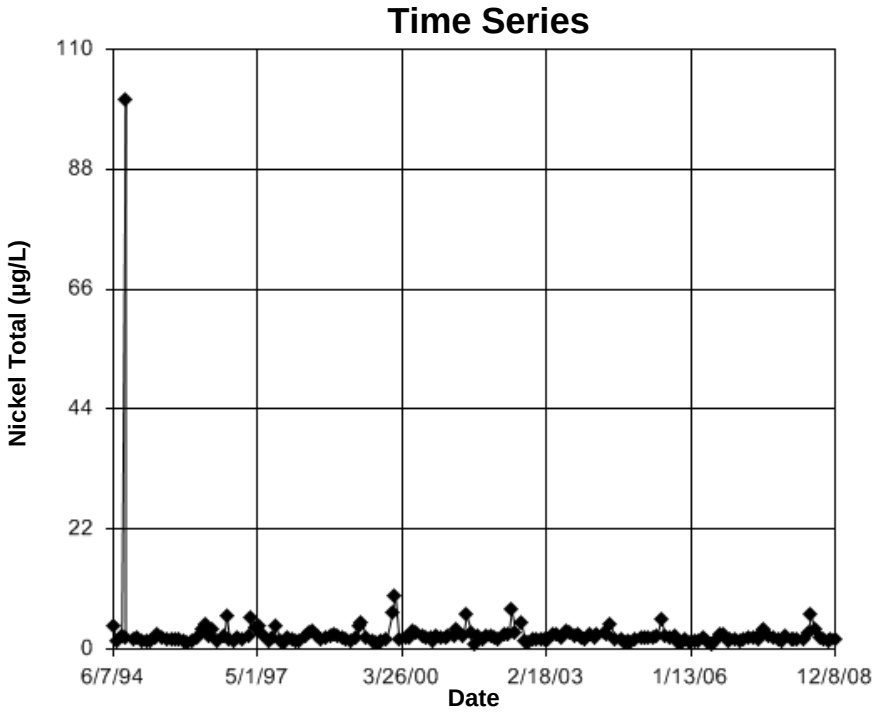


Figure E250 South Saskatchewan River: Nickel Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 18.16
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 9 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 18.16
Adjusted Kruskal-Wallis statistic (H') = 18.16

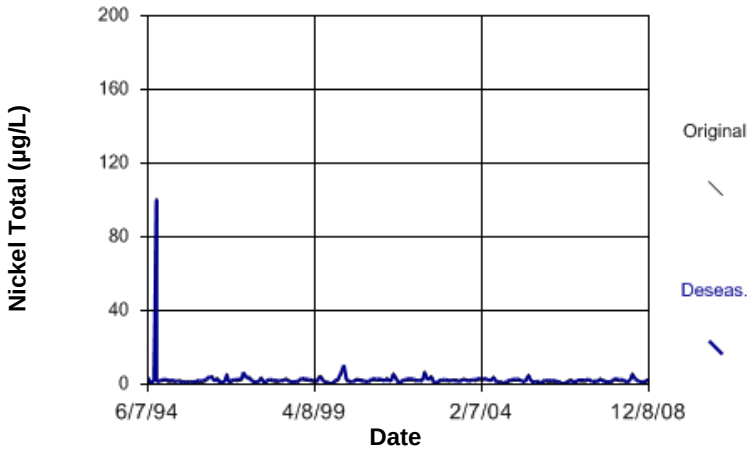


Figure E251 South Saskatchewan River: Nickel Total

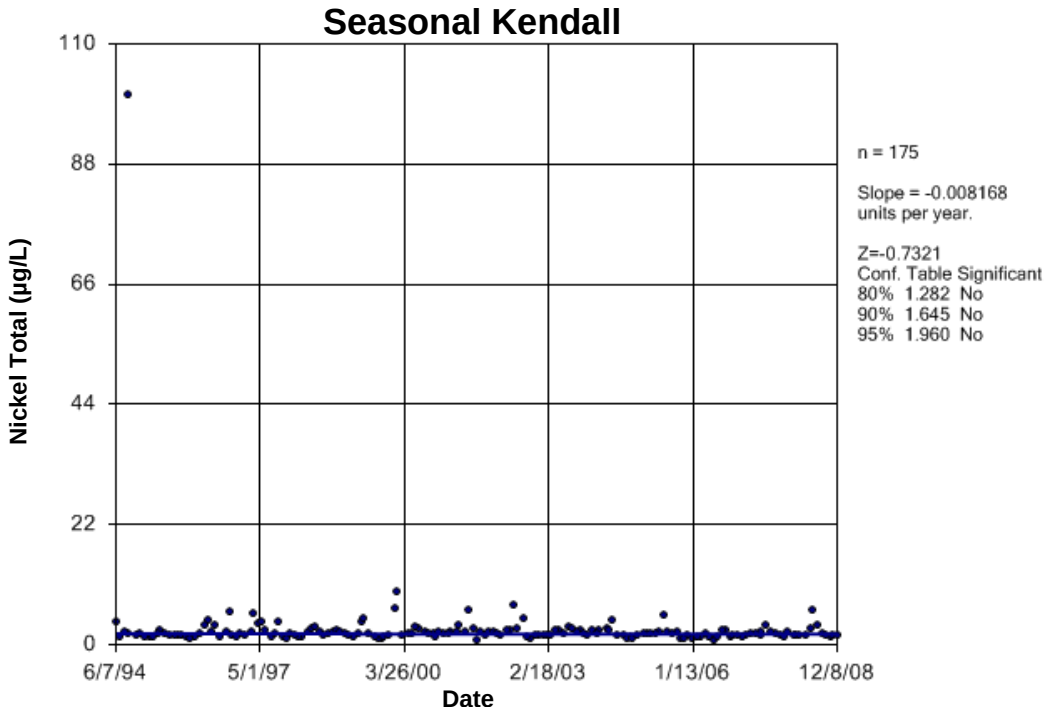


Figure E252 South Saskatchewan River: Nickel Total

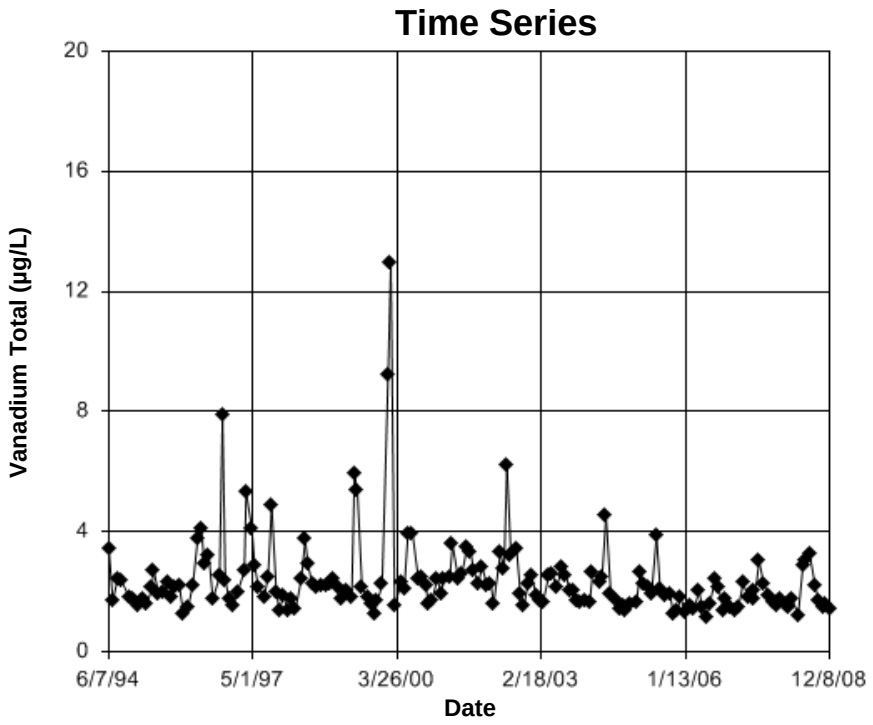


Figure E253 South Saskatchewan River: Vanadium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 22.78
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 6 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 22.78
Adjusted Kruskal-Wallis statistic (H') = 22.78

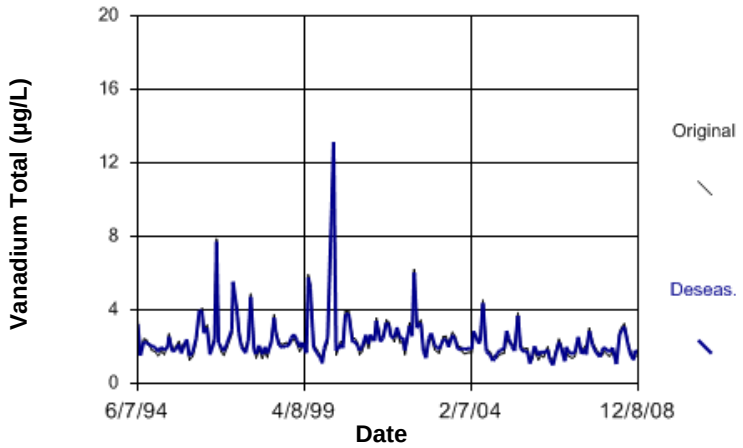


Figure E254 South Saskatchewan River: Vanadium Total

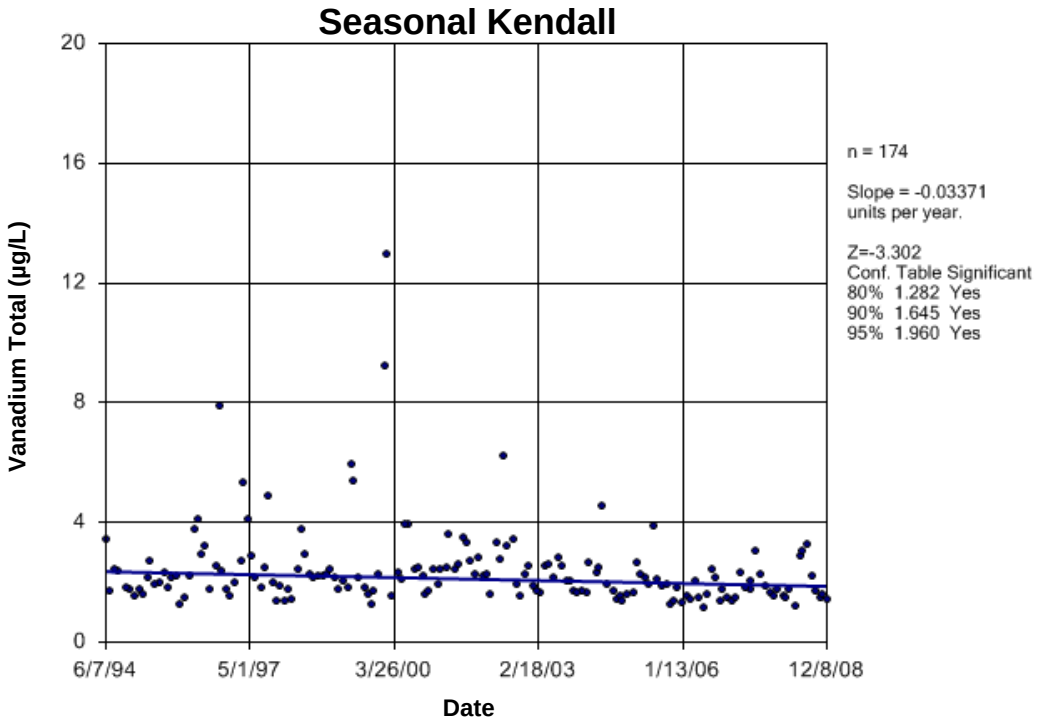


Figure E255 South Saskatchewan River: Vanadium Total

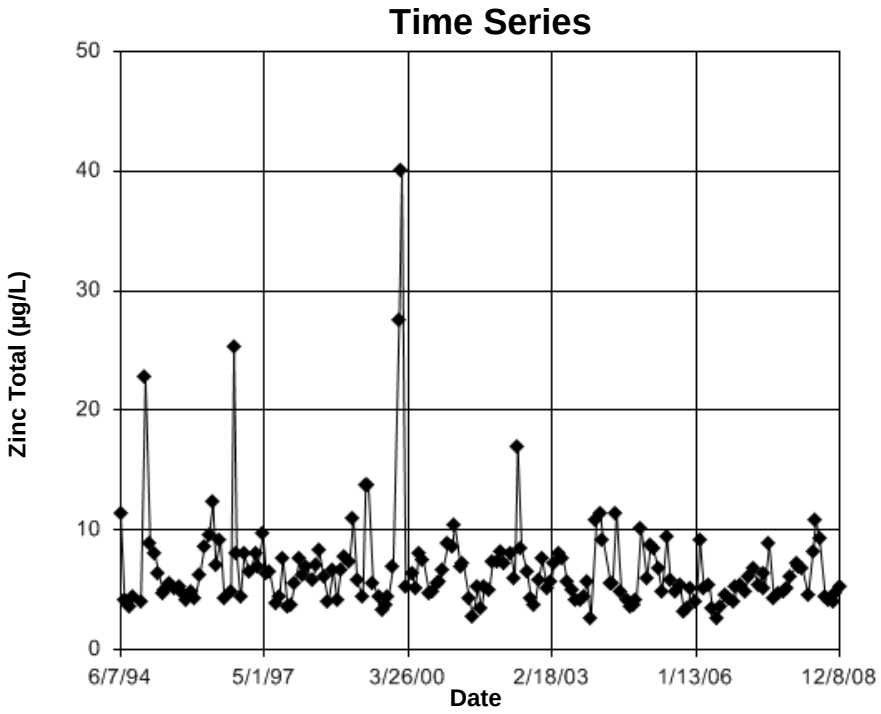


Figure E256 South Saskatchewan River: Zinc Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 13.06
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 13.06
Adjusted Kruskal-Wallis statistic (H') = 13.06

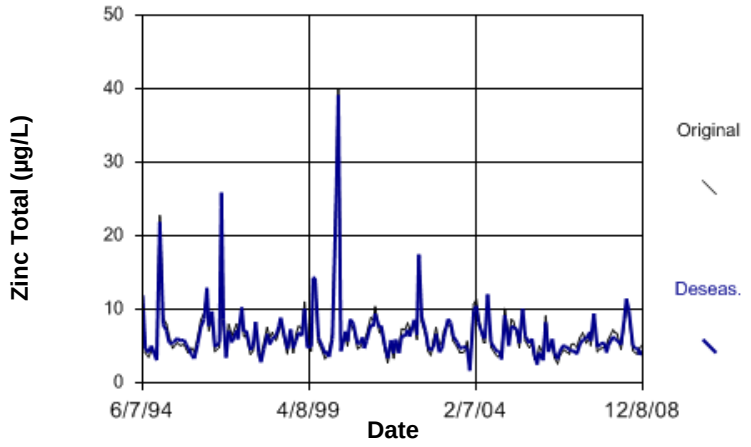


Figure E257 South Saskatchewan River: Zinc Total

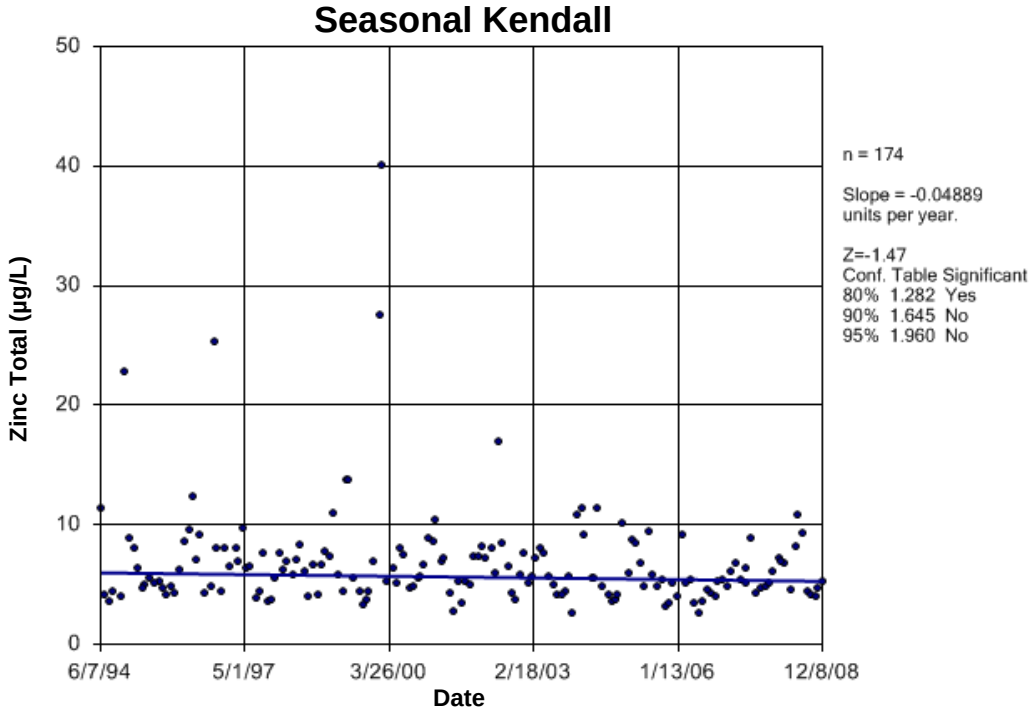


Figure E258 South Saskatchewan River: Zinc Total

Assiniboine River

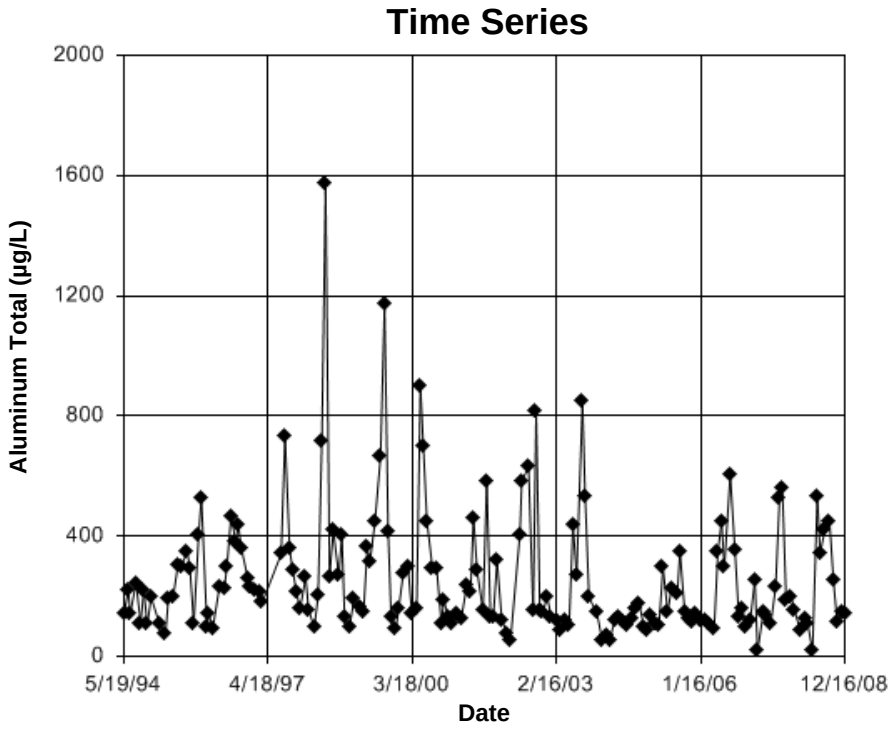


Figure E259 Assiniboine River: Aluminum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 45.04
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 45.04
Adjusted Kruskal-Wallis statistic (H') = 45.04

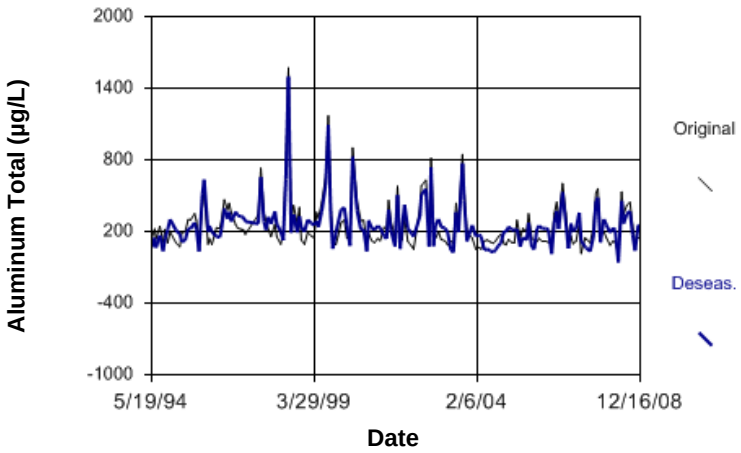


Figure E260 Assiniboine River: Aluminum Total

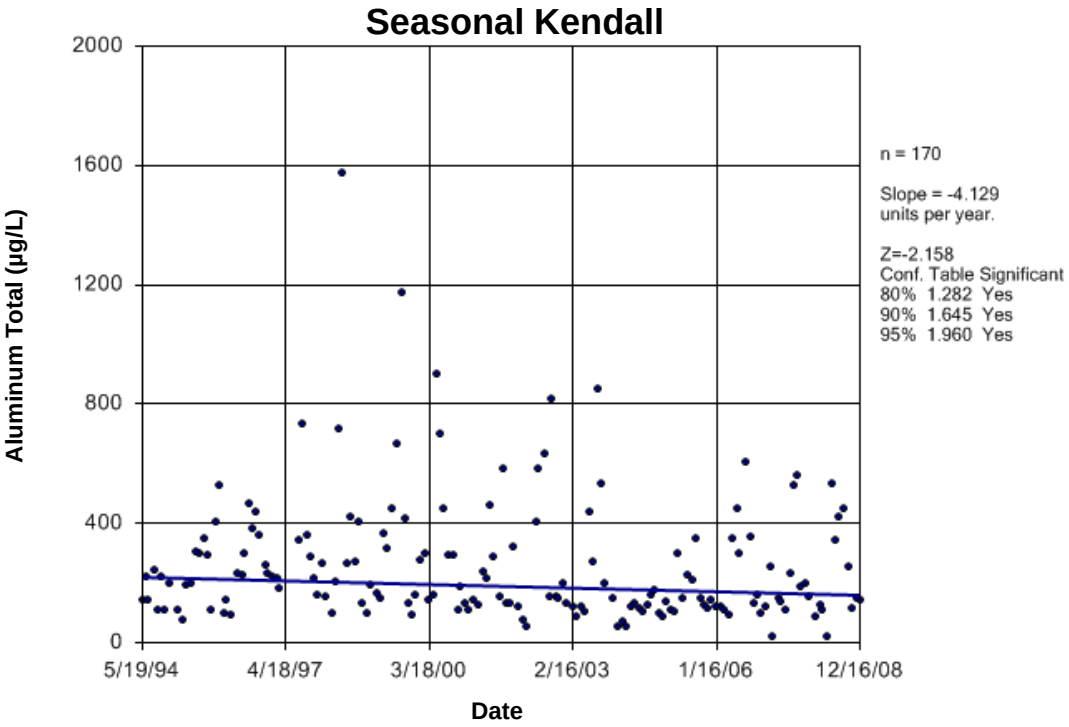


Figure E261 Assiniboine River: Aluminum Total

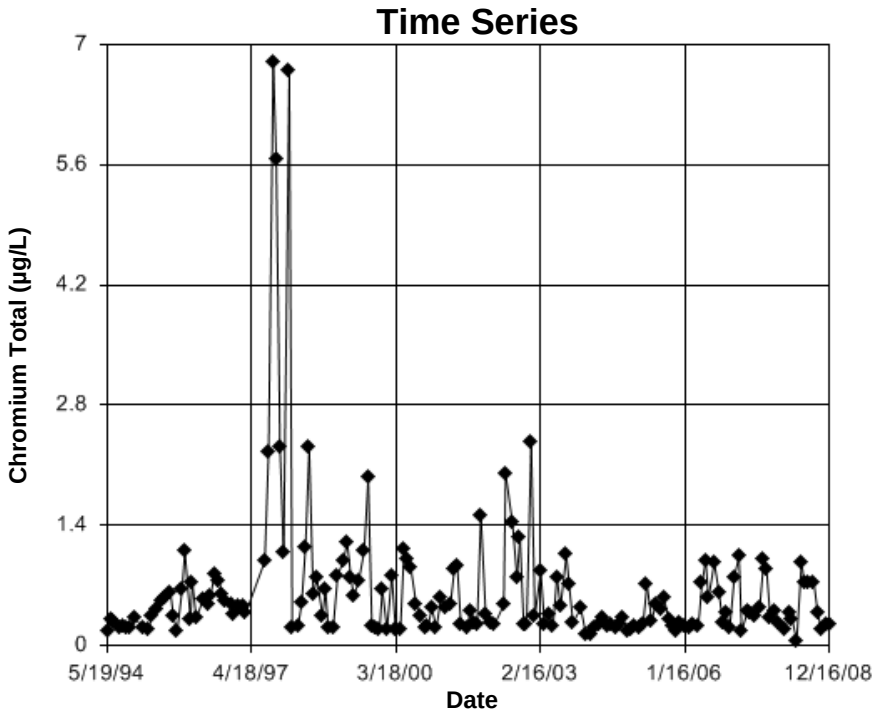


Figure E262 Assiniboine River: Chromium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 11.13
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 11.13
Adjusted Kruskal-Wallis statistic (H') = 11.13

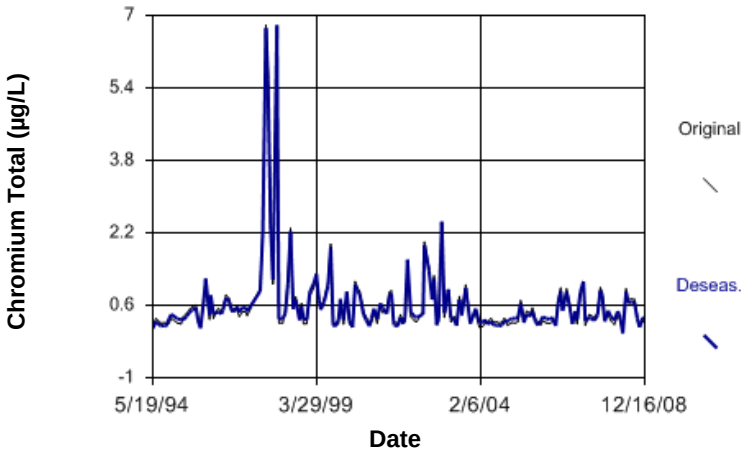


Figure E263 Assiniboine River: Chromium Total

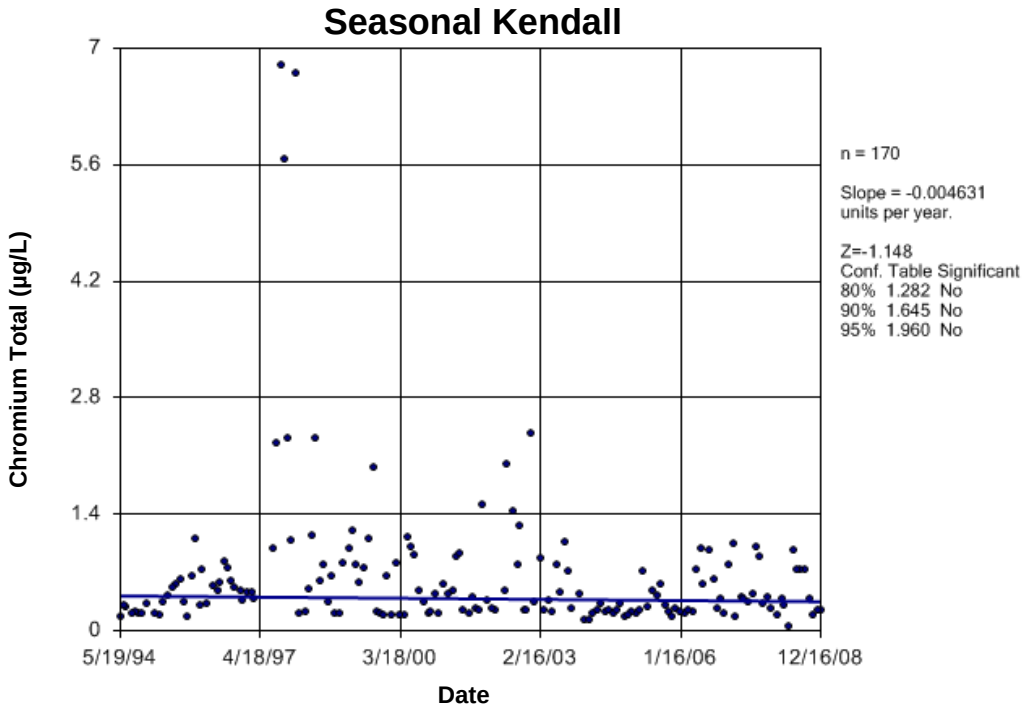


Figure E264 Assiniboine River: Chromium Total

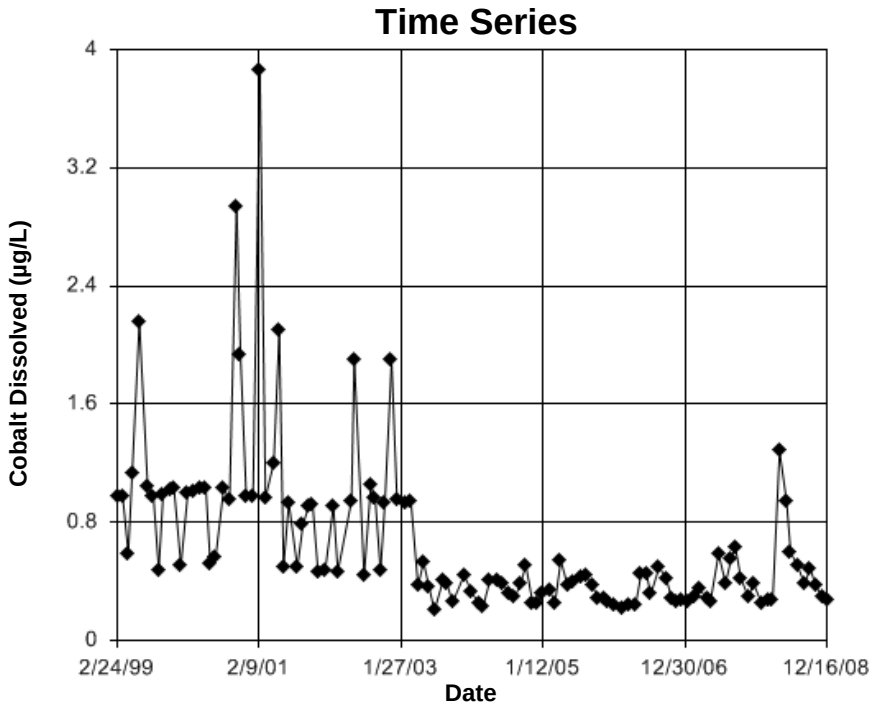


Figure E265 Assiniboine River: Cobalt Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 3.979
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 3.979
Adjusted Kruskal-Wallis statistic (H') = 3.979

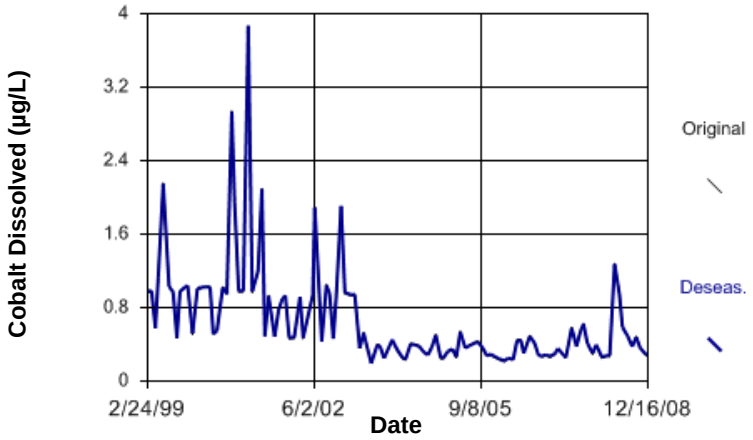


Figure E266 Assiniboine River: Cobalt Dissolved

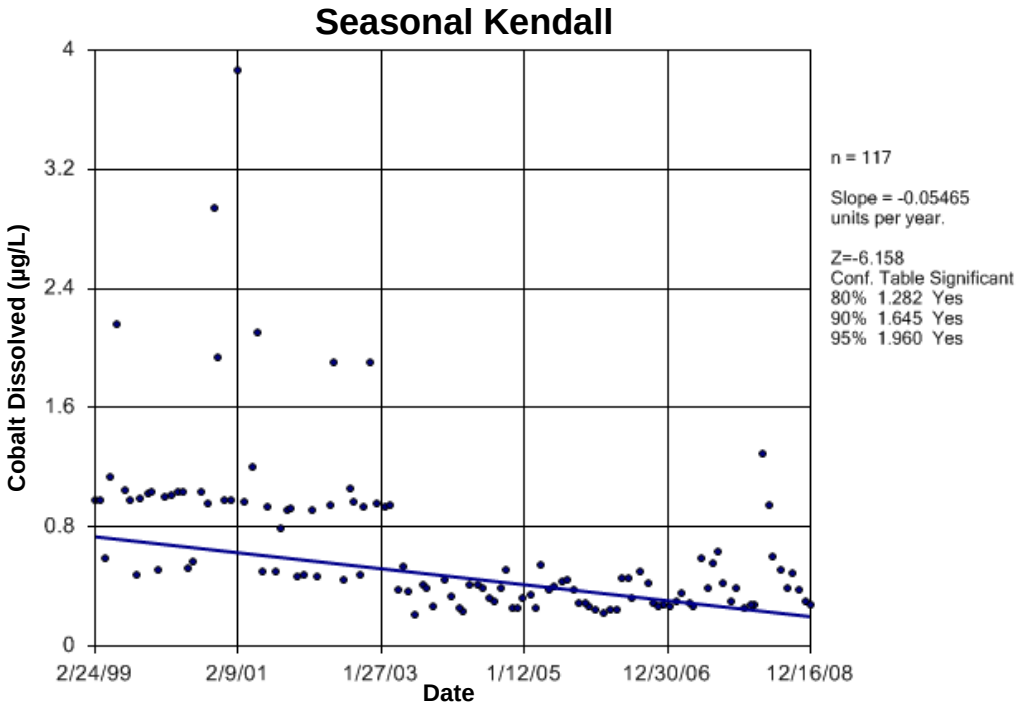


Figure E267 Assiniboine River: Cobalt Dissolved

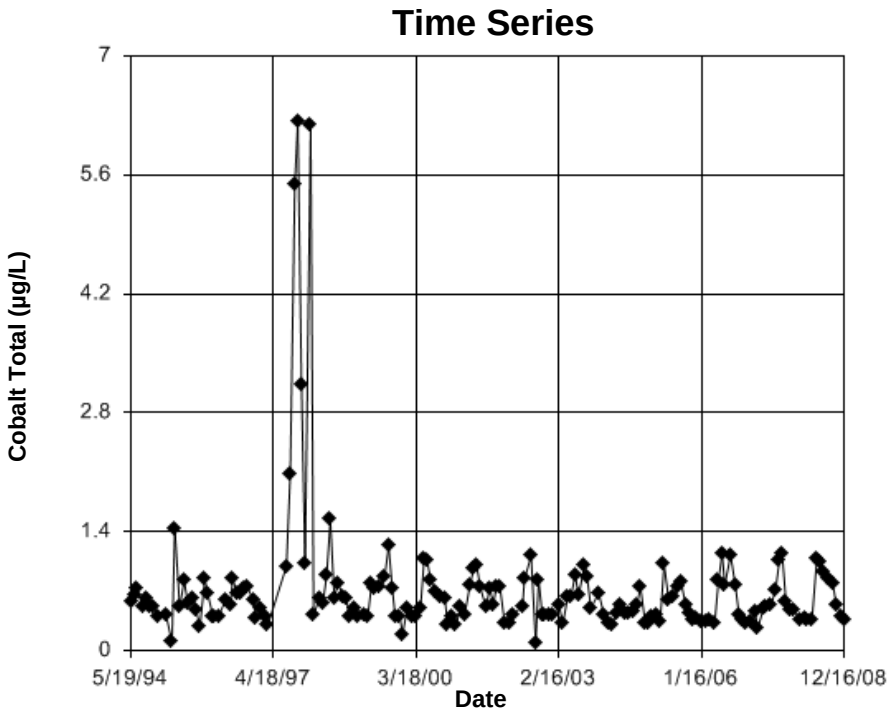


Figure E268 Assiniboine River: Cobalt Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 64.42
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

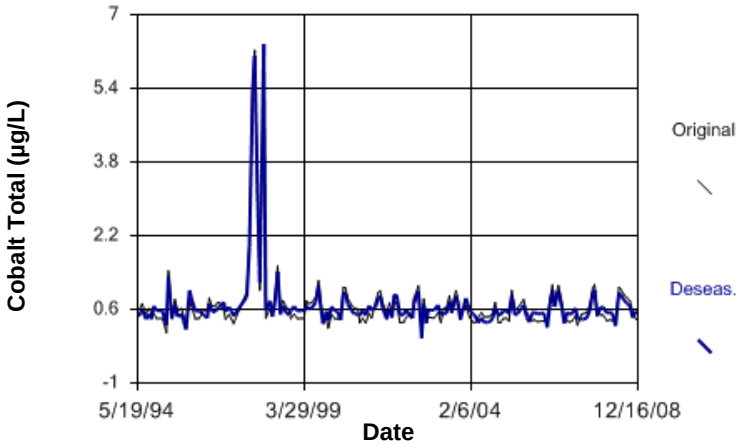


Figure E269 Assiniboine River: Cobalt Total

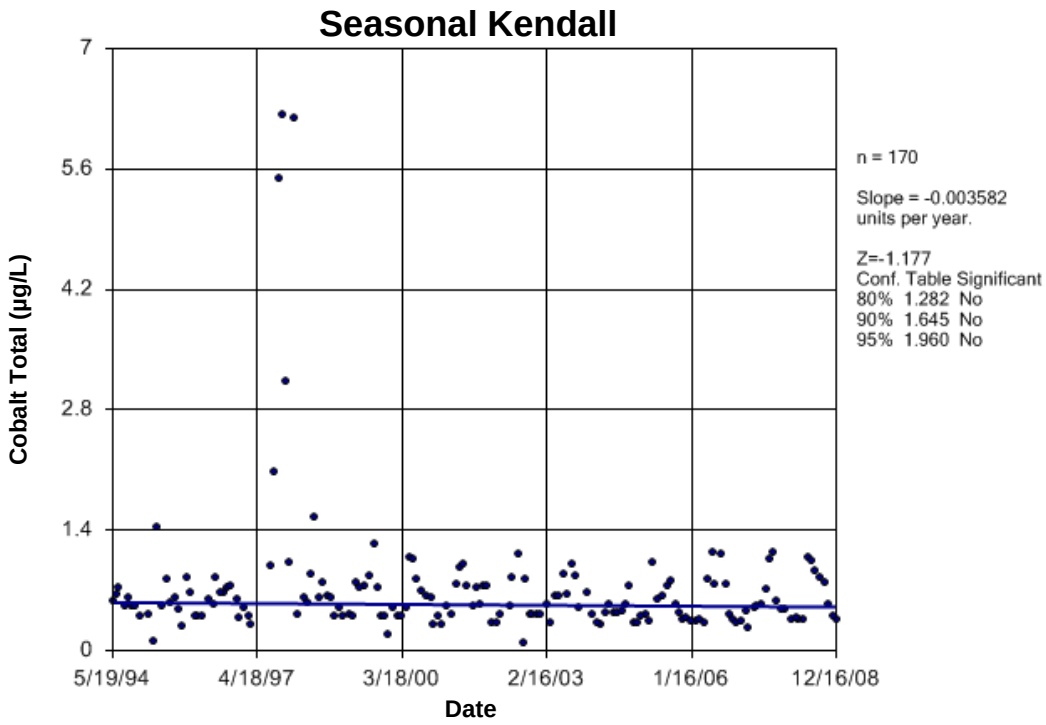


Figure E270 Assiniboine River: Cobalt Total

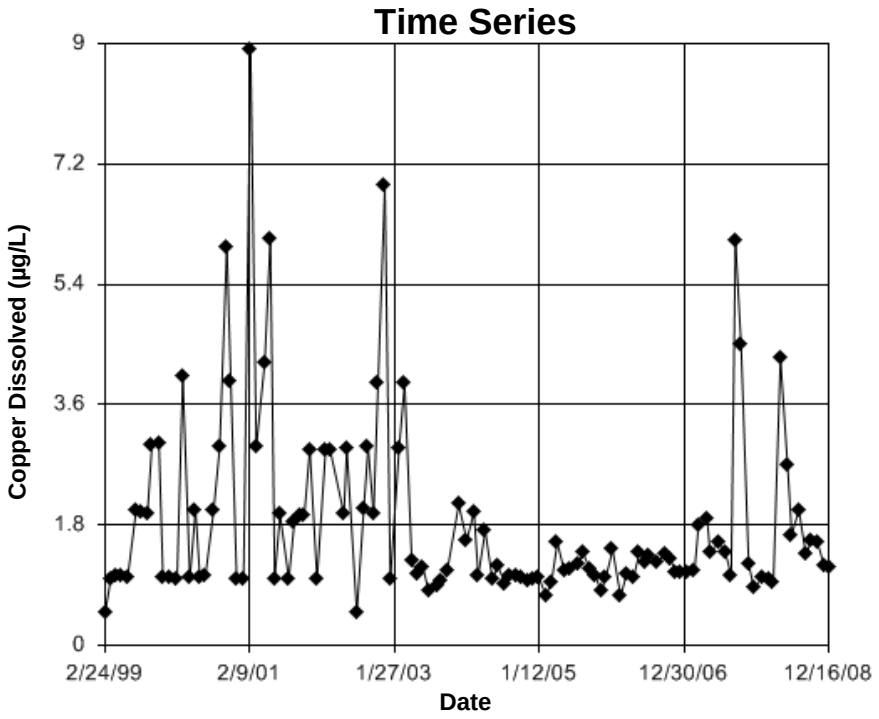


Figure E271 Assiniboine River: Copper Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 2.791
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 2.791
Adjusted Kruskal-Wallis statistic (H') = 2.791

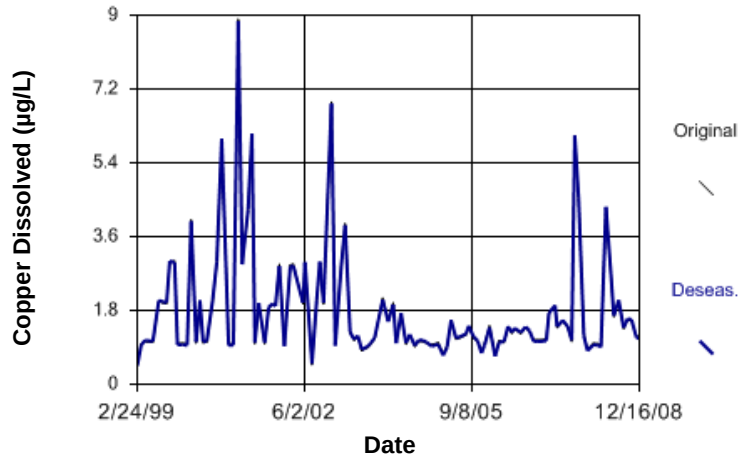


Figure E272 Assiniboine River: Copper Dissolved

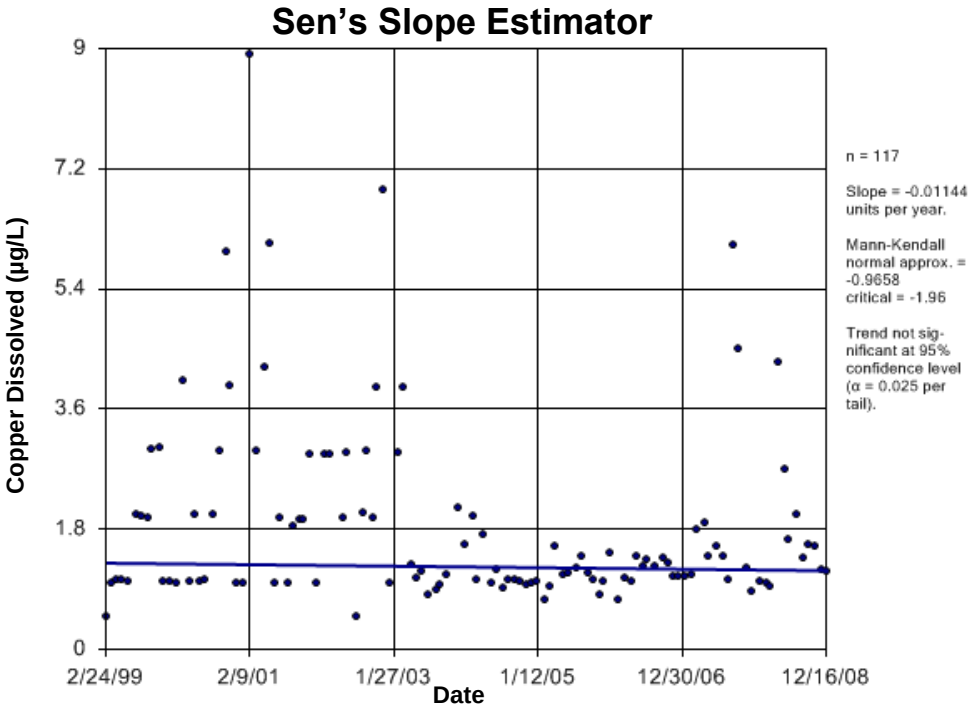


Figure E273 Assiniboine River: Copper Dissolved

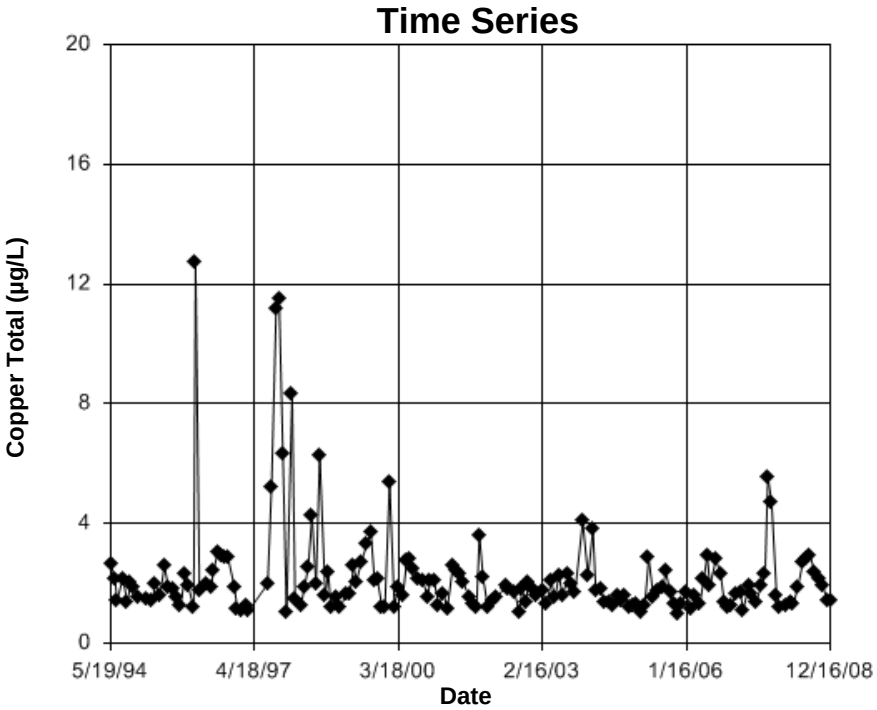


Figure E274 Assiniboine River: Copper Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 31.09
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 9 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 31.09
Adjusted Kruskal-Wallis statistic (H') = 31.09

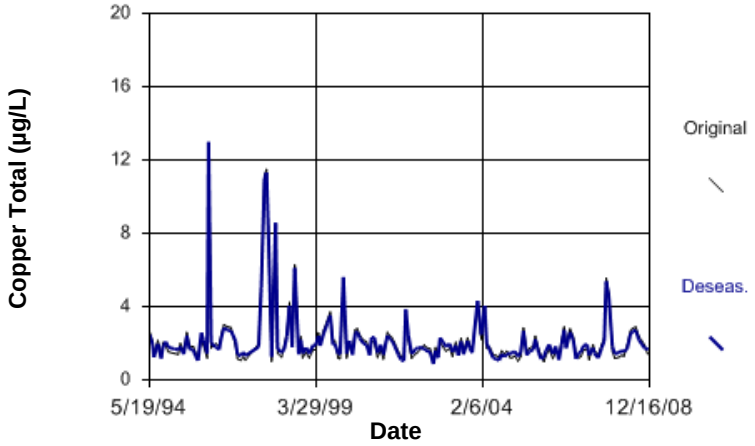


Figure E275 Assiniboine River: Copper Total

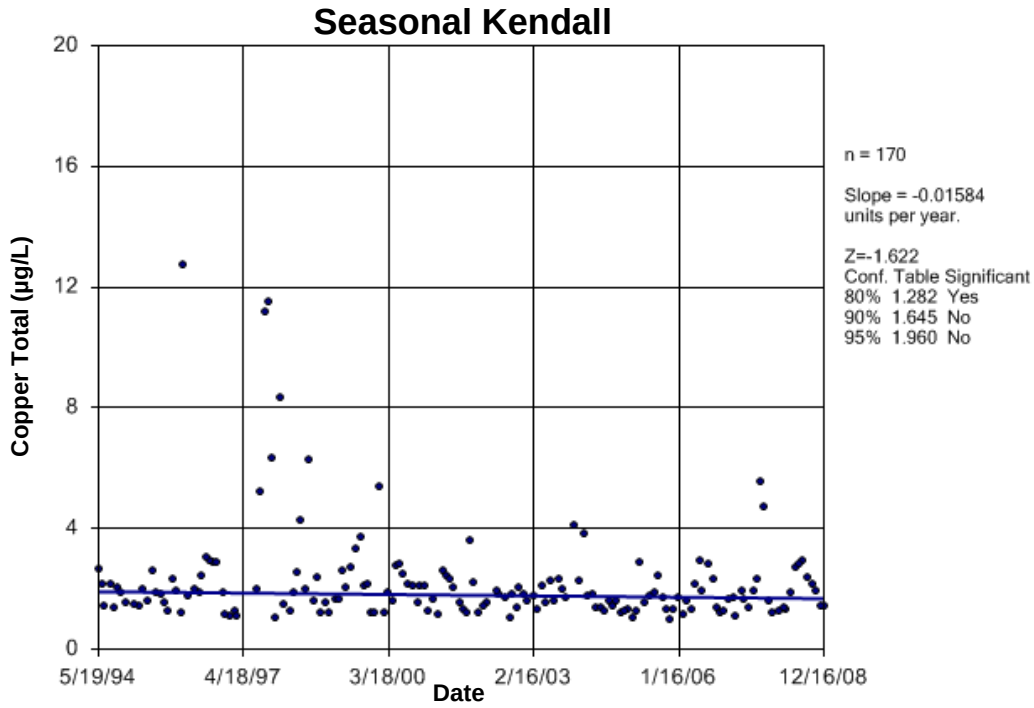


Figure E276 Assiniboine River: Copper Total

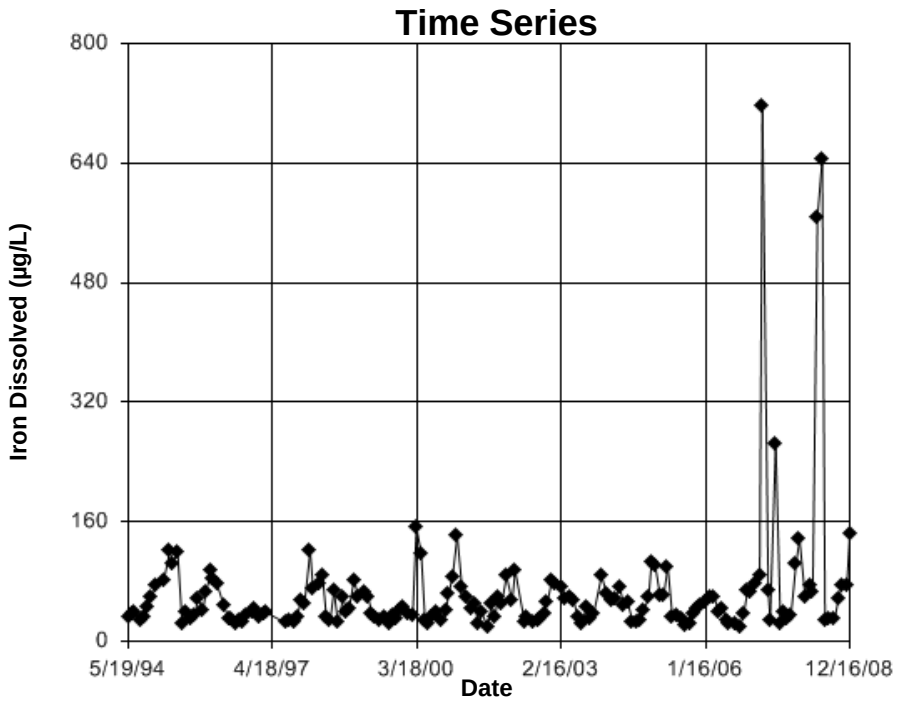


Figure E277 Assiniboine River: Iron Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 63.97
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 63.97
Adjusted Kruskal-Wallis statistic (H') = 63.97

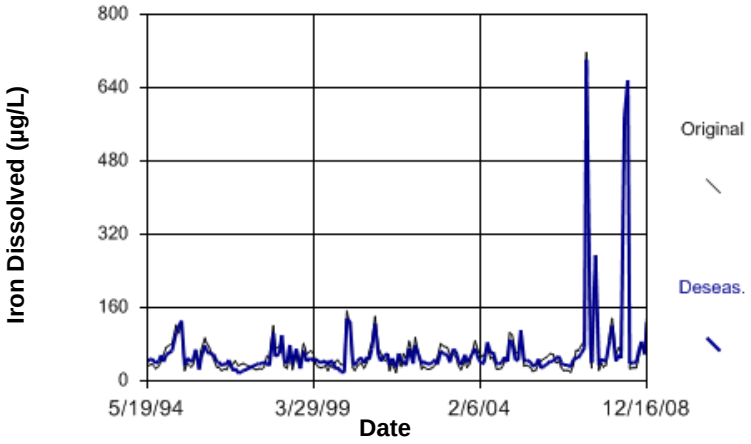


Figure E278 Assiniboine River: Iron Dissolved

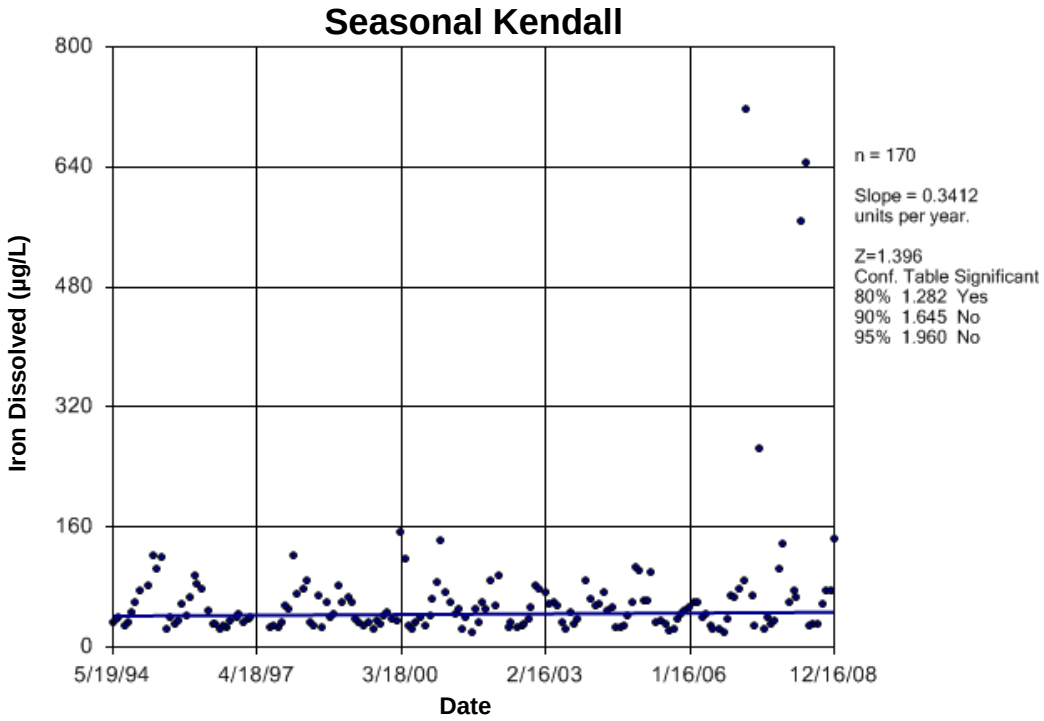


Figure E279 Assiniboine River: Iron Dissolved

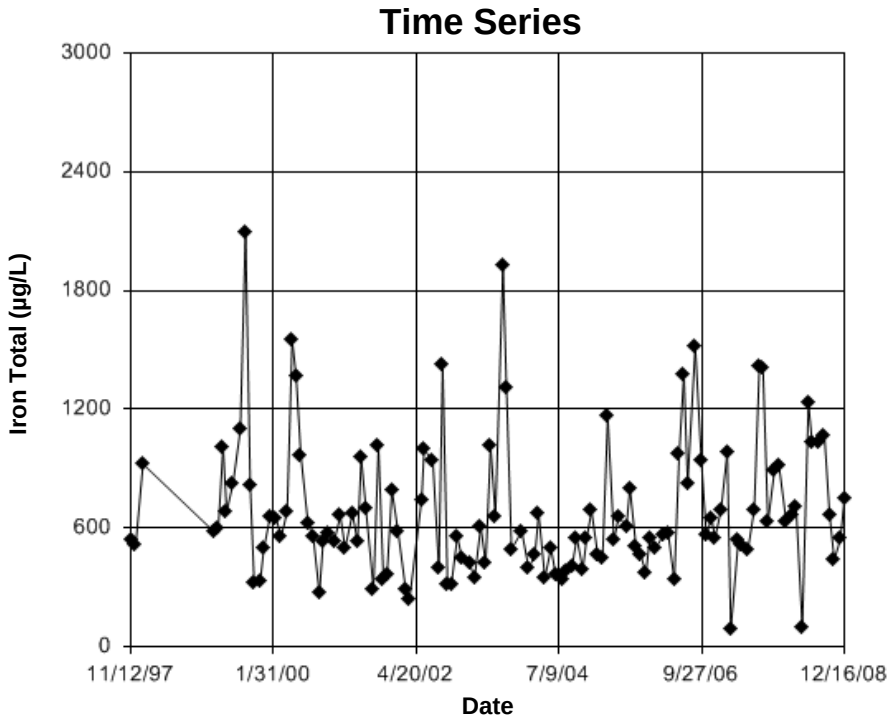


Figure E280 Assiniboine River: Iron Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 8.371
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 8.371
Adjusted Kruskal-Wallis statistic (H') = 8.371

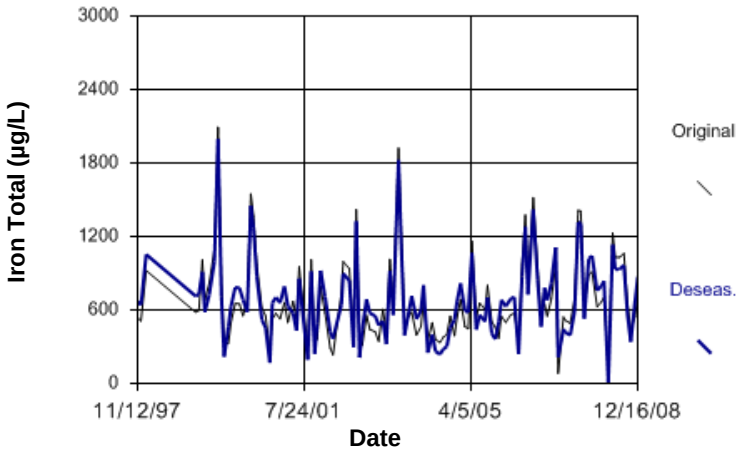


Figure E281 Assiniboine River: Iron Total

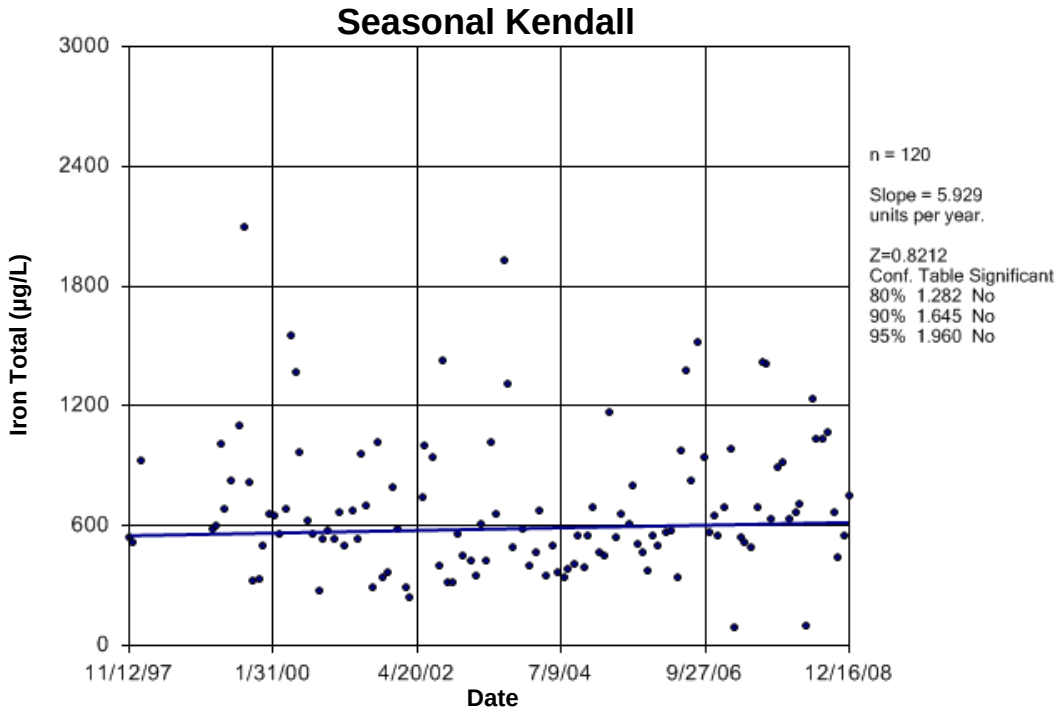


Figure E282 Assiniboine River: Iron Total

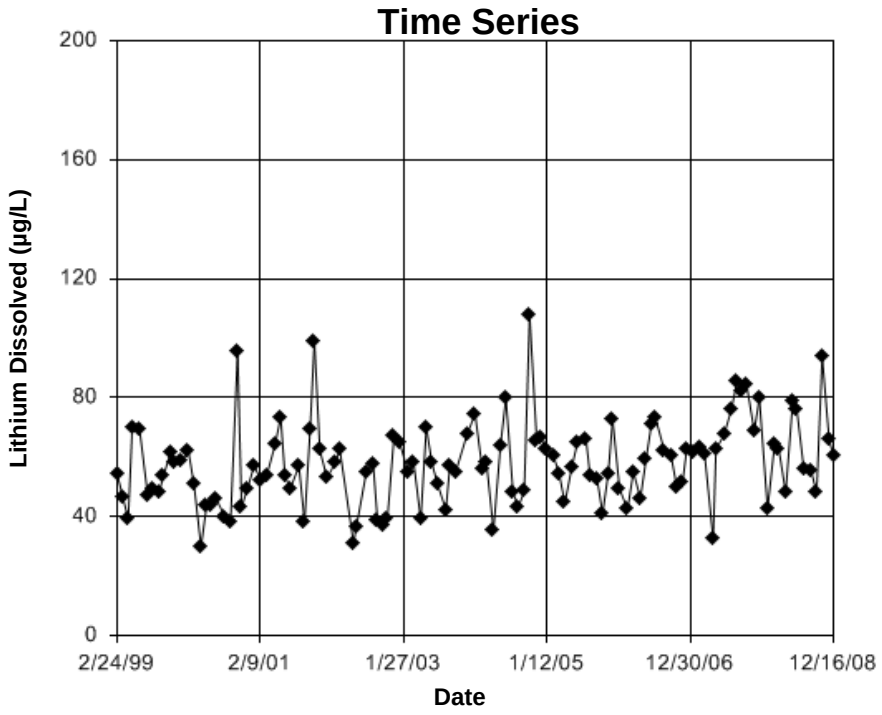


Figure E283 Assiniboine River: Lithium Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 2.582
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 2.582
Adjusted Kruskal-Wallis statistic (H') = 2.582

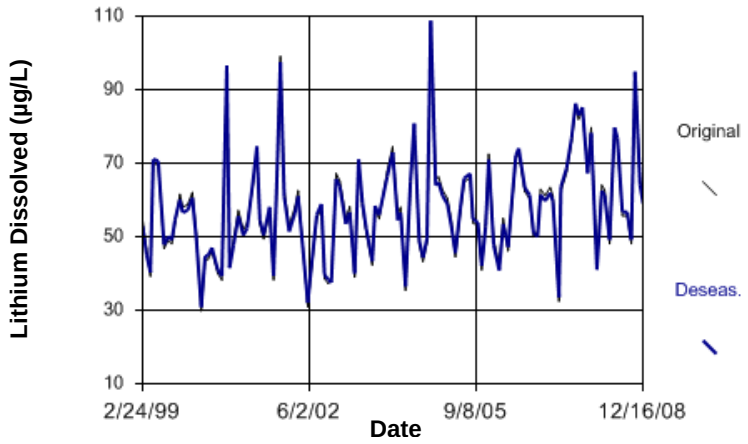


Figure E284 Assiniboine River: Lithium Dissolved

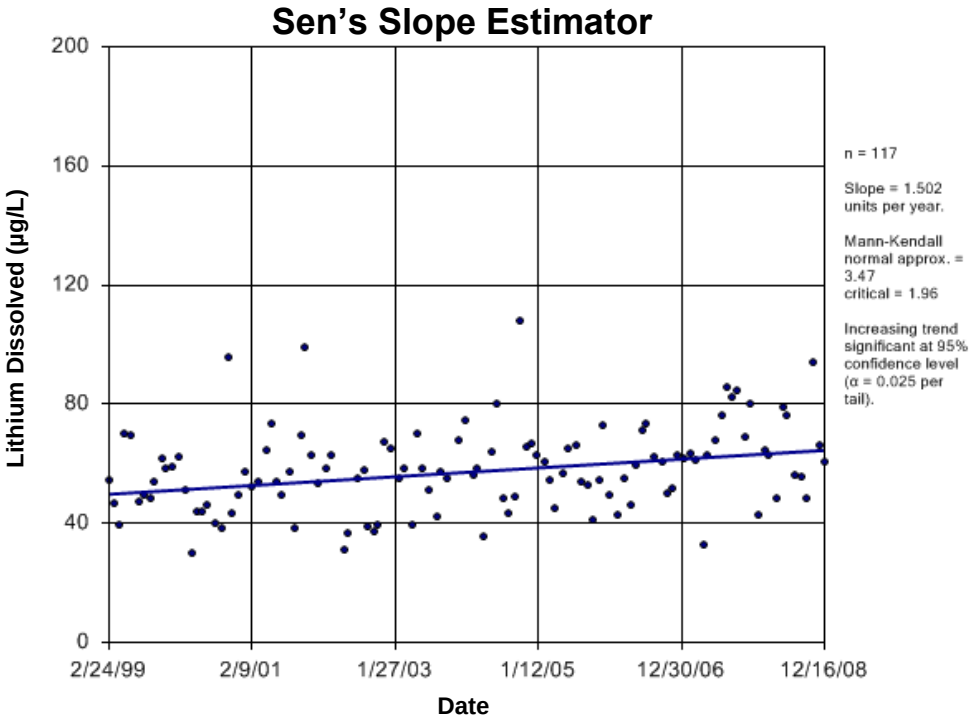


Figure E285 Assiniboine River: Lithium Dissolved

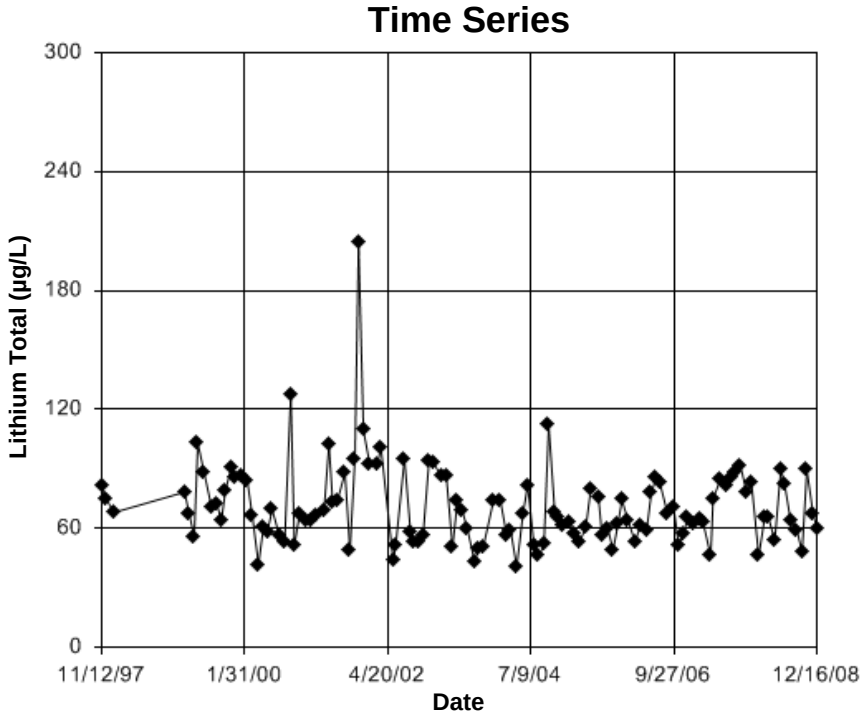


Figure E286 Assiniboine River: Lithium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 2.596
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 2.596
Adjusted Kruskal-Wallis statistic (H') = 2.596

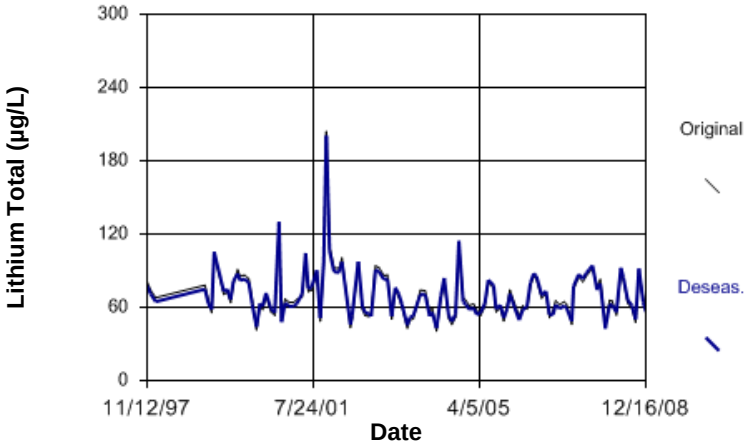


Figure E287 Assiniboine River: Lithium Total

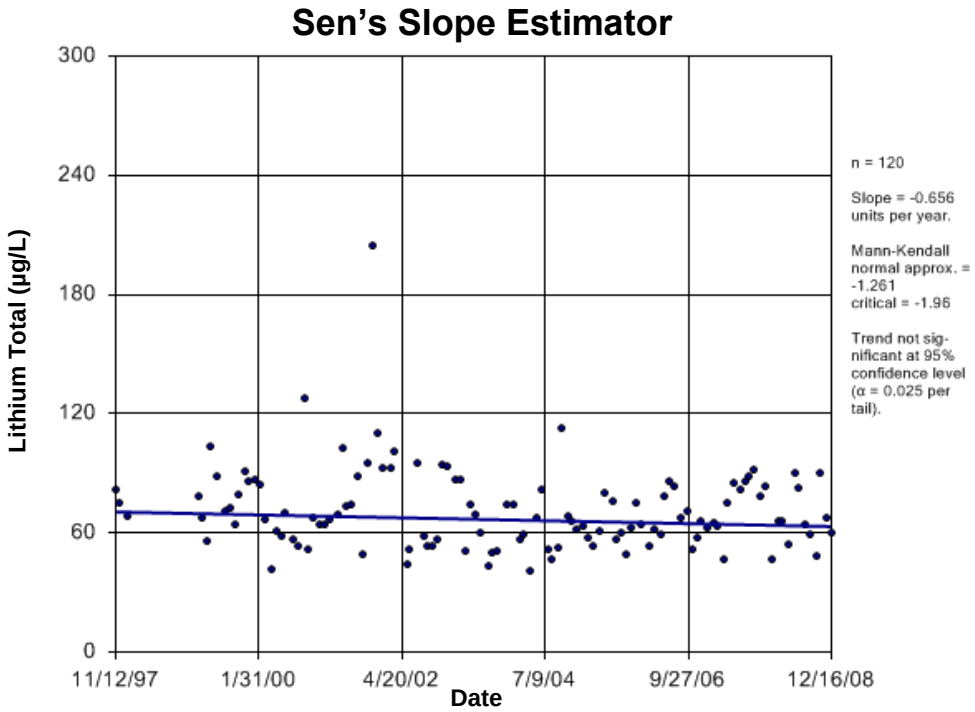


Figure E288 Assiniboine River: Lithium Total

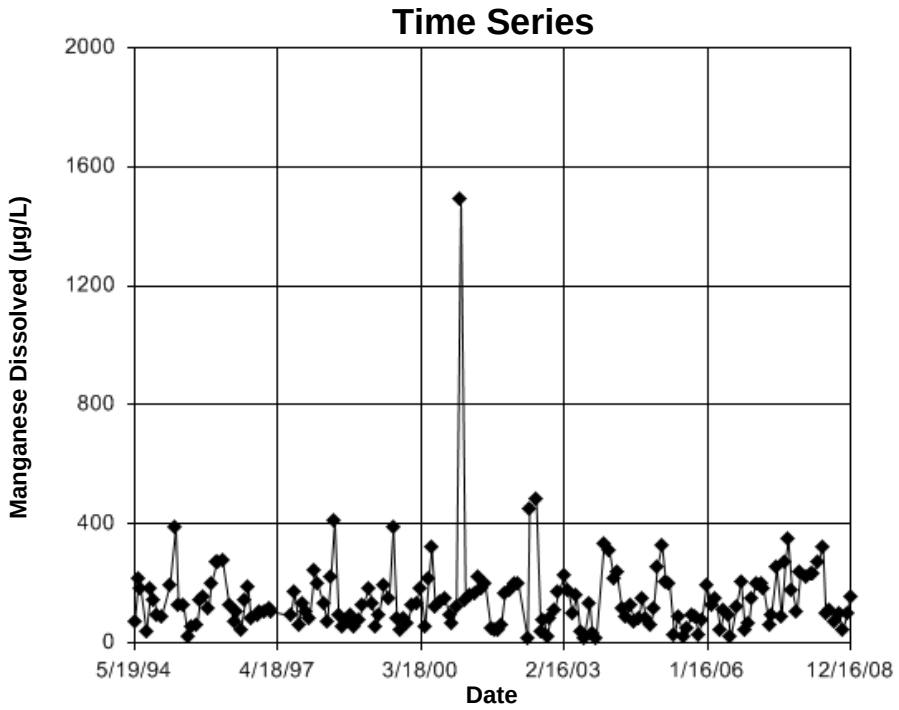


Figure E289 Assiniboine River: Manganese Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 14.41
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 14.41
Adjusted Kruskal-Wallis statistic (H') = 14.41

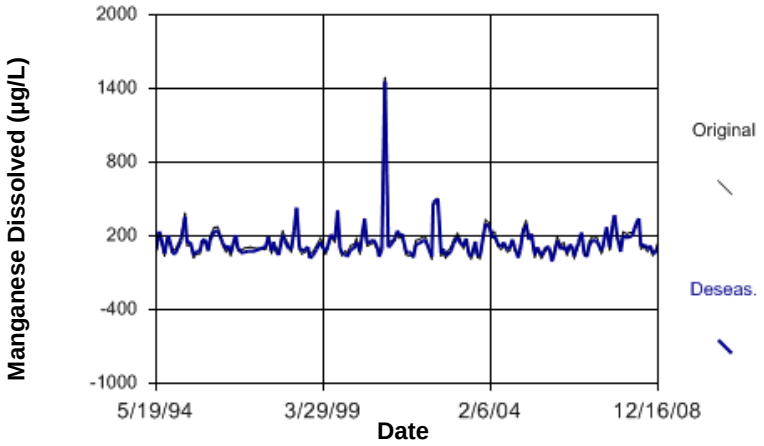


Figure E290 Assiniboine River: Manganese Dissolved

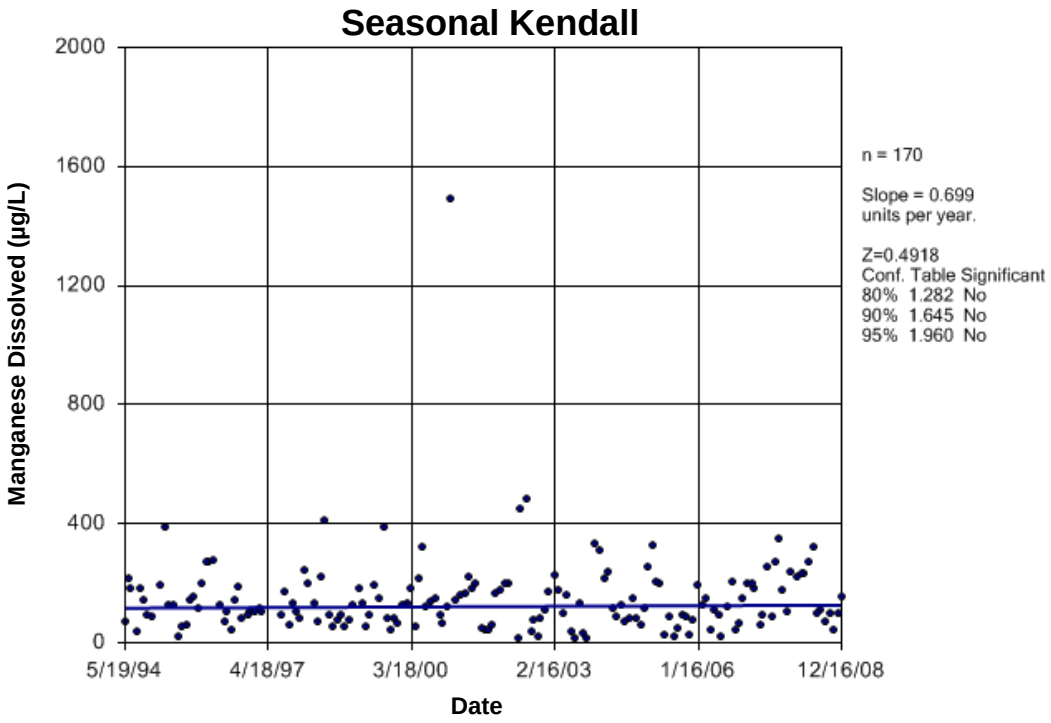


Figure E291 Assiniboine River: Manganese Dissolved

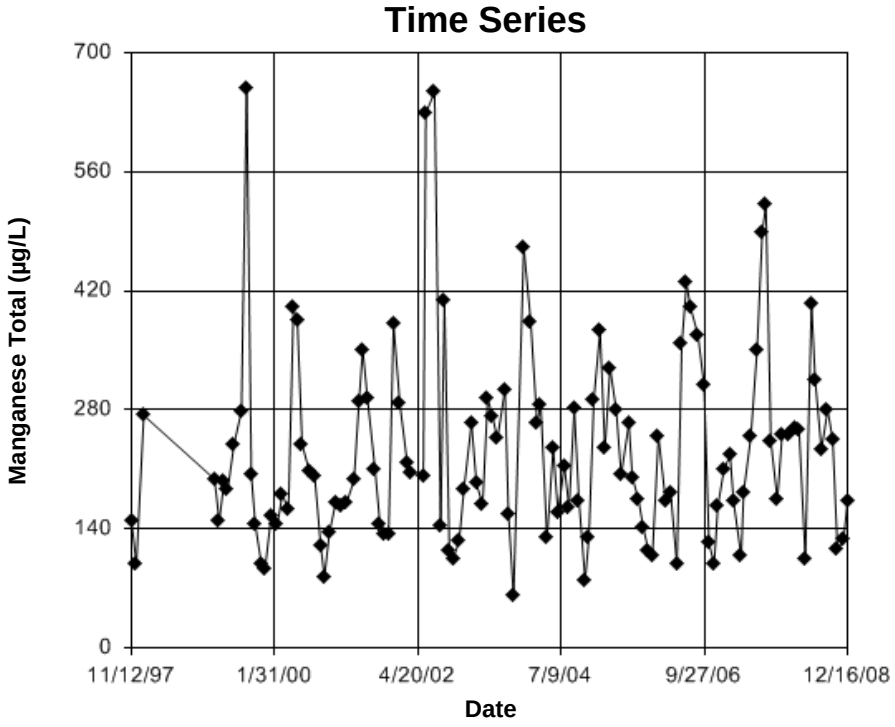


Figure E292 Assiniboine River: Manganese Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 7.116
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 6 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 7.116
Adjusted Kruskal-Wallis statistic (H') = 7.116

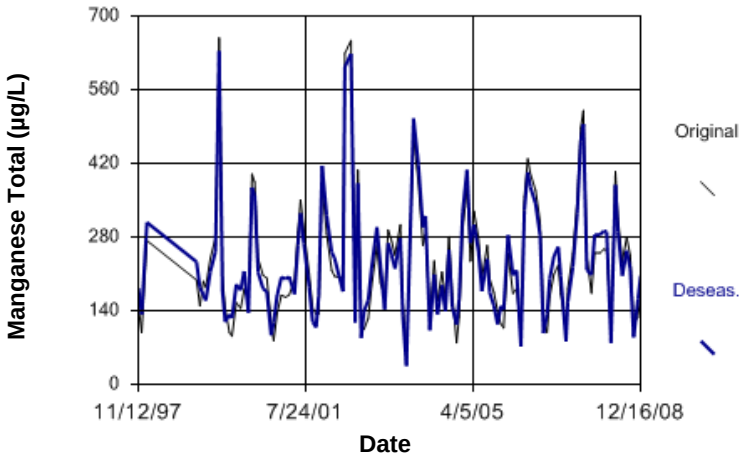


Figure E293 Assiniboine River: Manganese Total

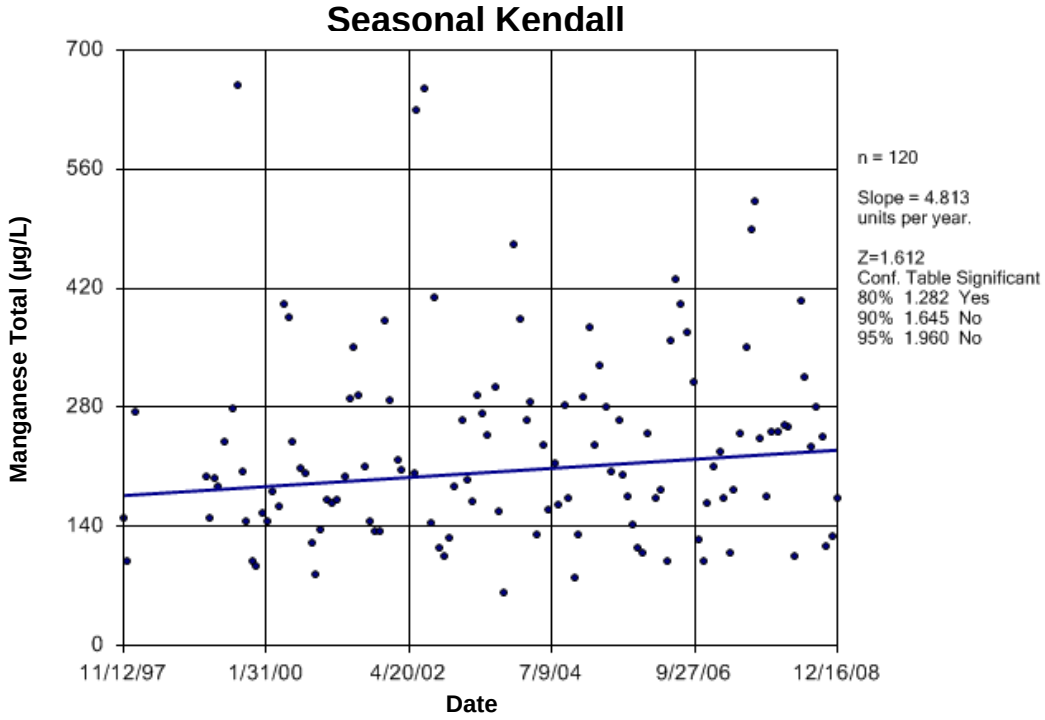


Figure E294 Assiniboine River: Manganese Total

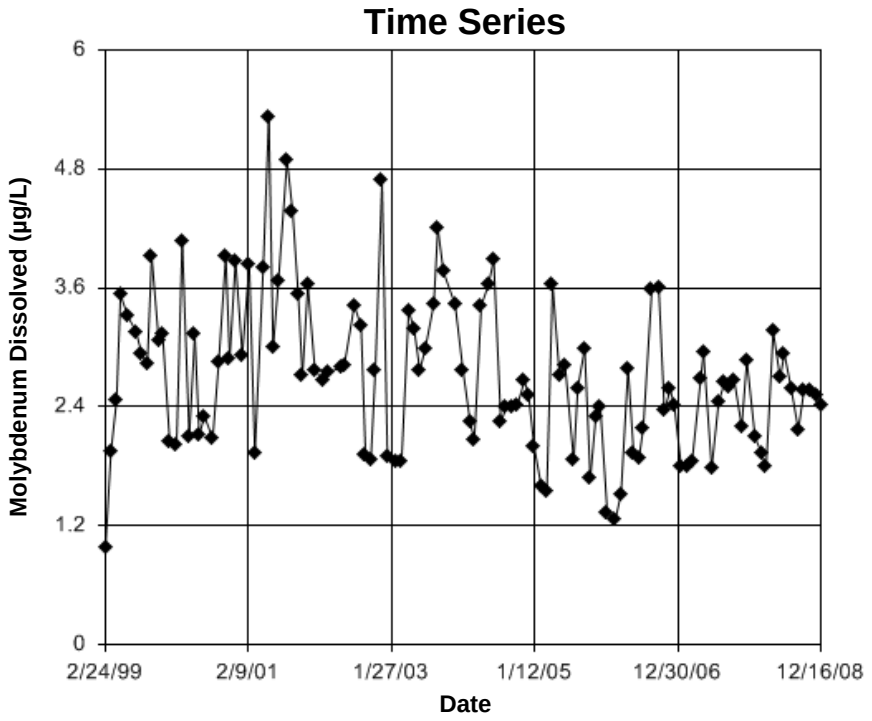


Figure E295 Assiniboine River: Molybdenum Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 13.54
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 13.54
Adjusted Kruskal-Wallis statistic (H') = 13.54

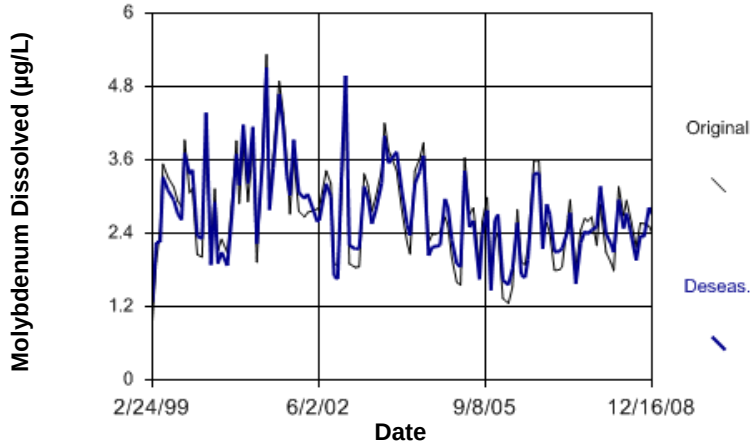


Figure E296 Assiniboine River: Molybdenum Dissolved

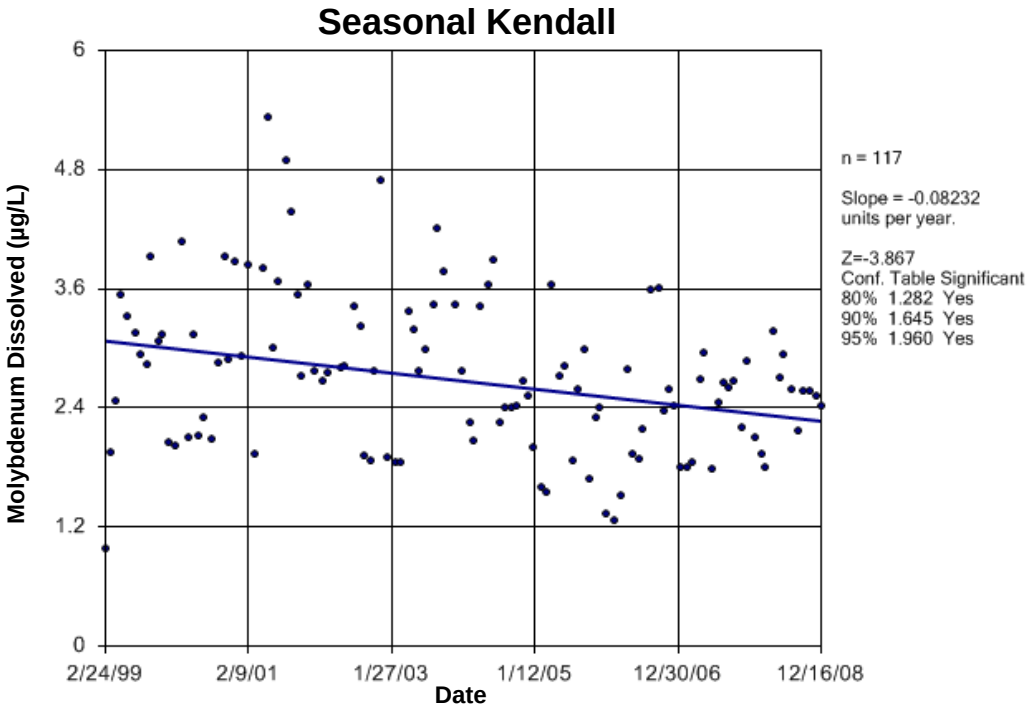


Figure E297 Assiniboine River: Molybdenum Dissolved

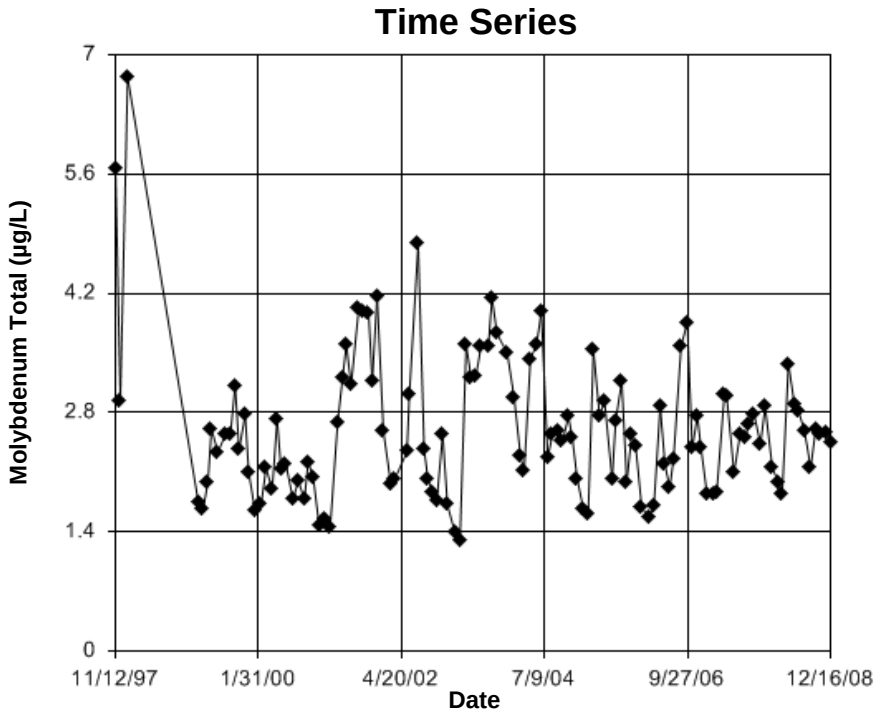


Figure E298 Assiniboine River: Molybdenum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 20.87
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 4 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 20.87
Adjusted Kruskal-Wallis statistic (H') = 20.87

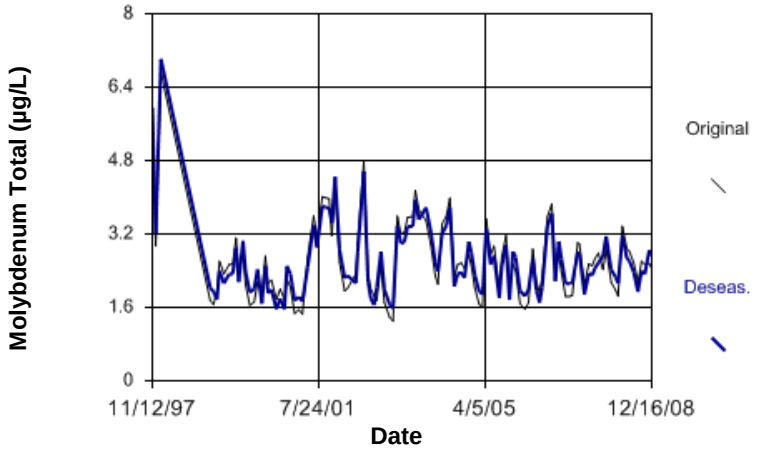


Figure E299 Assiniboine River: Molybdenum Total

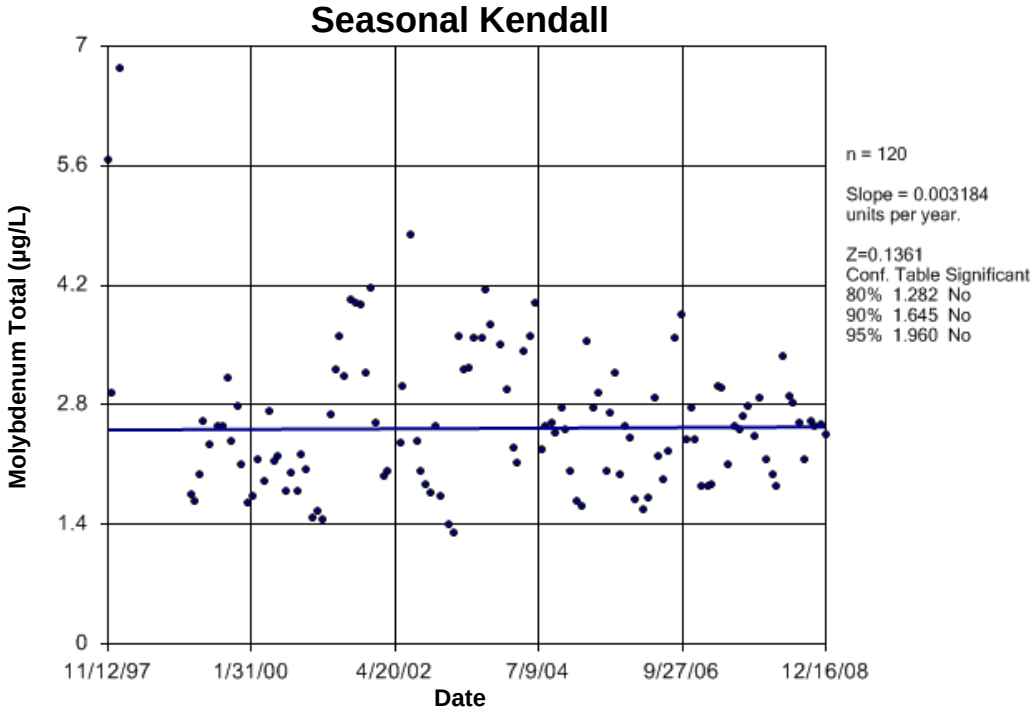


Figure E300 Assiniboine River: Molybdenum Total

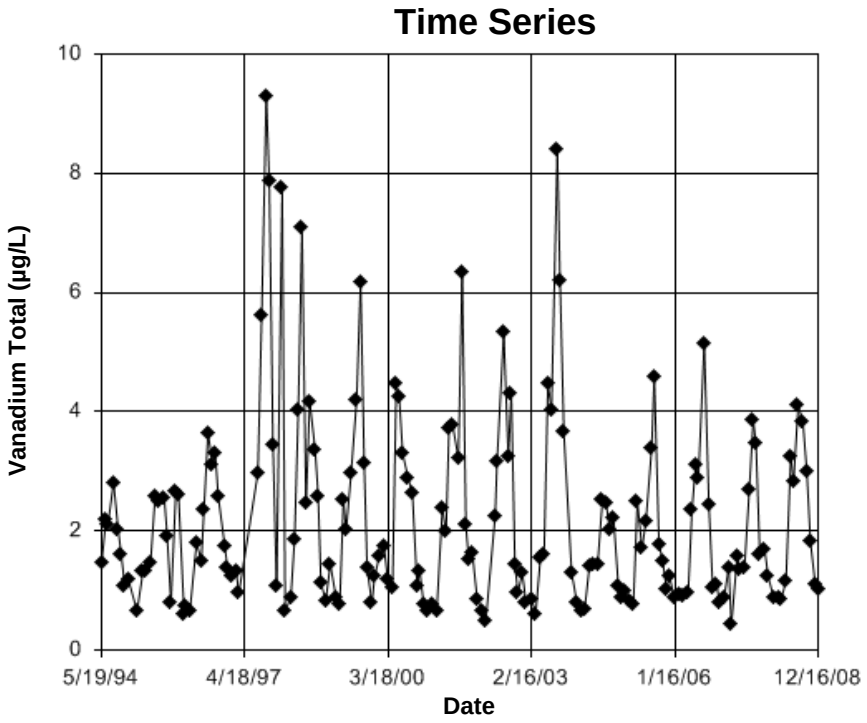


Figure E301 Assiniboine River: Vanadium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 86.62
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 86.62
Adjusted Kruskal-Wallis statistic (H') = 86.62

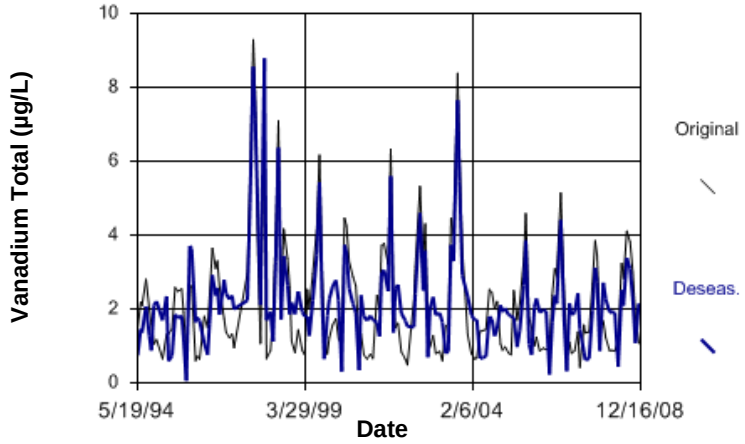


Figure E302 Assiniboine River: Vanadium Total

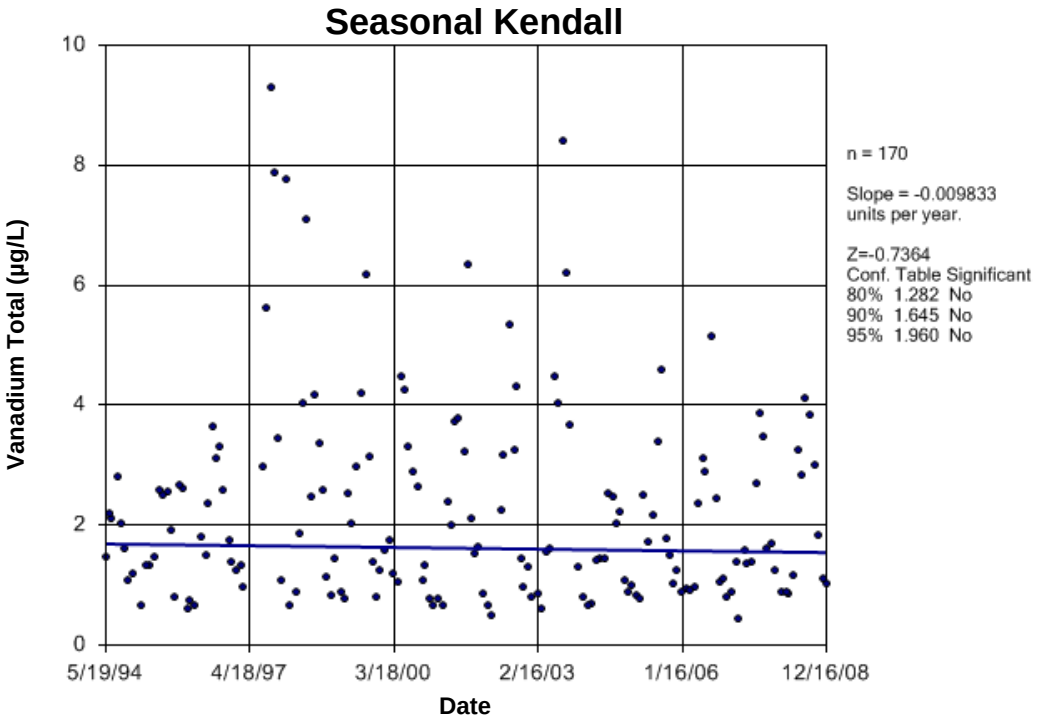


Figure E303 Assiniboine River: Vanadium Total

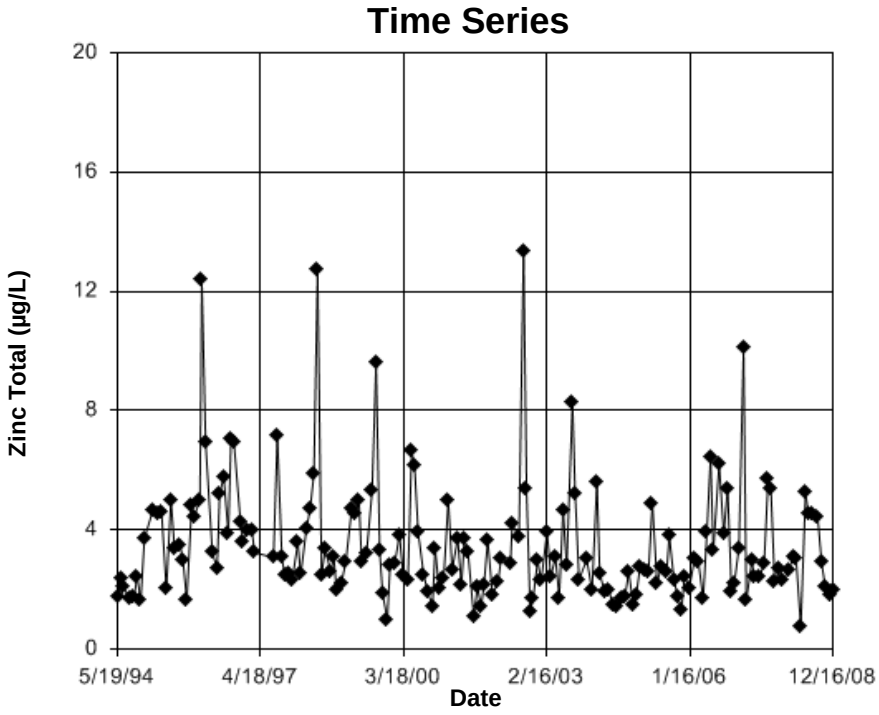


Figure E304 Assiniboine River: Zinc Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.232
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 1.232
Adjusted Kruskal-Wallis statistic (H') = 1.232

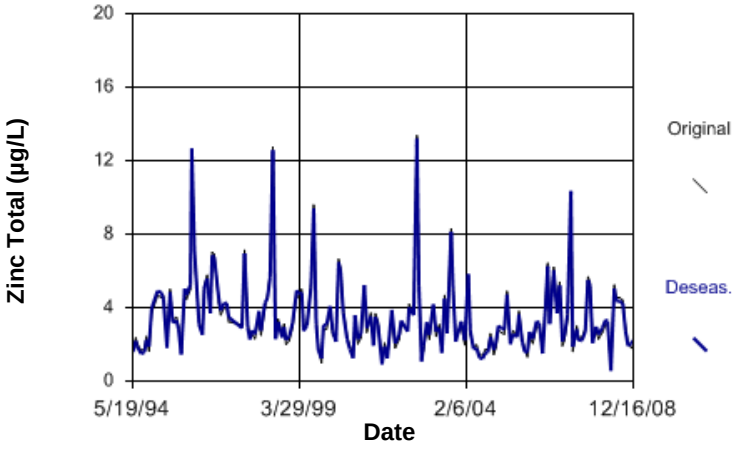


Figure E305 Assiniboine River: Zinc Total

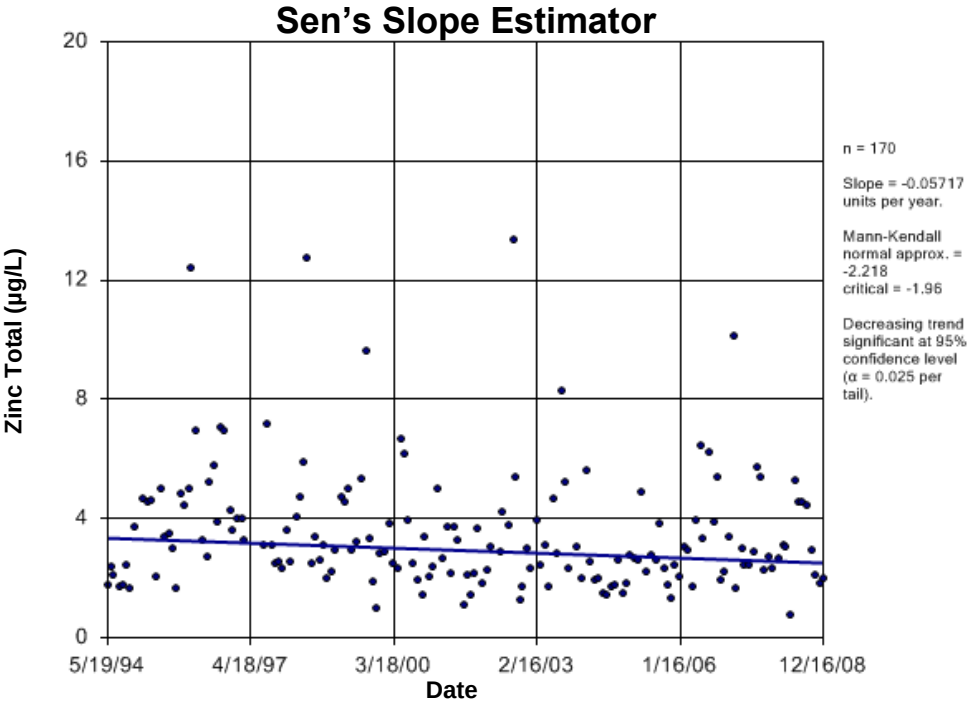


Figure E306 Assiniboine River: Zinc Total

Carrot River

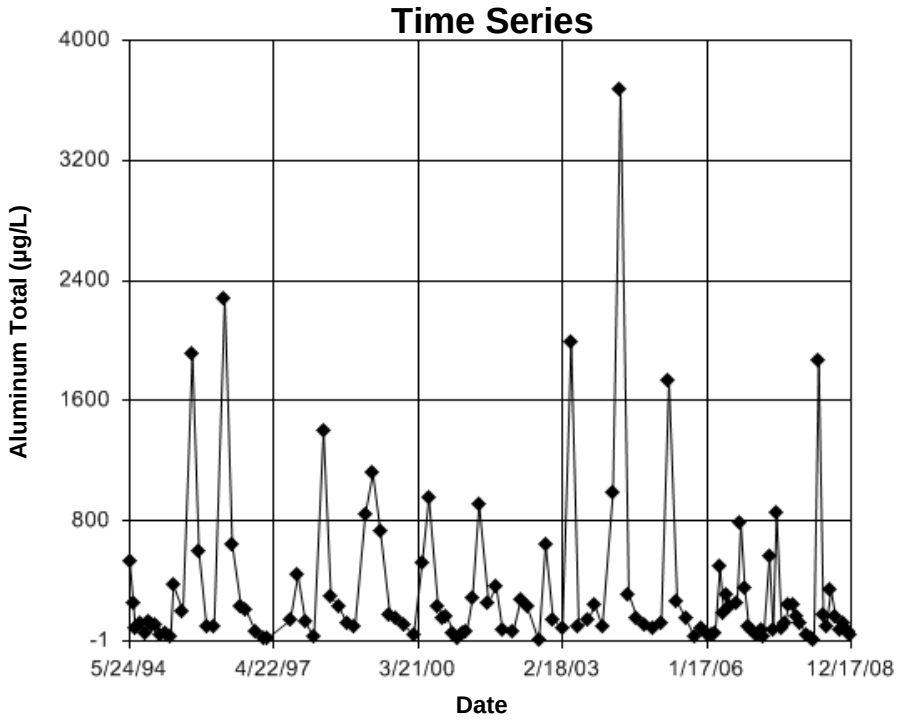


Figure E307 Carrot River: Aluminum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 48.62
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 48.62
Adjusted Kruskal-Wallis statistic (H') = 48.62

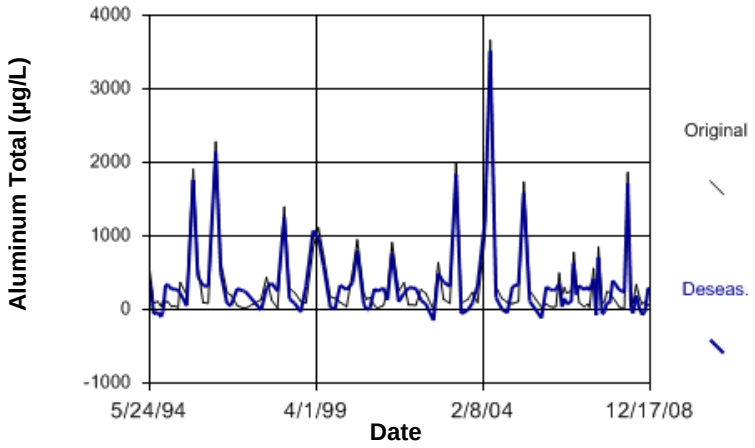


Figure E308 Carrot River: Aluminum Total

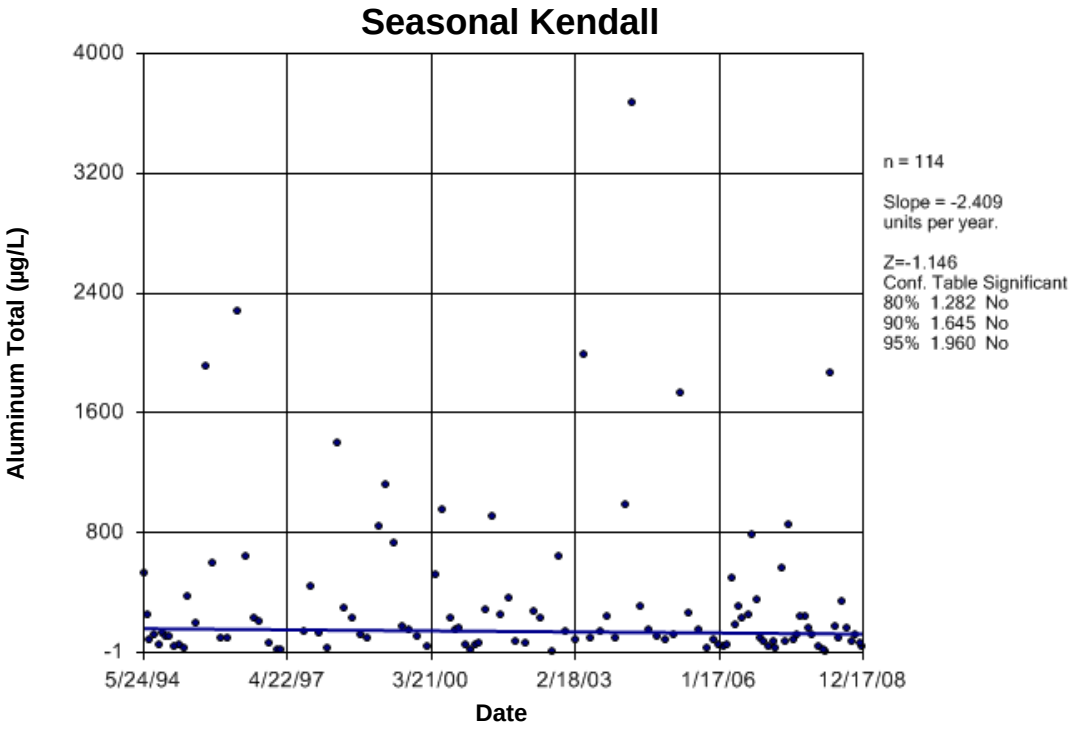


Figure E309 Carrot River: Aluminum Total

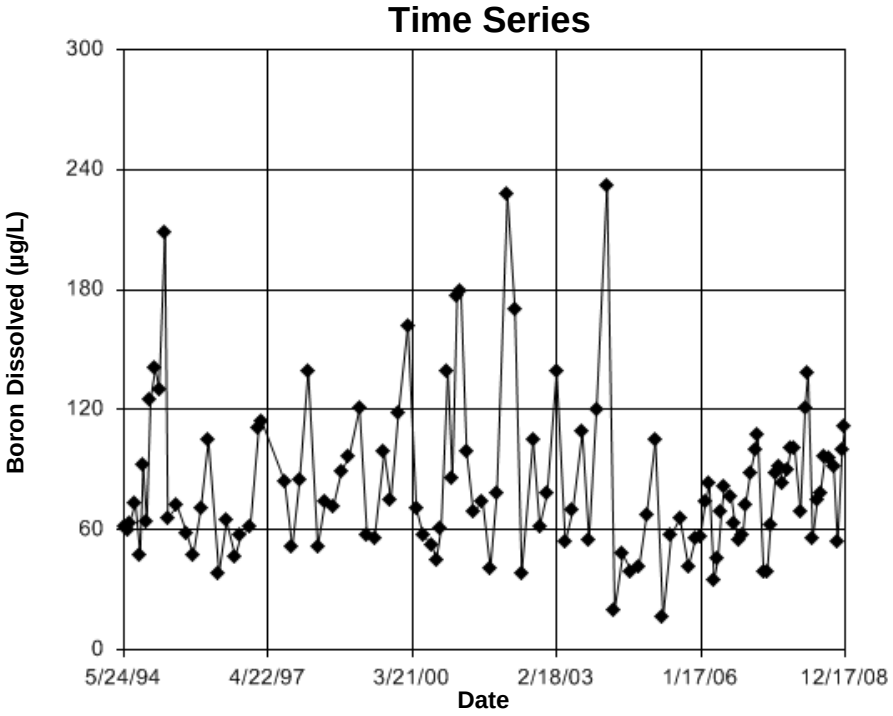


Figure E310 Carrot River: Boron Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 40.03
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 40.03
Adjusted Kruskal-Wallis statistic (H') = 40.03

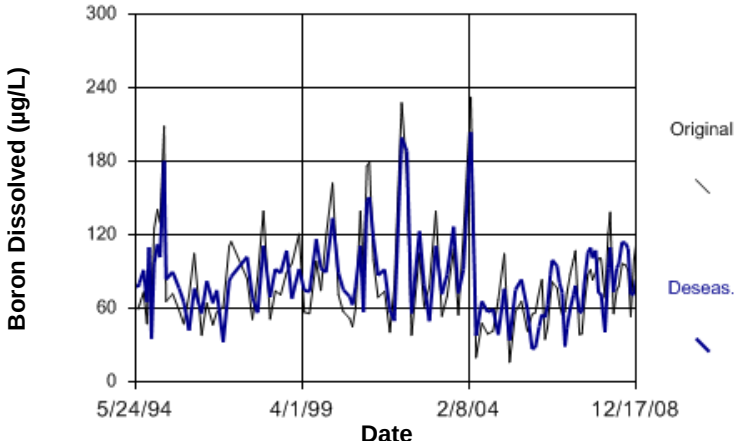


Figure E311 Carrot River: Boron Dissolved

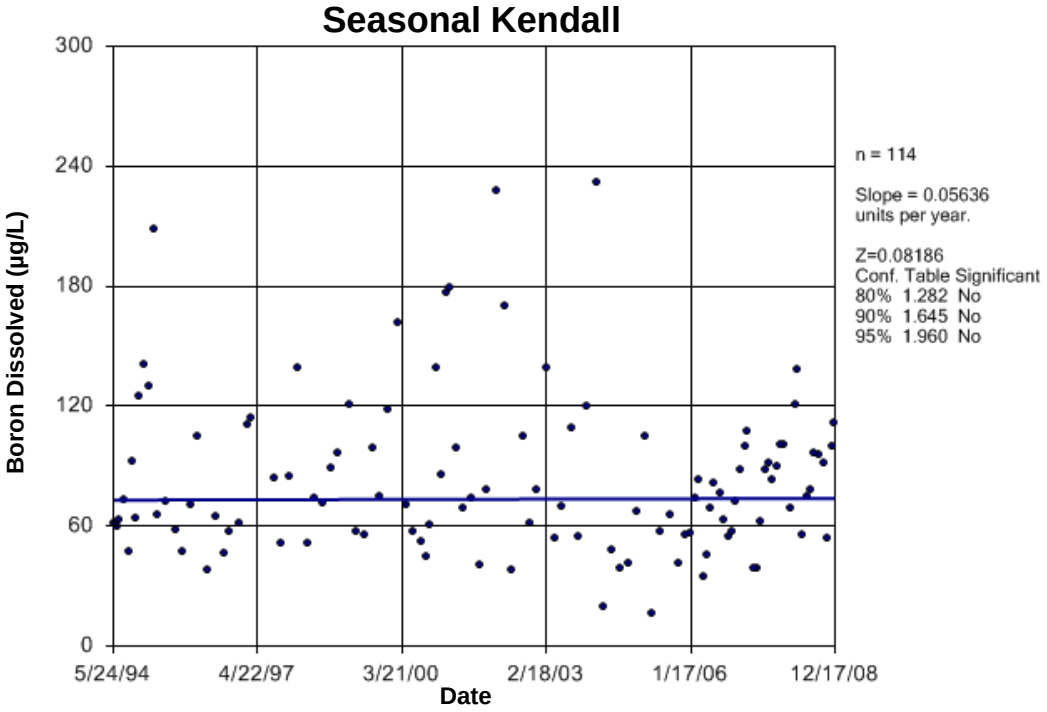


Figure E312 Carrot River: Boron Dissolved

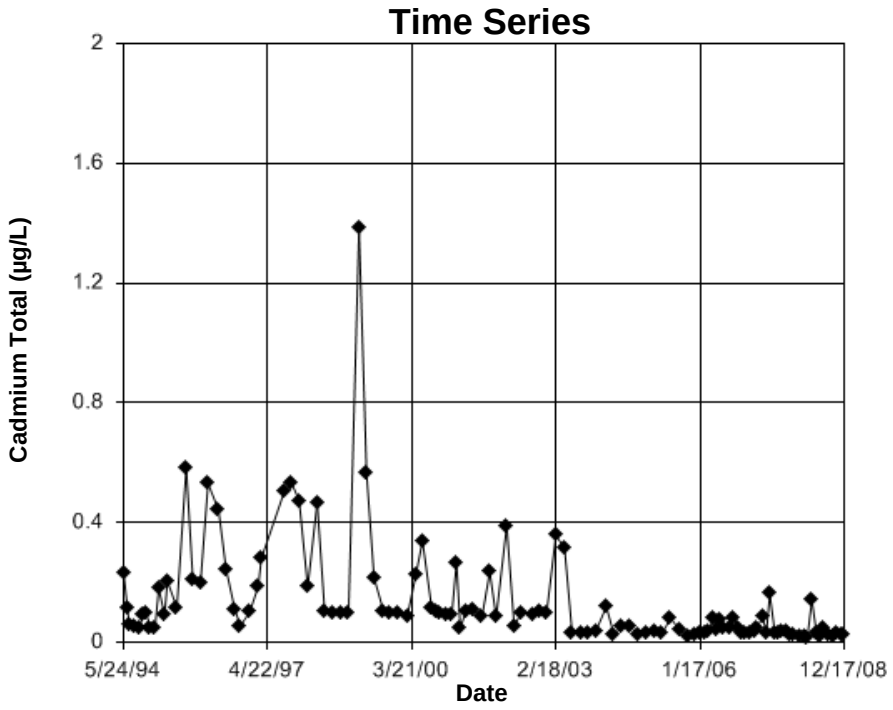


Figure E313 Carrot River: Cadmium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.508
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

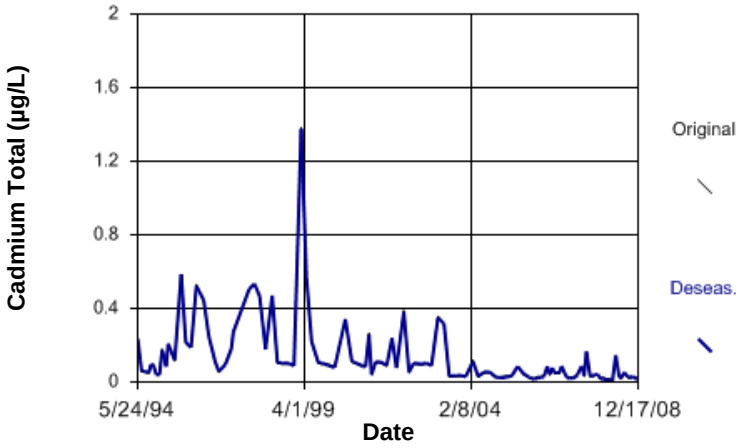


Figure E314 Carrot River: Cadmium Total

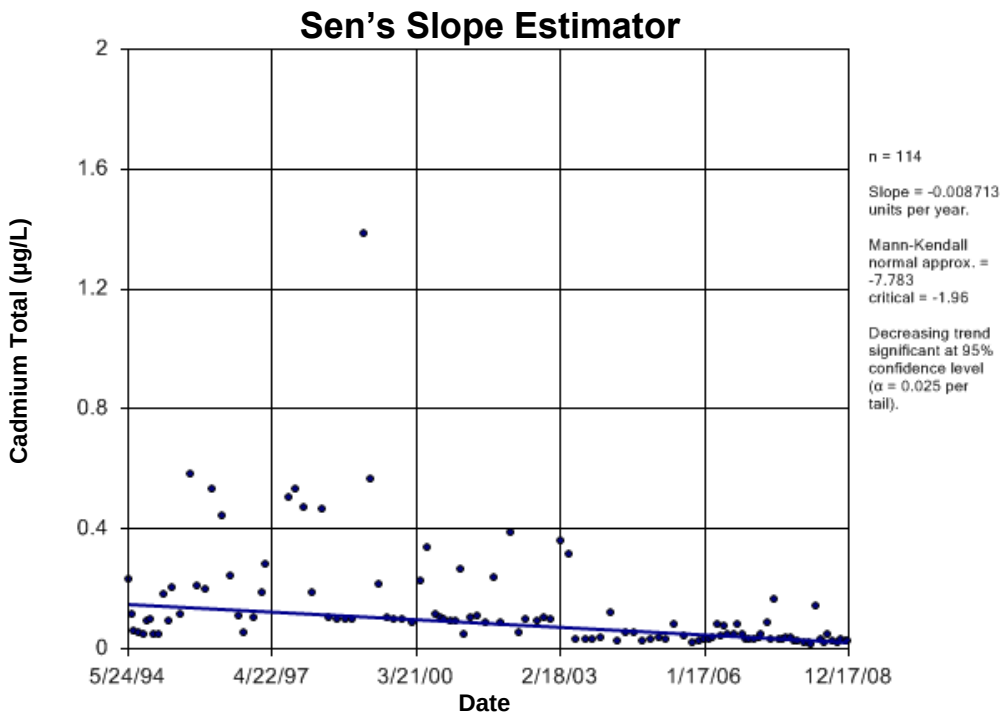


Figure E315 Carrot River: Cadmium Total

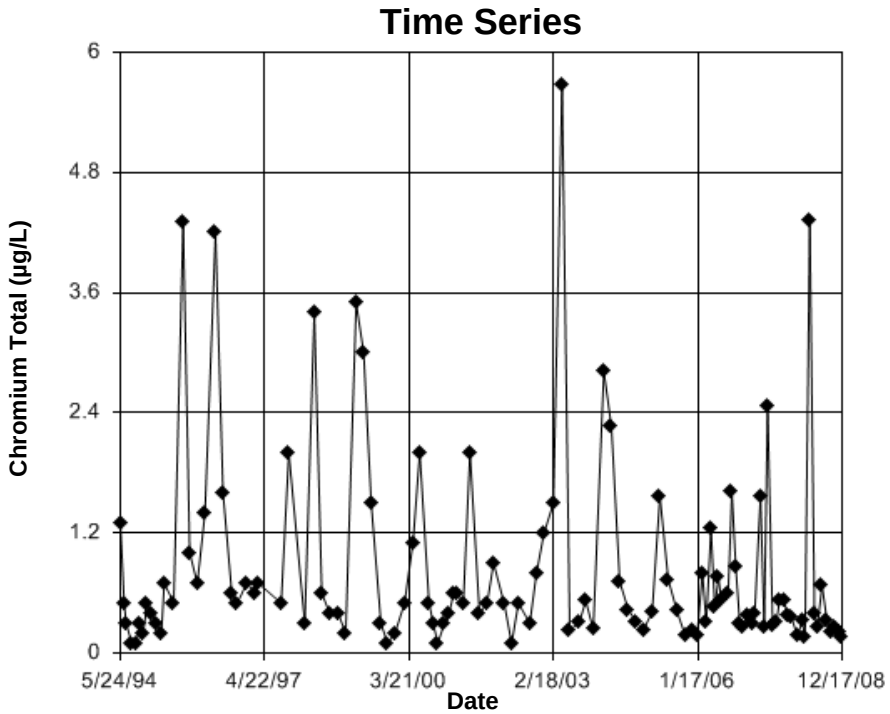


Figure E316 Carrot River: Chromium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 6.695
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 11 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 6.694
Adjusted Kruskal-Wallis statistic (H') = 6.695

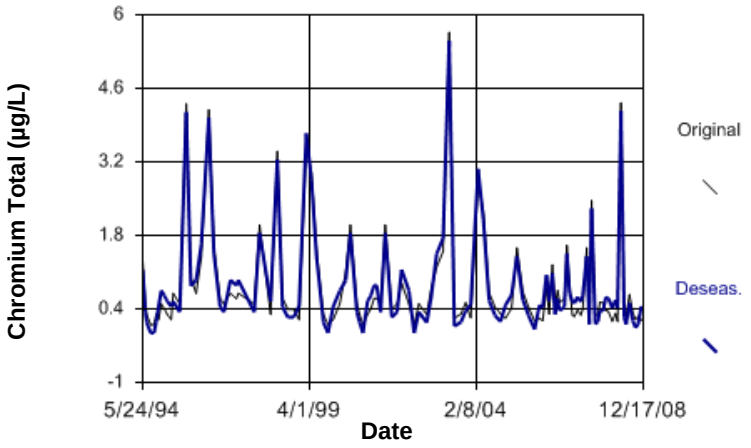


Figure E317 Carrot River: Chromium Total

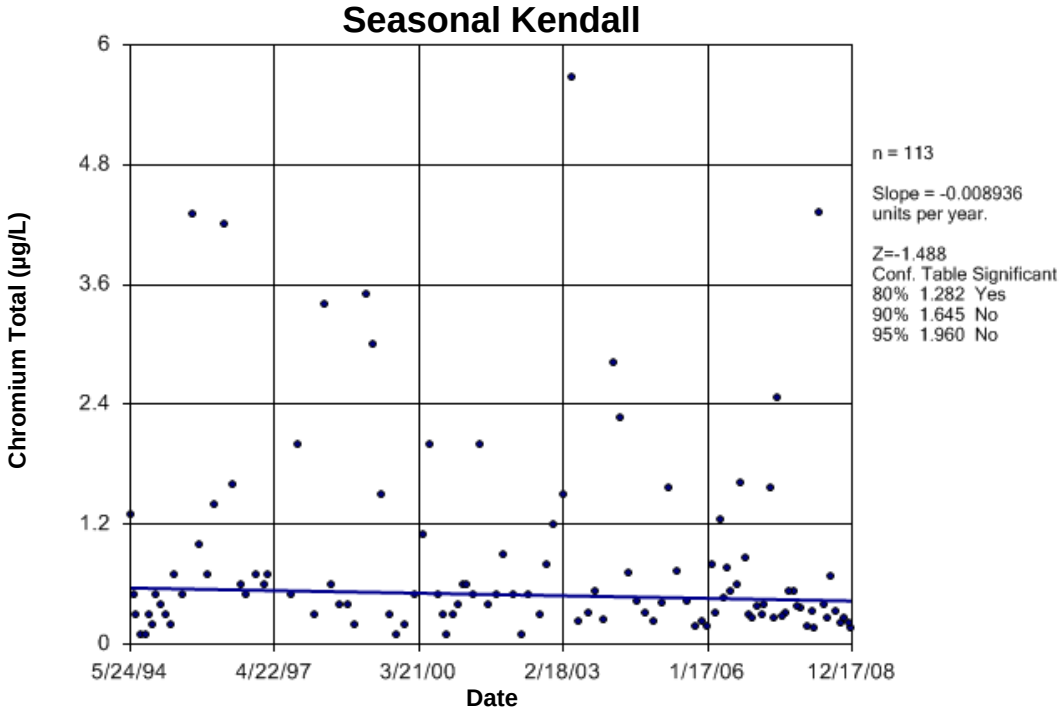


Figure E318 Carrot River: Chromium Total

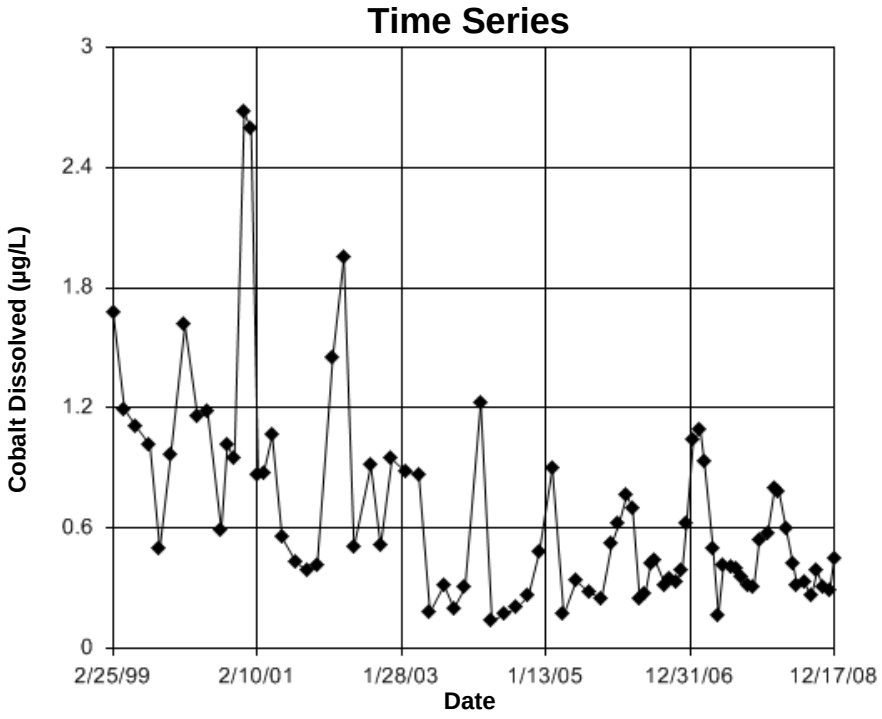


Figure E319 Carrot River: Cobalt Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 14.43
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

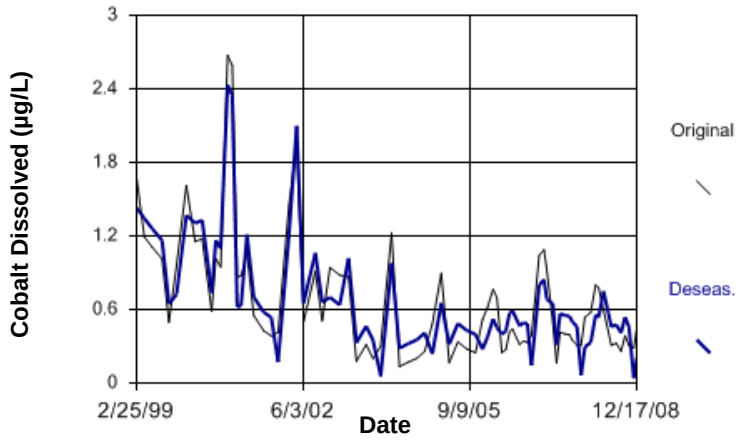


Figure E320 Carrot River: Cobalt Dissolved

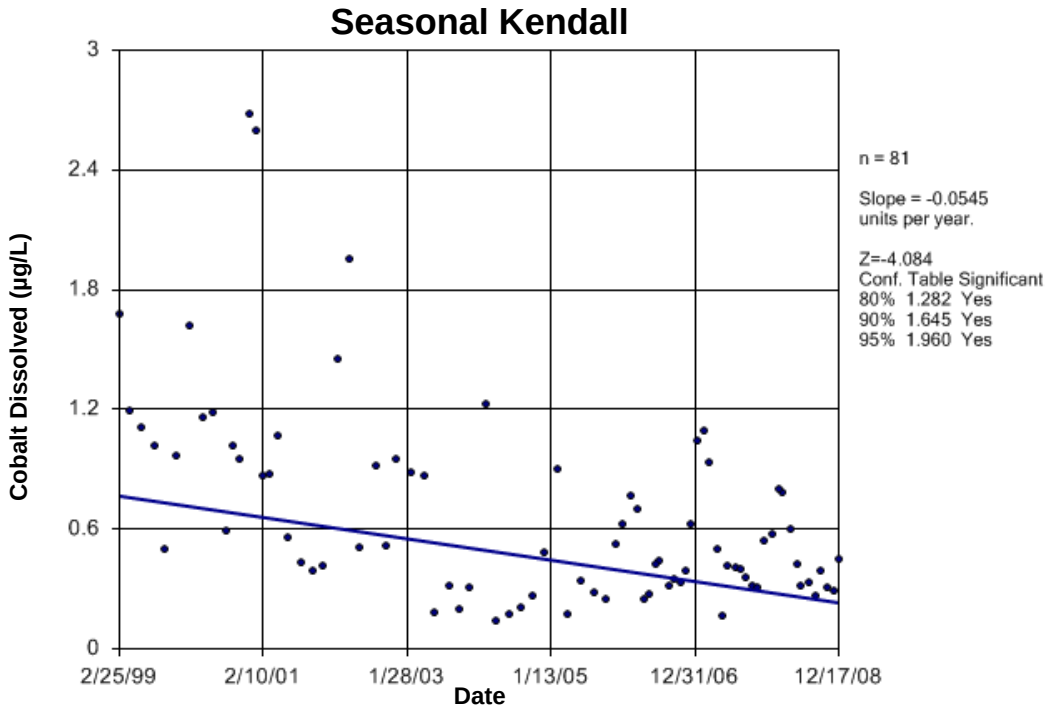


Figure E321 Carrot River: Cobalt Dissolved

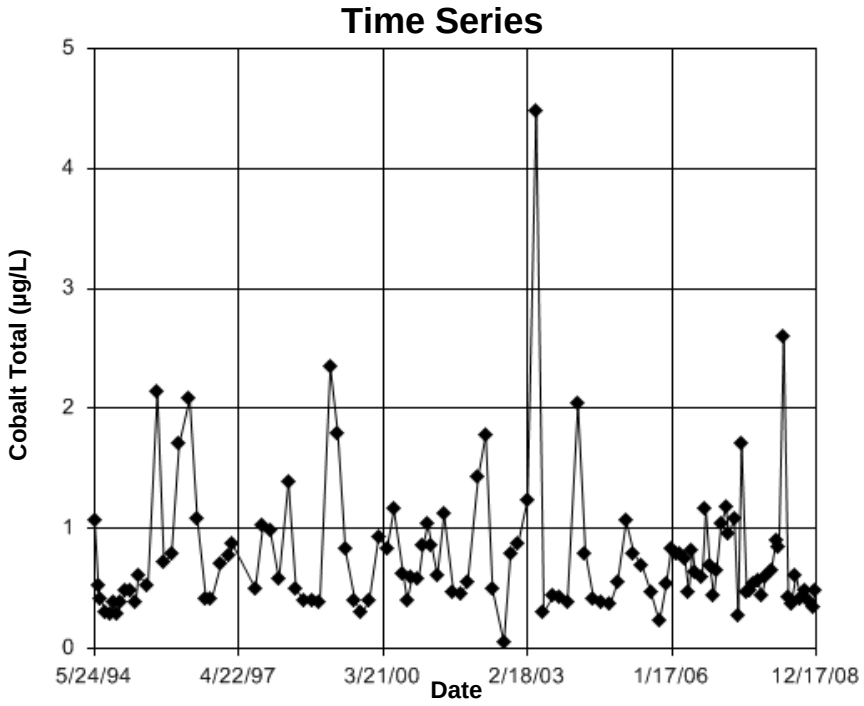


Figure E322 Carrot River: Cobalt Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 3.469
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 3.469
Adjusted Kruskal-Wallis statistic (H') = 3.469

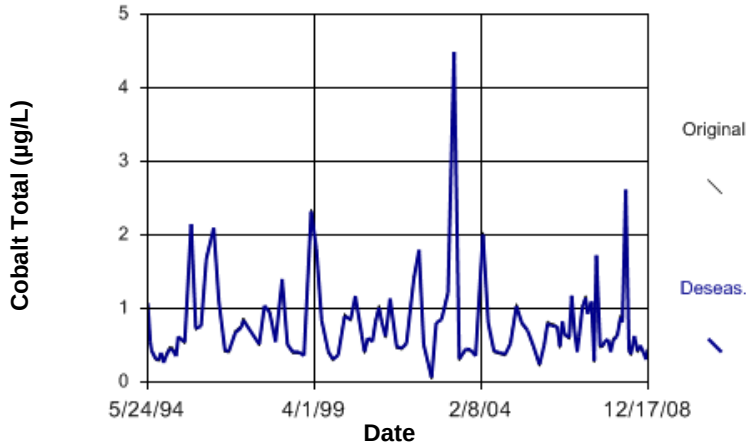


Figure E323 Carrot River: Cobalt Total

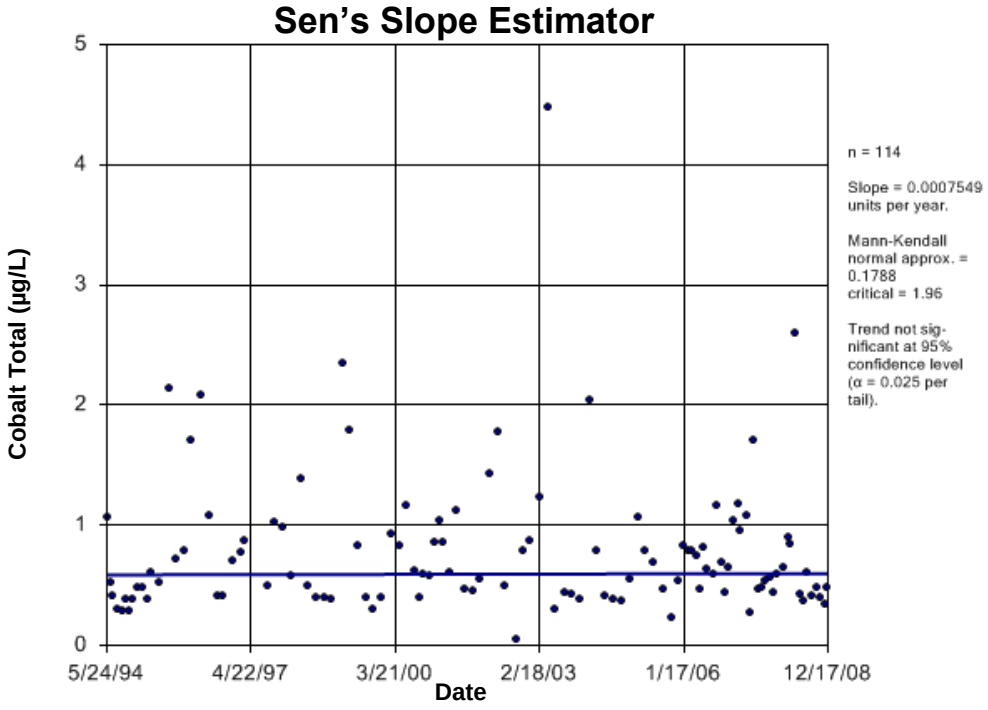


Figure E324 Carrot River: Cobalt Total

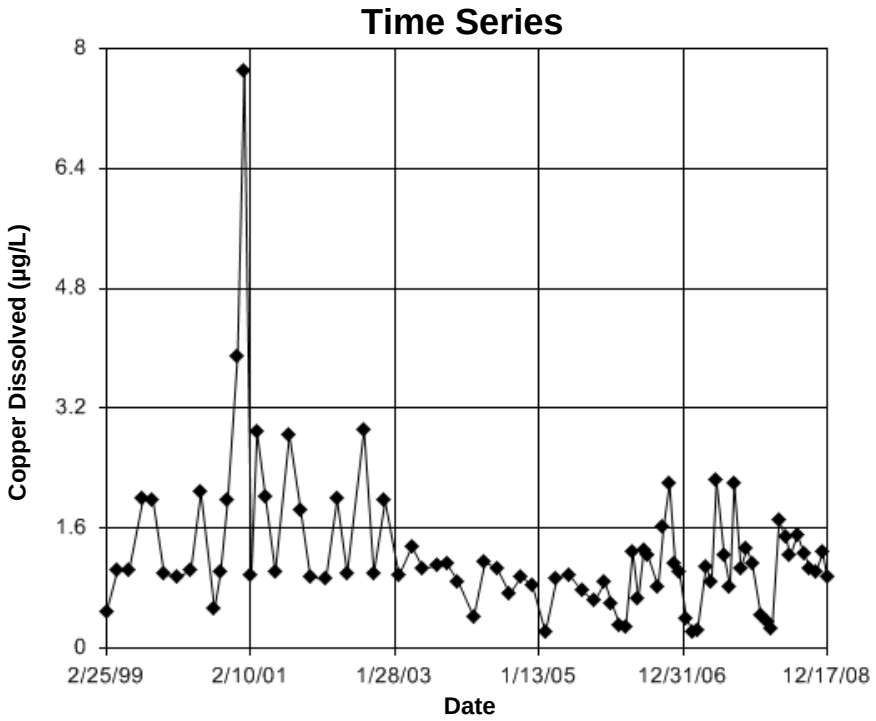


Figure E325 Carrot River: Copper Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 12.75
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 12.75
Adjusted Kruskal-Wallis statistic (H') = 12.75

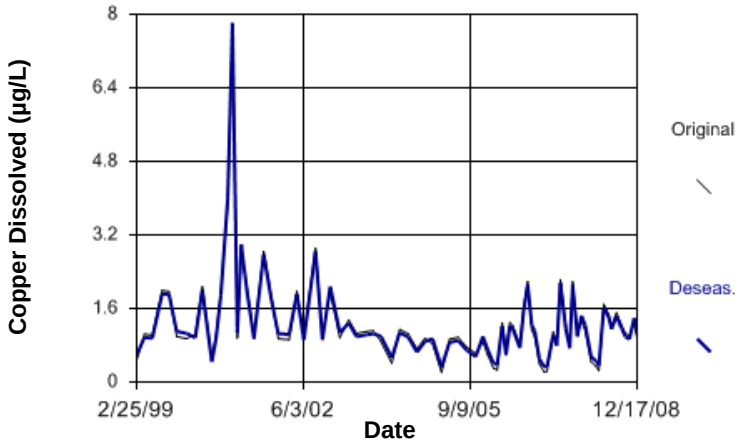


Figure E326 Carrot River: Copper Dissolved

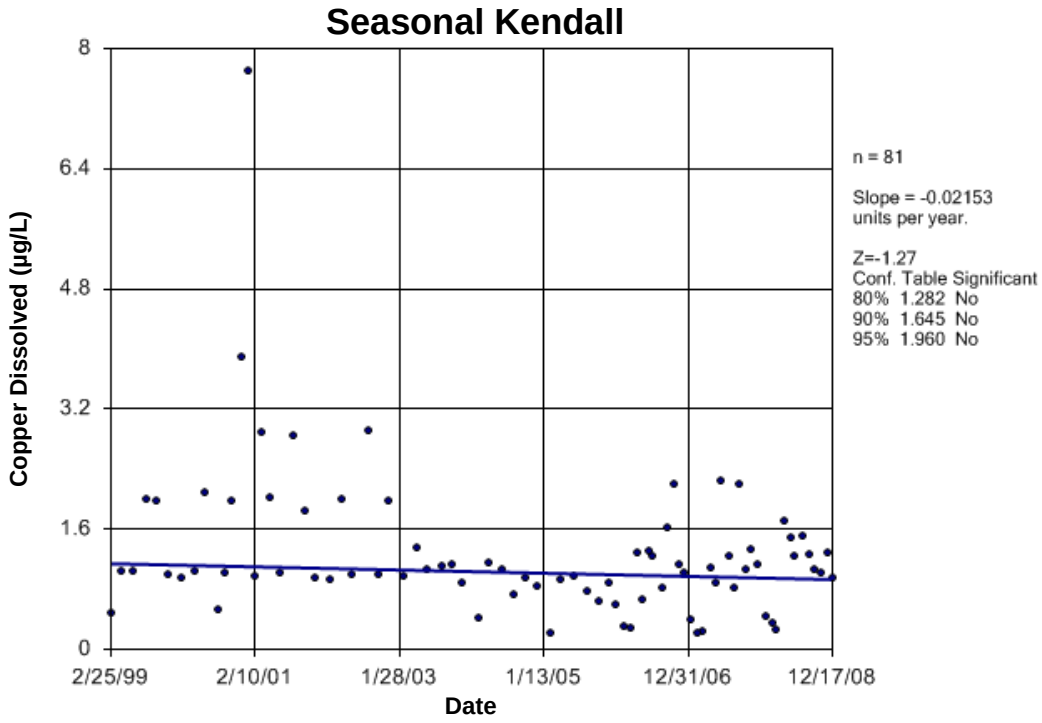


Figure E327 Carrot River: Copper Dissolved

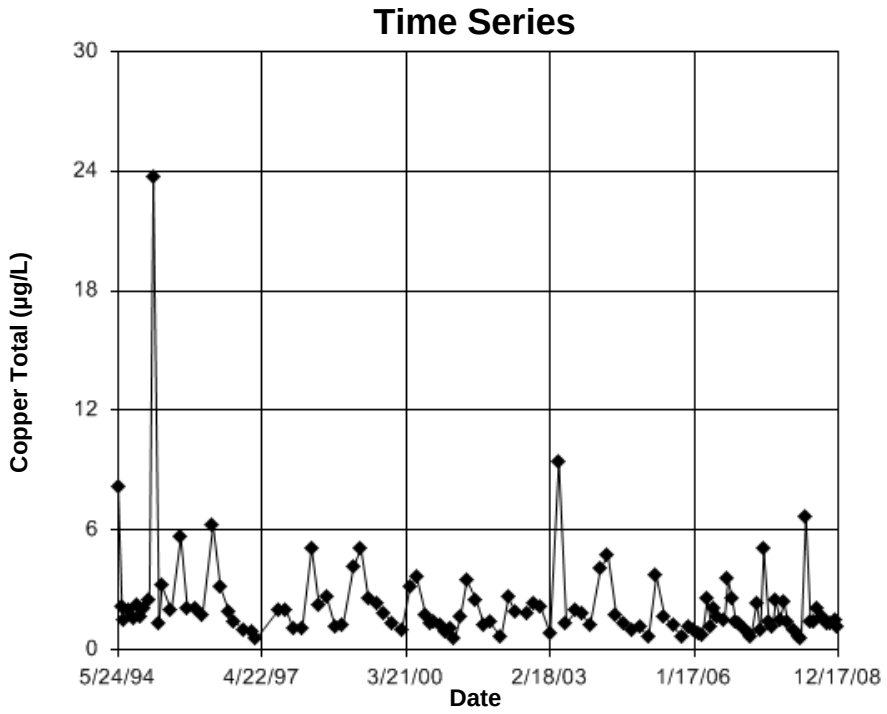


Figure E328 Carrot River: Copper Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 29.24
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 29.24
Adjusted Kruskal-Wallis statistic (H') = 29.24

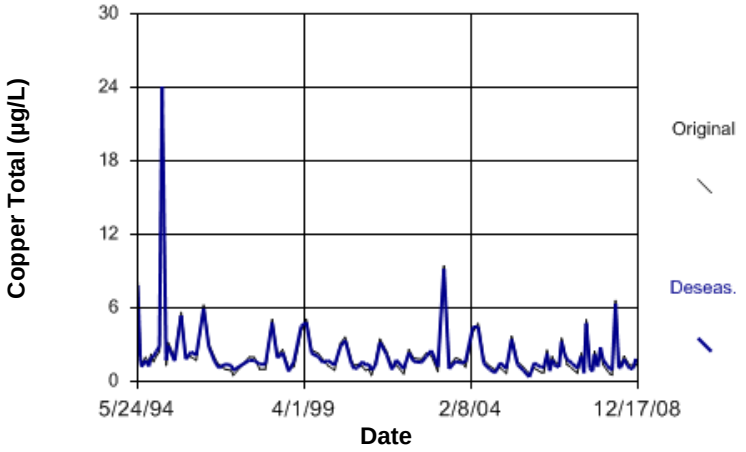


Figure E329 Carrot River: Copper Total

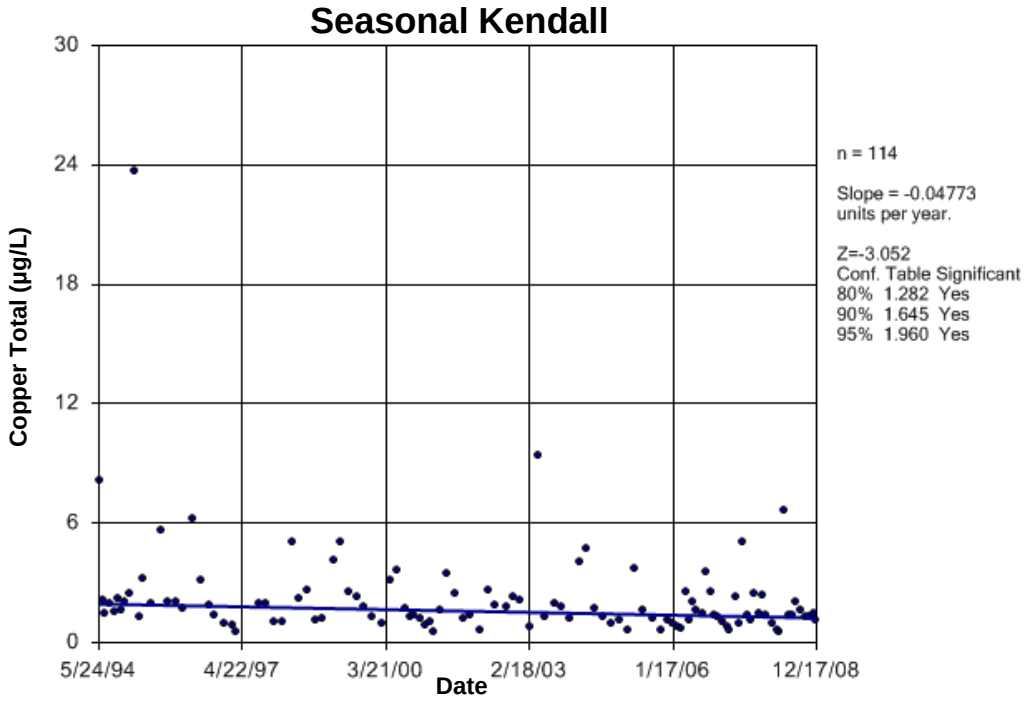


Figure E330 Carrot River: Copper Total

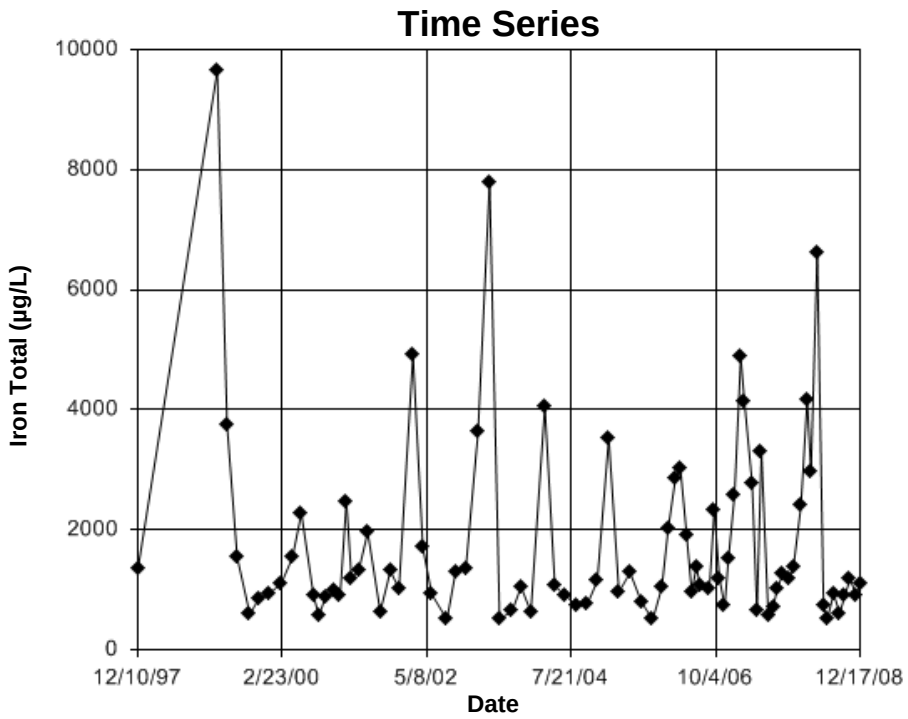


Figure E331 Carrot River: Iron Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 12.04
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

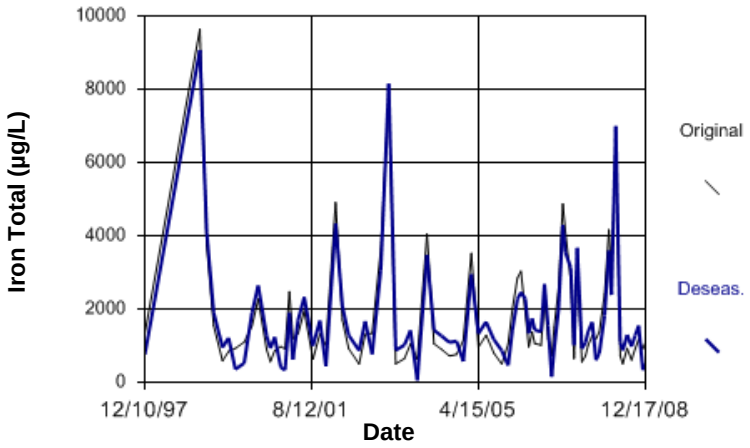


Figure E332 Carrot River: Iron Total

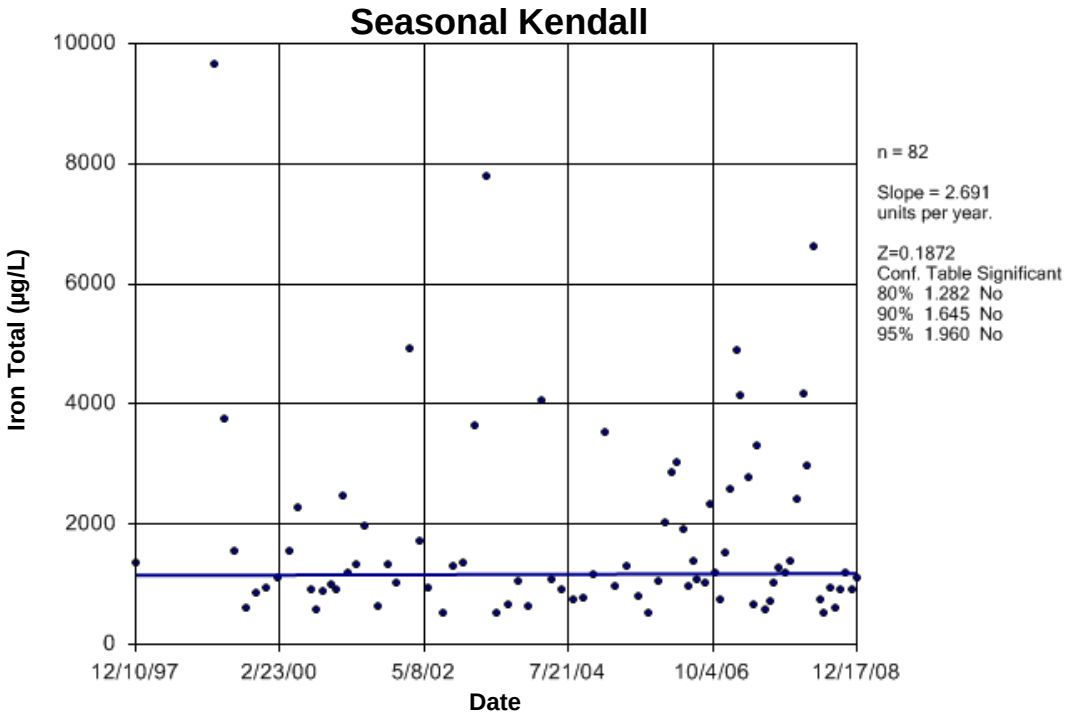


Figure E333 Carrot River: Iron Total

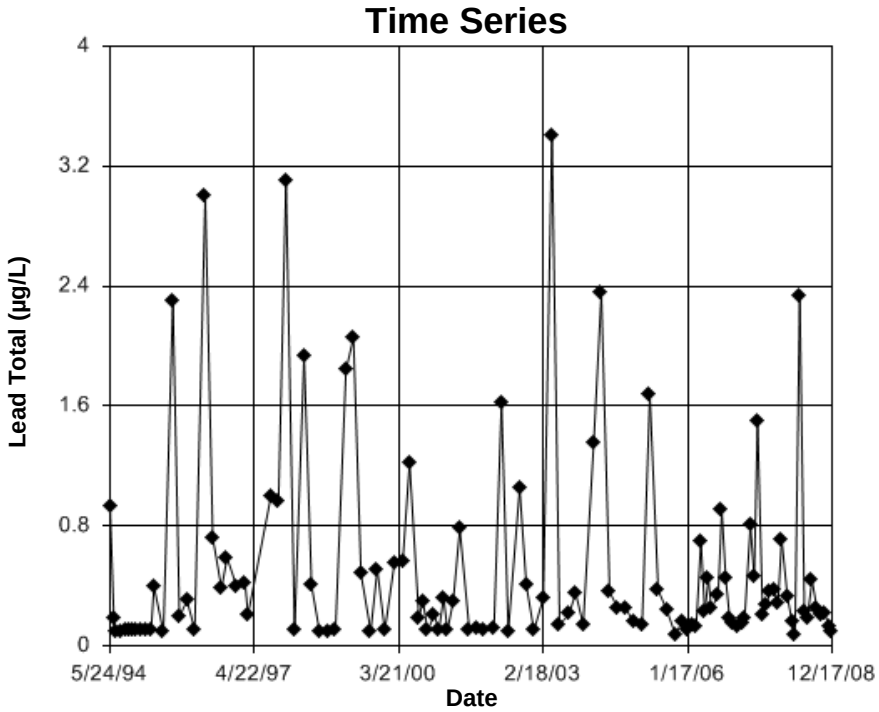


Figure E334 Carrot River: Lead Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 13.45
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 13.45
Adjusted Kruskal-Wallis statistic (H') = 13.45

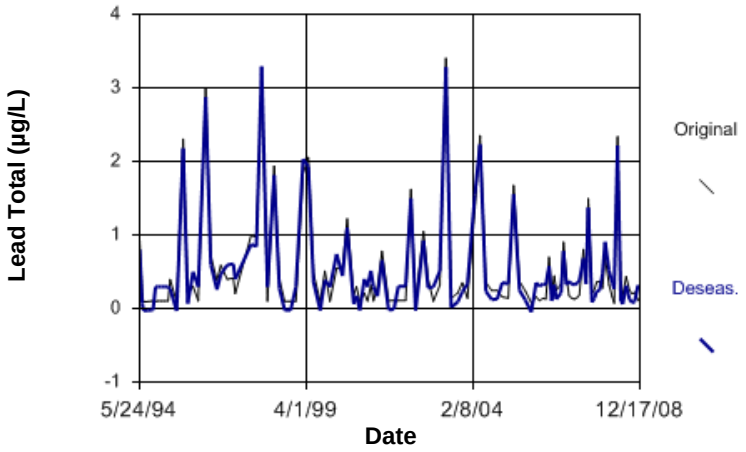


Figure E335 Carrot River: Lead Total

Seasonal Kendall

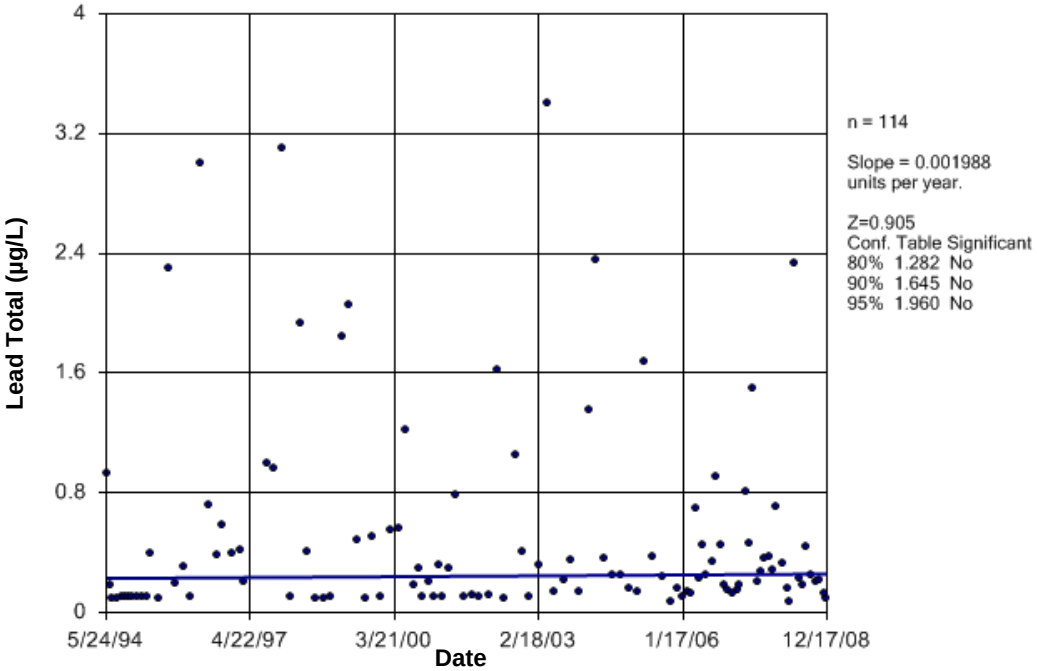


Figure E336 Carrot River: Lead Total

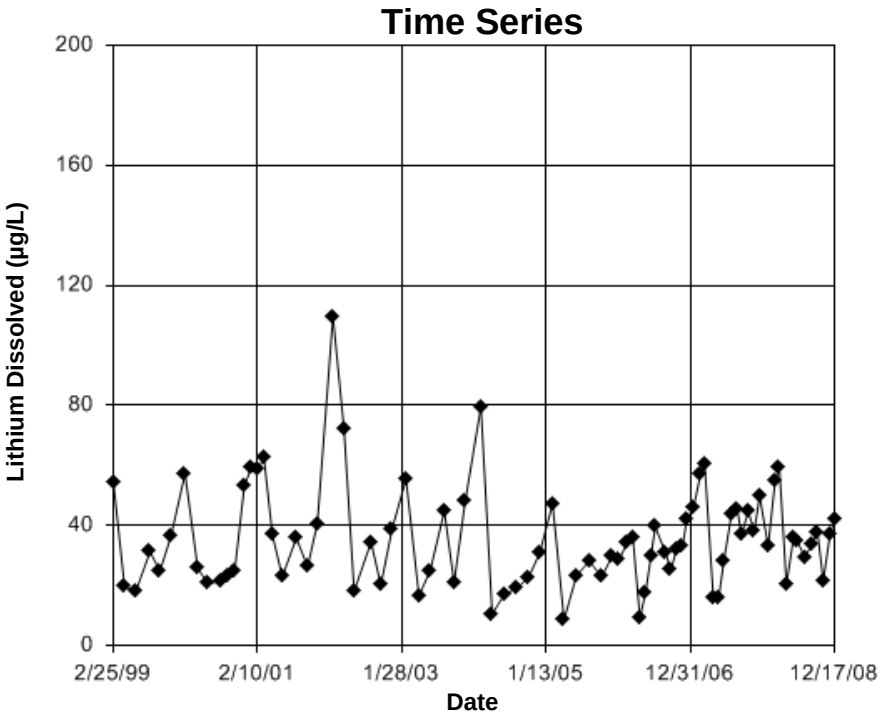


Figure E337 Carrot River: Lithium Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 35.36
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

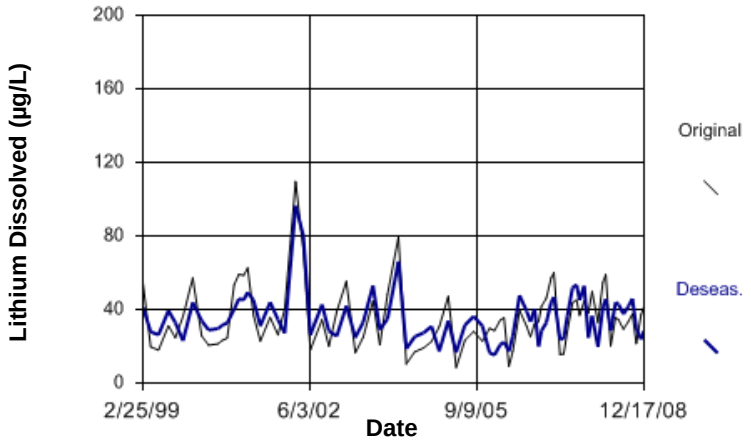


Figure E338 Carrot River: Lithium Dissolved

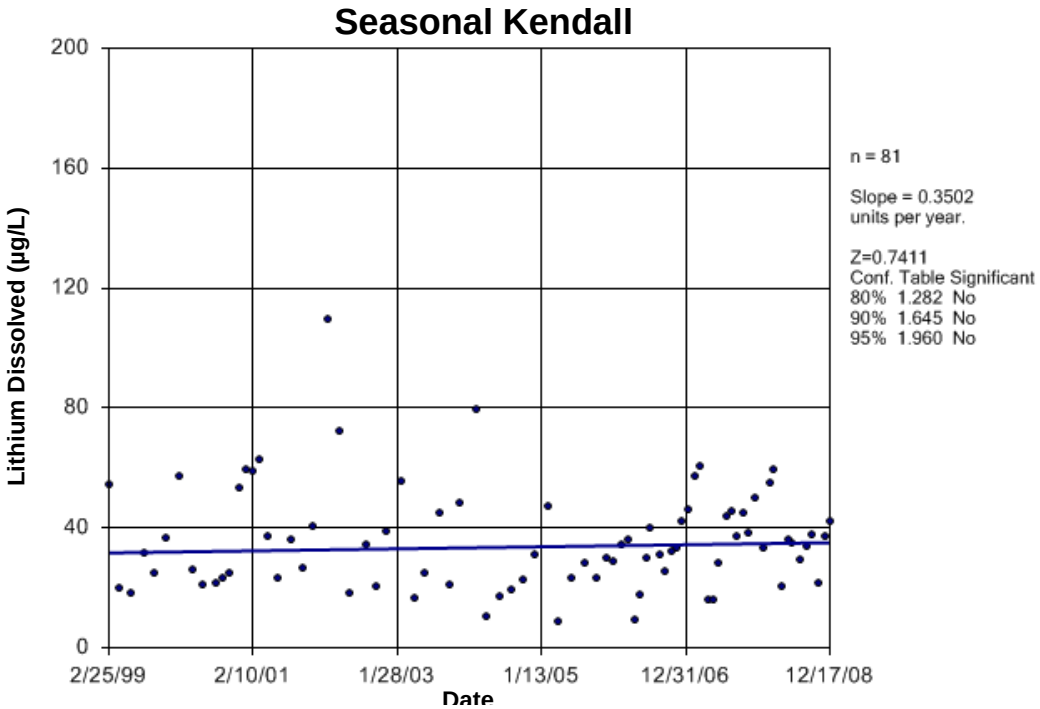


Figure E339 Carrot River: Lithium Dissolved

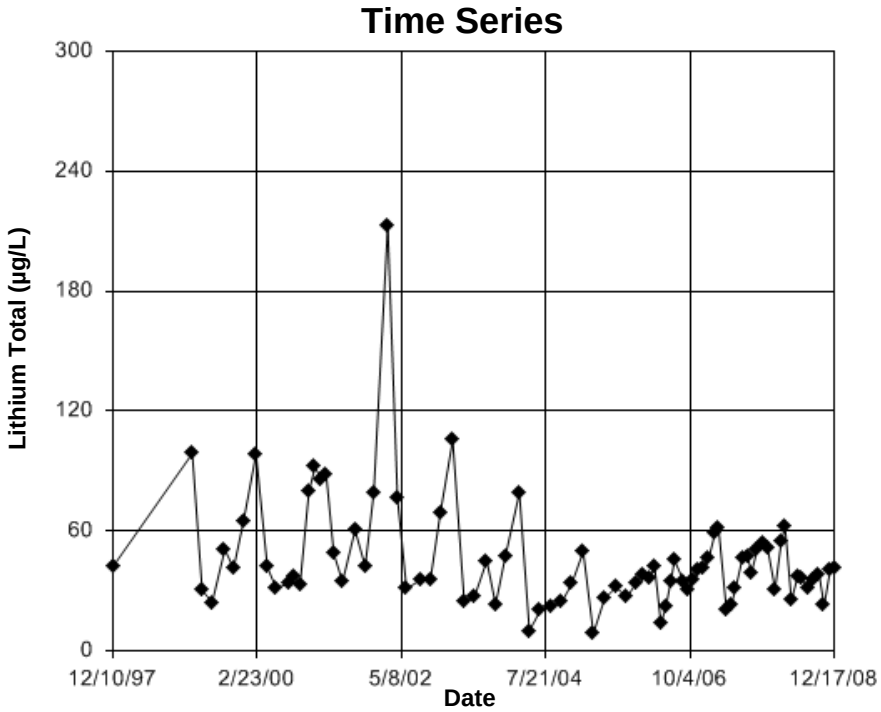


Figure E340 Carrot River: Lithium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 31.99
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

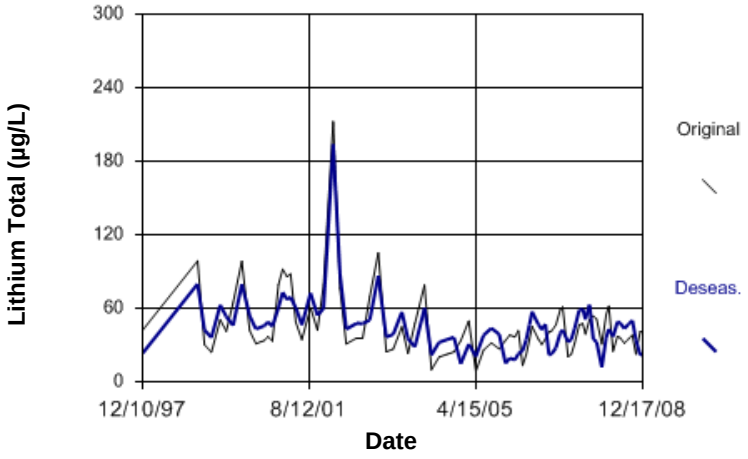


Figure E341 Carrot River: Lithium Total

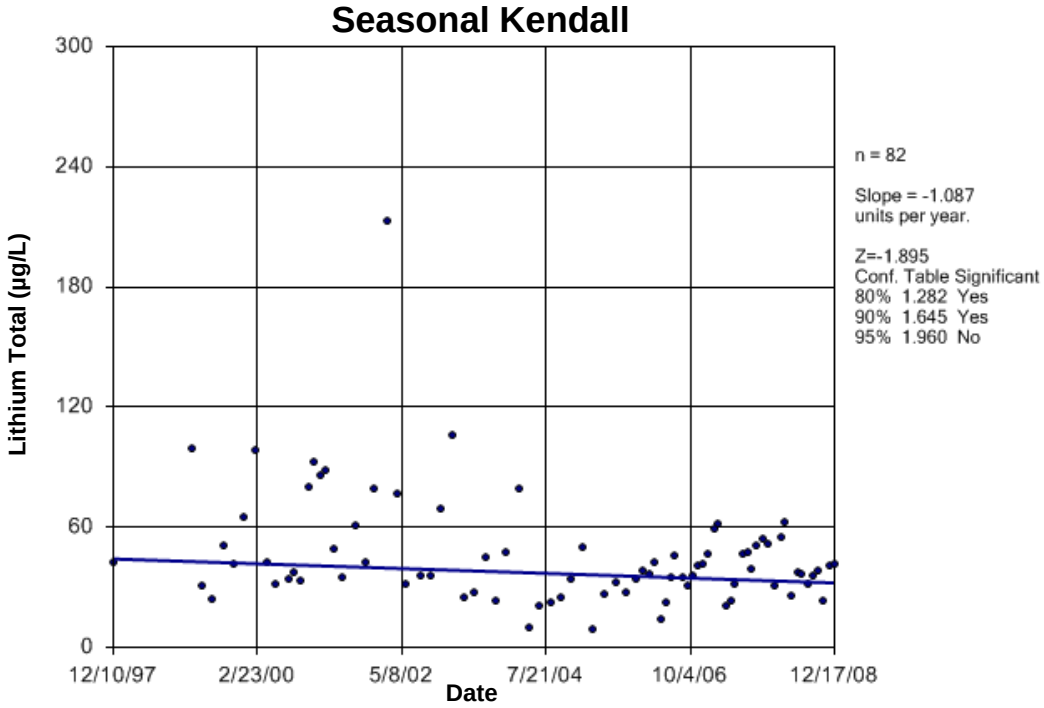


Figure E342 Carrot River: Lithium Total

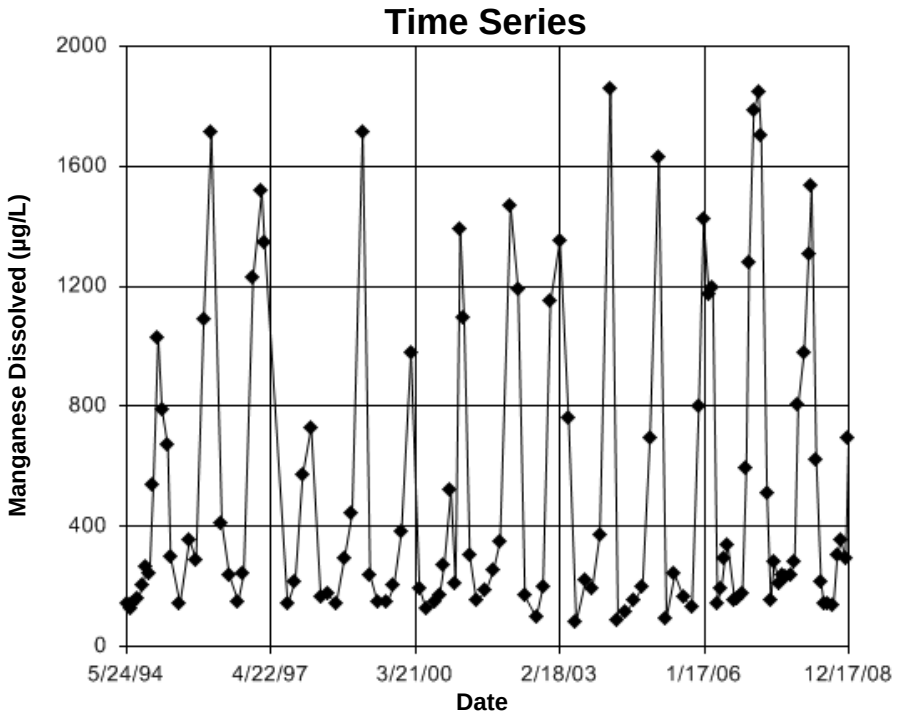


Figure E343 Carrot River: Manganese Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 67.93
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 67.93
Adjusted Kruskal-Wallis statistic (H') = 67.93

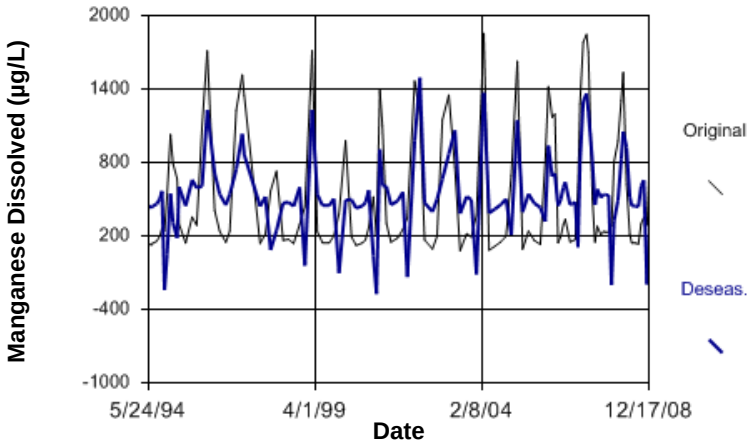


Figure E344 Carrot River: Manganese Dissolved

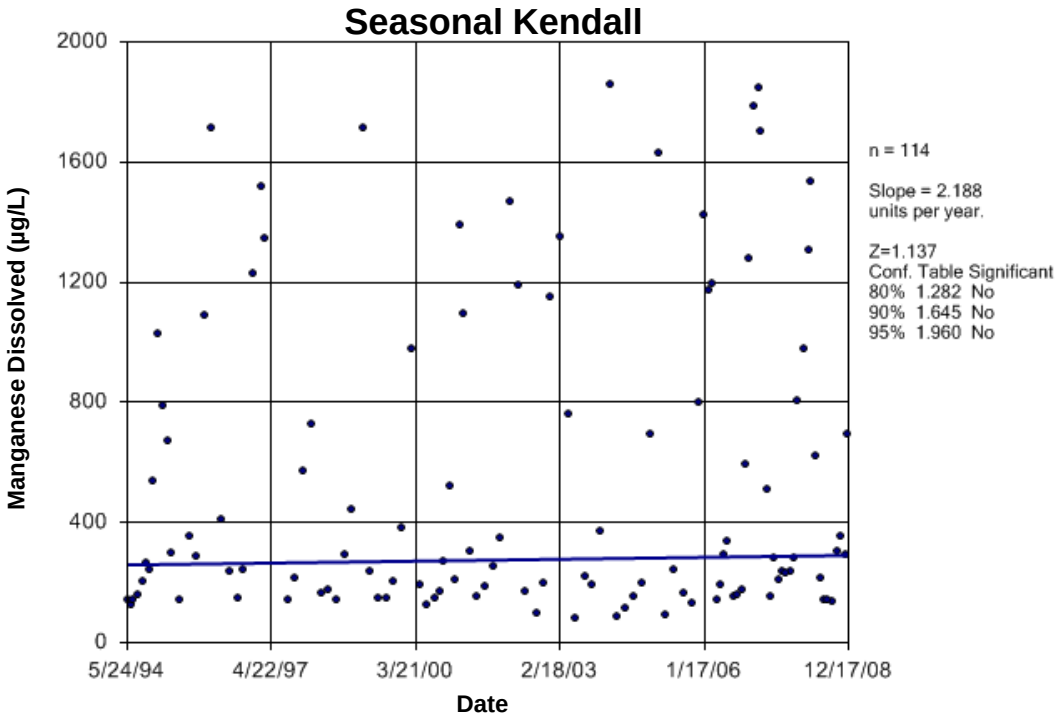


Figure E345 Carrot River: Manganese Dissolved

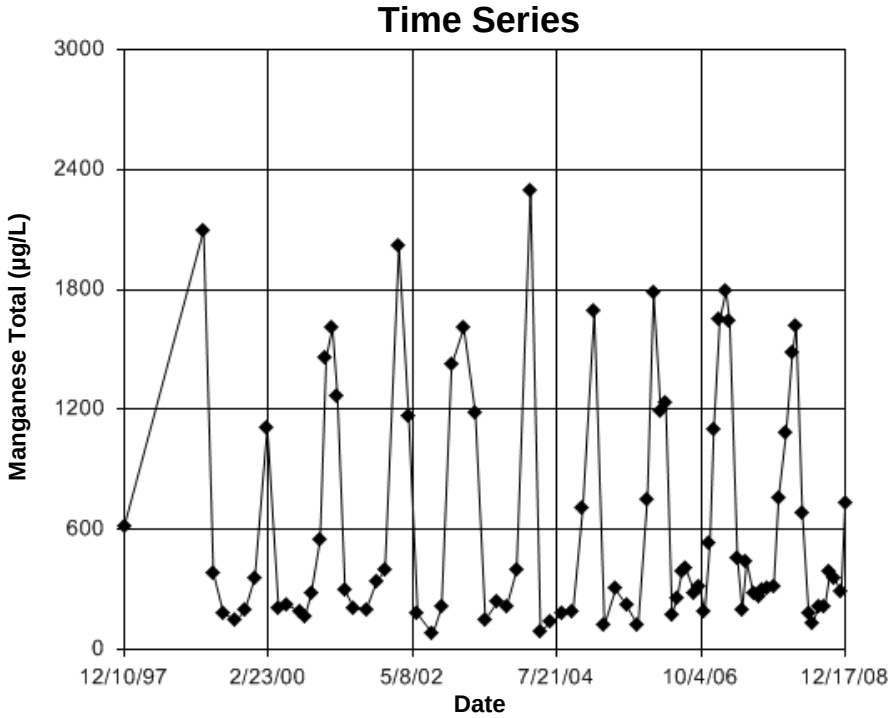


Figure E346 Carrot River: Manganese Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 47.89
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

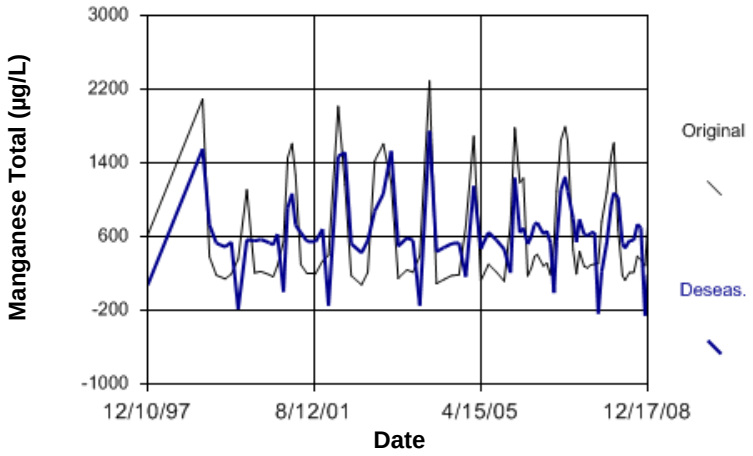


Figure E347 Carrot River: Manganese Total

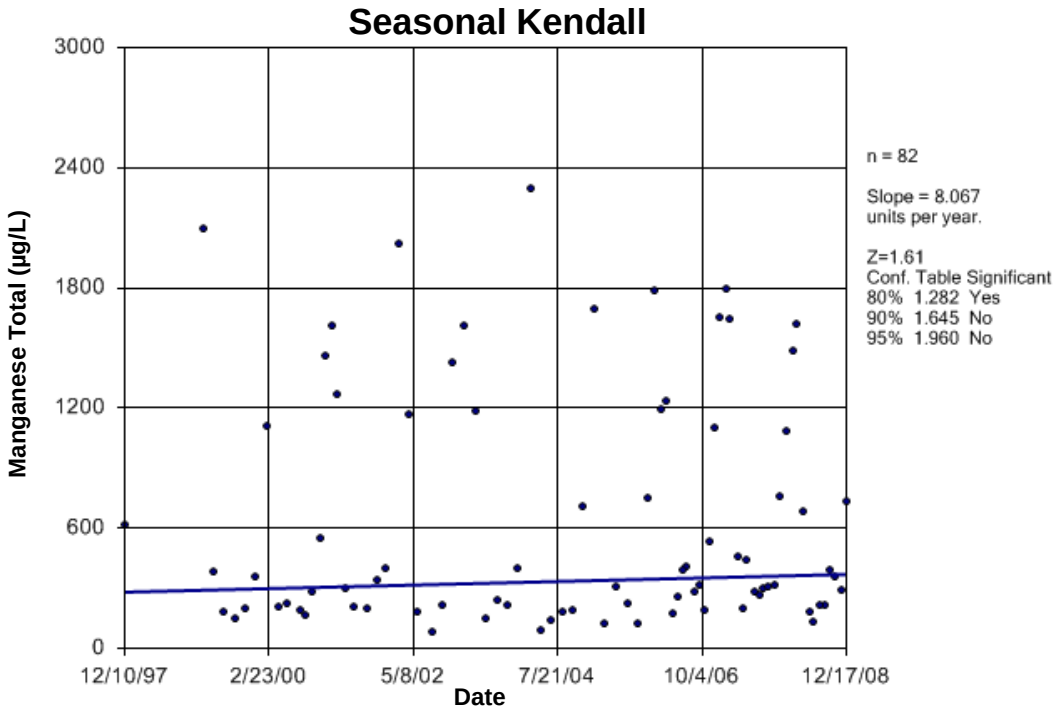


Figure E348 Carrot River: Manganese Total

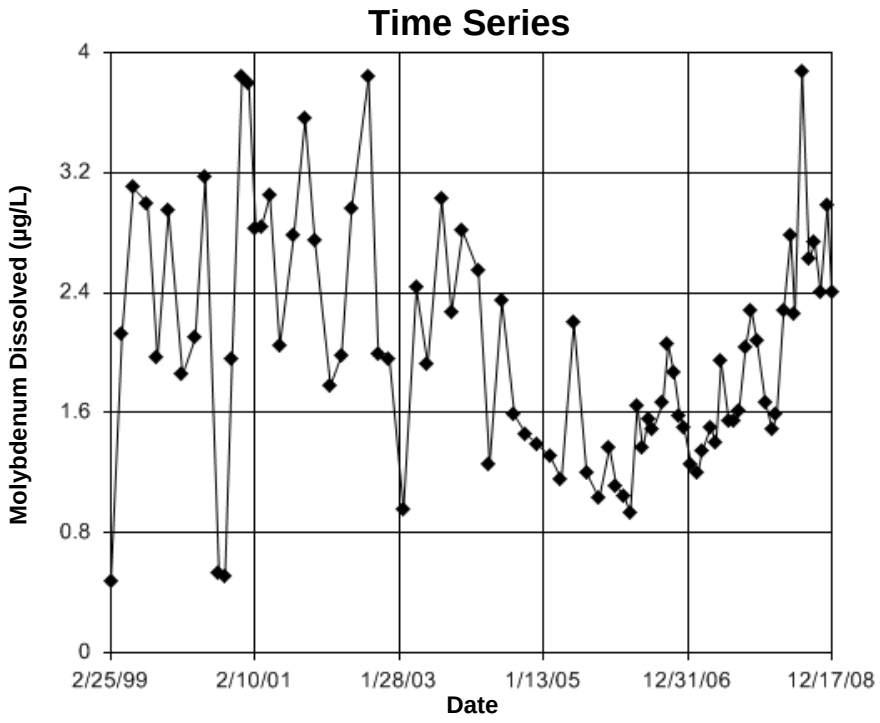


Figure E349 Carrot River: Molybdenum Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.608
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 1.608
Adjusted Kruskal-Wallis statistic (H') = 1.608

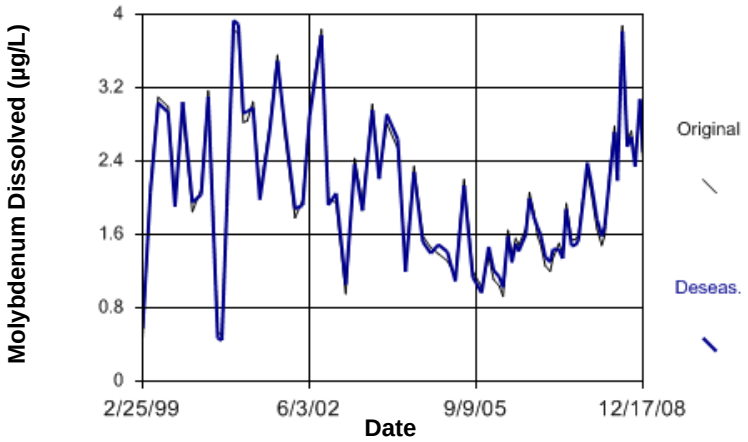


Figure E350 Carrot River: Molybdenum Dissolved

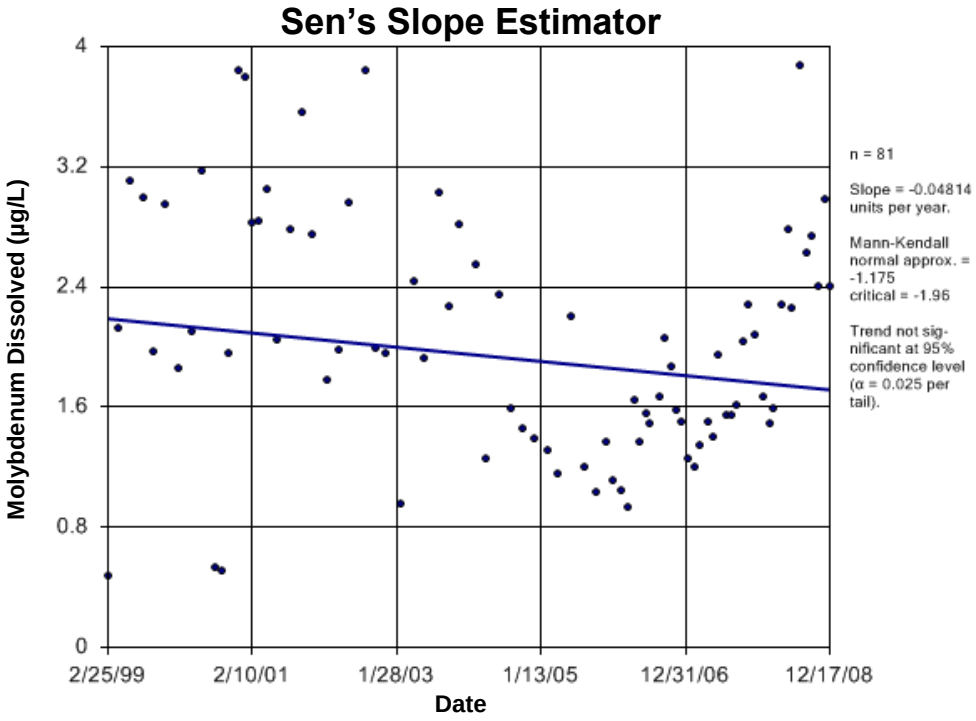


Figure E351 Carrot River: Molybdenum Dissolved

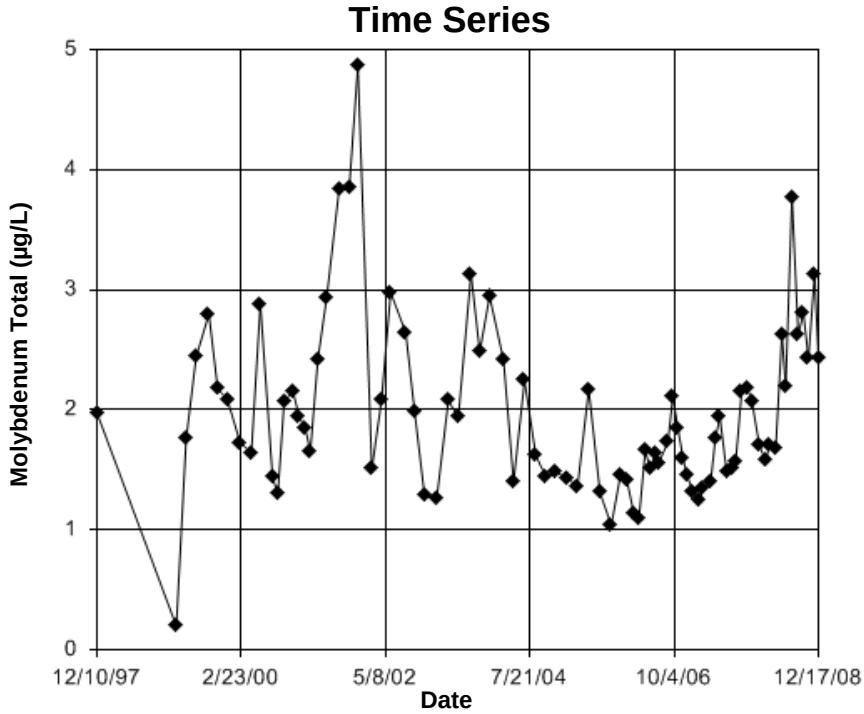


Figure E352 Carrot River: Molybdenum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 5.716
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 5.716
Adjusted Kruskal-Wallis statistic (H') = 5.716

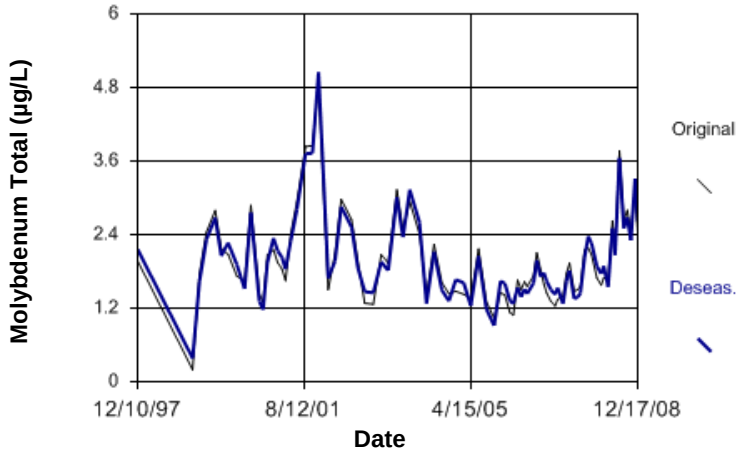


Figure E353 Carrot River: Molybdenum Total

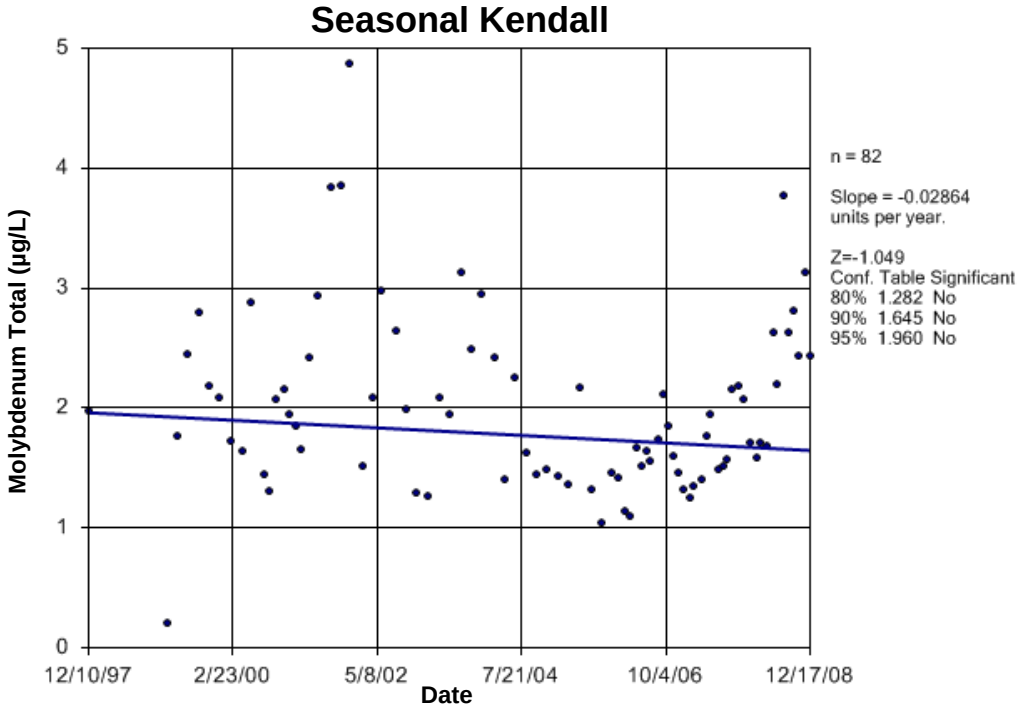


Figure E354 Carrot River: Molybdenum Total

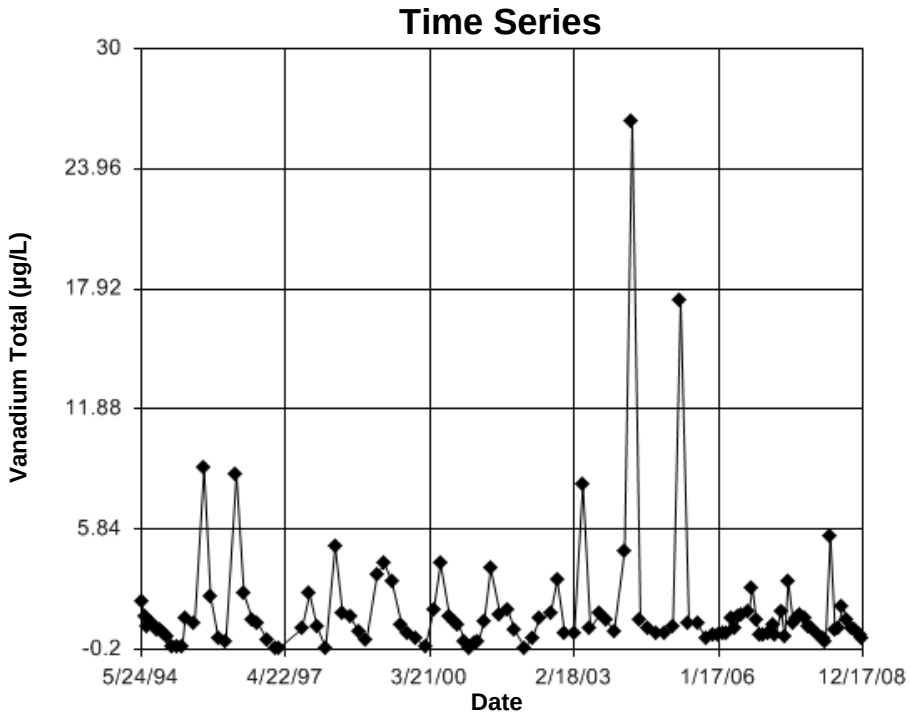


Figure E355 Carrot River: Vanadium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 54.3
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

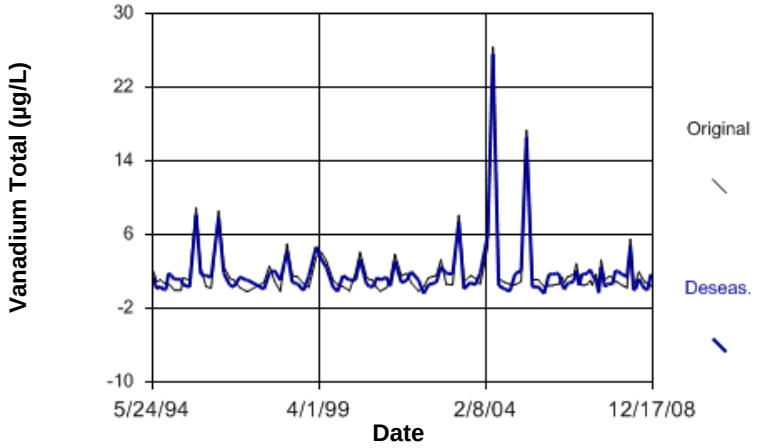


Figure E356 Carrot River: Vanadium Total

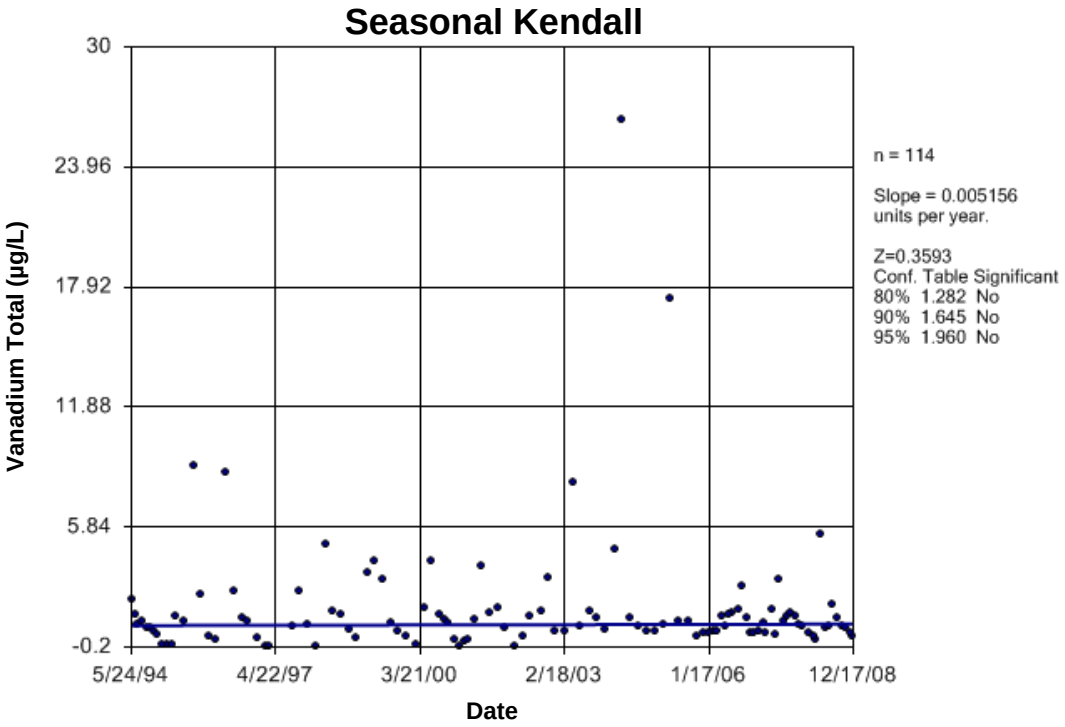


Figure E357 Carrot River: Vanadium Total

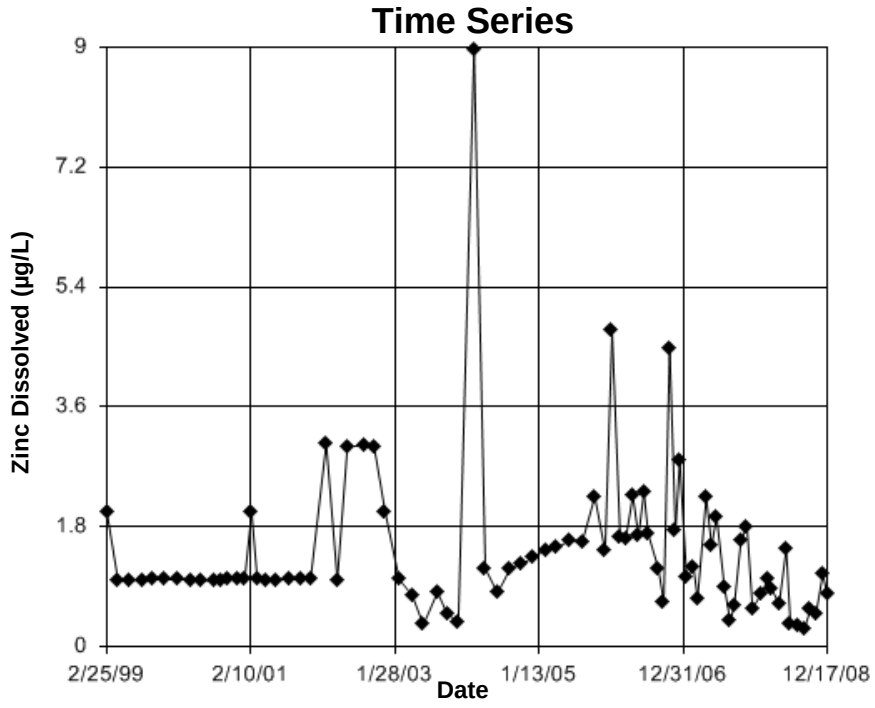


Figure E358 Carrot River: Zinc Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 2.826
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 6 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 2.826
Adjusted Kruskal-Wallis statistic (H') = 2.826

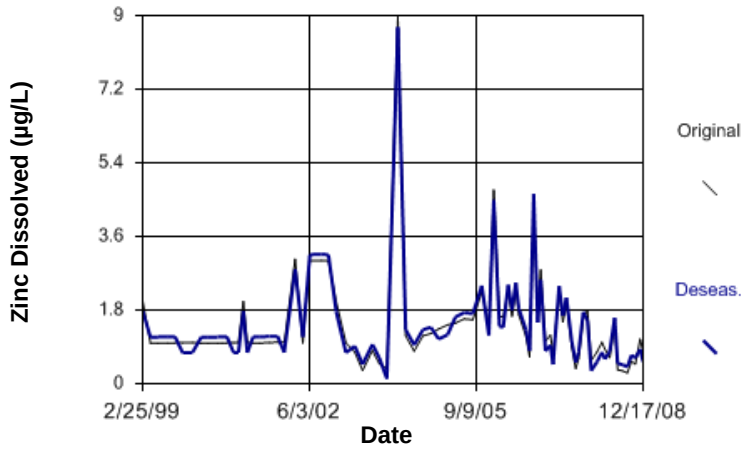


Figure E359 Carrot River: Zinc Dissolved

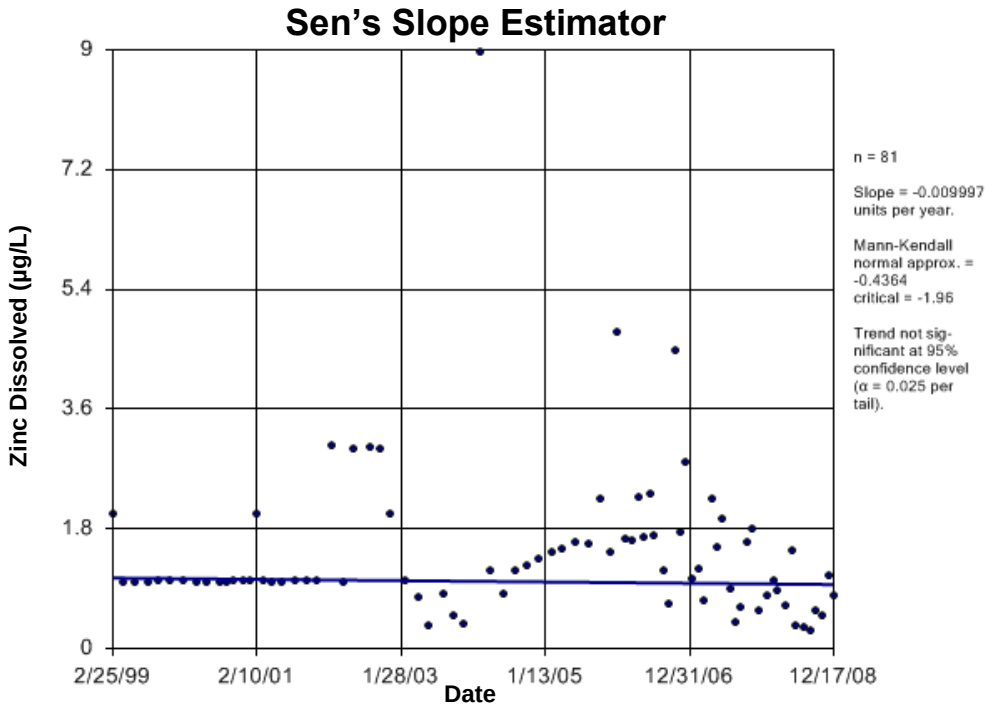


Figure E360 Carrot River: Zinc Dissolved

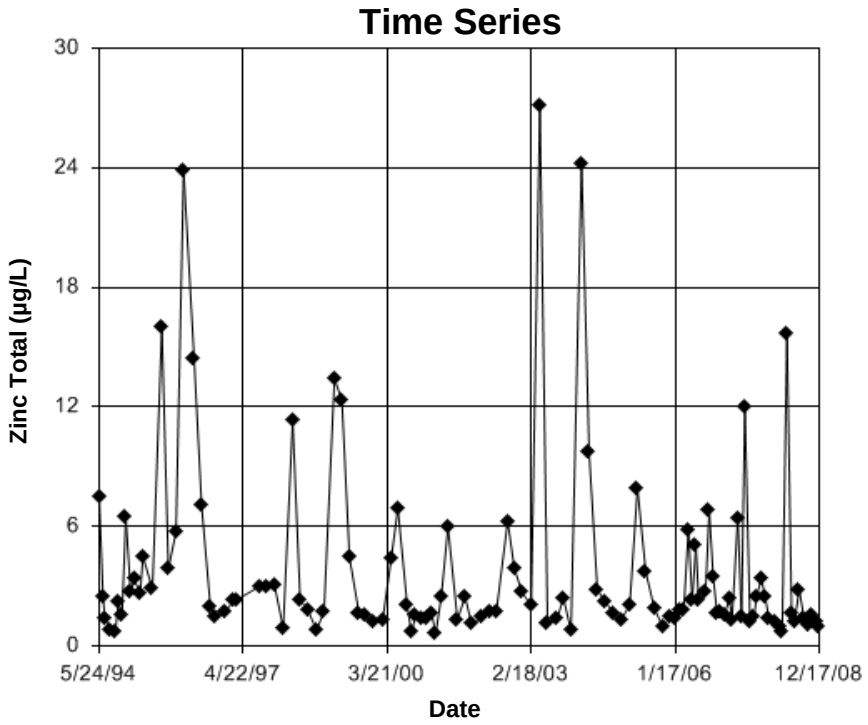


Figure E361 Carrot River: Zinc Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 8.234
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

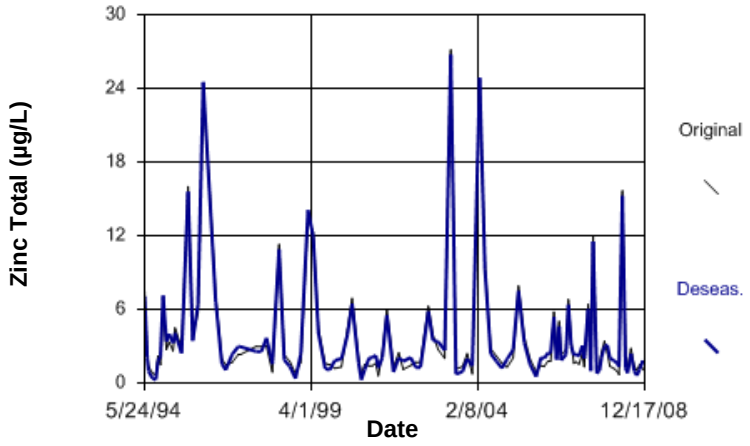


Figure E362 Carrot River: Zinc Total

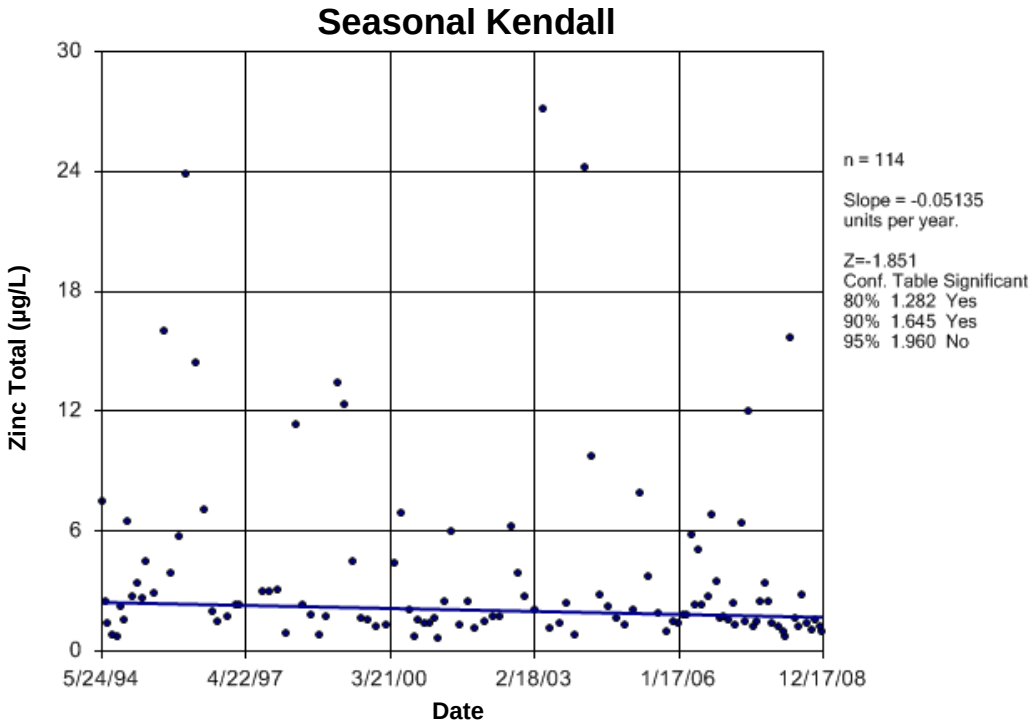


Figure E363 Carrot River: Zinc Total

Churchill River

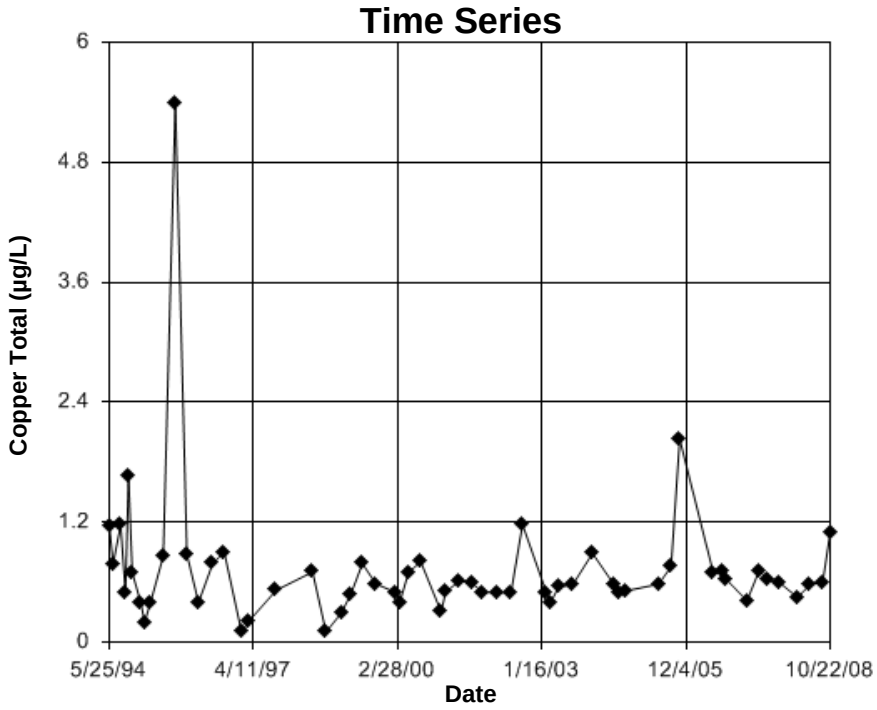


Figure E364 Churchill River: Copper Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 20.89
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

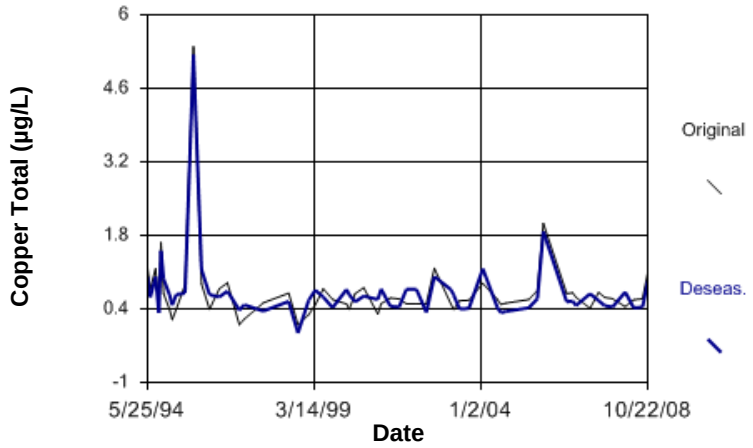


Figure E365 Churchill River: Copper Total

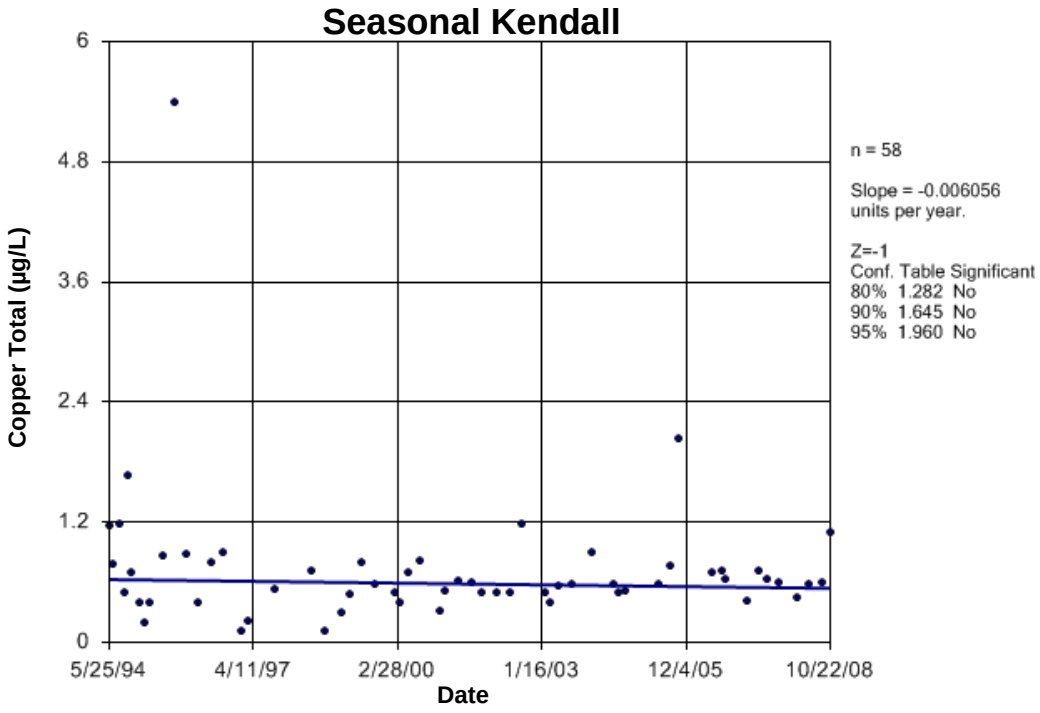


Figure E366 Churchill River: Copper Total

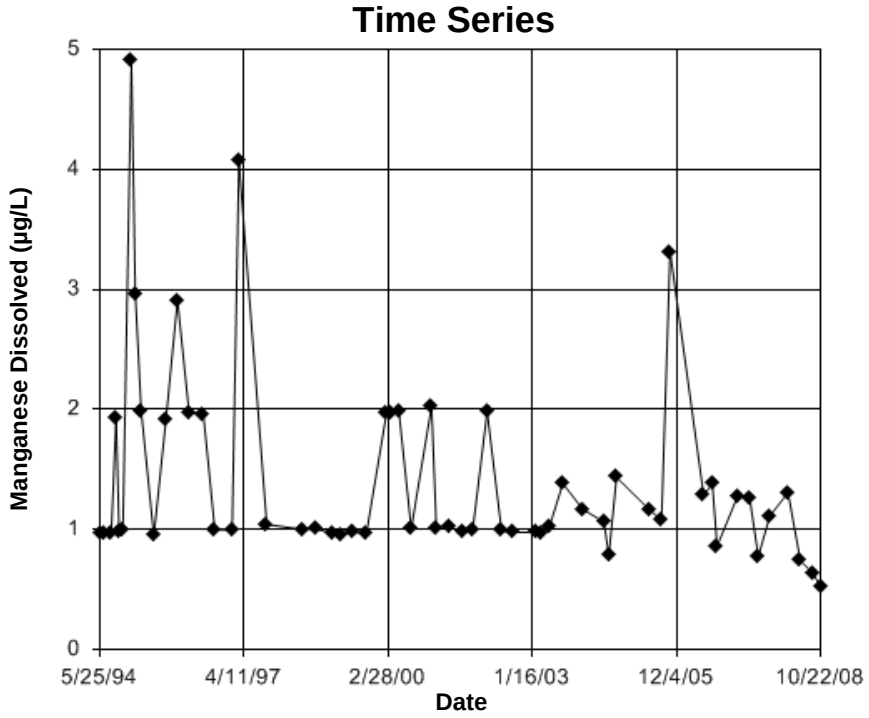


Figure E367 Churchill River: Manganese Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 6.786
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 6.785
Adjusted Kruskal-Wallis statistic (H') = 6.786

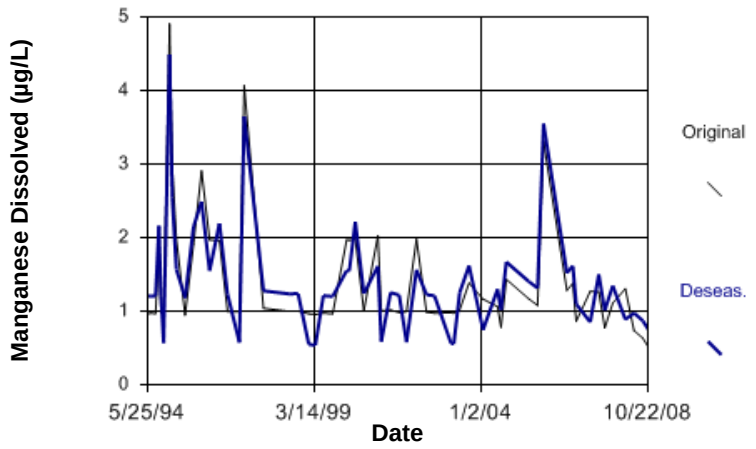


Figure E368 Churchill River: Manganese Dissolved

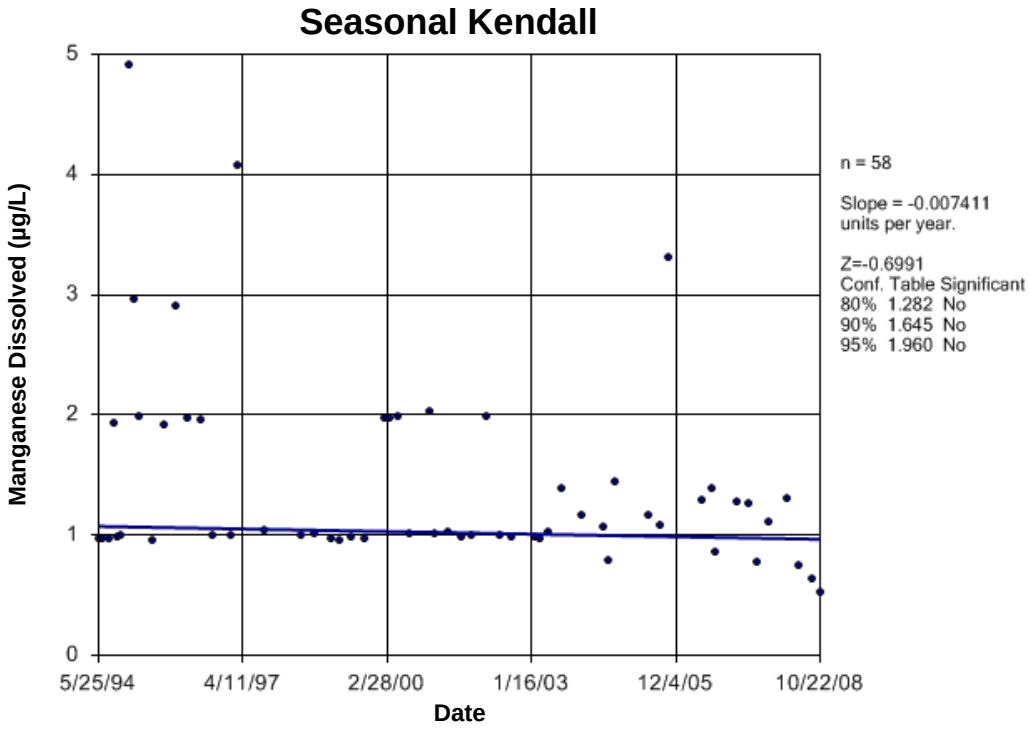


Figure E369 Churchill River: Manganese Dissolved

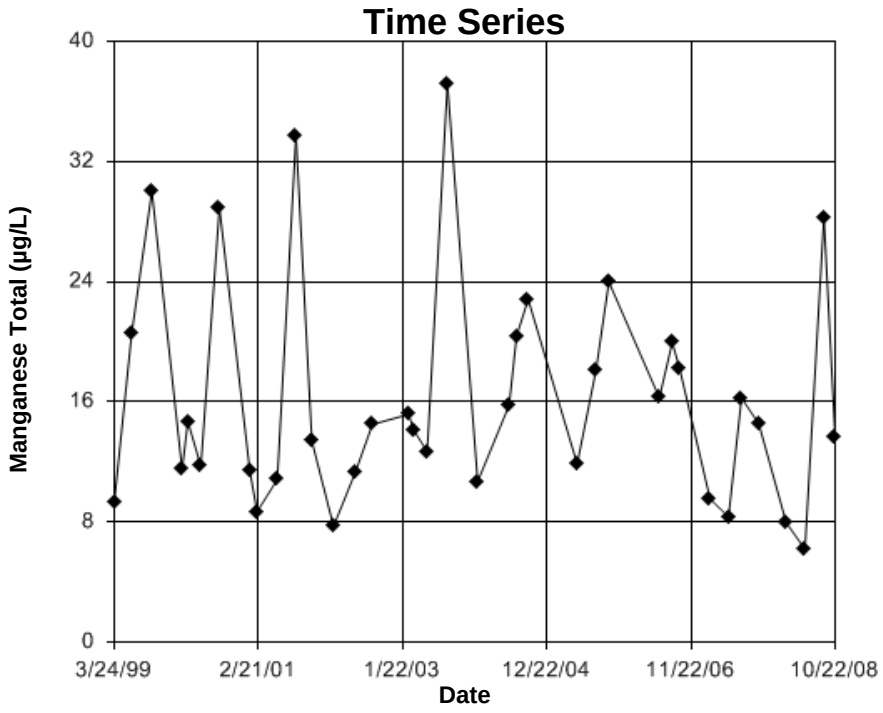


Figure E370 Churchill River: Manganese Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 9.904
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

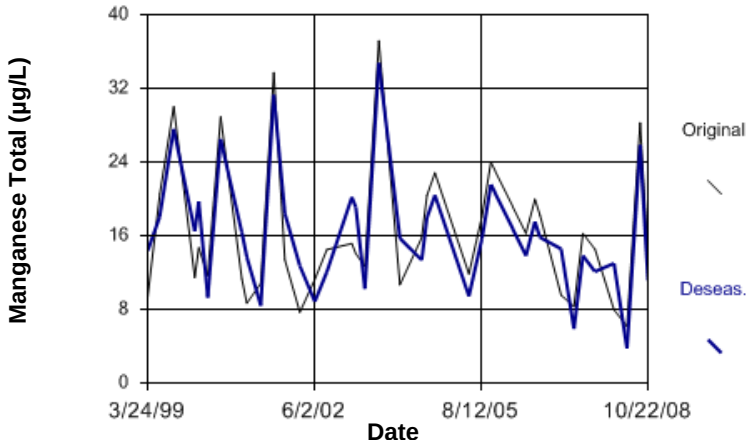


Figure E371 Churchill River: Manganese Total

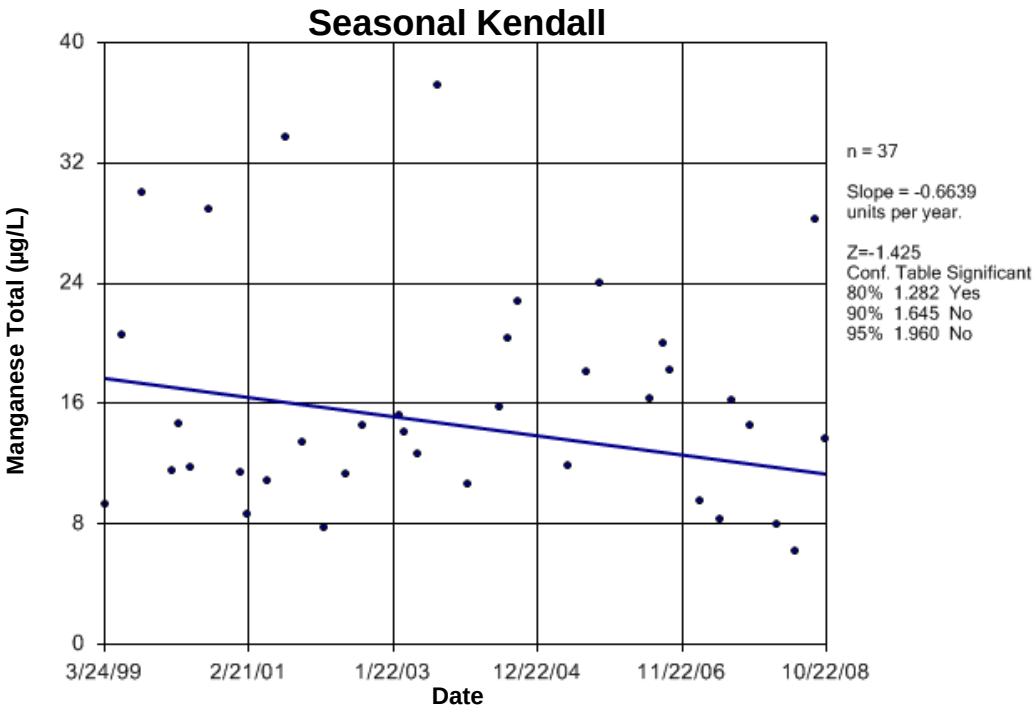


Figure E372 Churchill River: Manganese Total

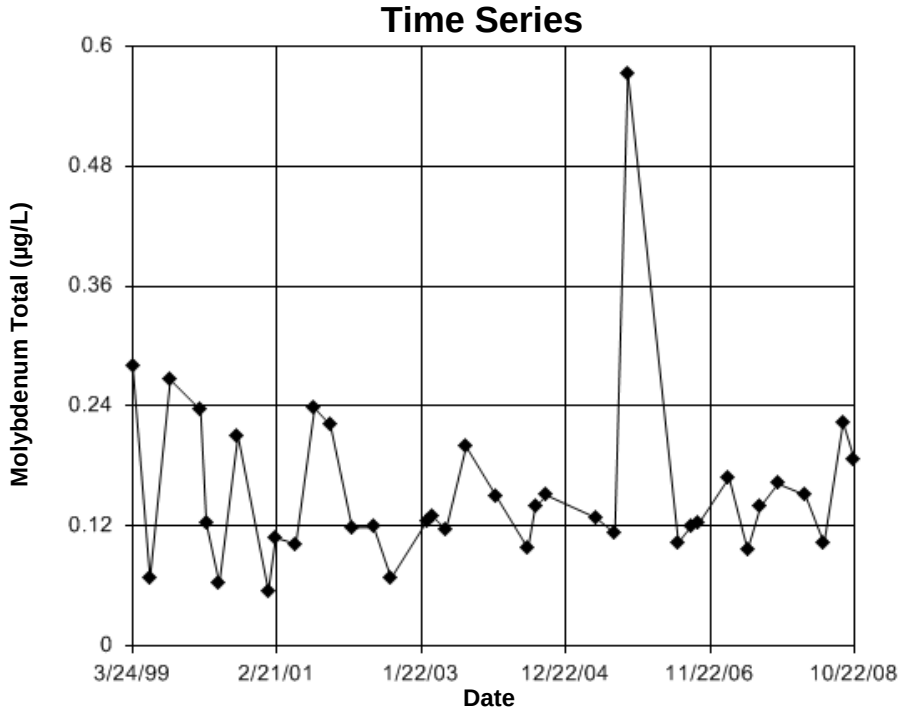


Figure E373 Churchill River: Molybdenum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.7117
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.7116
Adjusted Kruskal-Wallis statistic (H') = 0.7117

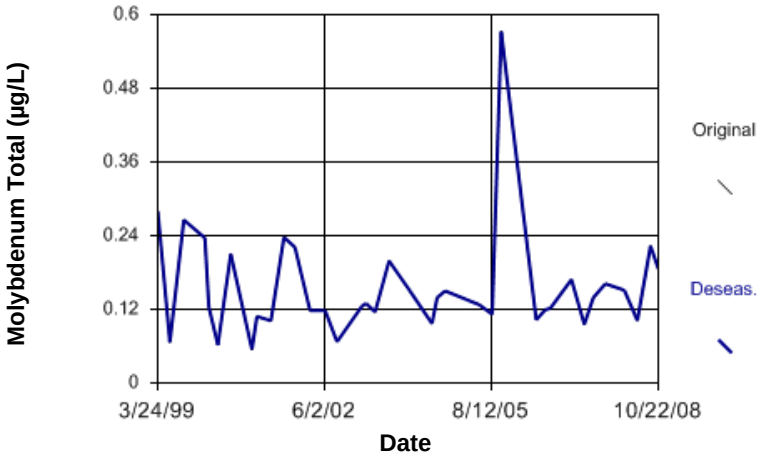


Figure E374 Churchill River: Molybdenum Total

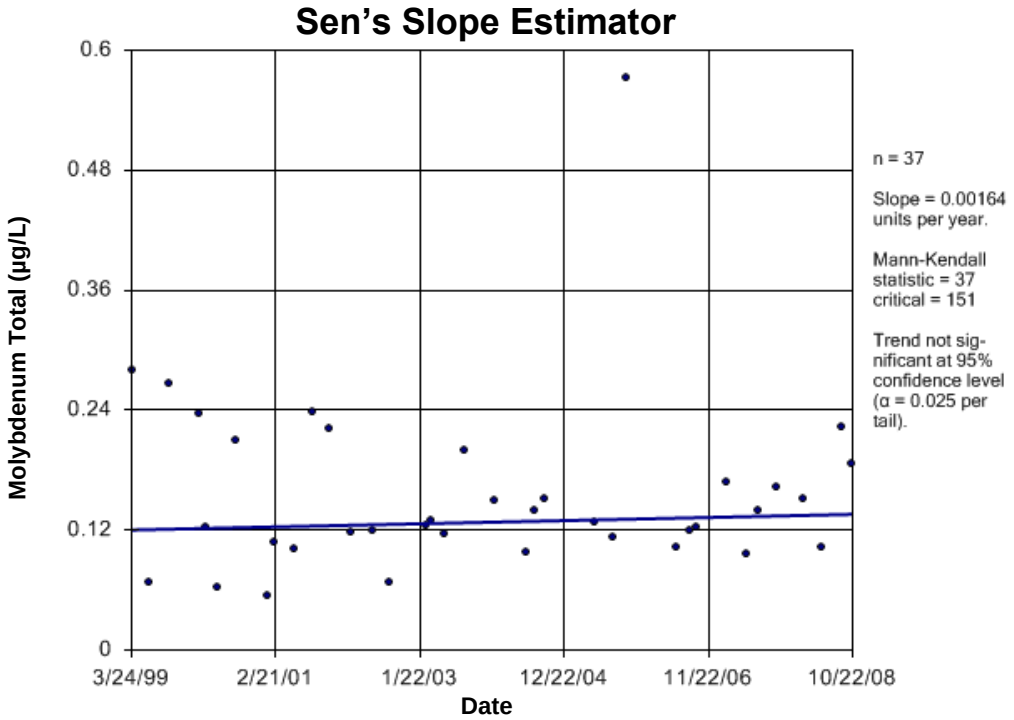


Figure E375 Churchill River: Molybdenum Total

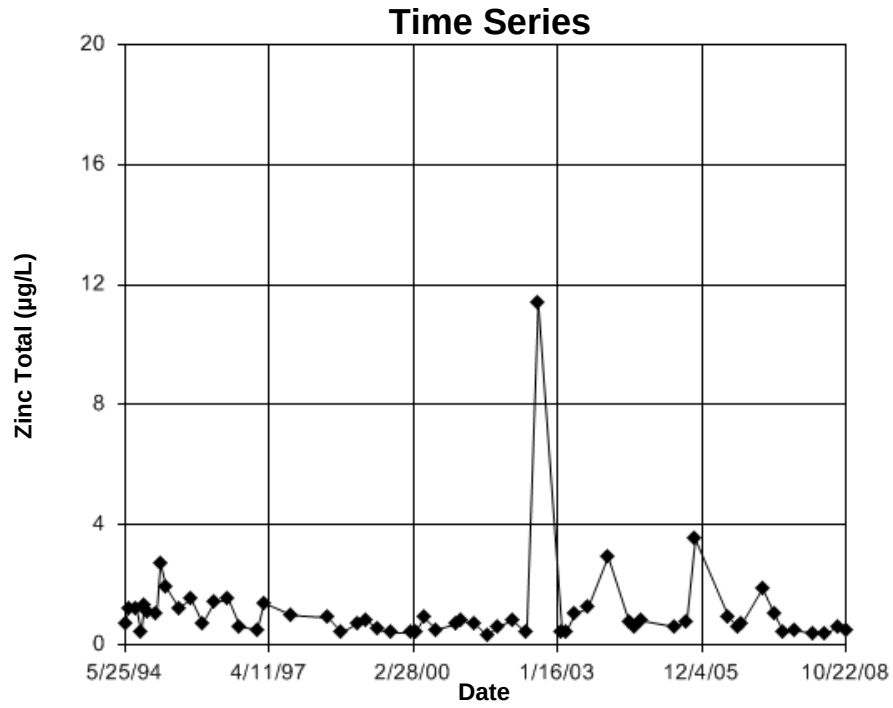


Figure E376 Churchill River: Zinc Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.2851
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.2851
Adjusted Kruskal-Wallis statistic (H') = 0.2851

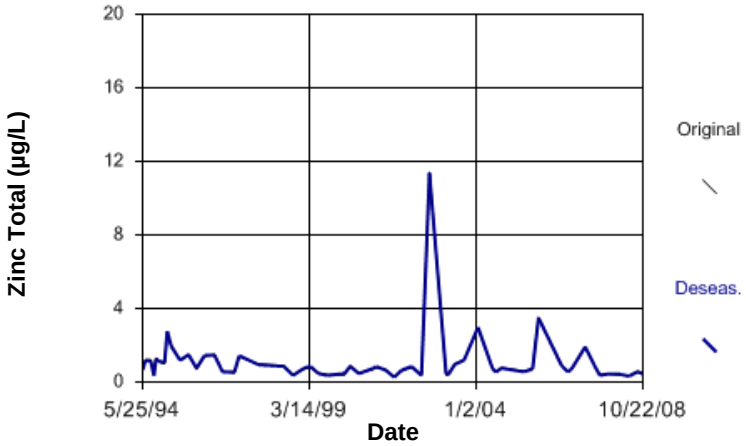


Figure E377 Churchill River: Zinc Total

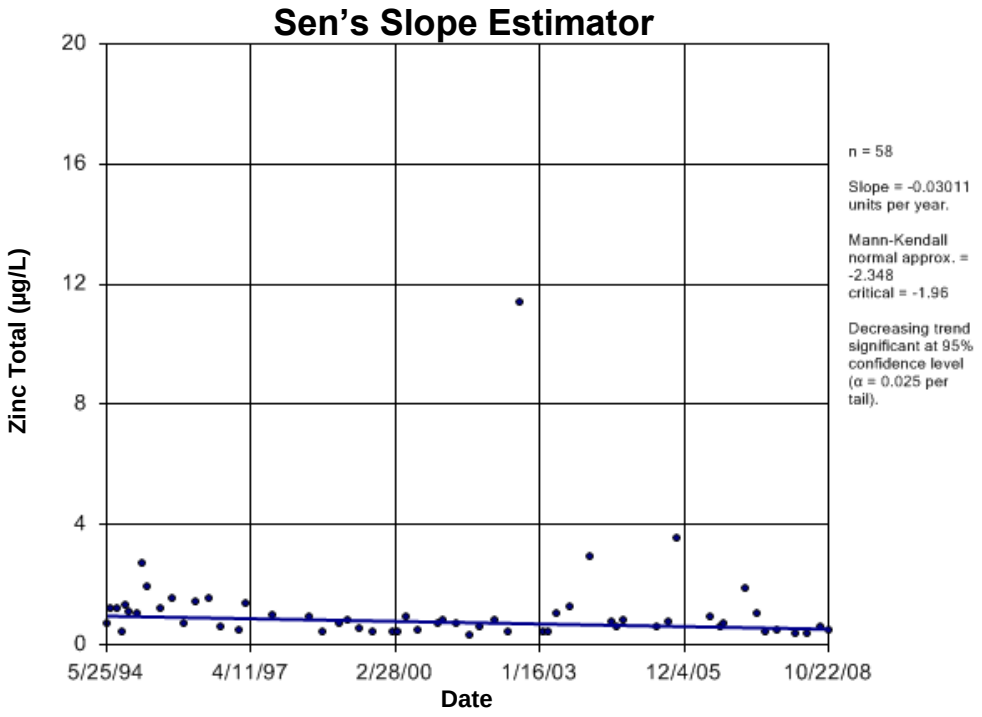


Figure E378 Churchill River: Zinc Total

Qu'Appelle River

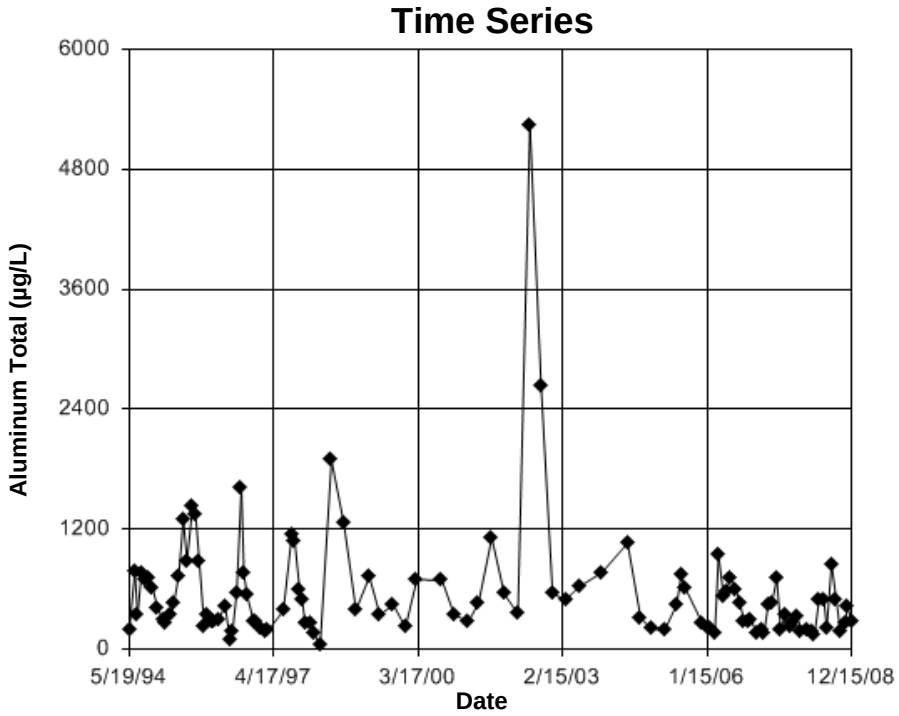


Figure E379 Qu'Appelle River: Aluminum Total

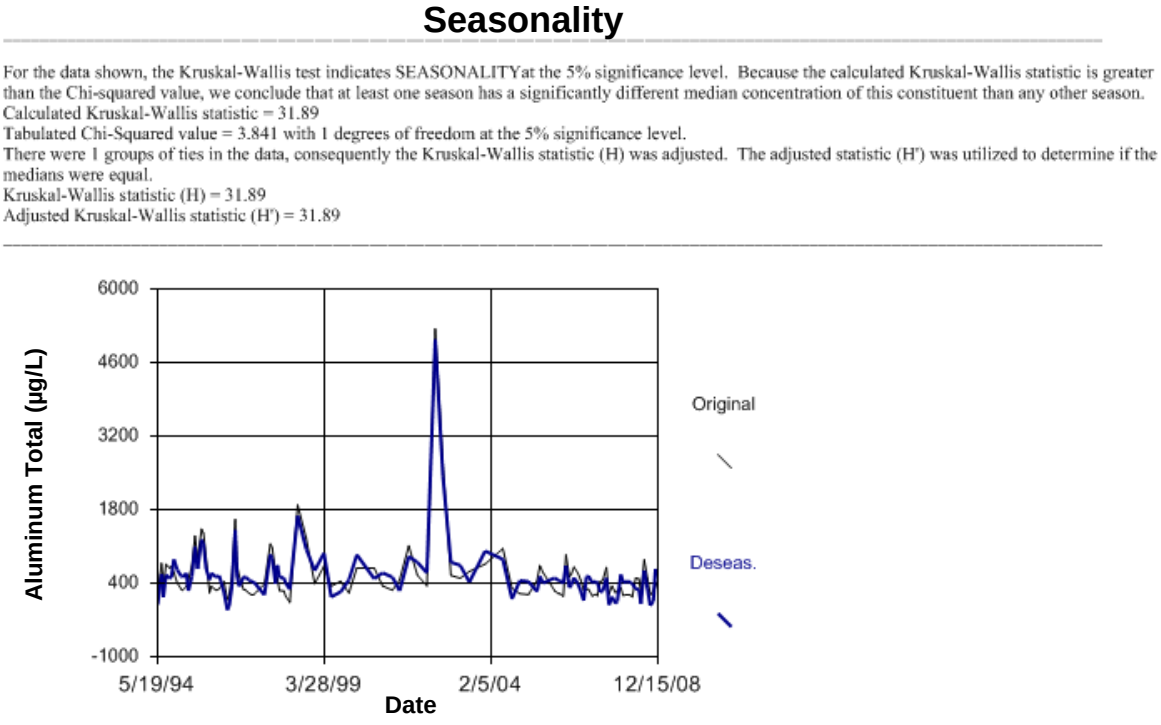


Figure E380 Qu'Appelle River: Aluminum Total

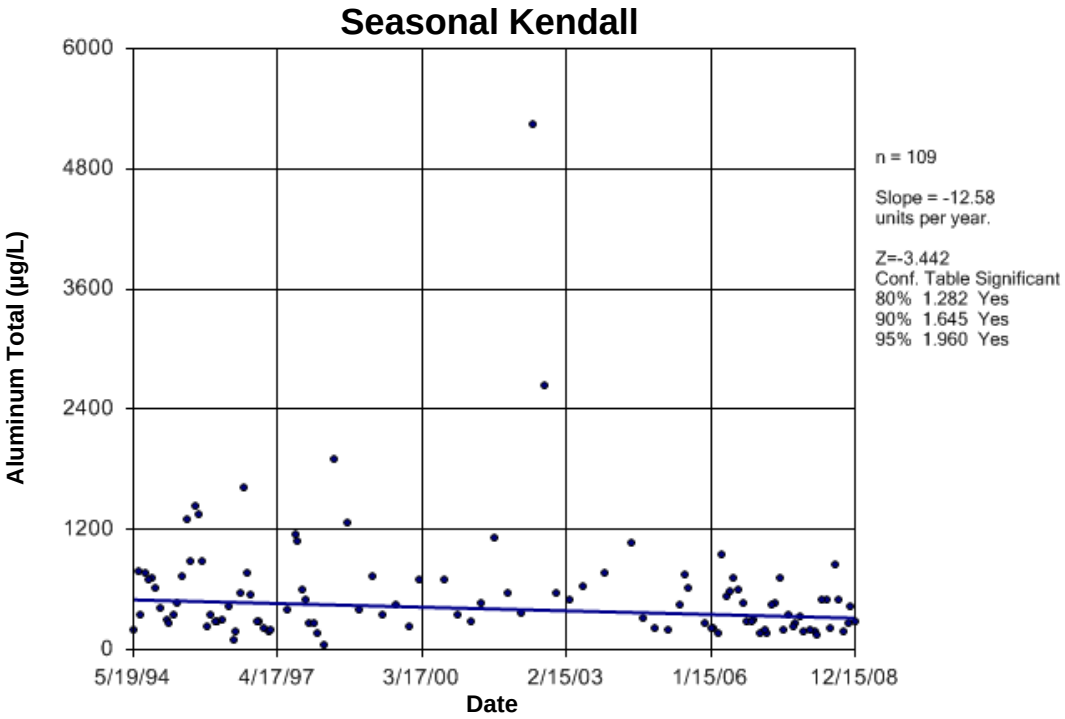


Figure E381 Qu'Appelle River: Aluminum Total

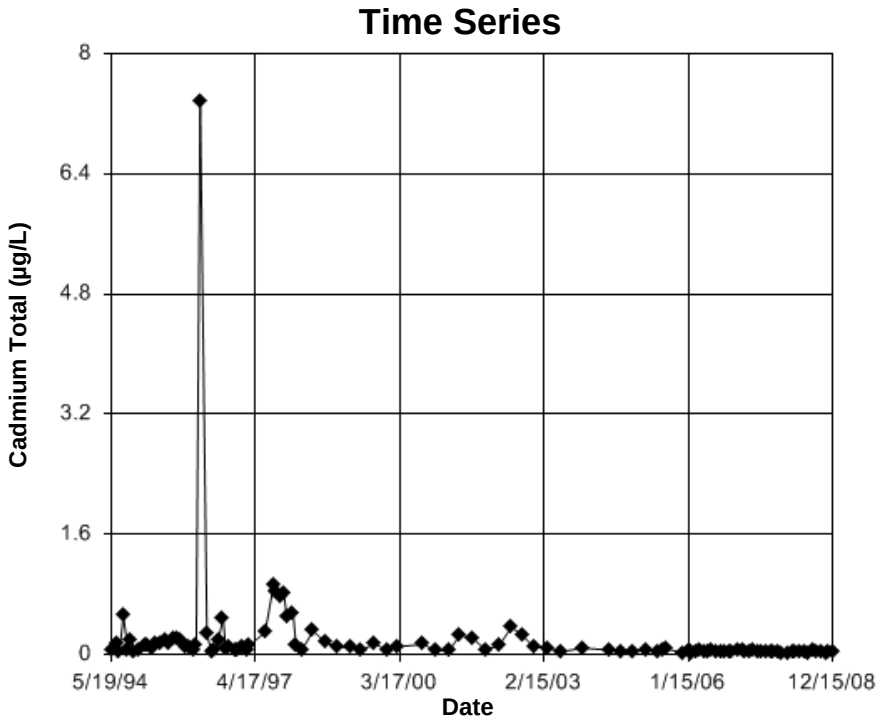


Figure E382 Qu'Appelle River: Cadmium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.552
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 1.552
Adjusted Kruskal-Wallis statistic (H') = 1.552

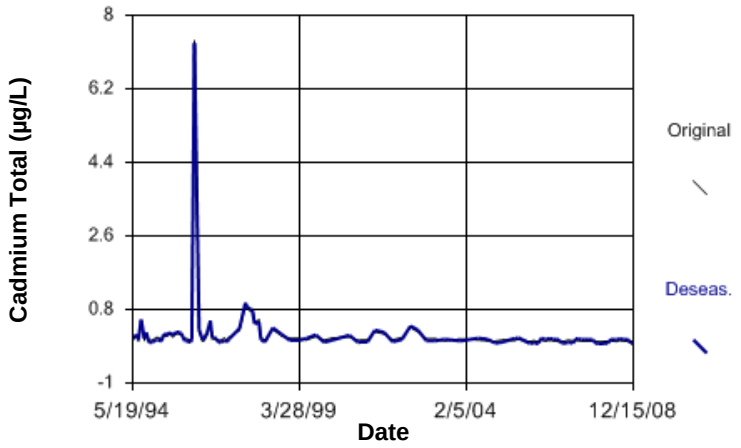


Figure E383 Qu'Appelle River: Cadmium Total

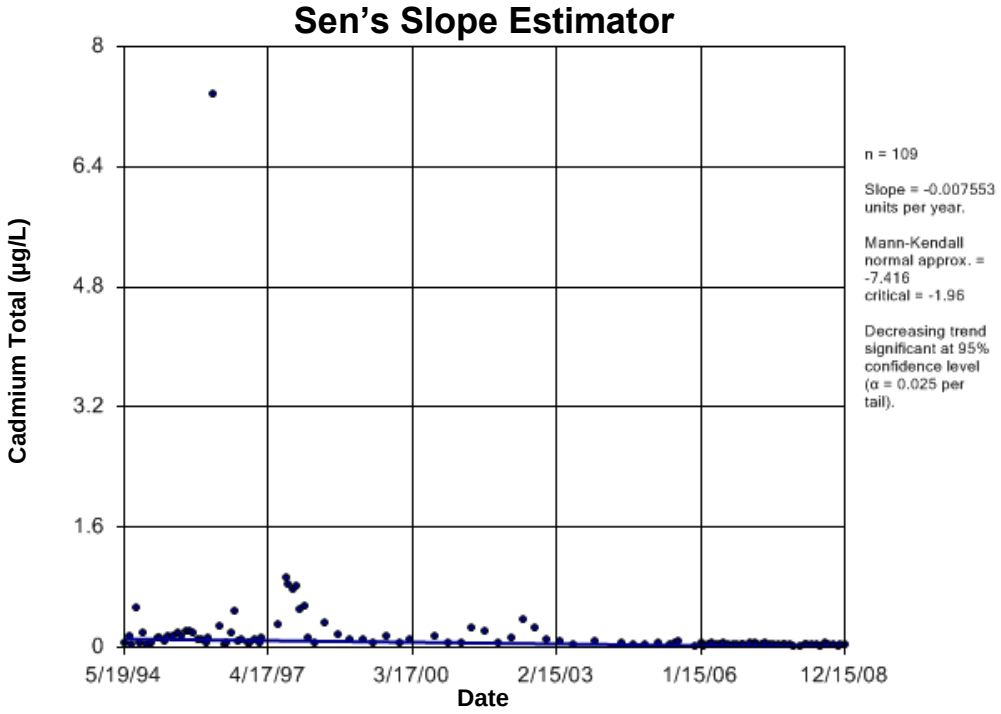


Figure E384 Qu'Appelle River: Cadmium Total

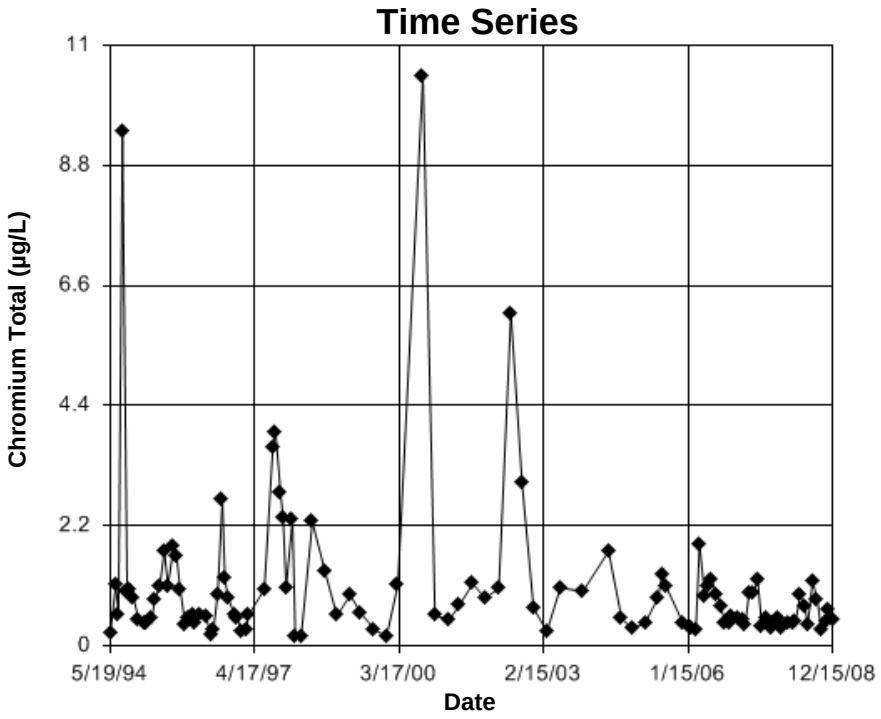


Figure E385 Qu'Appelle River: Chromium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 23.69
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

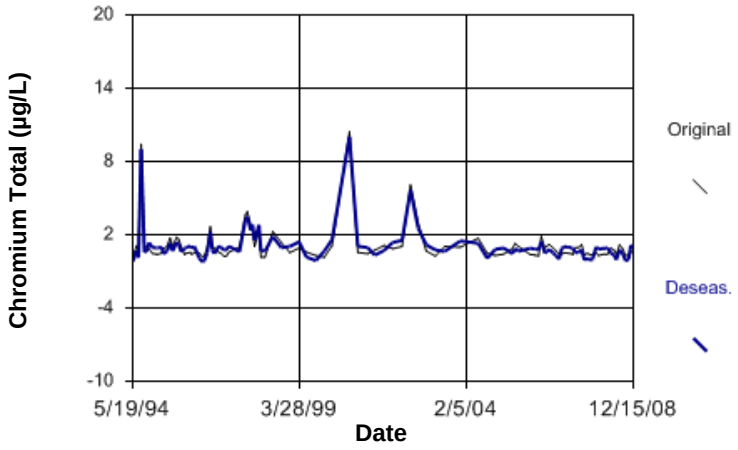


Figure E386 Qu'Appelle River: Chromium Total

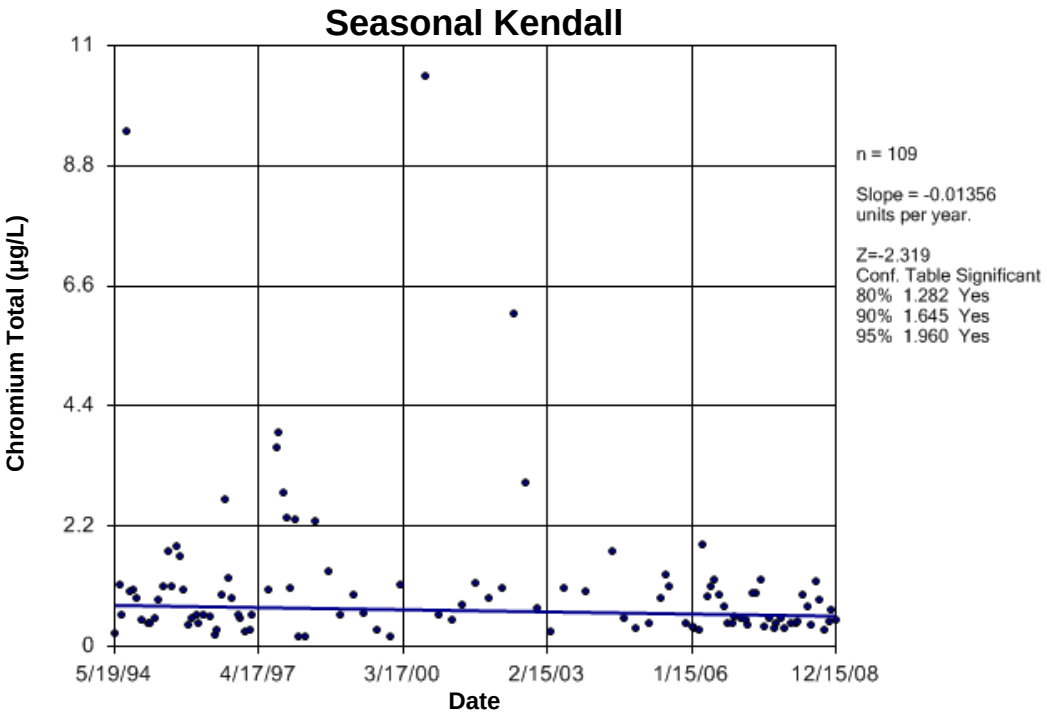


Figure E387 Qu'Appelle River: Chromium Total

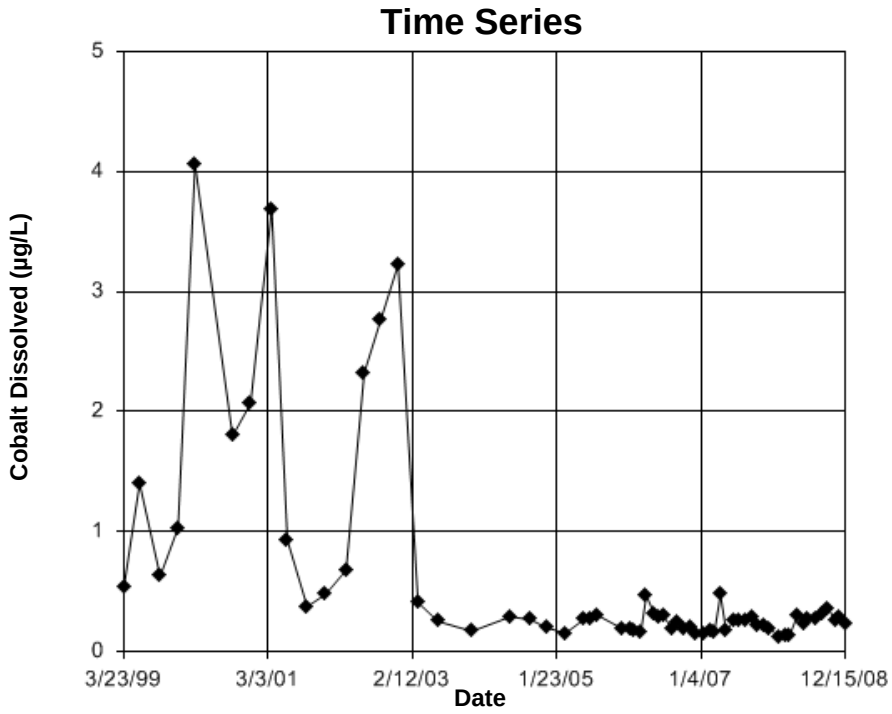


Figure E388 Qu'Appelle River: Cobalt Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 5.316
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

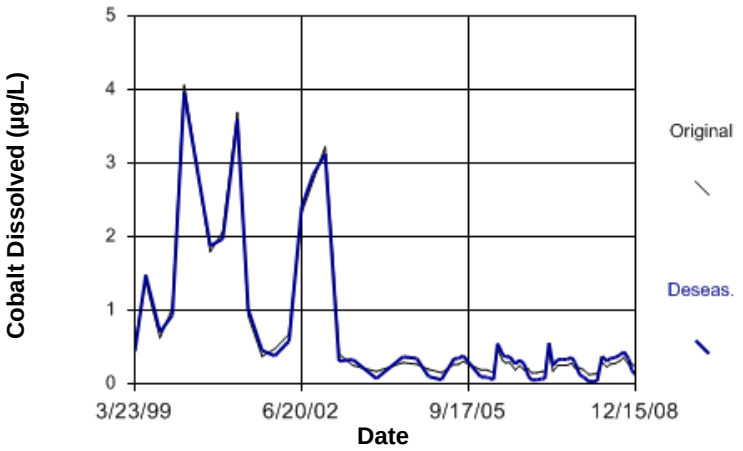


Figure E389 Qu'Appelle River: Cobalt Dissolved

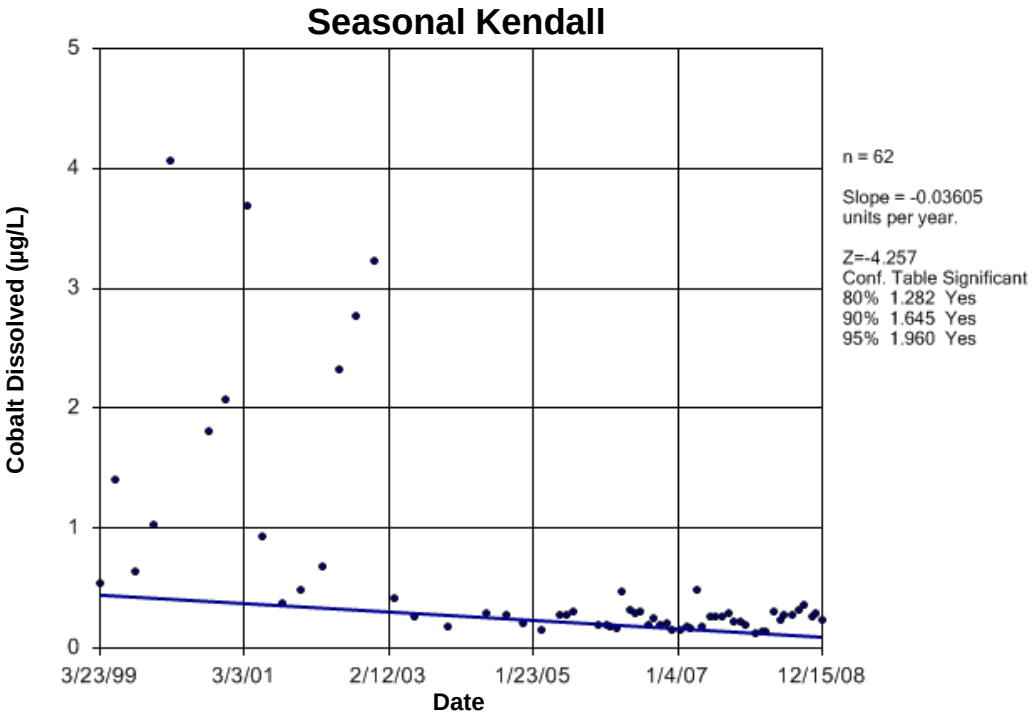


Figure E390 Qu'Appelle River: Cobalt Dissolved

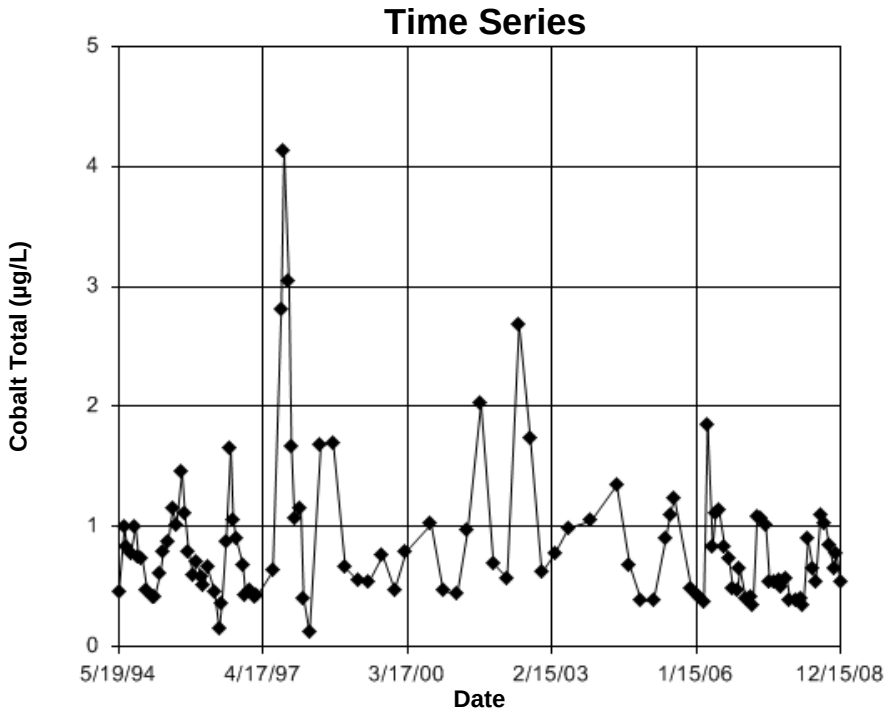


Figure E391 Qu'Appelle River: Cobalt Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 36.22
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 36.22
Adjusted Kruskal-Wallis statistic (H') = 36.22

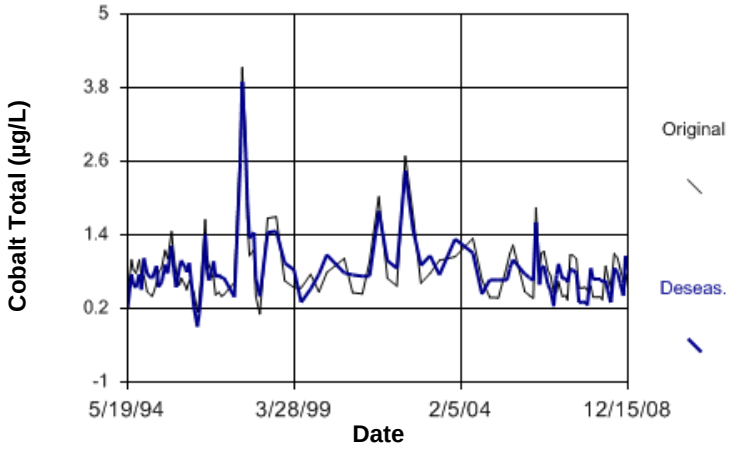


Figure E392 Qu'Appelle River: Cobalt Total

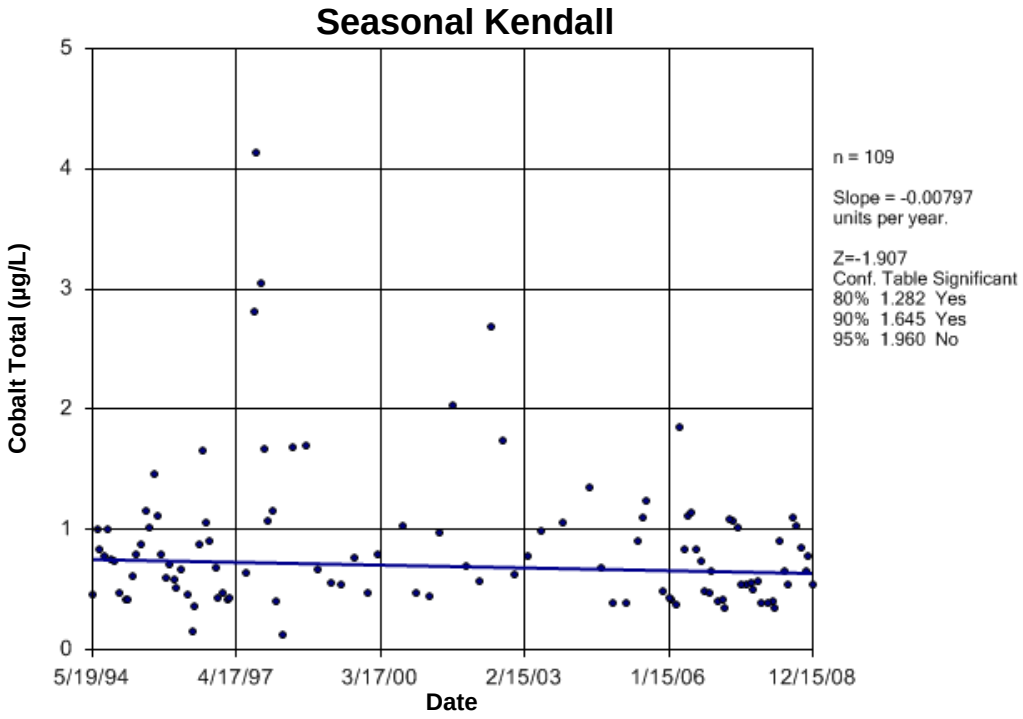


Figure E393 Qu'Appelle River: Cobalt Total

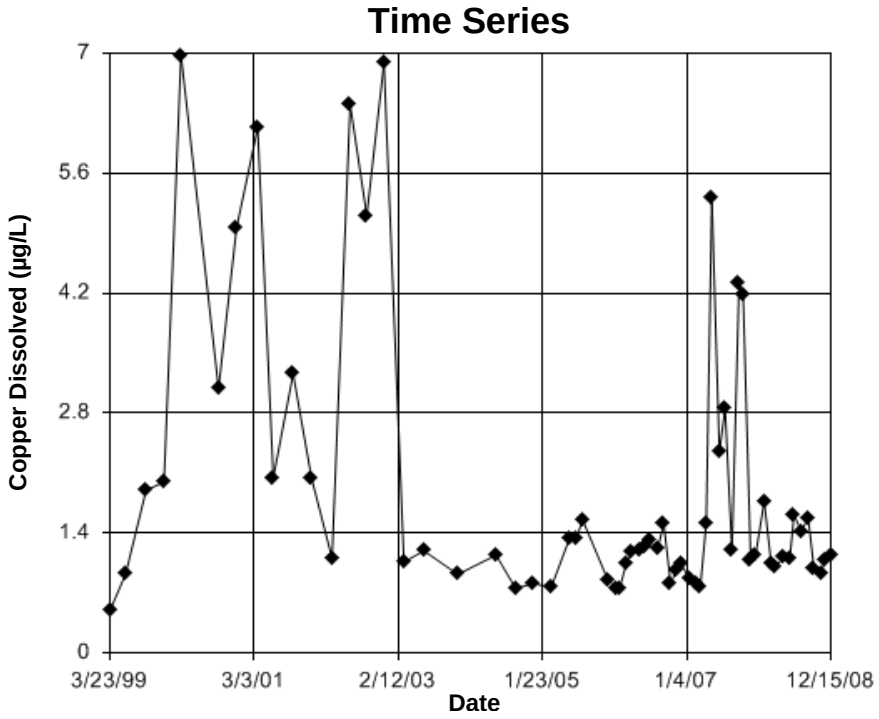


Figure E394 Qu'Appelle River: Copper Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 8.083
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

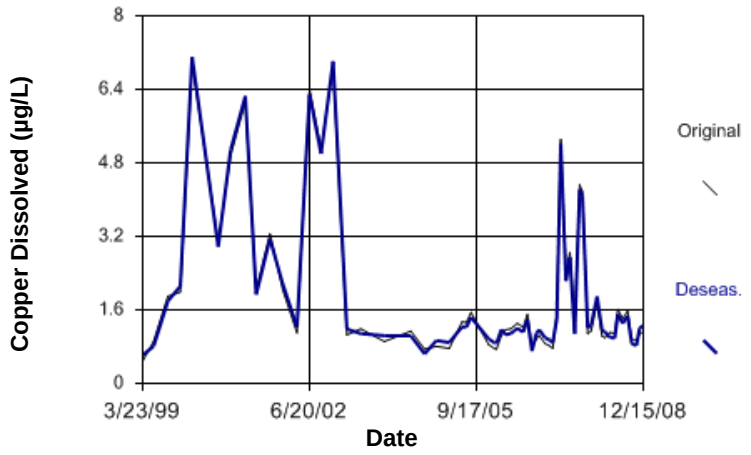


Figure E395 Qu'Appelle River: Copper Dissolved

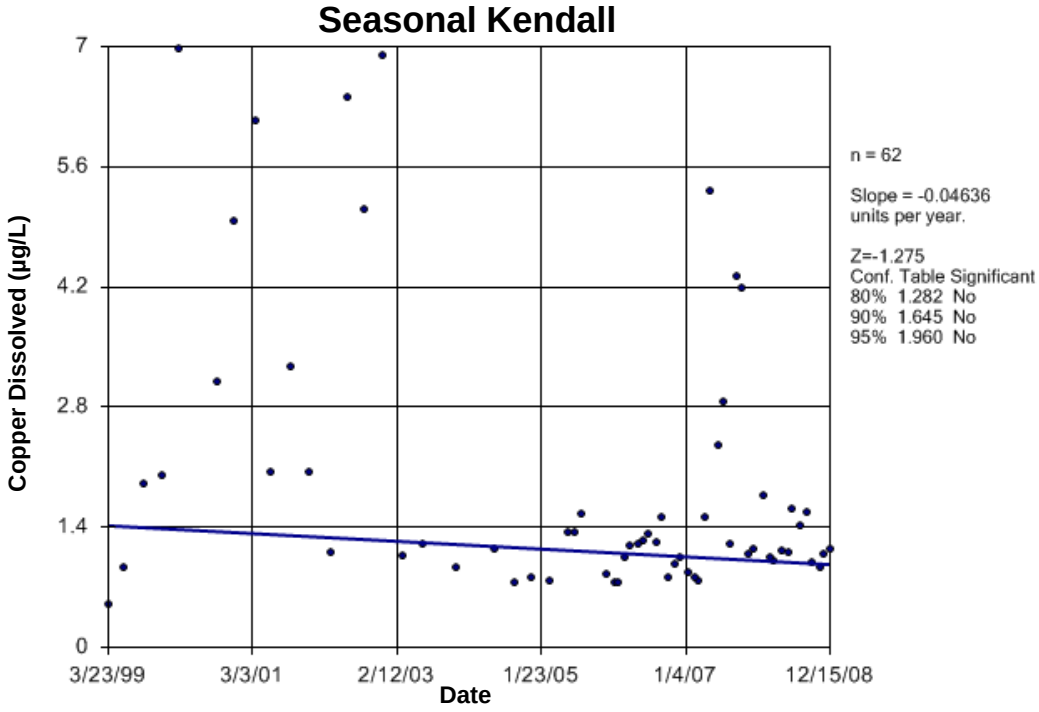


Figure E396 Qu'Appelle River: Copper Dissolved

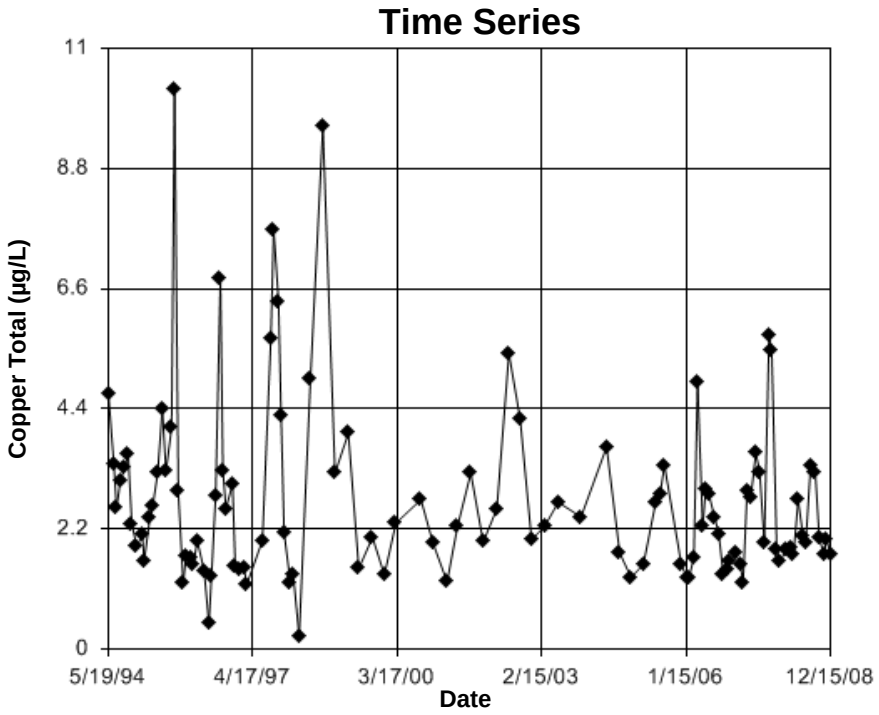


Figure E397 Qu'Appelle River: Copper Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 38.53
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 38.53
Adjusted Kruskal-Wallis statistic (H') = 38.53

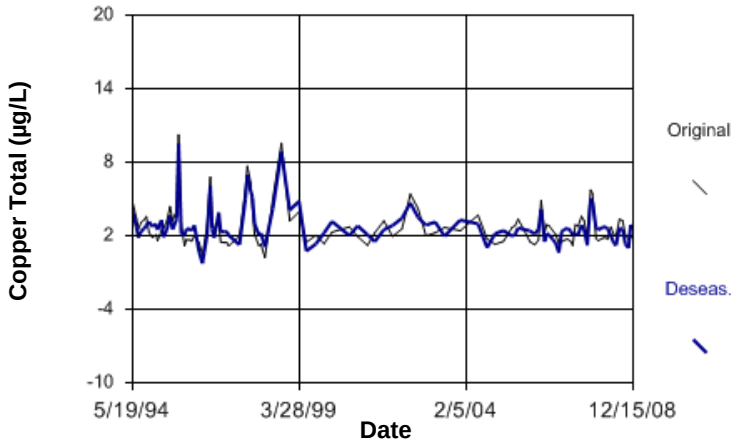


Figure E398 Qu'Appelle River: Copper Total

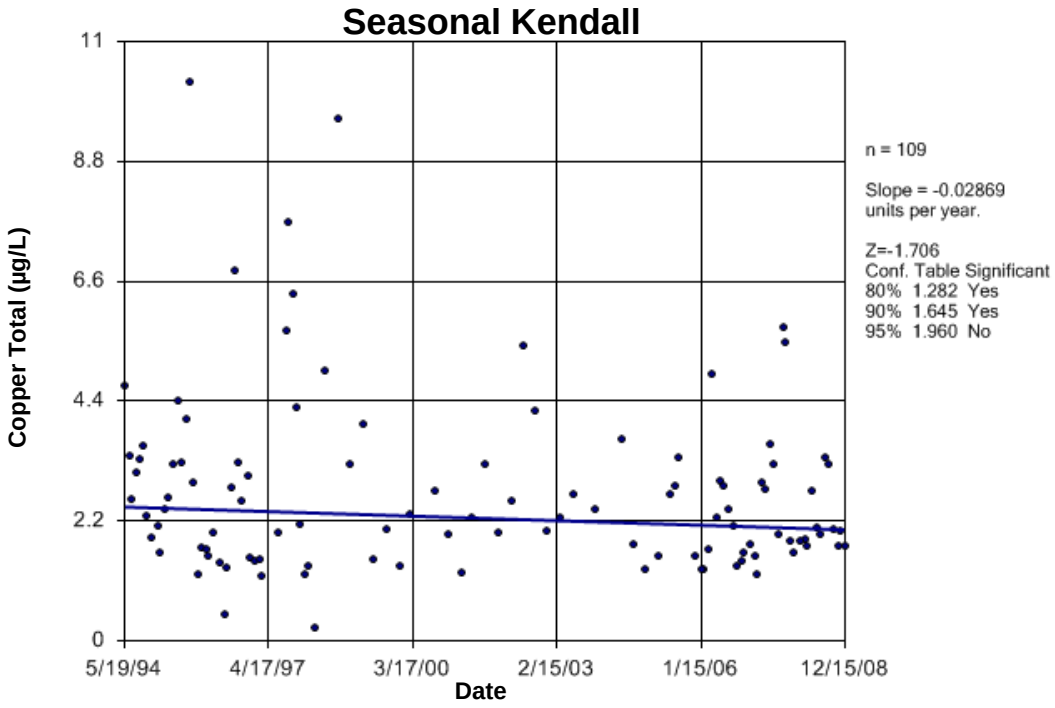


Figure E399 Qu'Appelle River: Copper Total

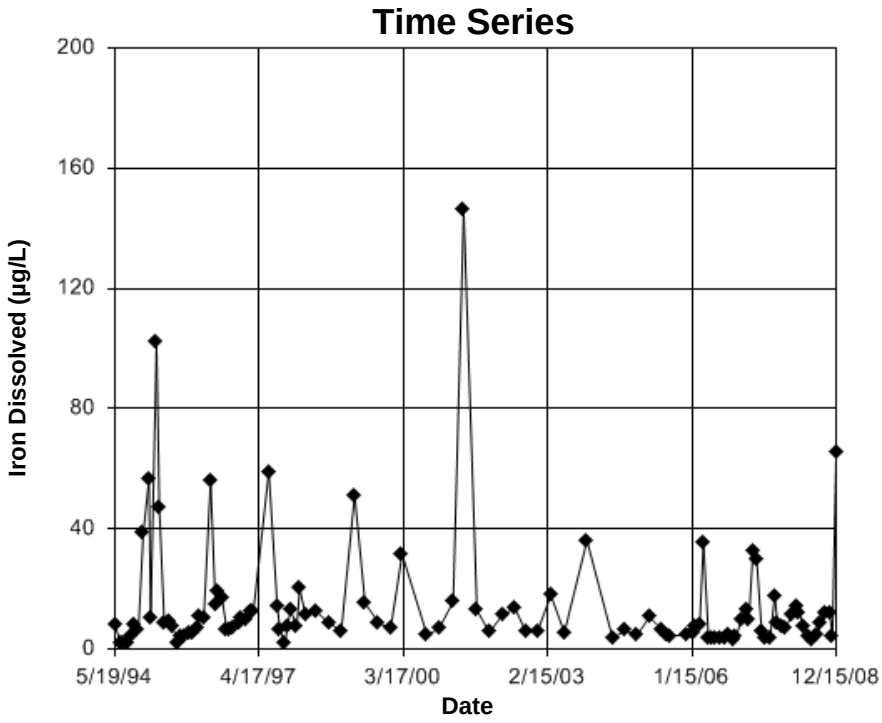


Figure E400 Qu'Appelle River: Iron Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 6.026
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

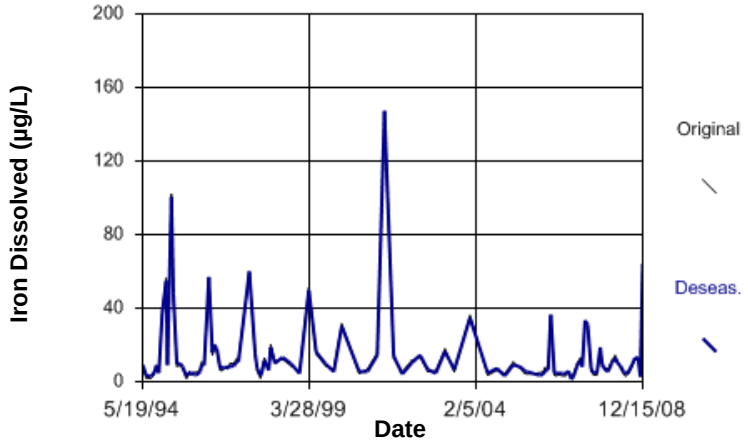


Figure E401 Qu'Appelle River: Iron Dissolved

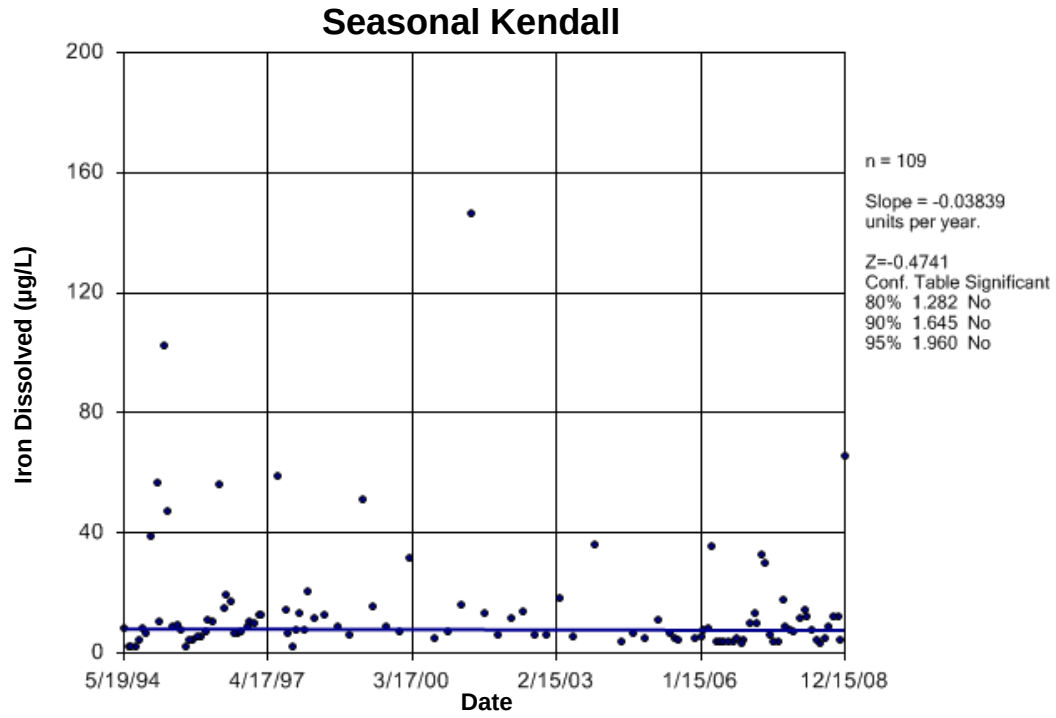


Figure E402 Qu'Appelle River: Iron Dissolved

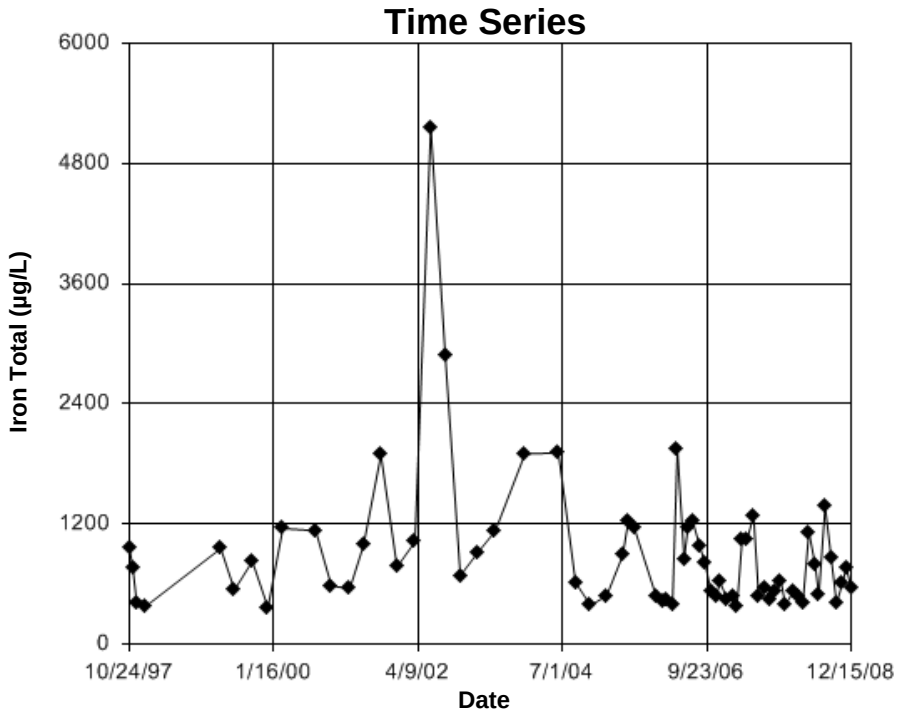


Figure E403 Qu'Appelle River: Iron Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 18.2
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 18.2
Adjusted Kruskal-Wallis statistic (H') = 18.2

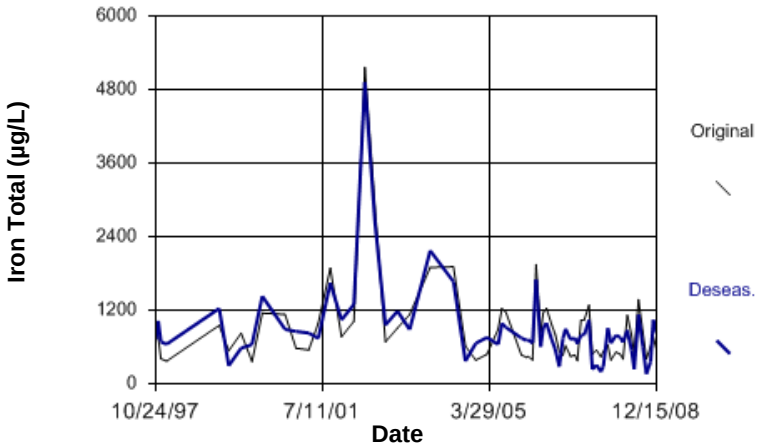


Figure E404 Qu'Appelle River: Iron Total

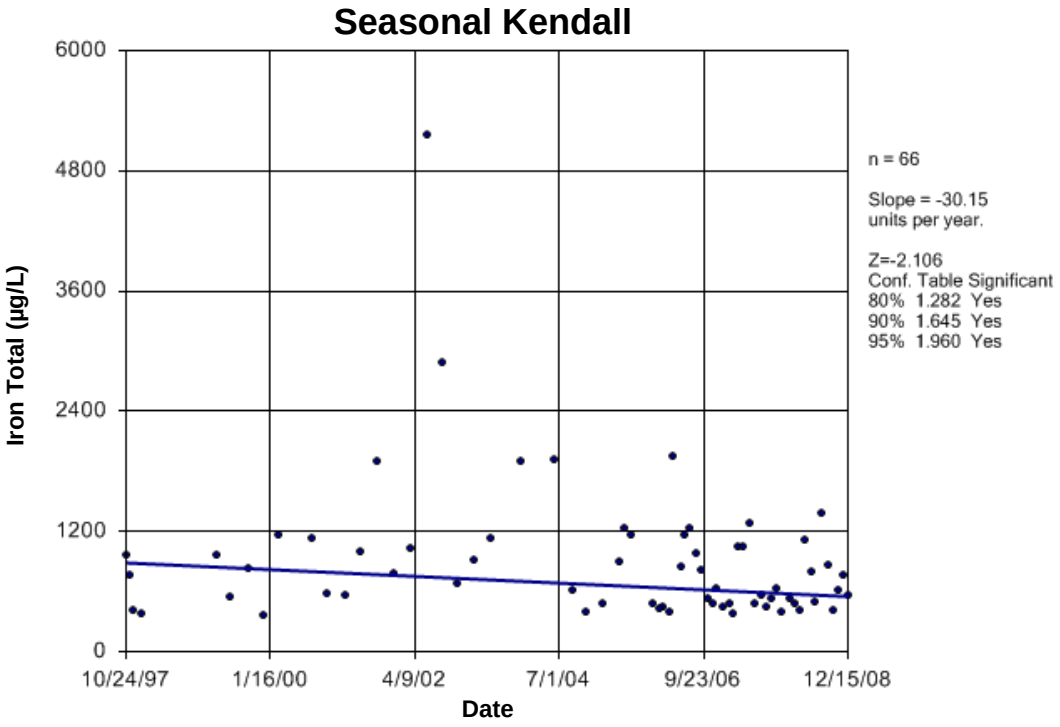


Figure E405 Qu'Appelle River: Iron Total

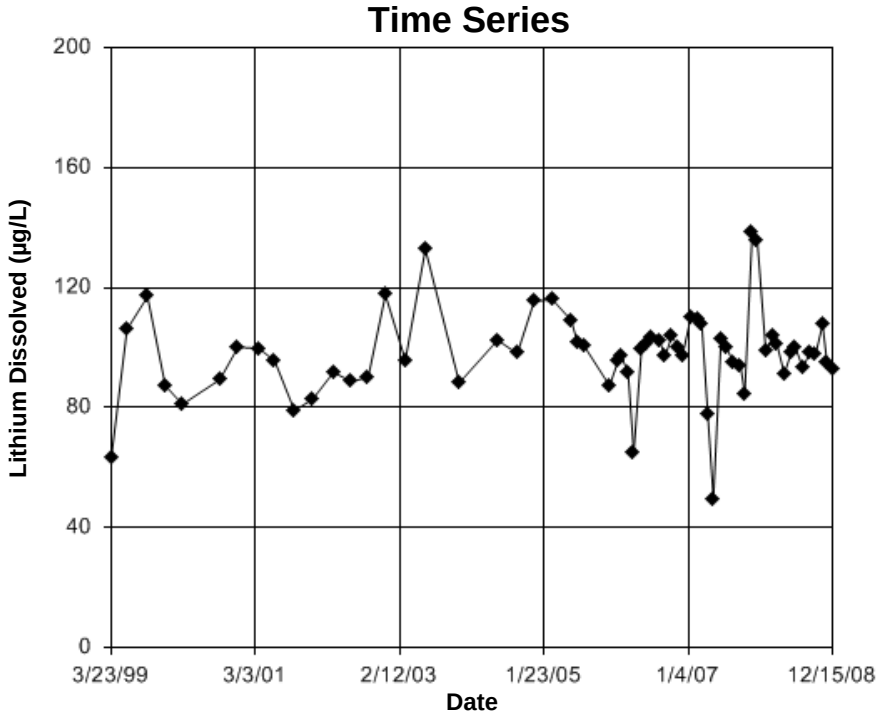


Figure E406 Qu'Appelle River: Lithium Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.1353
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.1353
Adjusted Kruskal-Wallis statistic (H') = 0.1353

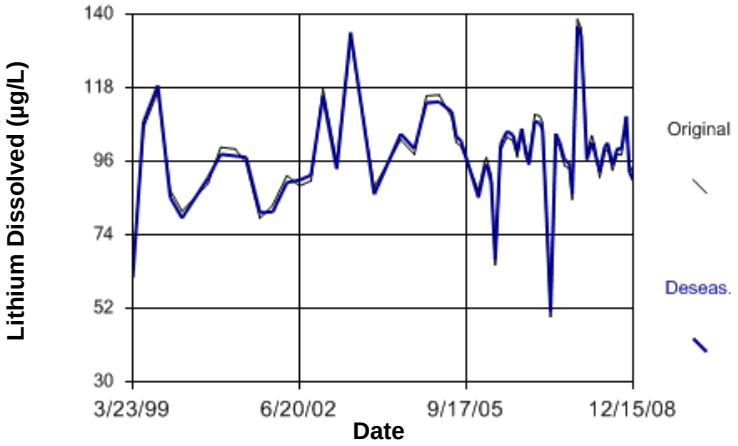


Figure E407 Qu'Appelle River: Lithium Dissolved

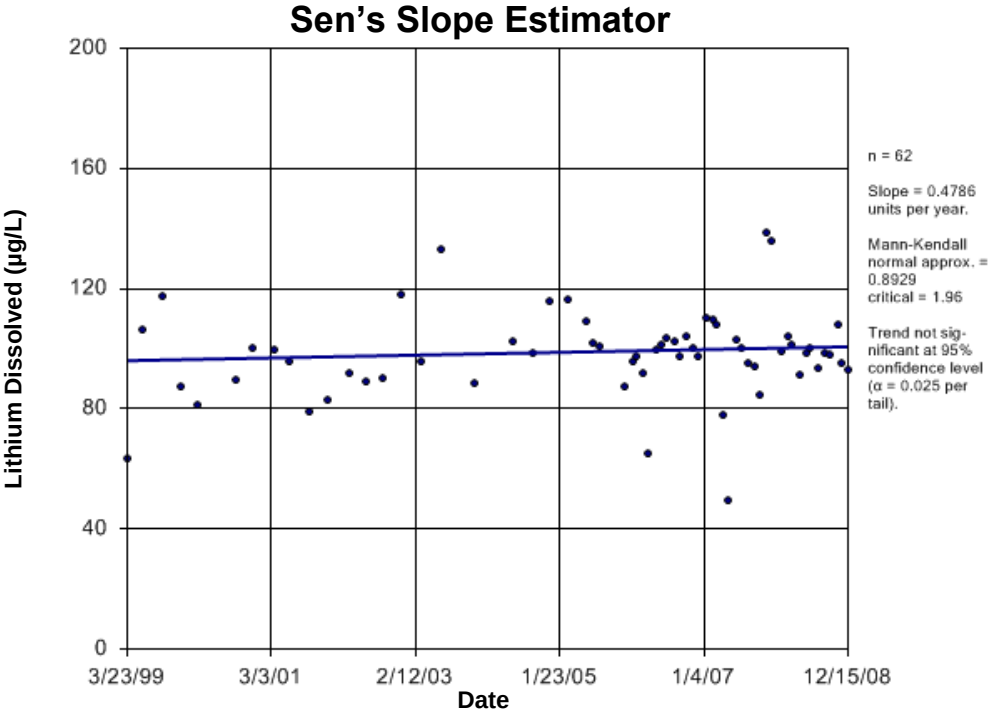


Figure E408 Qu'Appelle River: Lithium Dissolved

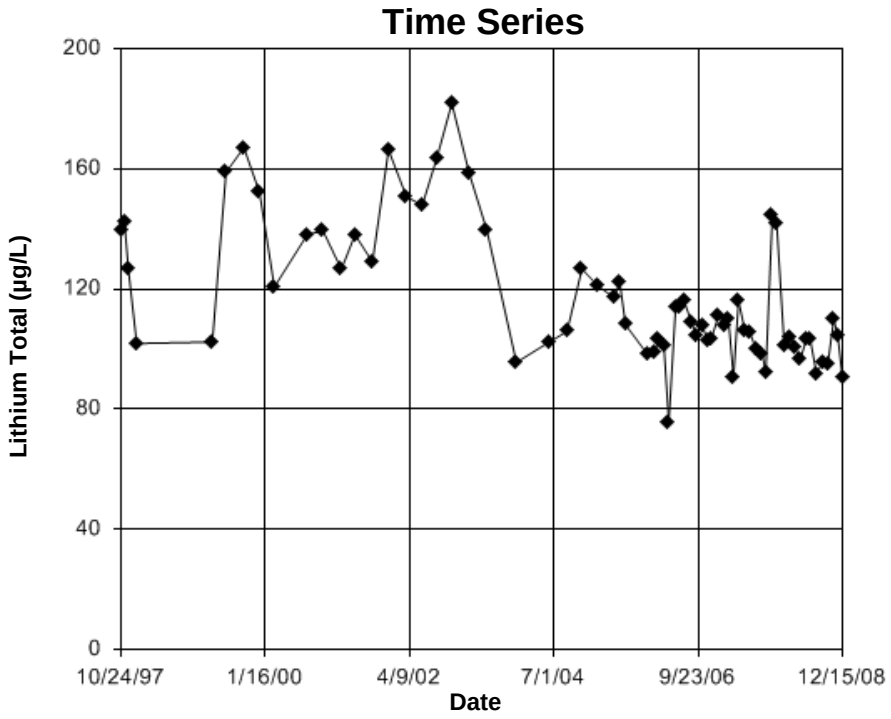


Figure E409 Qu'Appelle River: Lithium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.421
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 4 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.421
Adjusted Kruskal-Wallis statistic (H') = 0.421

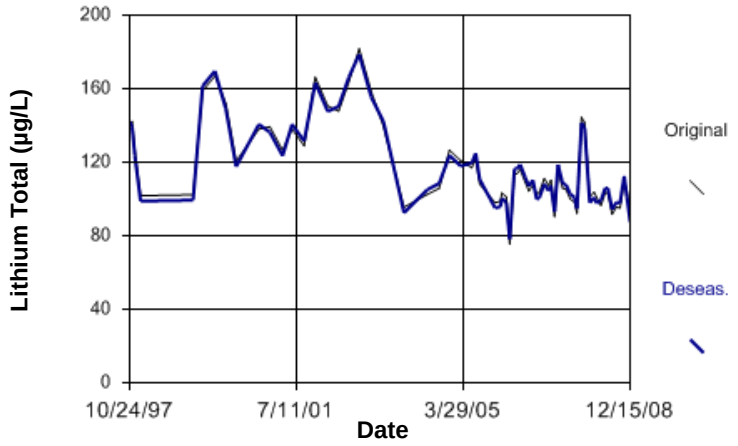


Figure E410 Qu'Appelle River: Lithium Total

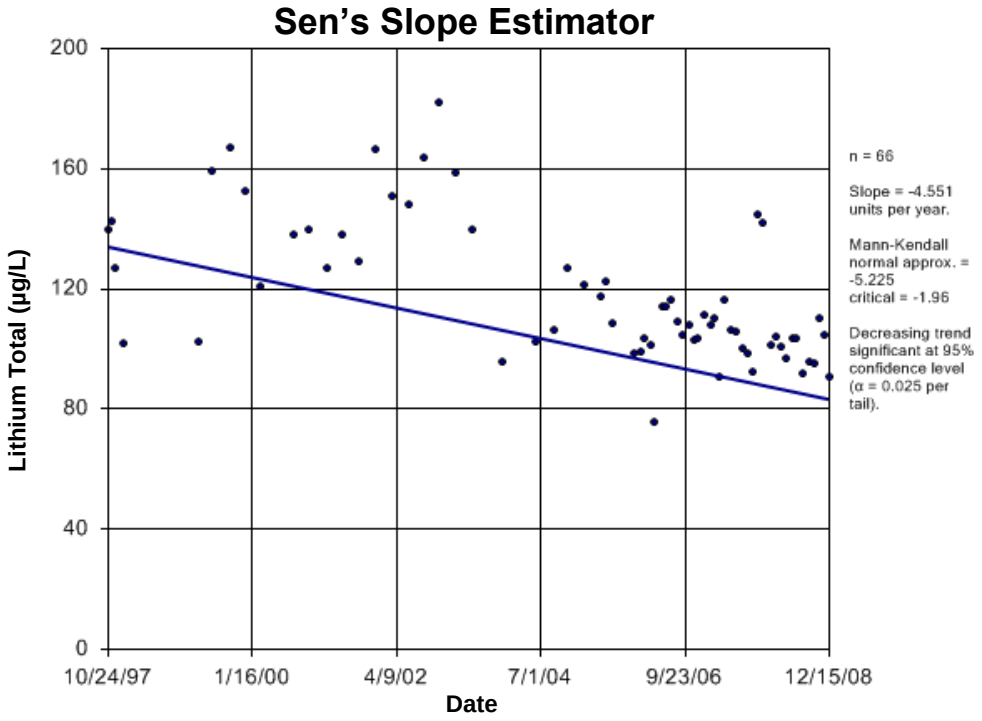


Figure E411 Qu'Appelle River: Lithium Total

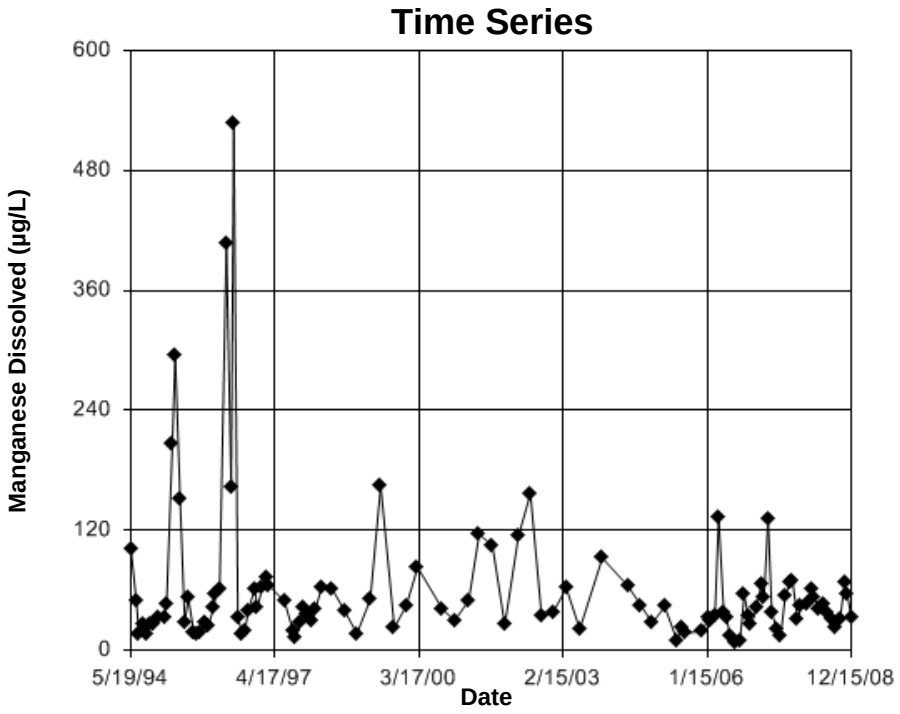


Figure E412 Qu'Appelle River: Manganese Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.668
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 1.668
Adjusted Kruskal-Wallis statistic (H') = 1.668

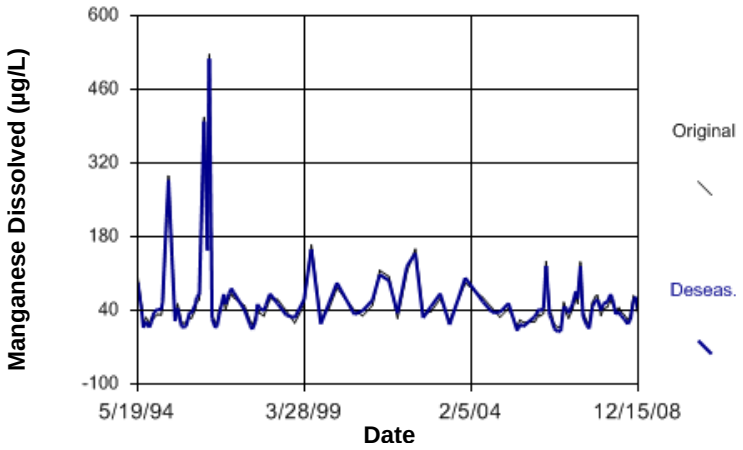


Figure E413 Qu'Appelle River: Manganese Dissolved

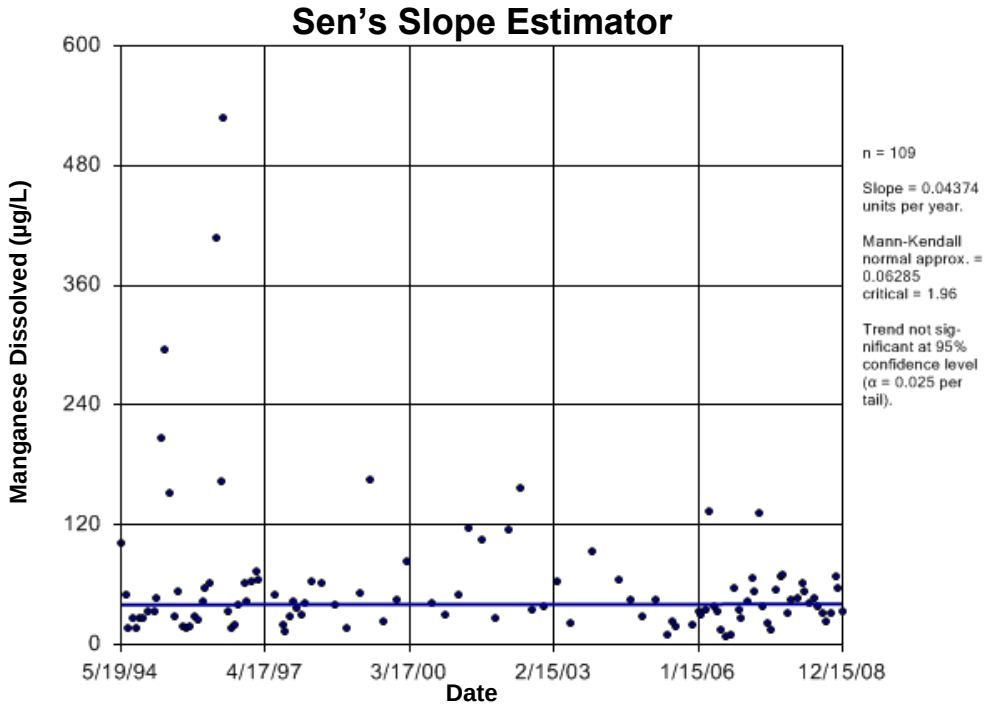


Figure E414 Qu'Appelle River: Manganese Dissolved

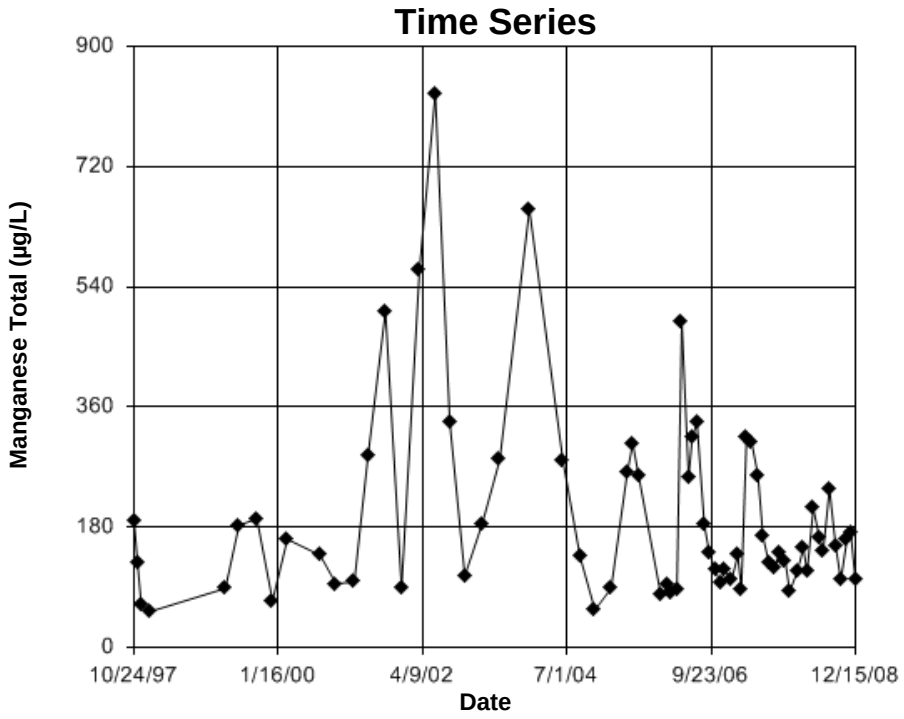


Figure E415 Qu'Appelle River: Manganese Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 27.14
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

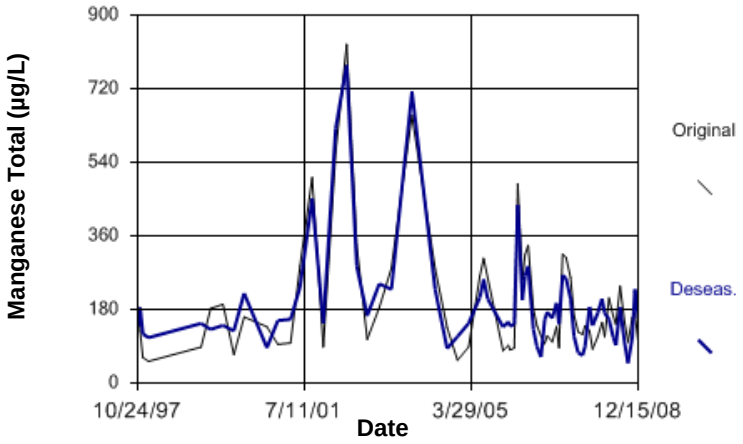


Figure E416 Qu'Appelle River: Manganese Total

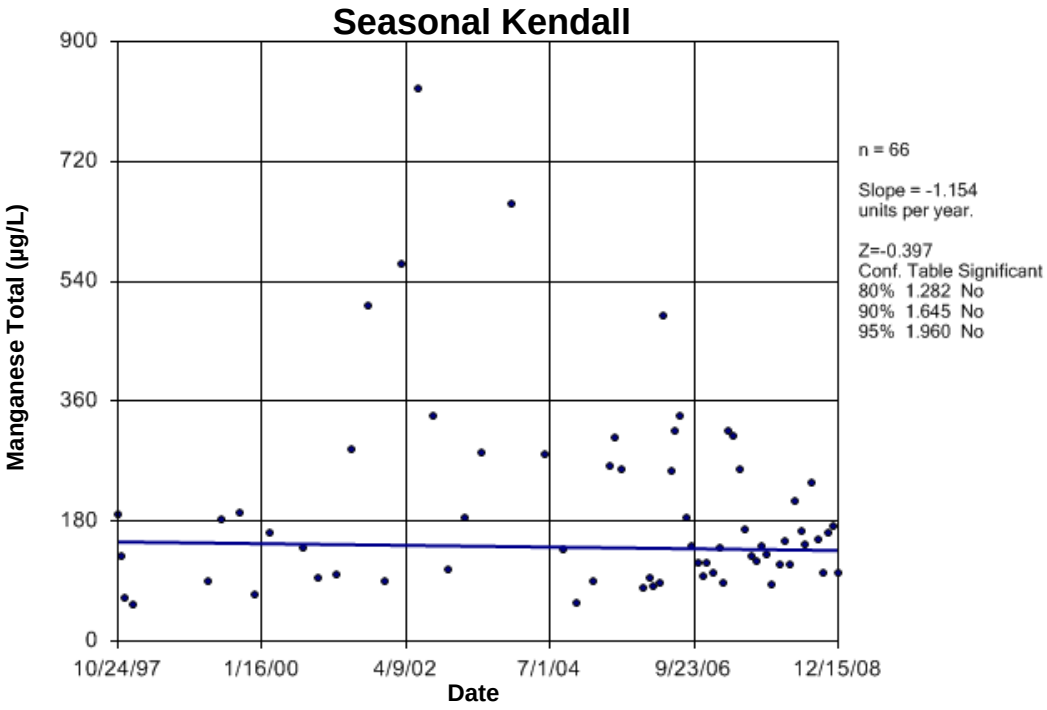


Figure E417 Qu'Appelle River: Manganese Total

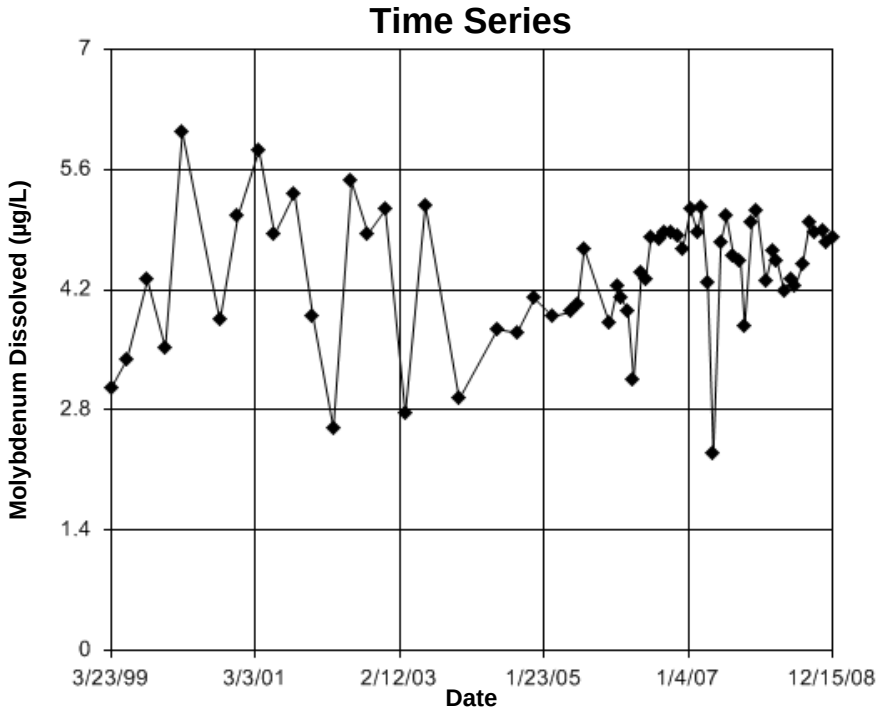


Figure E418 Qu'Appelle River: Molybdenum Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

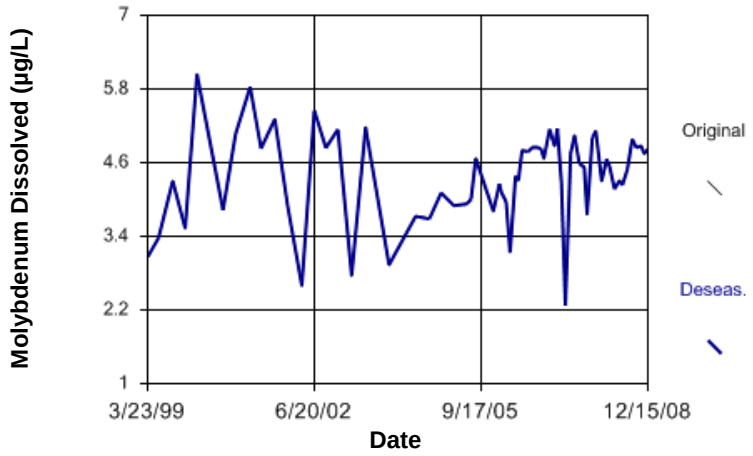


Figure E419 Qu'Appelle River: Molybdenum Dissolved

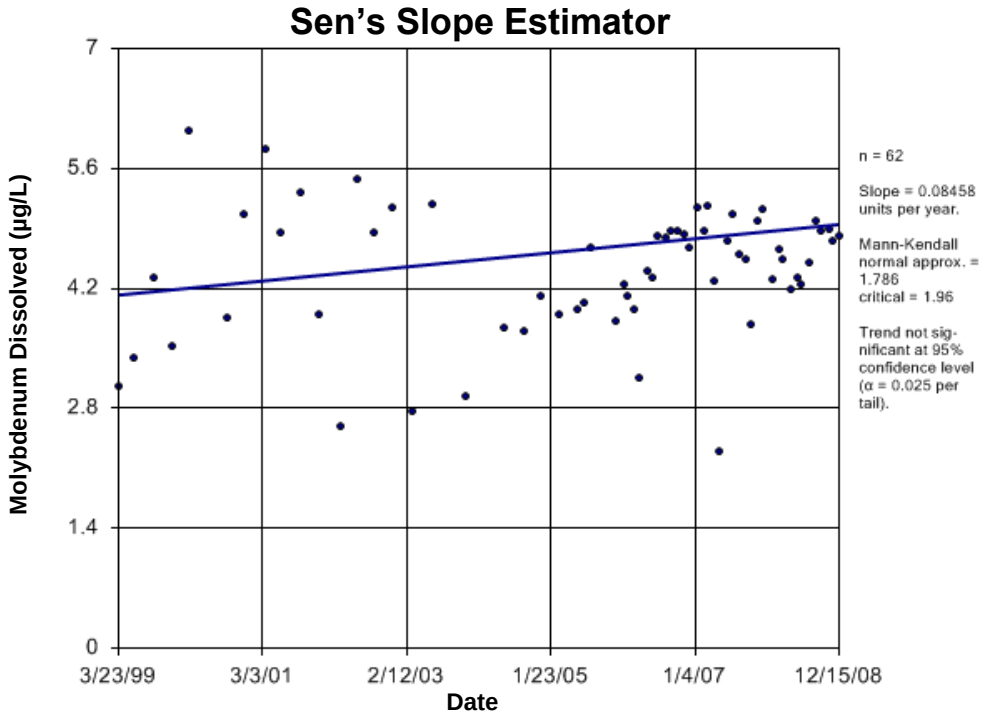


Figure E420 Qu'Appelle River: Molybdenum Dissolved

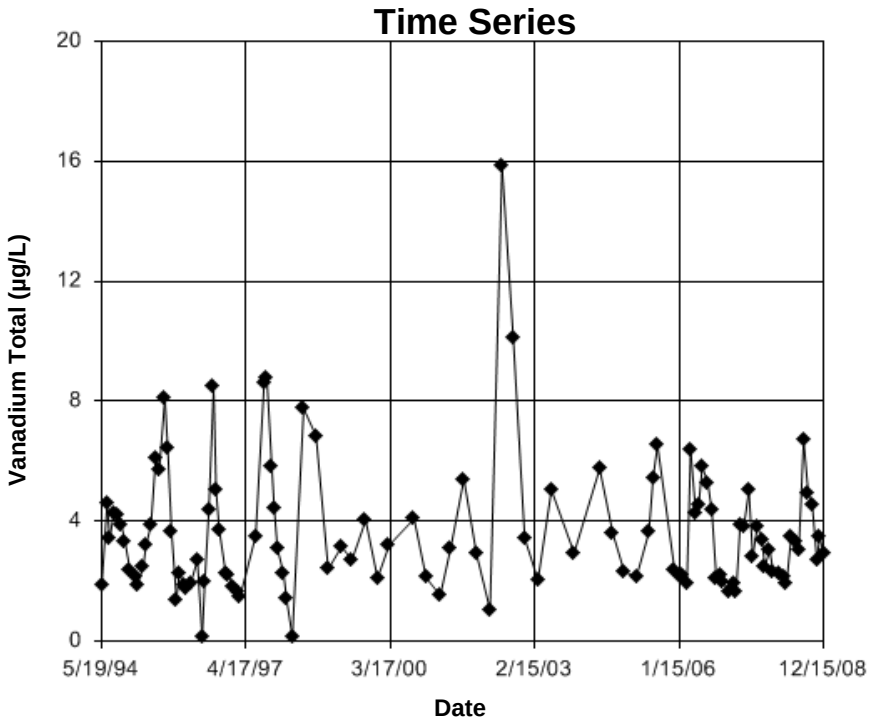


Figure E421 Qu'Appelle River: Vanadium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 55.41
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 55.41
Adjusted Kruskal-Wallis statistic (H') = 55.41

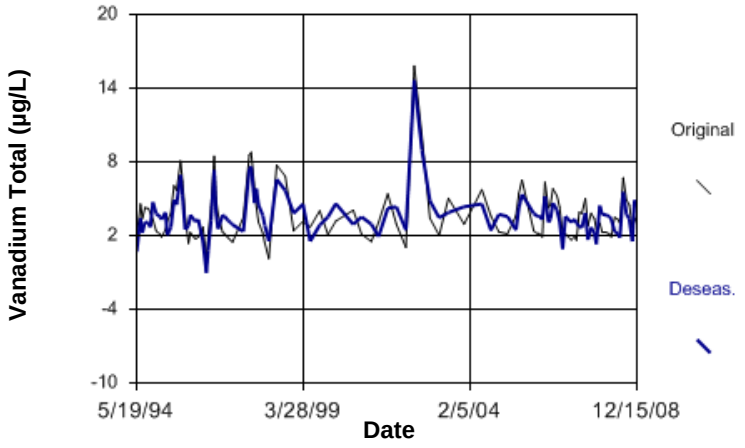


Figure E422 Qu'Appelle River: Vanadium Total

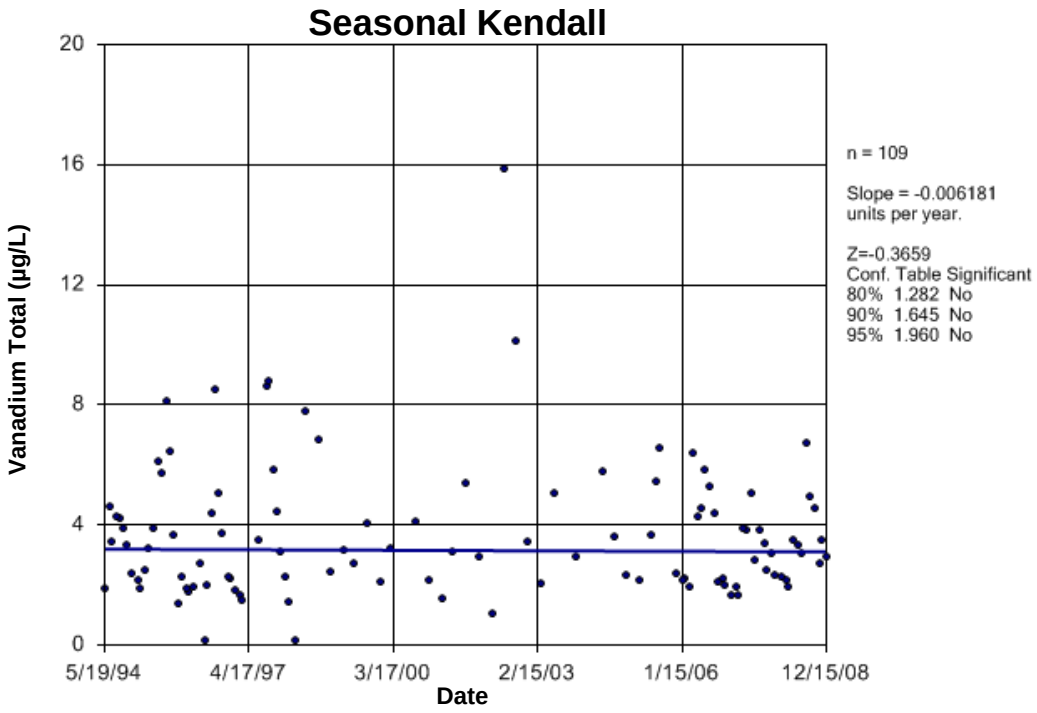


Figure E423 Qu'Appelle River: Vanadium Total

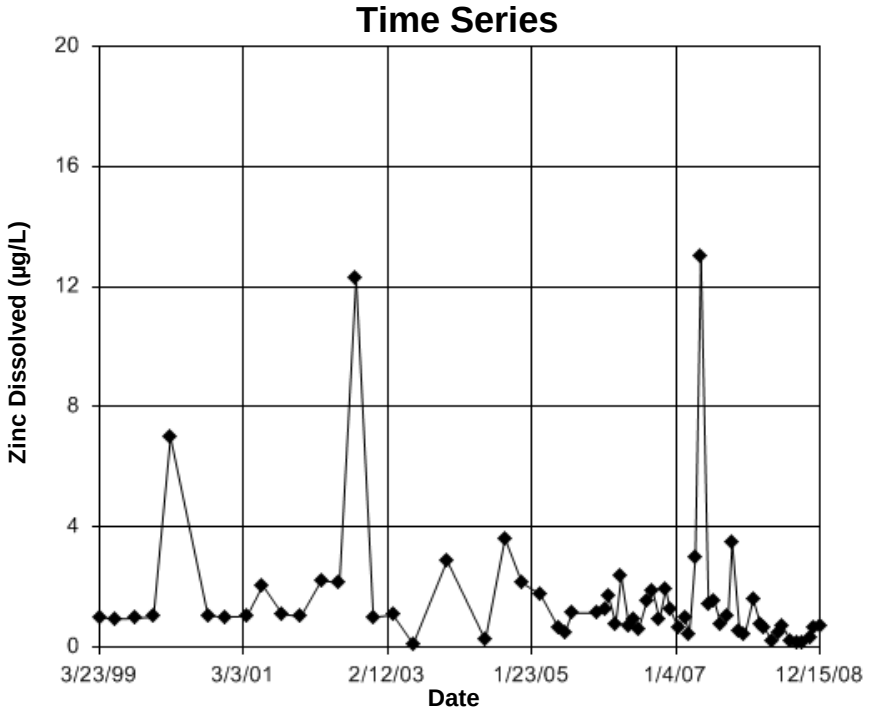


Figure E424 Qu'Appelle River: Zinc Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.541
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

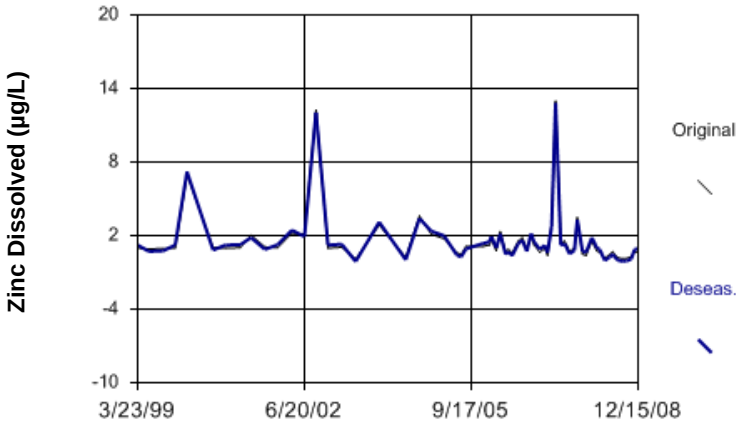


Figure E425 Qu'Appelle River: Zinc Dissolved

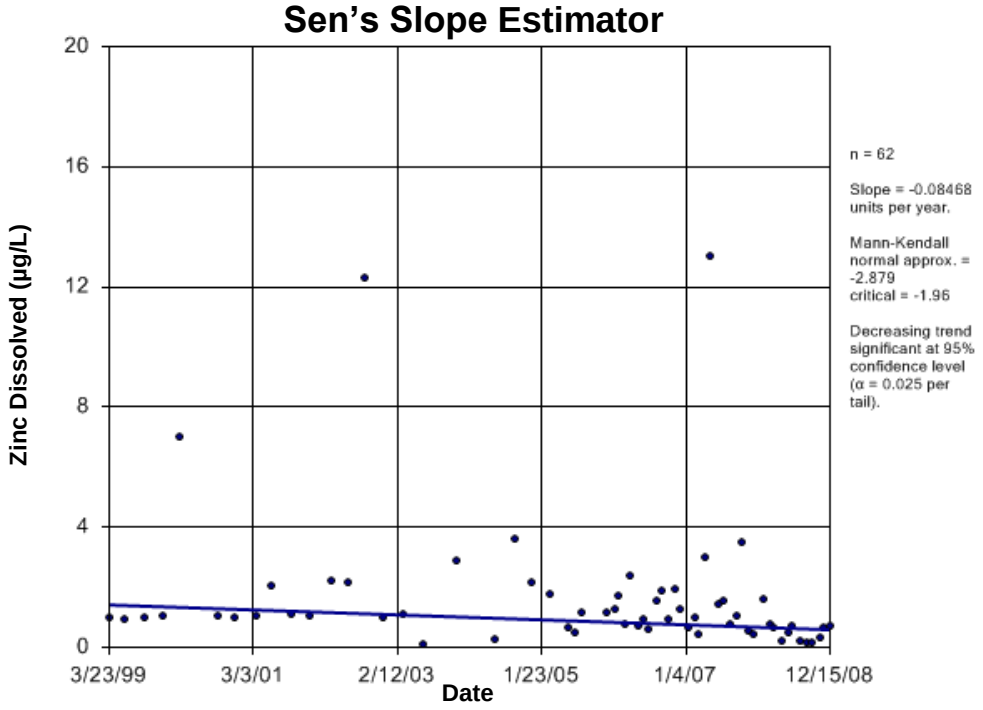


Figure E426 Qu'Appelle River: Zinc Dissolved

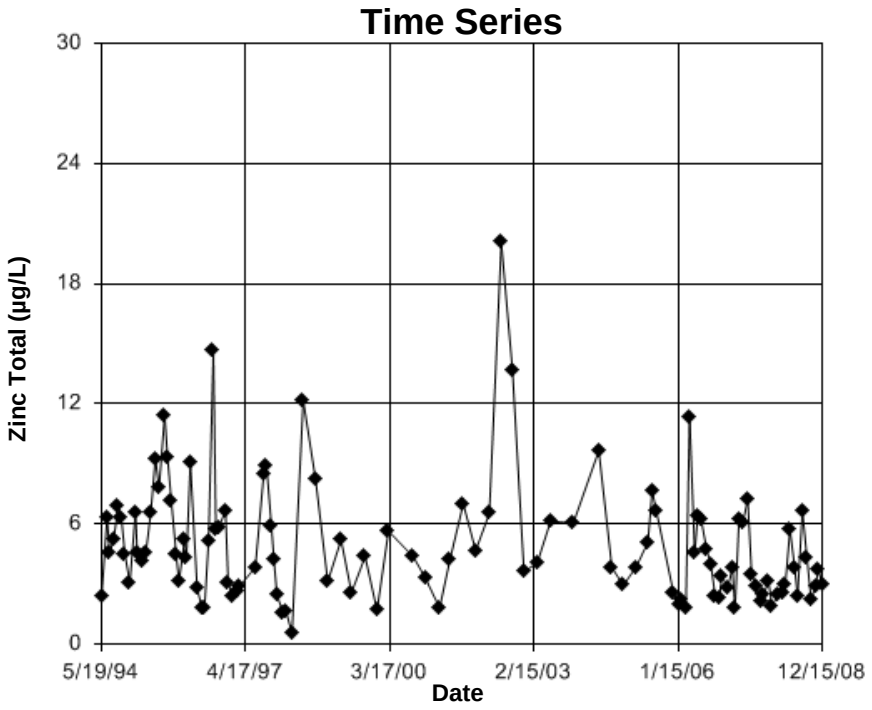


Figure E427 Qu'Appelle River: Zinc Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 22.34
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

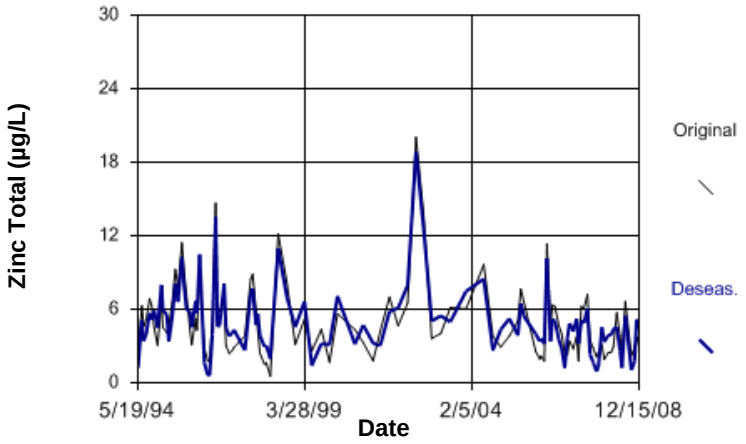


Figure E428 Qu'Appelle River: Zinc Total

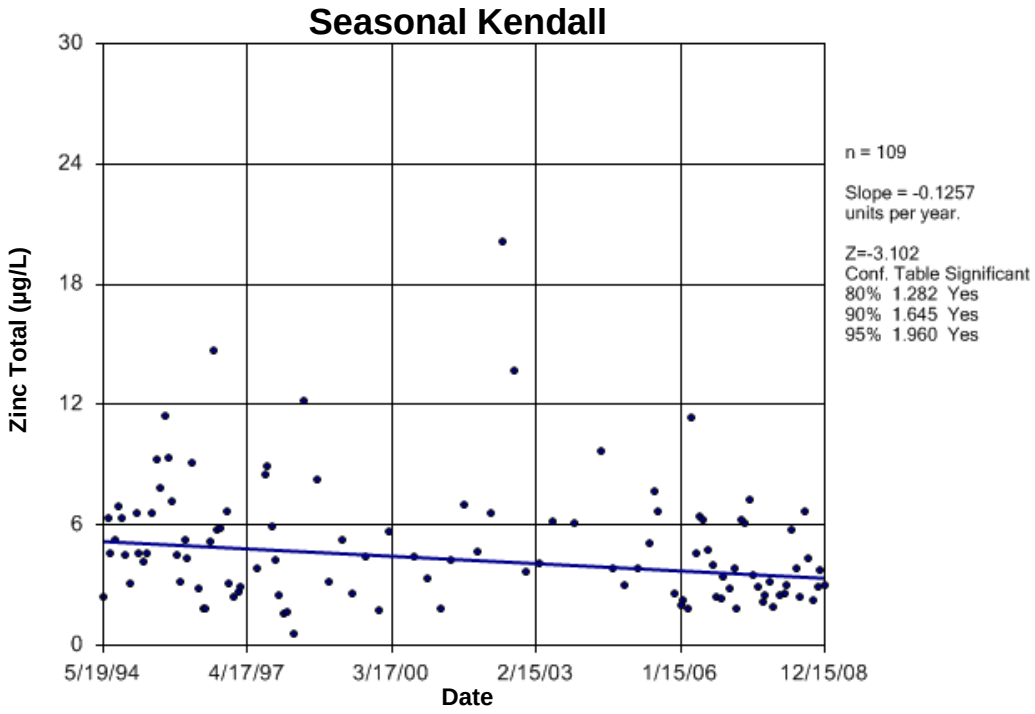


Figure E429 Qu'Appelle River: Zinc Total

Red Deer River (SK-MB)

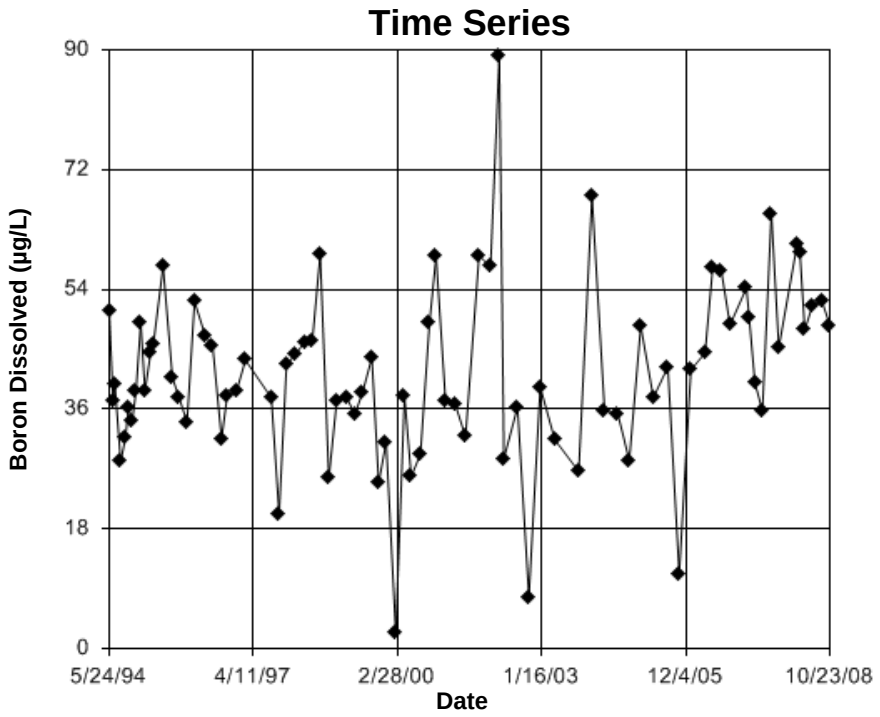


Figure E430 Red Deer River (SK-MB): Boron Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.981
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

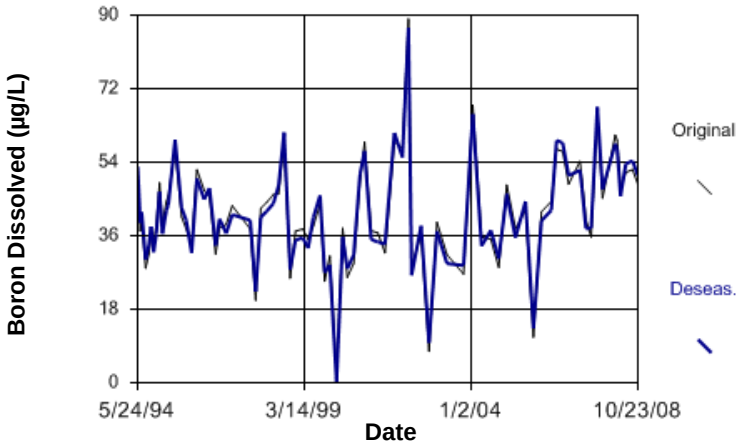


Figure E431 Red Deer River (SK-MB): Boron Dissolved

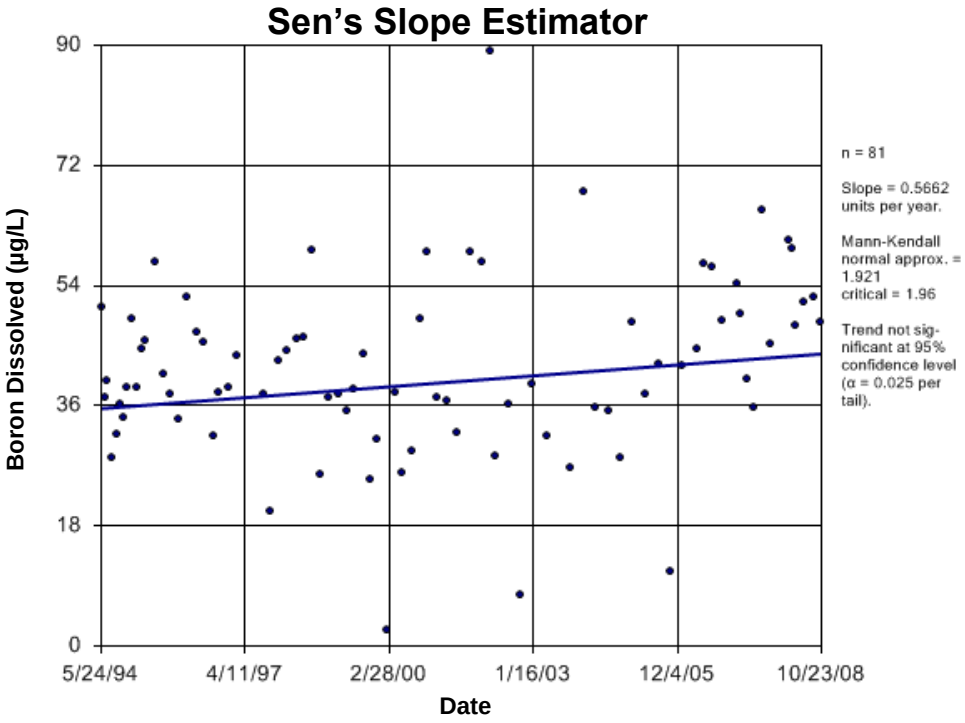


Figure E432 Red Deer River (SK-MB): Boron Dissolved

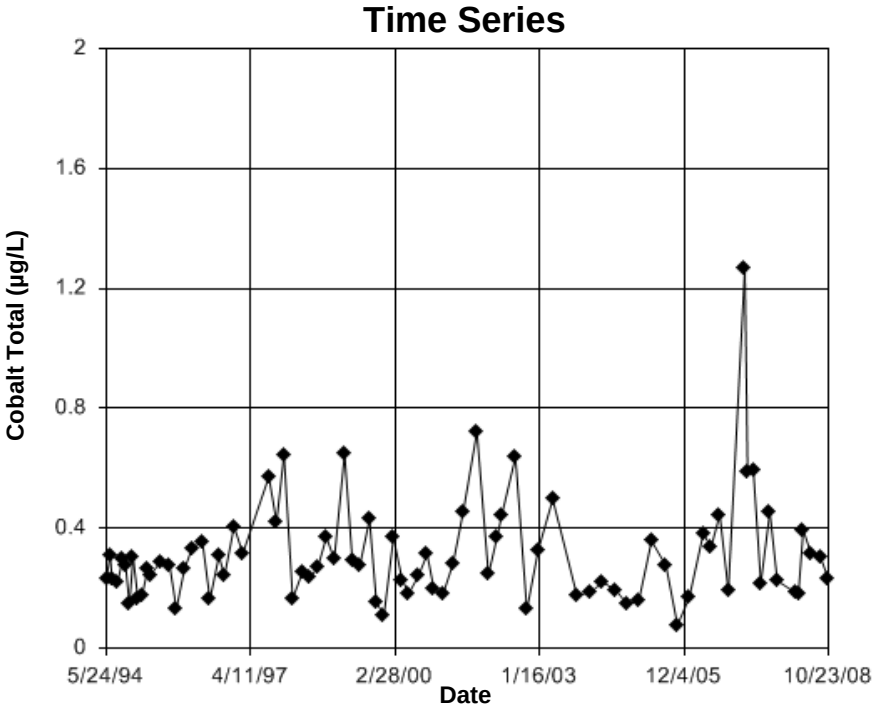


Figure E433 Red Deer River (SK-MB): Cobalt Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.377
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

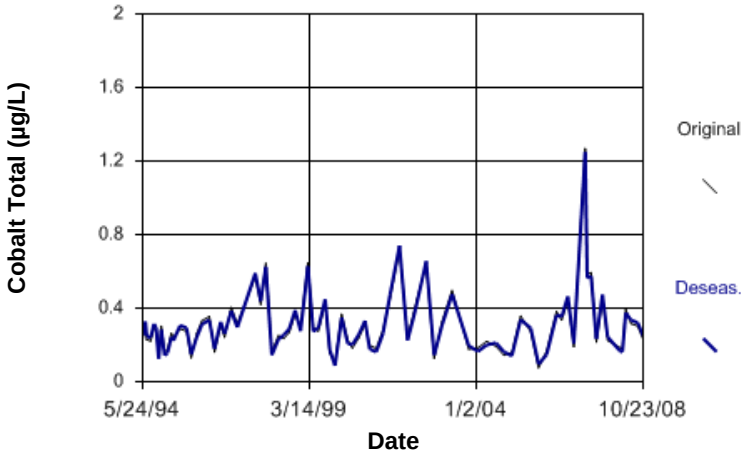


Figure E434 Red Deer River (SK-MB): Cobalt Total

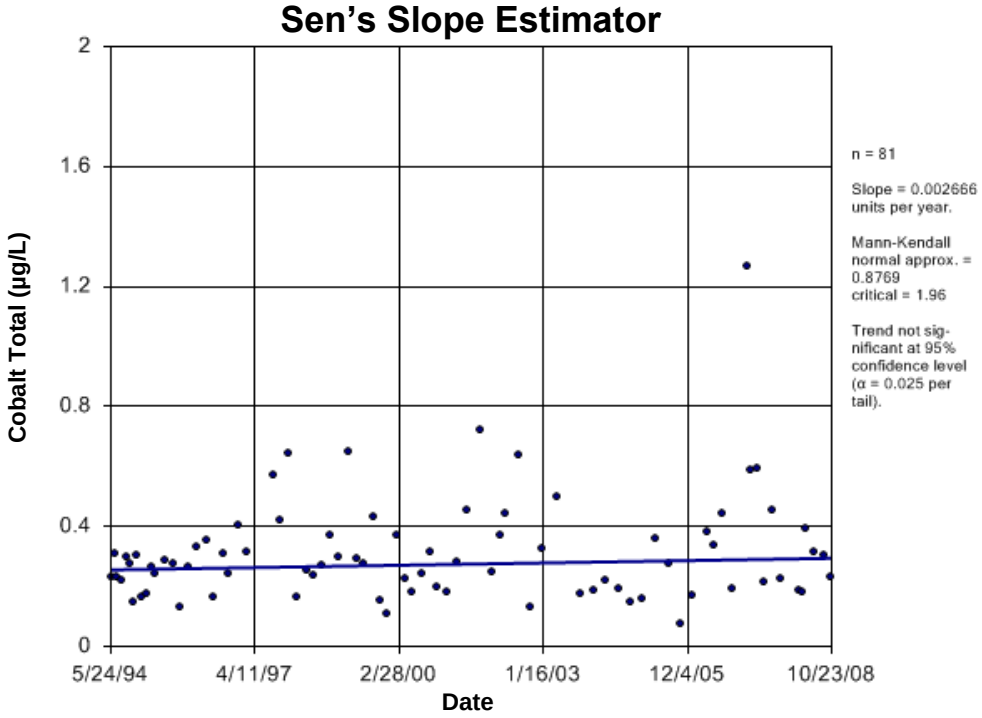


Figure E435 Red Deer River (SK-MB): Cobalt Total

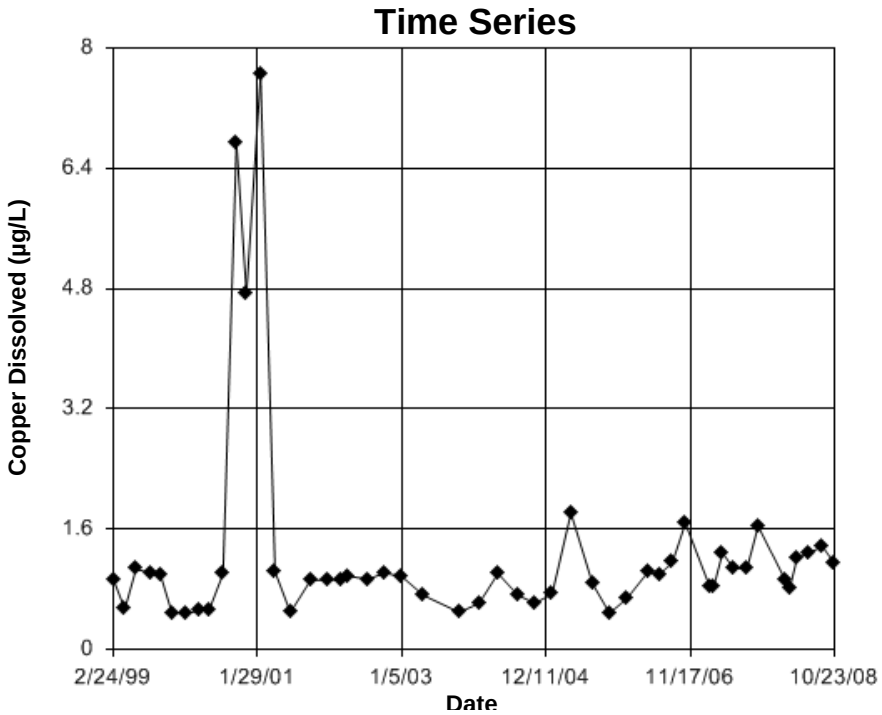


Figure E436 Red Deer River (SK-MB): Copper Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.254
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 1.254
Adjusted Kruskal-Wallis statistic (H') = 1.254

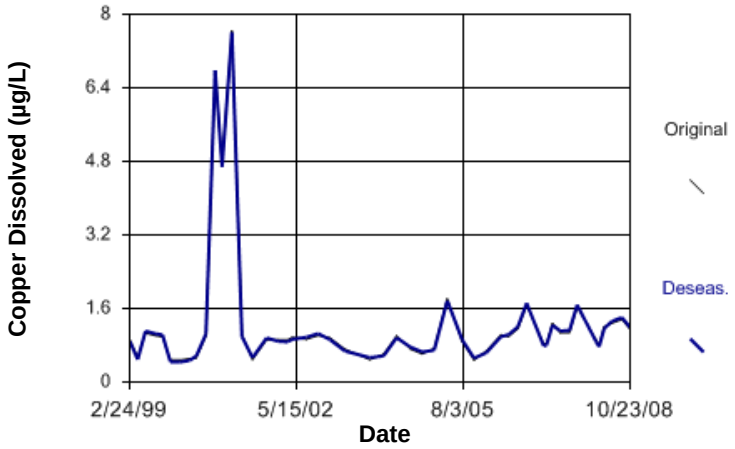


Figure E437 Red Deer River (SK-MB): Copper Dissolved

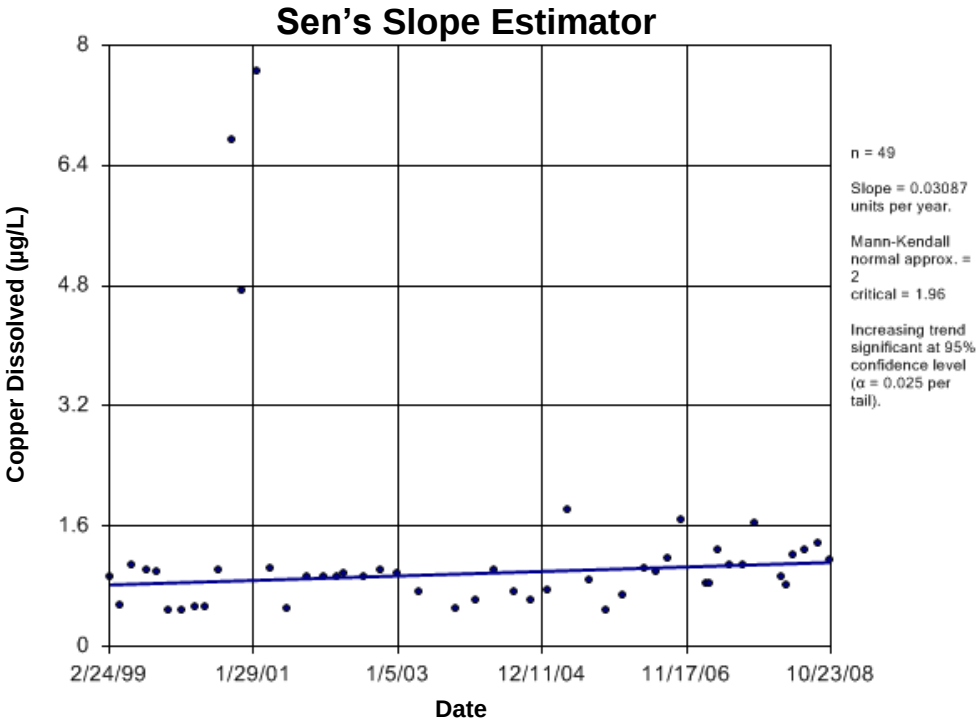


Figure E438 Red Deer River (SK-MB): Copper Dissolved

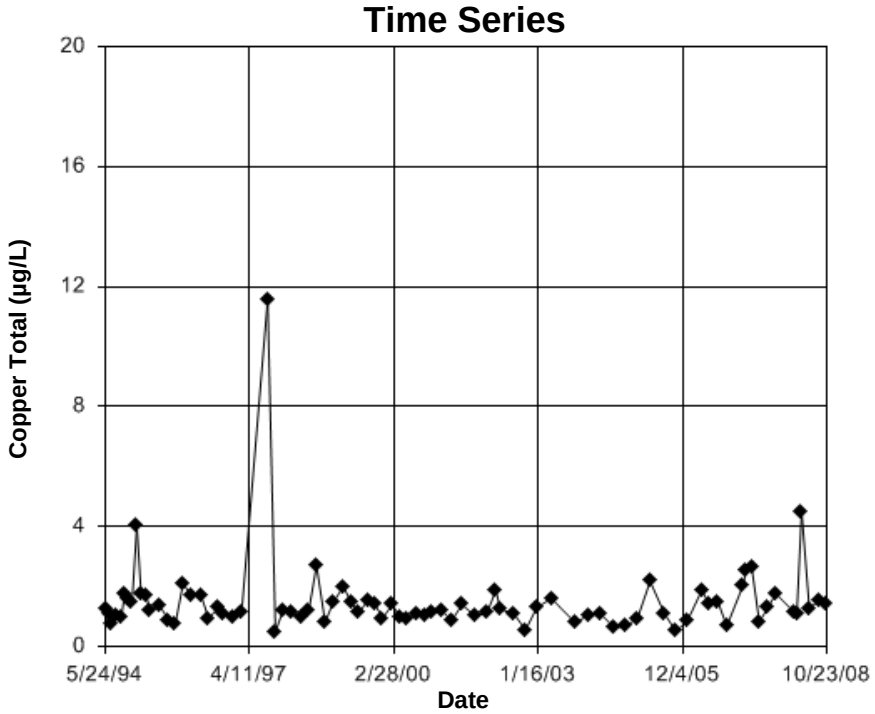


Figure E439 Red Deer River (SK-MB): Copper Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 9.718
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 9.717
Adjusted Kruskal-Wallis statistic (H') = 9.718

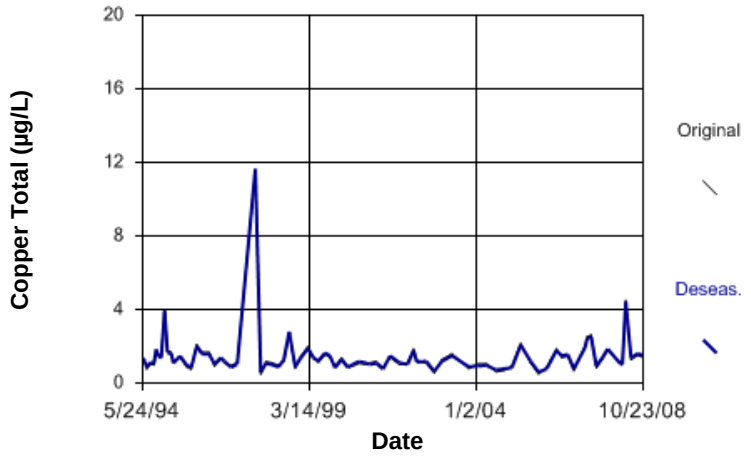


Figure E440 Red Deer River (SK-MB): Copper Total

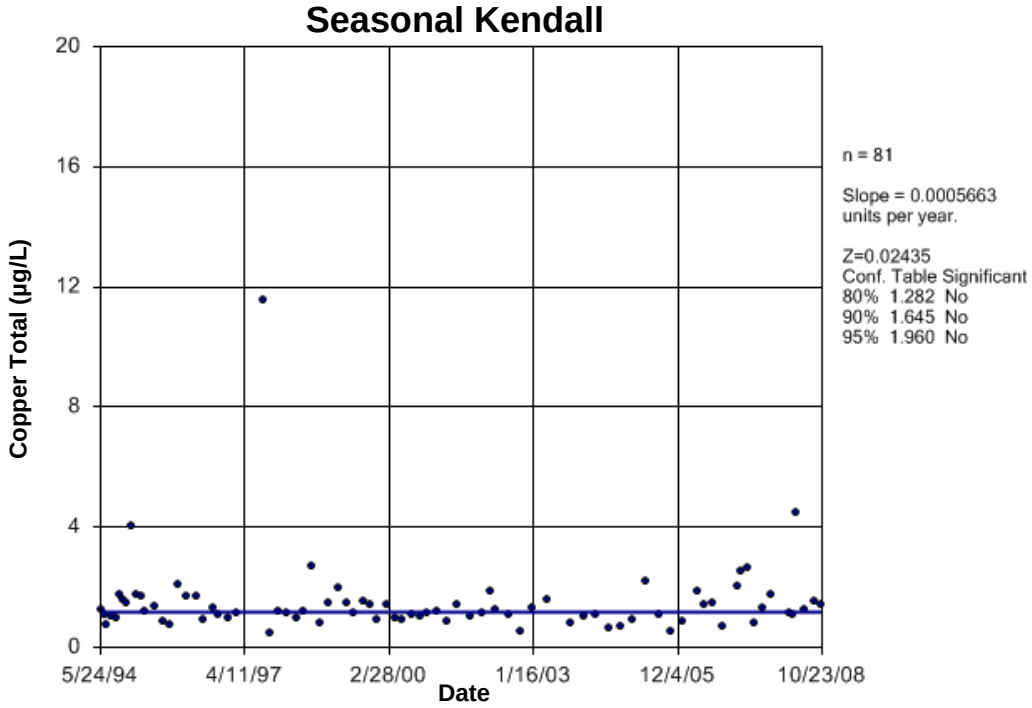


Figure E441 Red Deer River (SK-MB): Copper Total

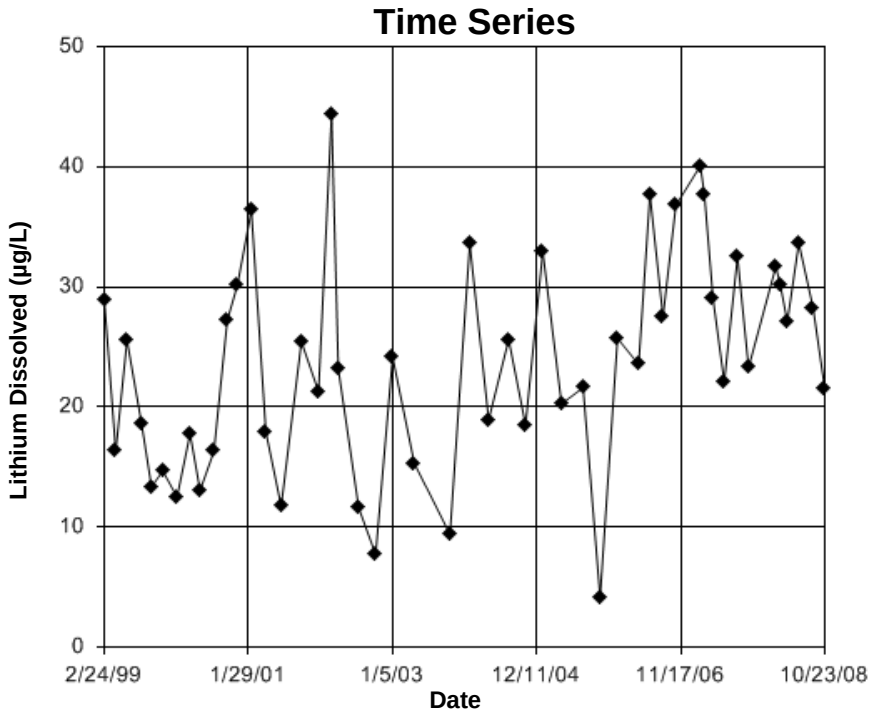


Figure E442 Red Deer River (SK-MB): Lithium Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 2.723
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 2.723
Adjusted Kruskal-Wallis statistic (H') = 2.723

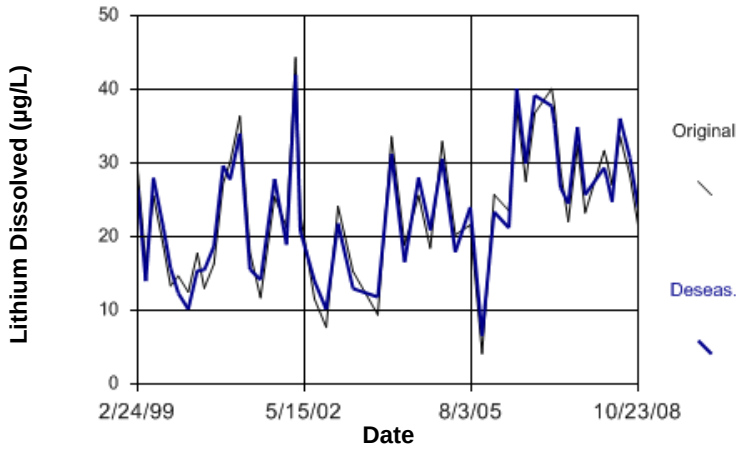


Figure E443 Red Deer River (SK-MB): Lithium Dissolved

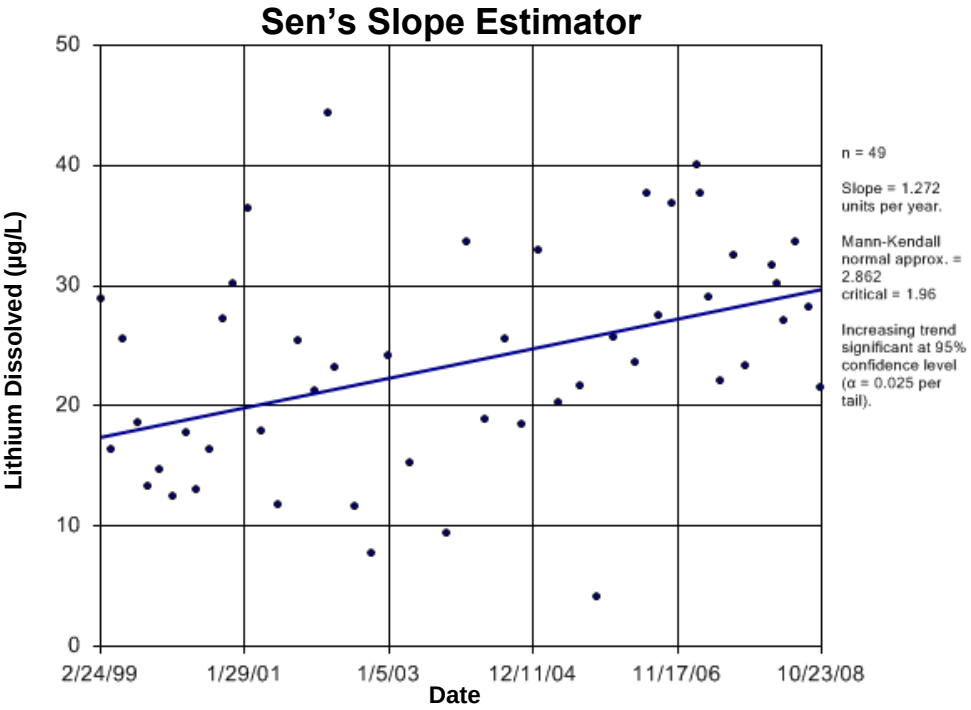


Figure E444 Red Deer River (SK-MB): Lithium Dissolved

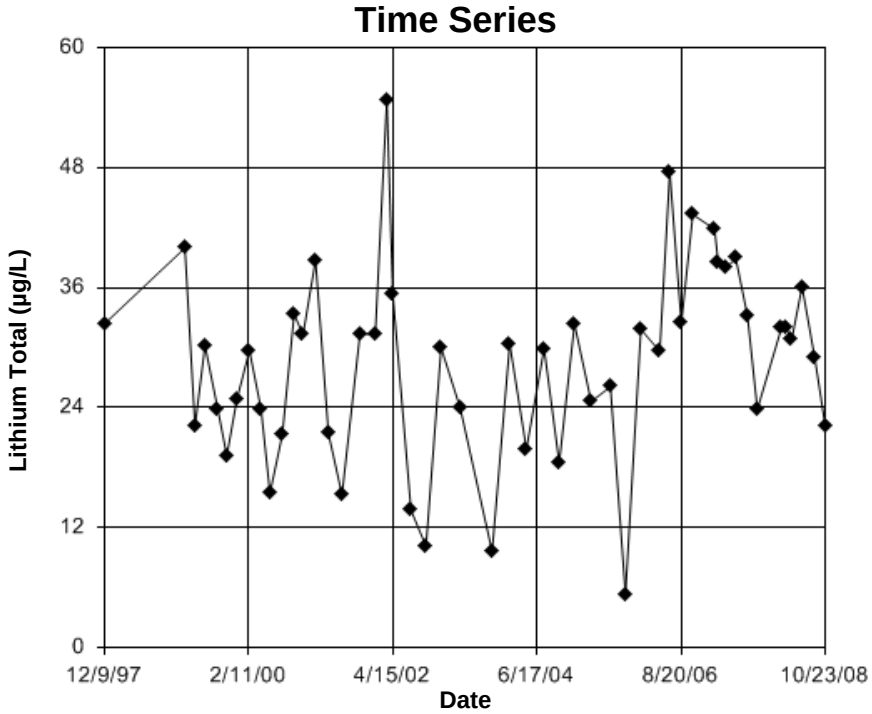


Figure E445 Red Deer River (SK-MB): Lithium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 4.157
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

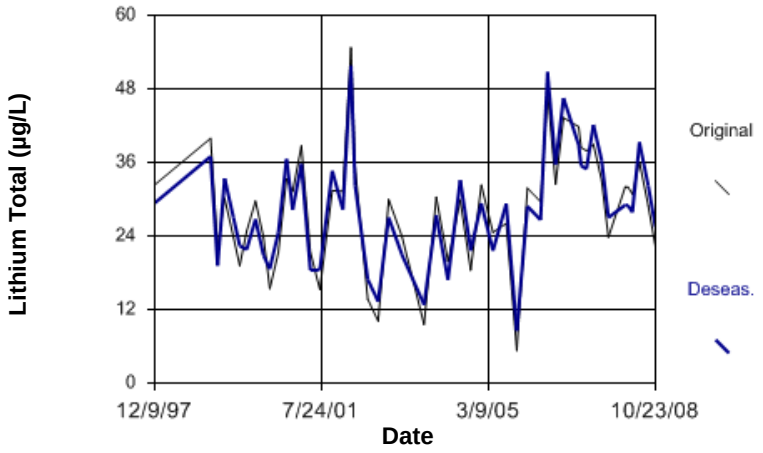


Figure E446 Red Deer River (SK-MB): Lithium Total

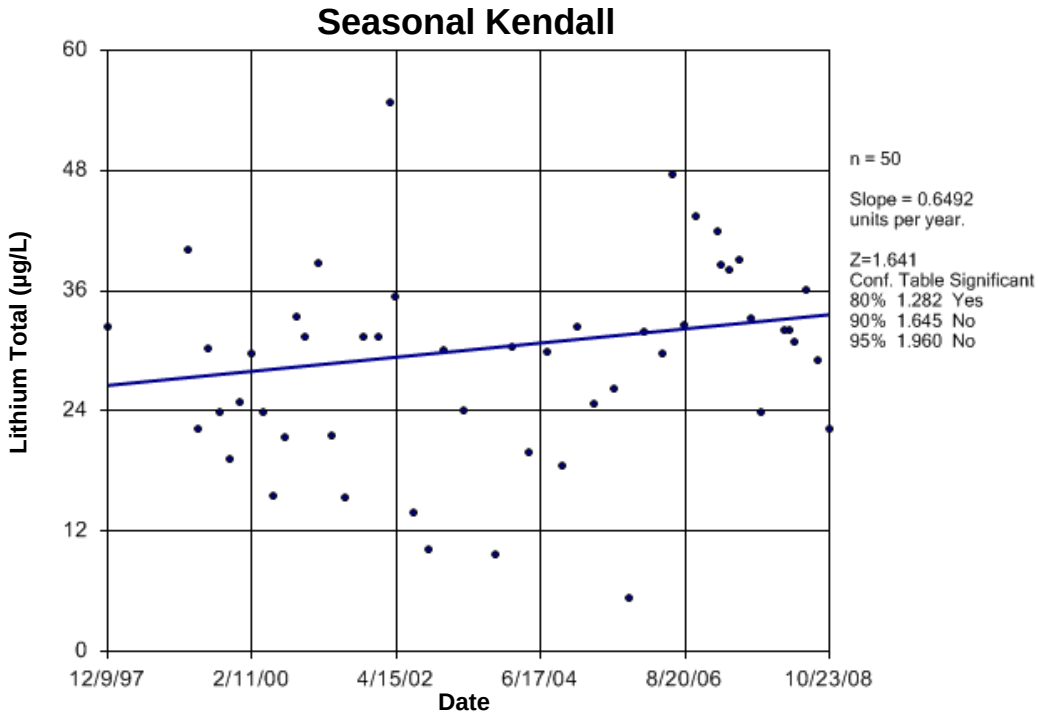


Figure E447 Red Deer River (SK-MB): Lithium Total

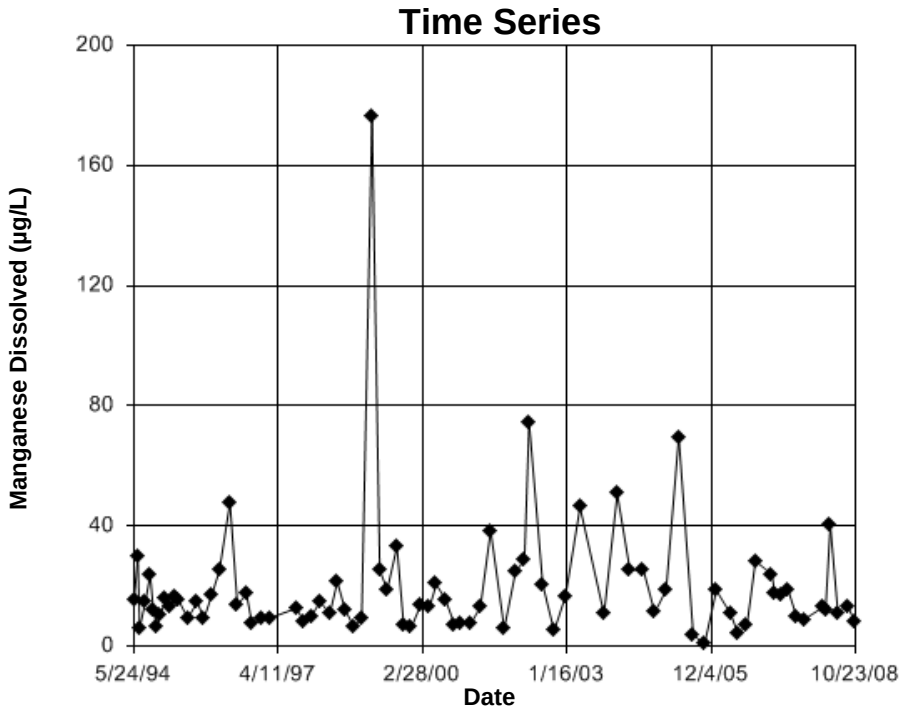


Figure E448 Red Deer River (SK-MB): Manganese Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 6.079
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

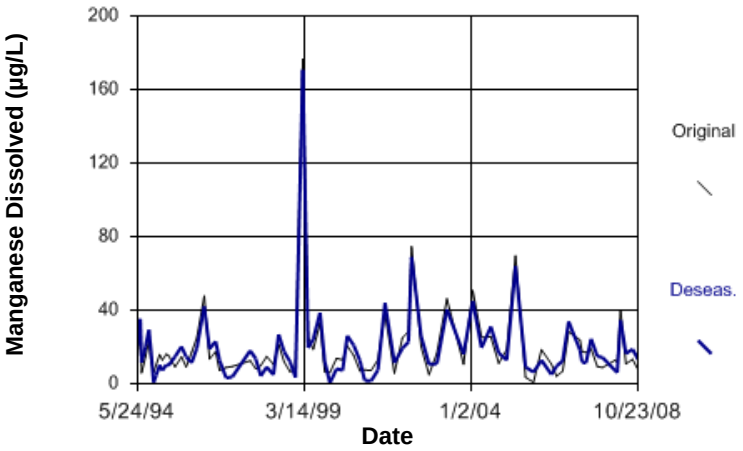


Figure E449 Red Deer River (SK-MB): Manganese Dissolved

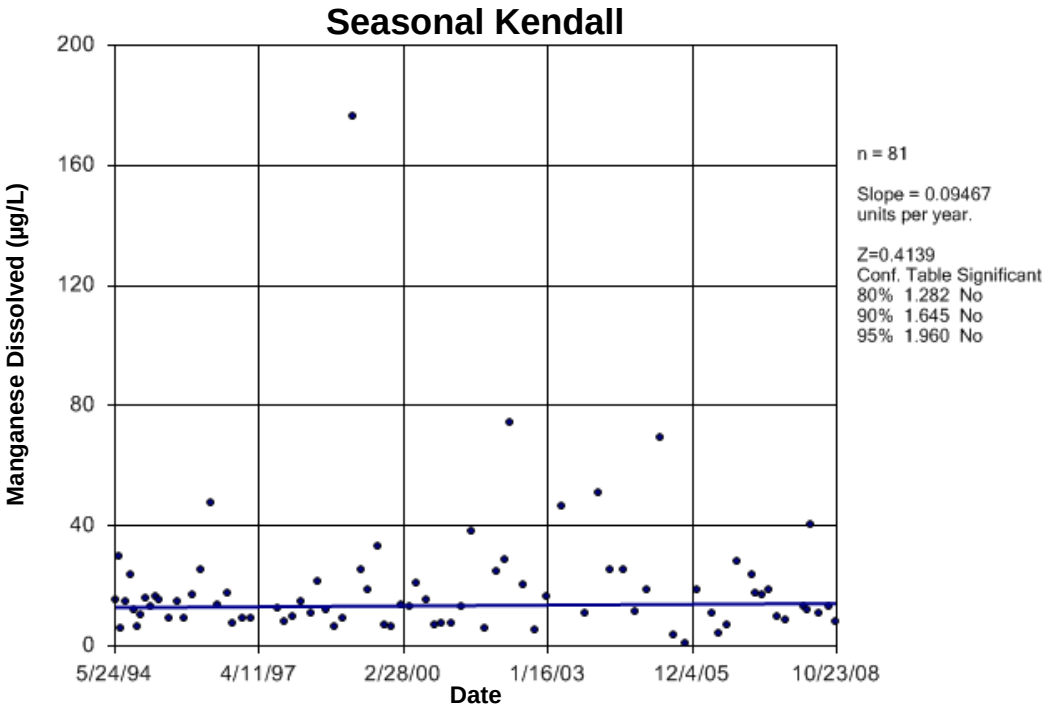


Figure E450 Red Deer River (SK-MB): Manganese Dissolved

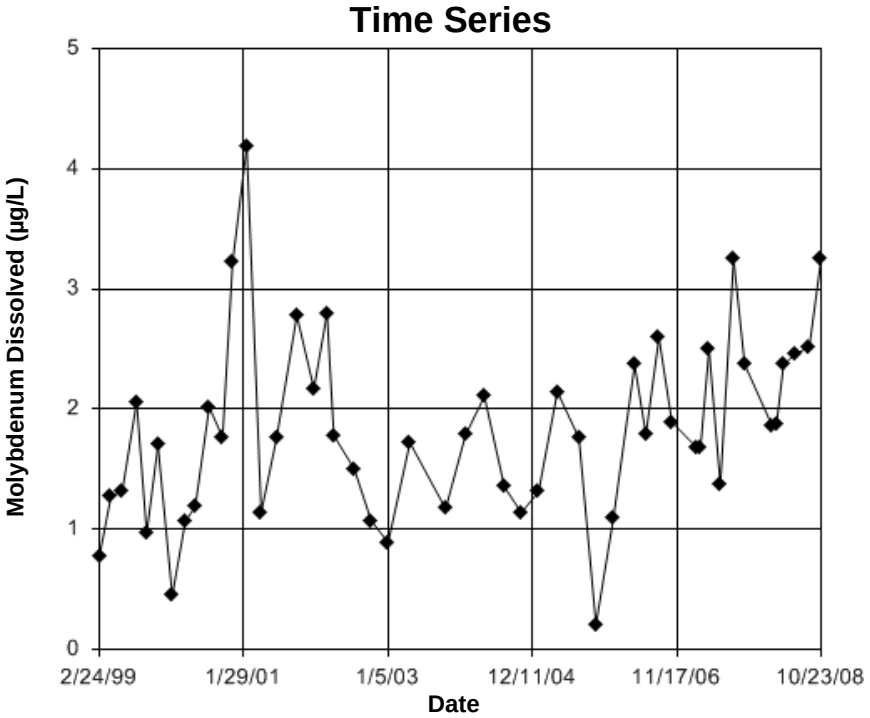


Figure E451 Red Deer River (SK-MB): Molybdenum Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.03611
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.0361
Adjusted Kruskal-Wallis statistic (H') = 0.03611

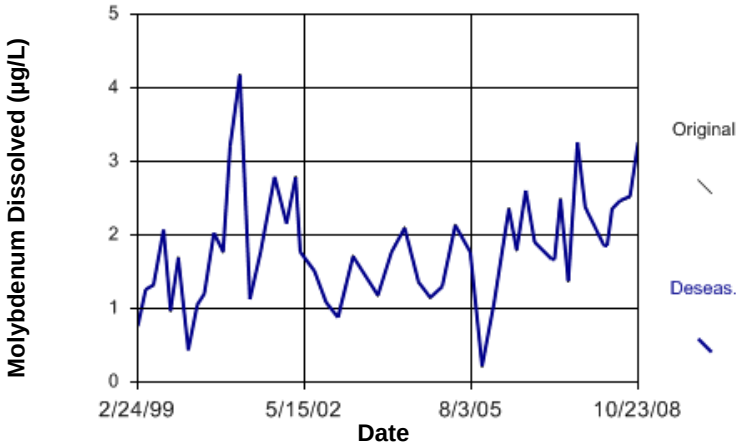


Figure E452 Red Deer River (SK-MB): Molybdenum Dissolved

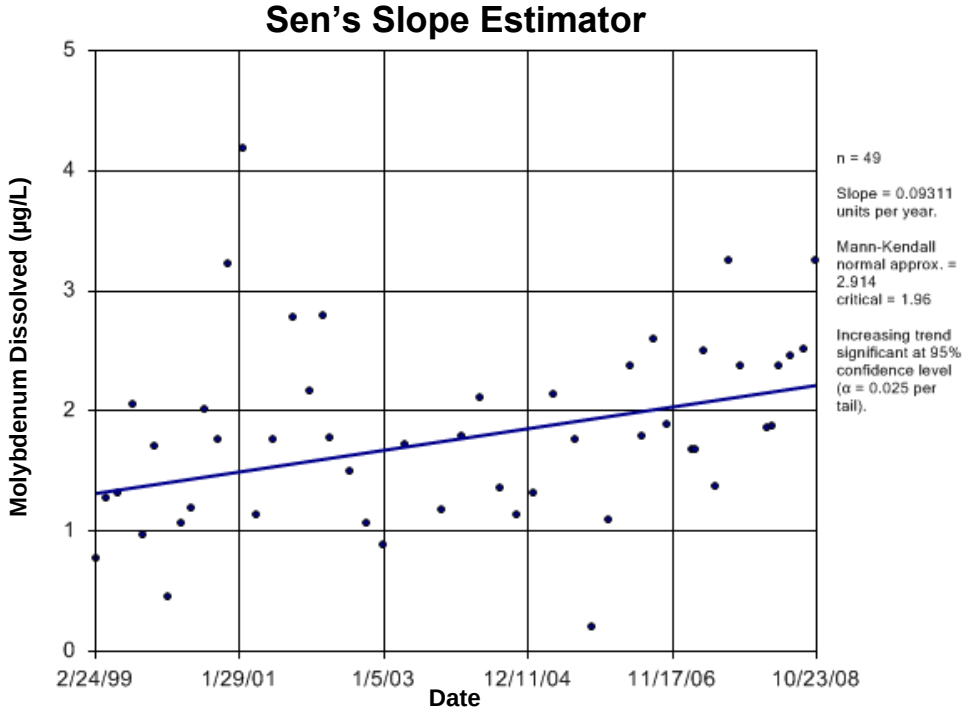


Figure E453 Red Deer River (SK-MB): Molybdenum Dissolved

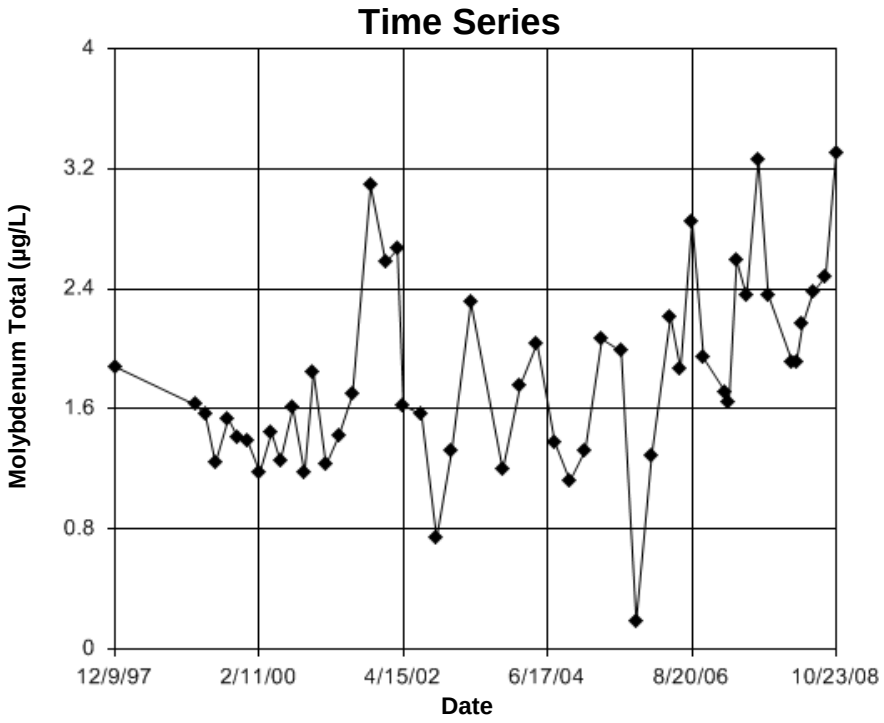


Figure E454 Red Deer River (SK-MB): Molybdenum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 0.04987
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 0.04987
Adjusted Kruskal-Wallis statistic (H') = 0.04987

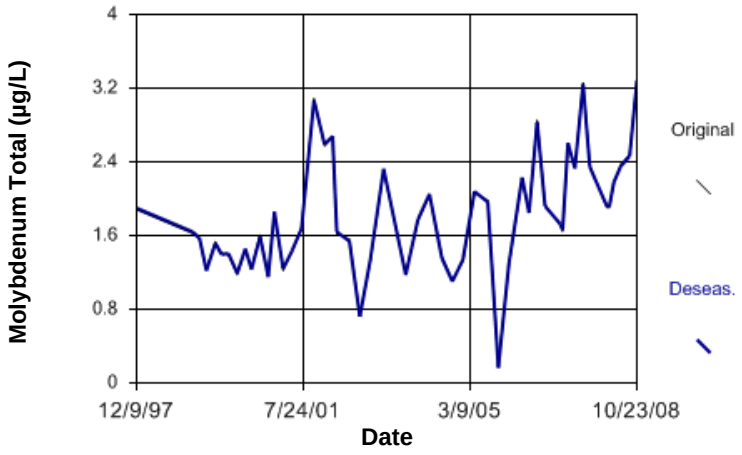


Figure E455 Red Deer River (SK-MB): Molybdenum Total

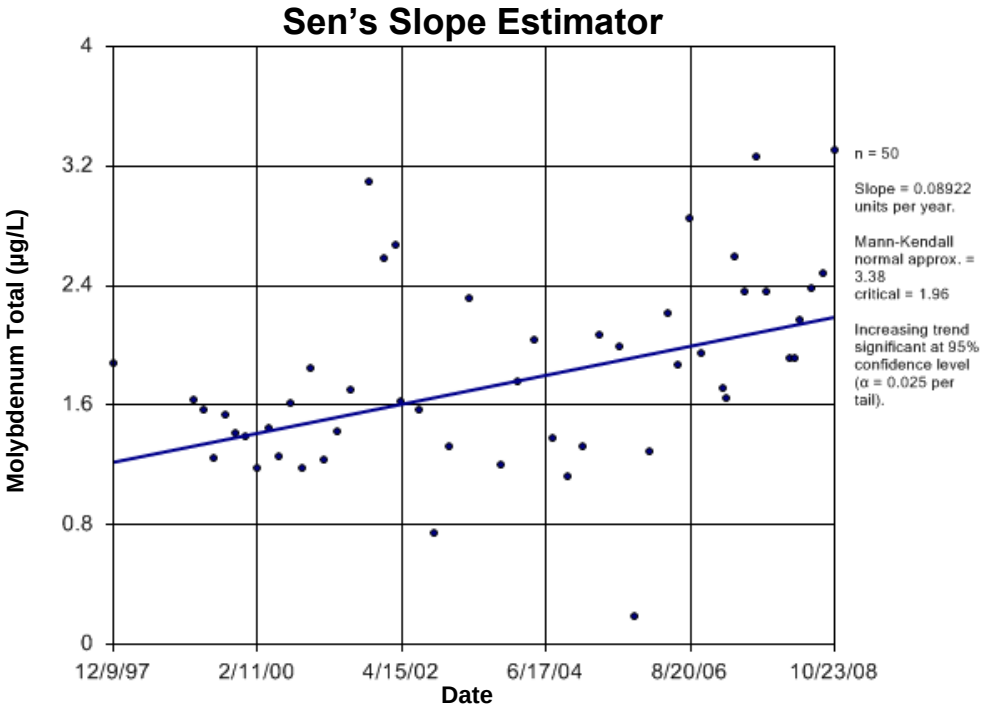


Figure E456 Red Deer River (SK-MB): Molybdenum Total

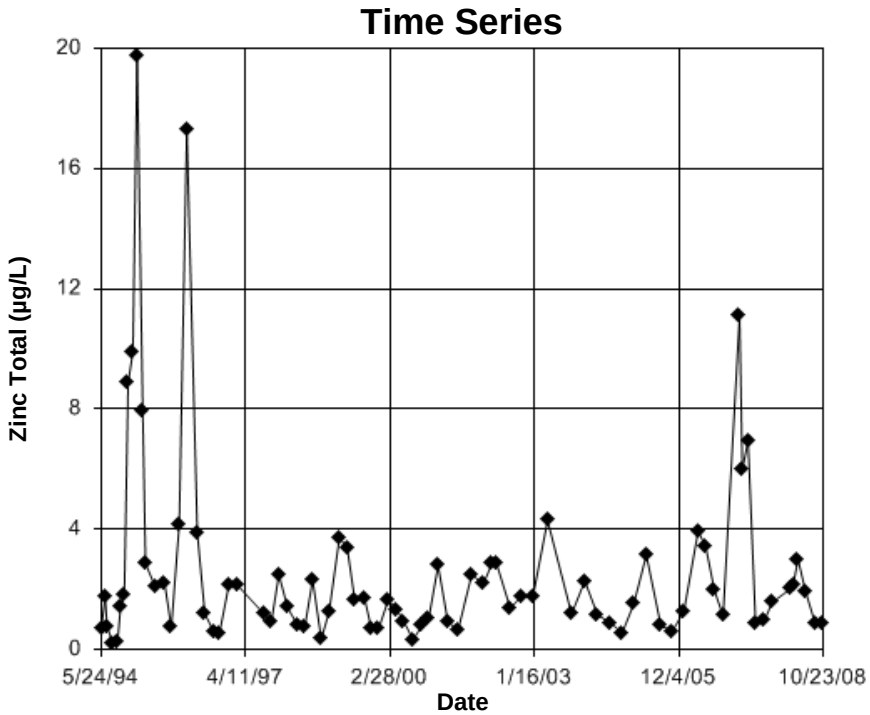


Figure E457 Red Deer River (SK-MB): Zinc Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 30.12
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 0 groups of ties in the data, so no adjustment to the Kruskal-Wallis statistic (H) was necessary.

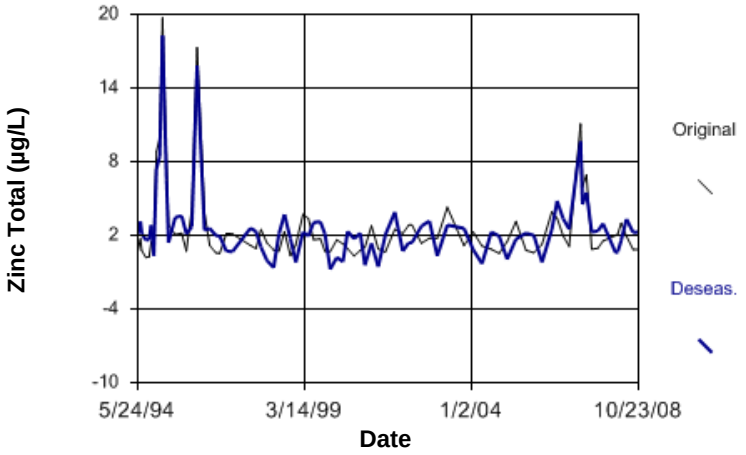


Figure E458 Red Deer River (SK-MB): Zinc Total

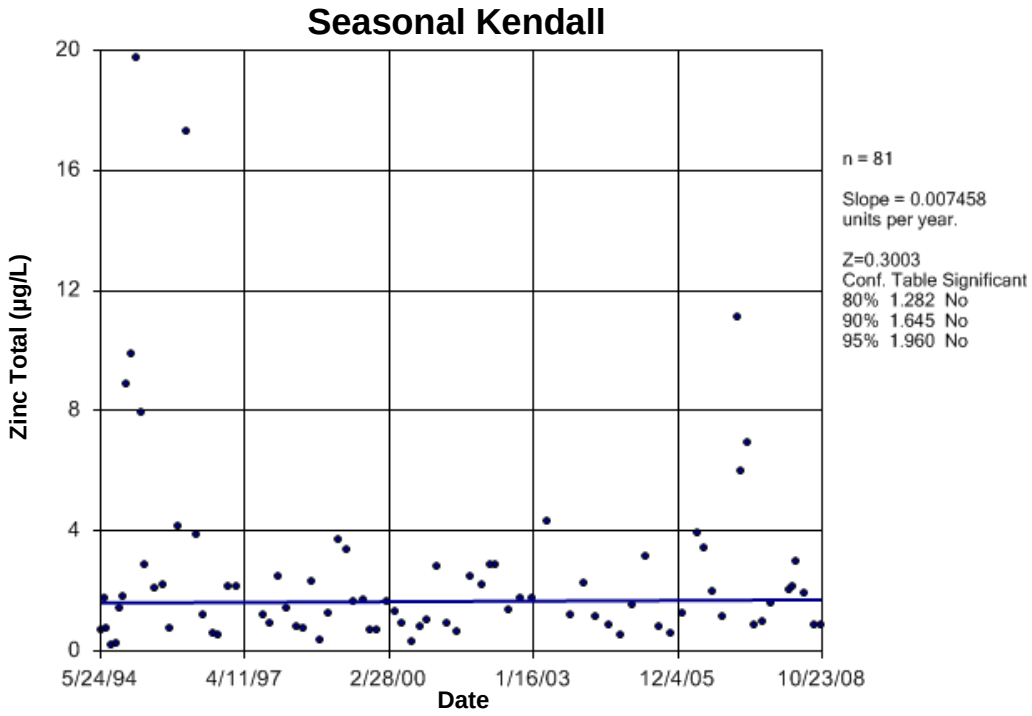


Figure E459 Red Deer River (SK-MB): Zinc Total

Saskatchewan River

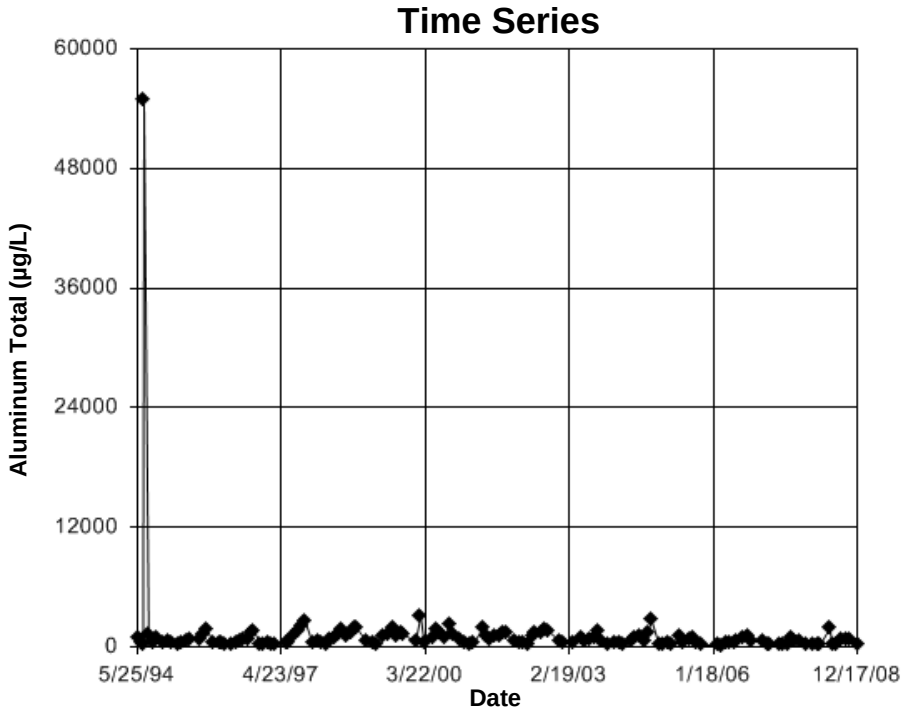
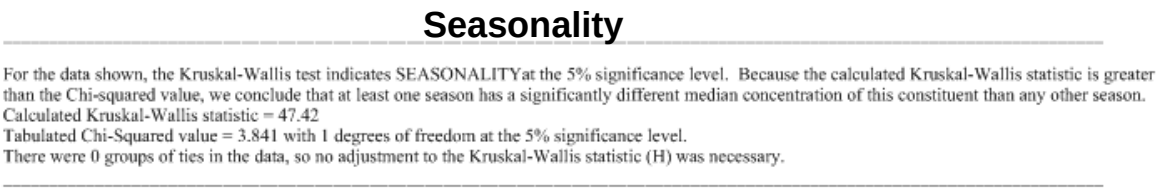


Figure E460 Saskatchewan River: Aluminum Total



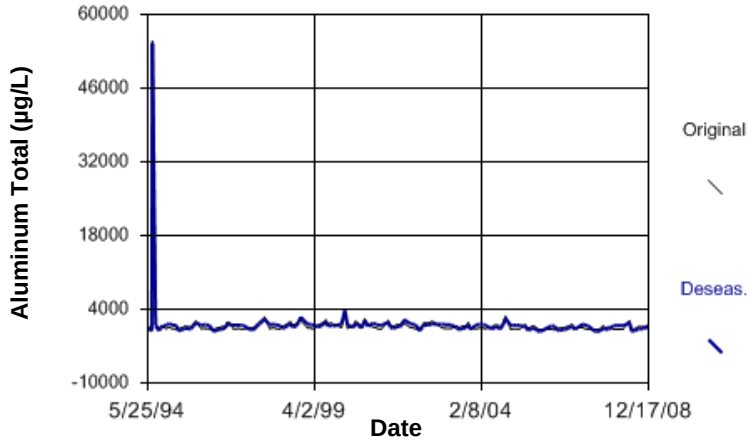


Figure E461 Saskatchewan River: Aluminum Total

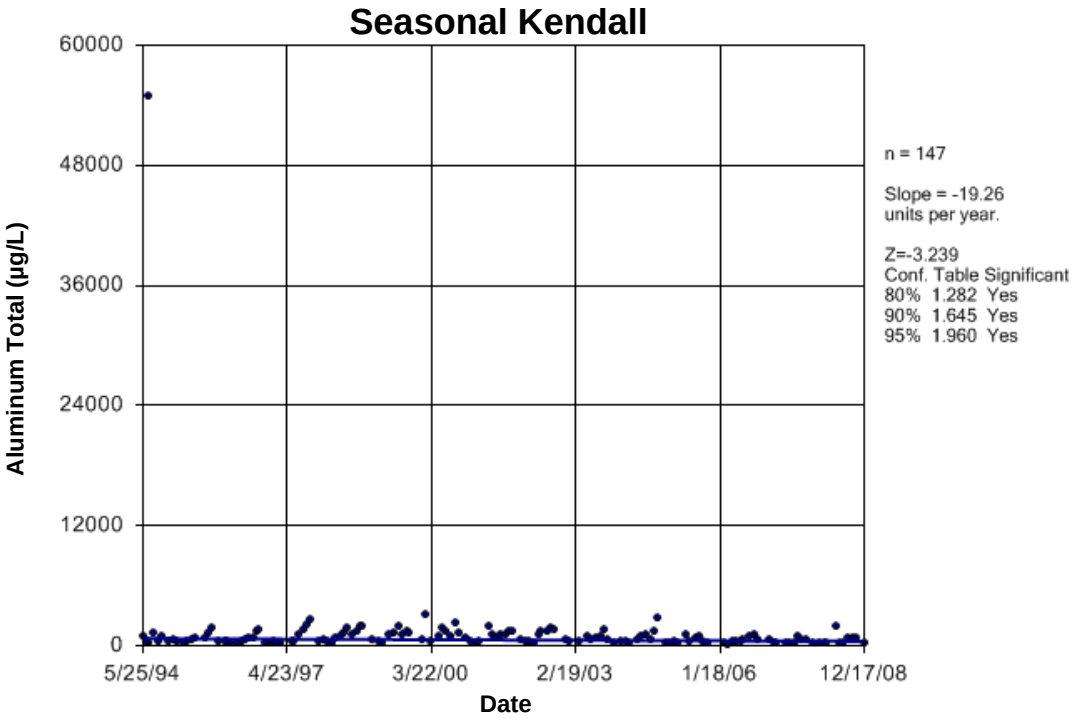


Figure E462 Saskatchewan River: Aluminum Total

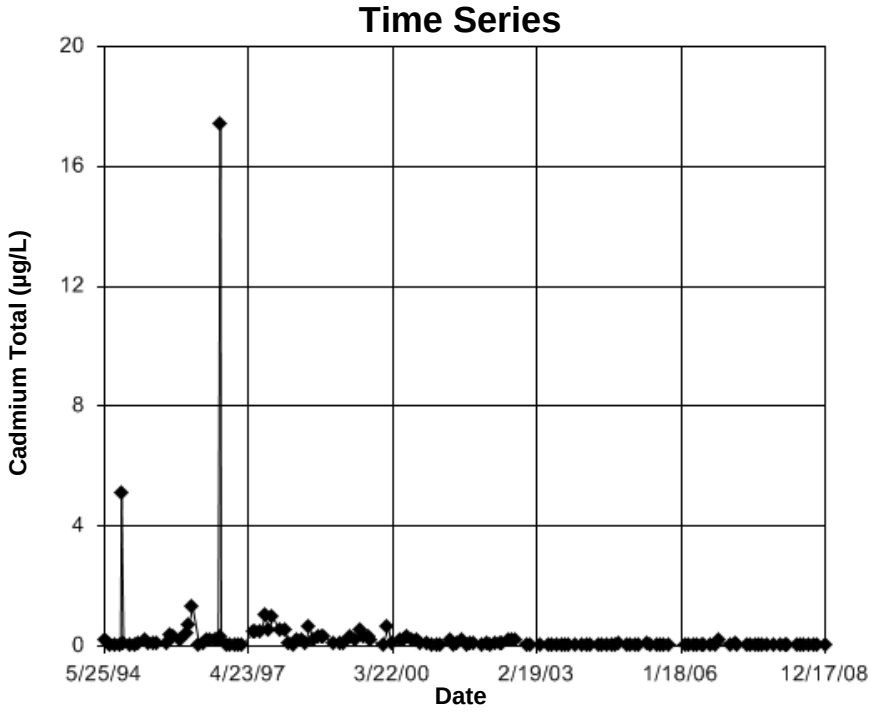


Figure E463 Saskatchewan River: Cadmium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 2.801
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 2.801
Adjusted Kruskal-Wallis statistic (H') = 2.801

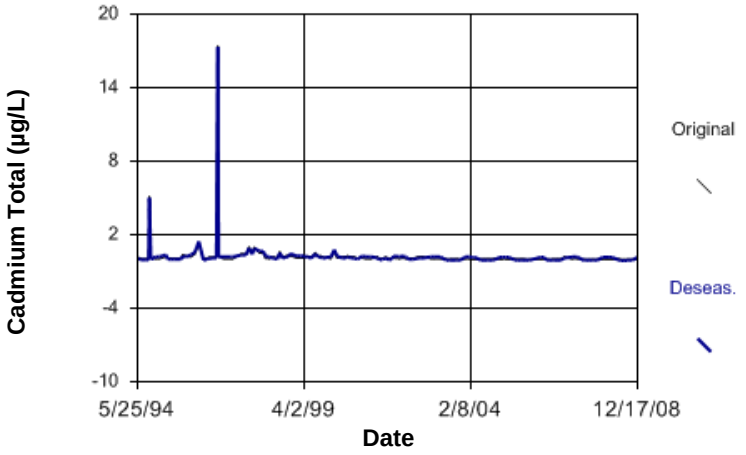


Figure E464 Saskatchewan River: Cadmium Total

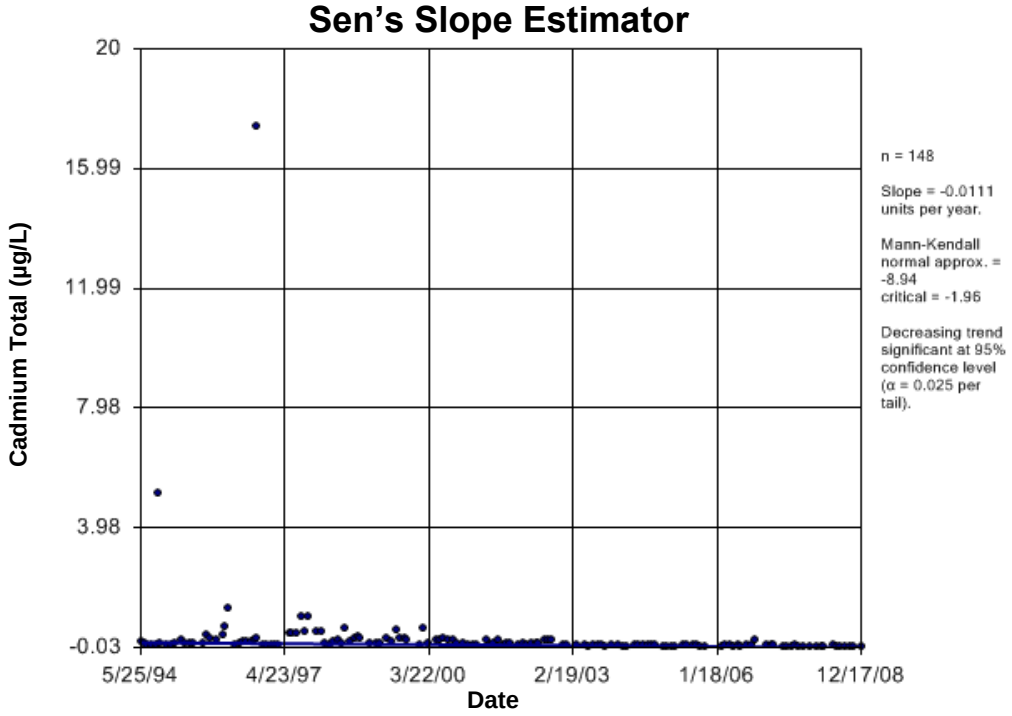


Figure E465 Saskatchewan River: Cadmium Total

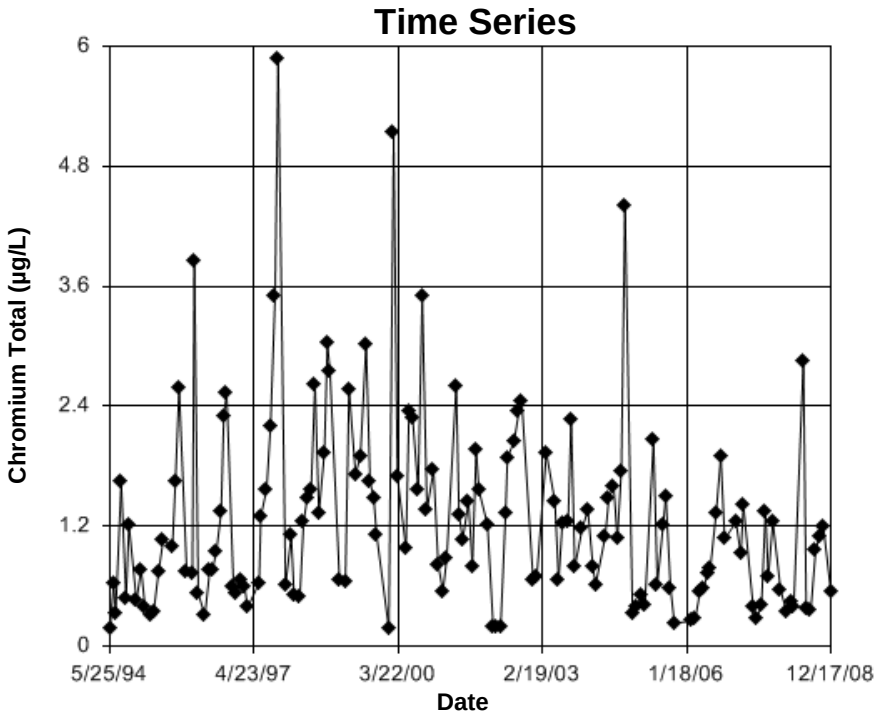


Figure E466 Saskatchewan River: Chromium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 18.87
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 4 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 18.87
Adjusted Kruskal-Wallis statistic (H') = 18.87

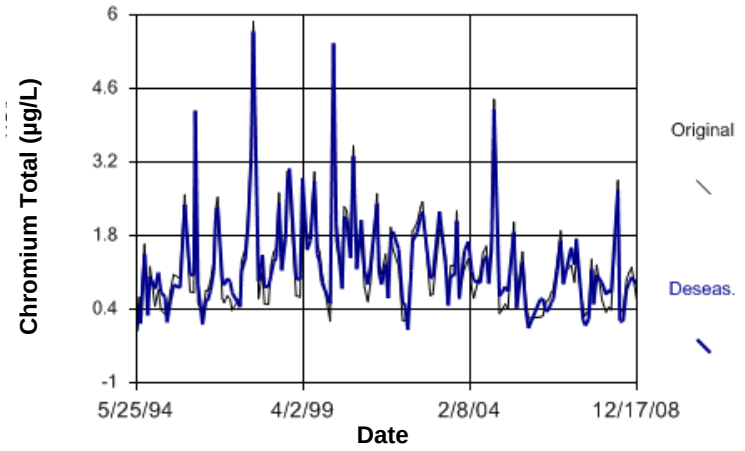


Figure E467 Saskatchewan River: Chromium Total

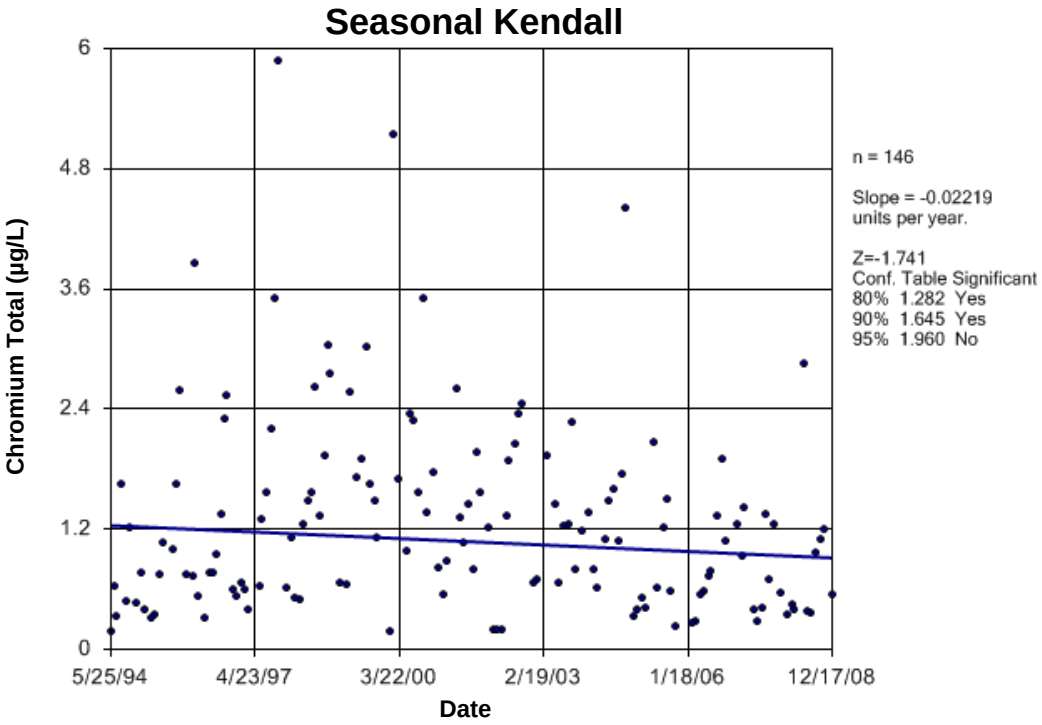


Figure E468 Saskatchewan River: Chromium Total

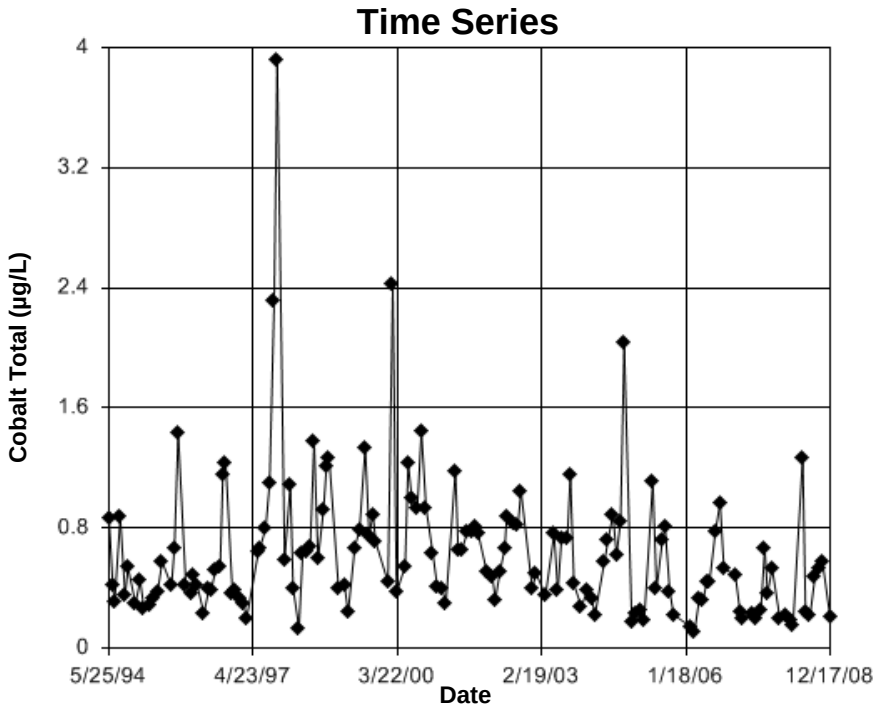


Figure E469 Saskatchewan River: Cobalt Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 41.01
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 41.01
Adjusted Kruskal-Wallis statistic (H') = 41.01

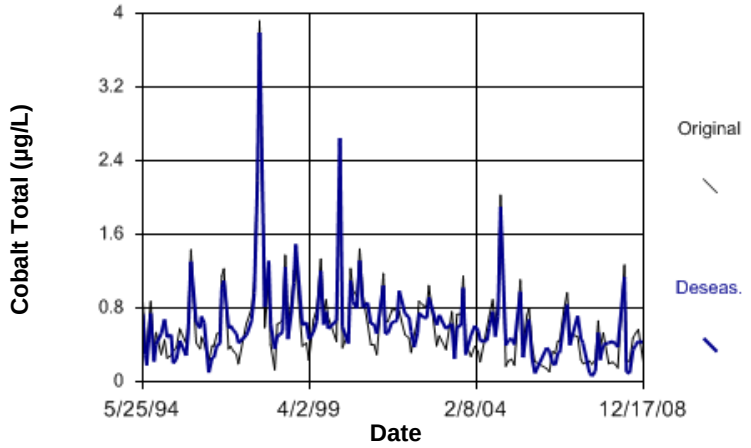


Figure E470 Saskatchewan River: Cobalt Total

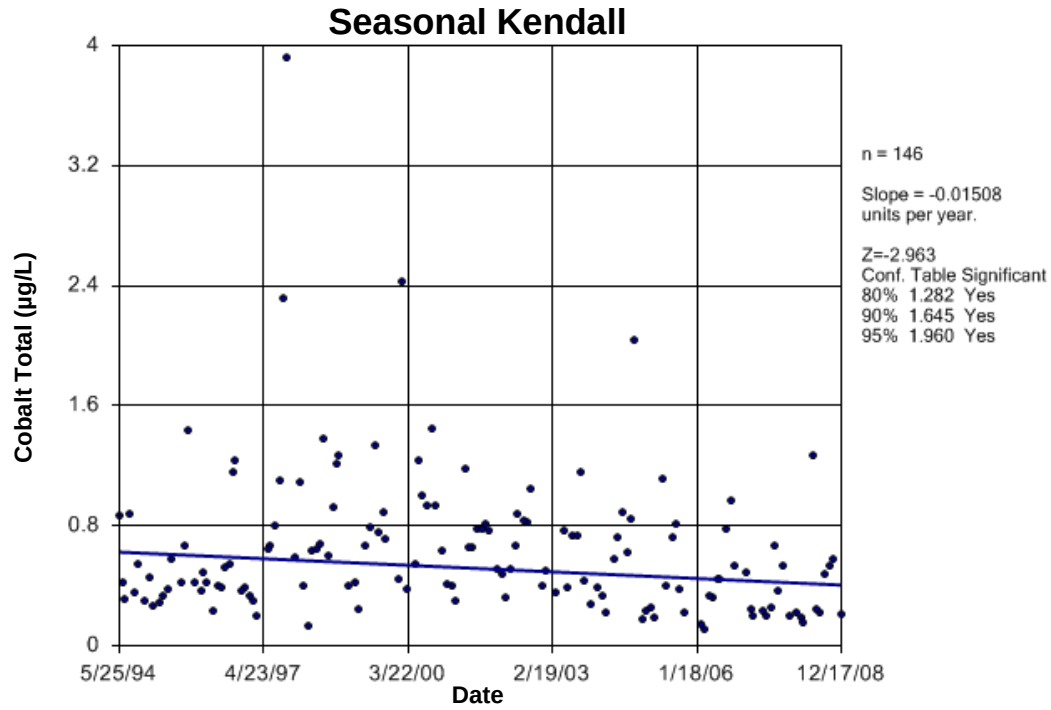


Figure E471 Saskatchewan River: Cobalt Total

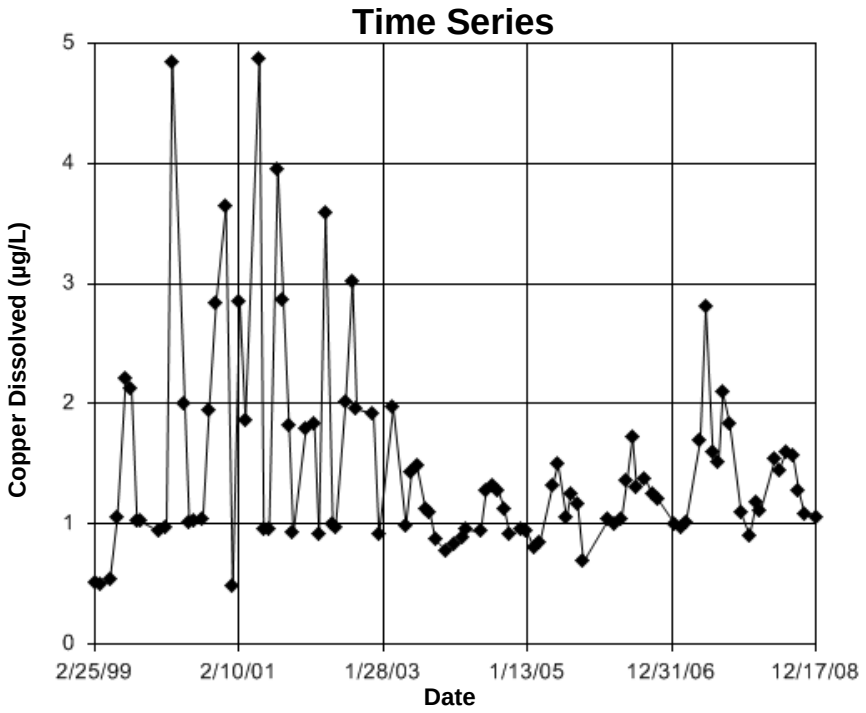


Figure E472 Saskatchewan River: Copper Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 11.83
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 11.83
Adjusted Kruskal-Wallis statistic (H') = 11.83

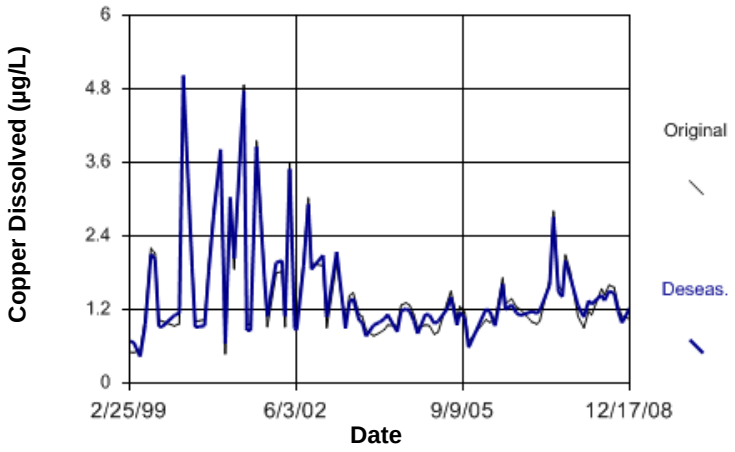


Figure E473 Saskatchewan River: Copper Dissolved

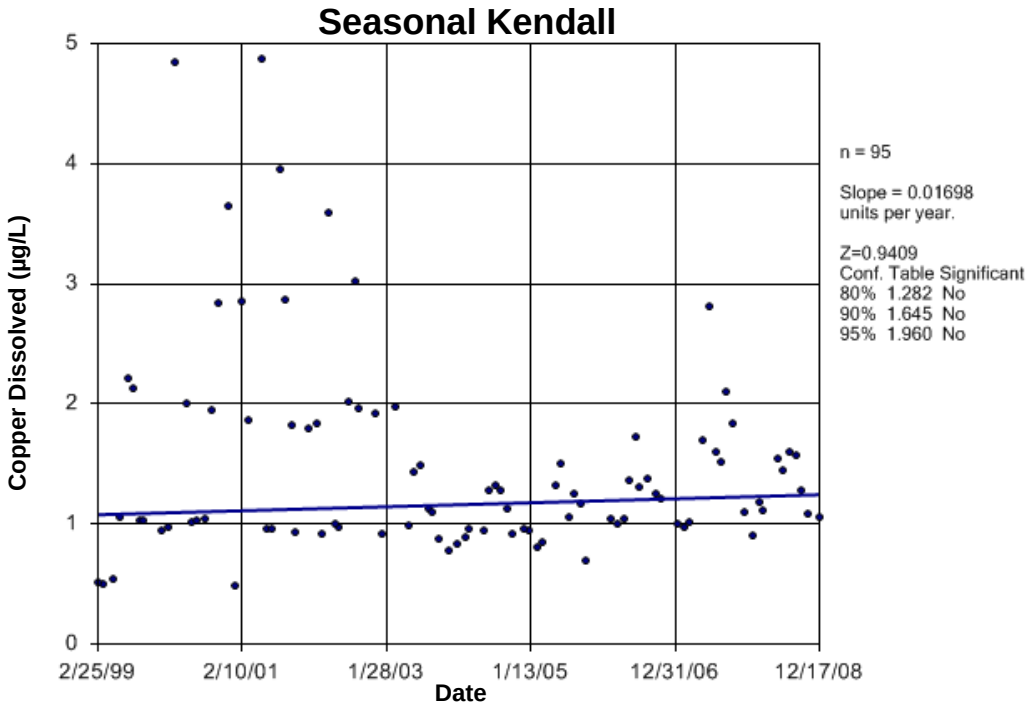


Figure E474 Saskatchewan River: Copper Dissolved

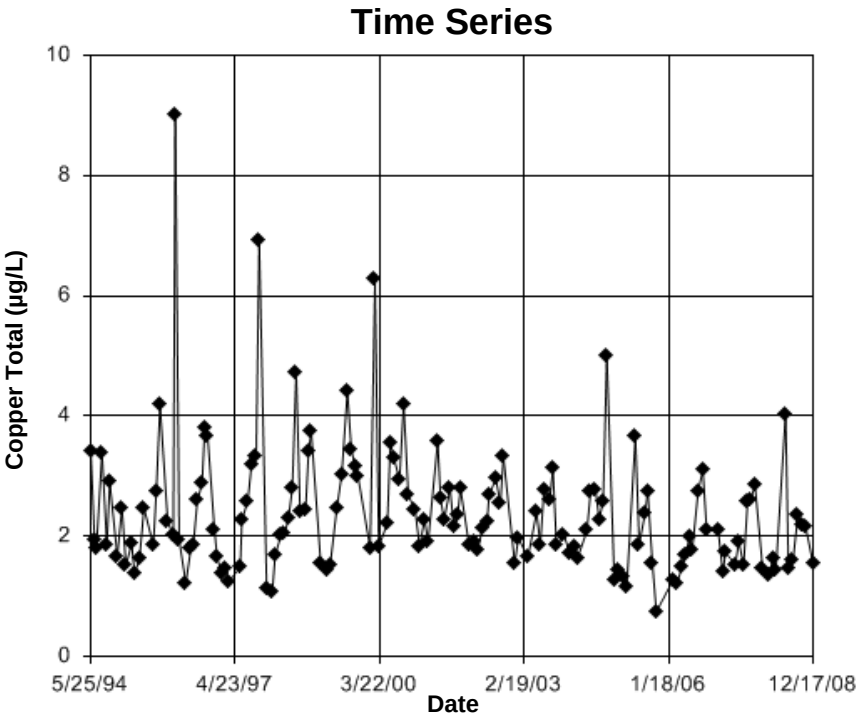


Figure E475 Saskatchewan River: Copper Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 36.62
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 36.62
Adjusted Kruskal-Wallis statistic (H') = 36.62

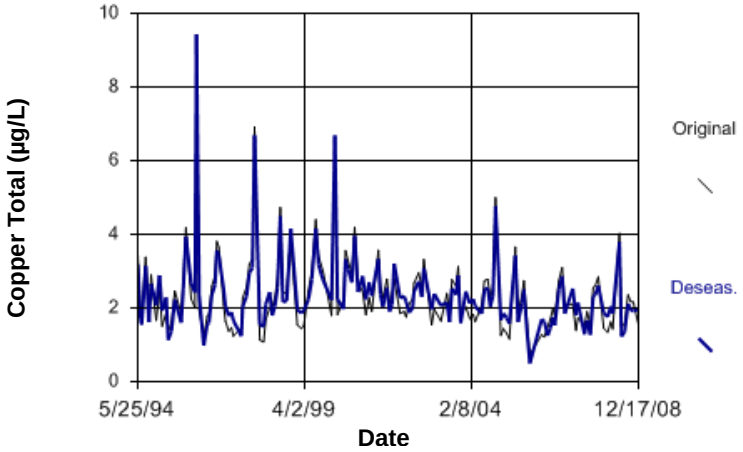


Figure E476 Saskatchewan River: Copper Total

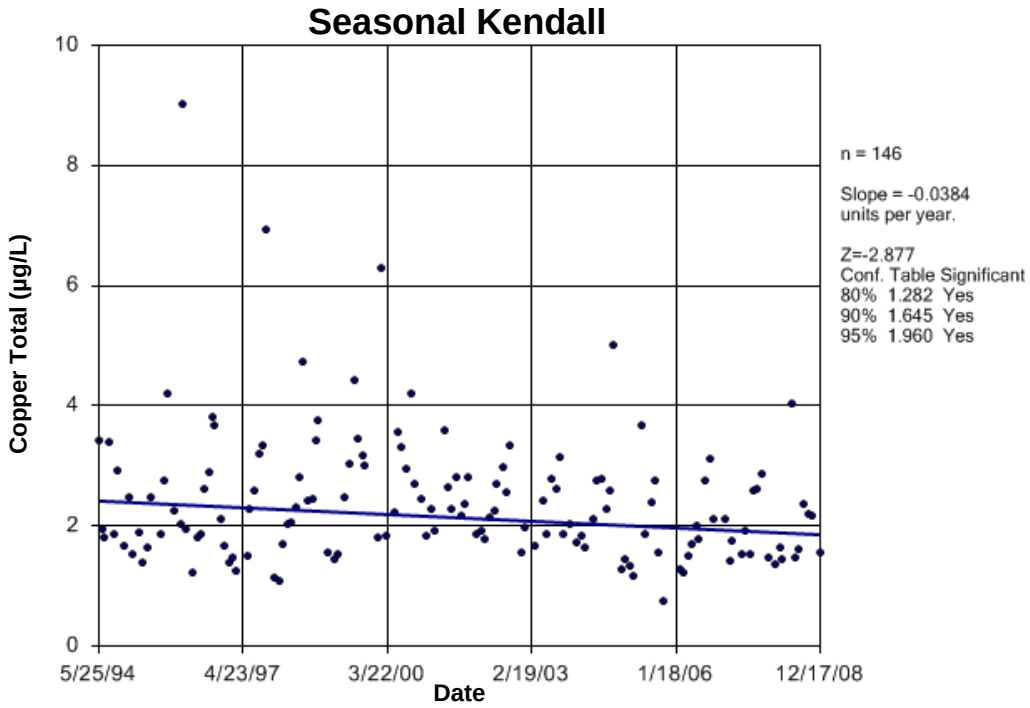


Figure E477 Saskatchewan River: Copper Total

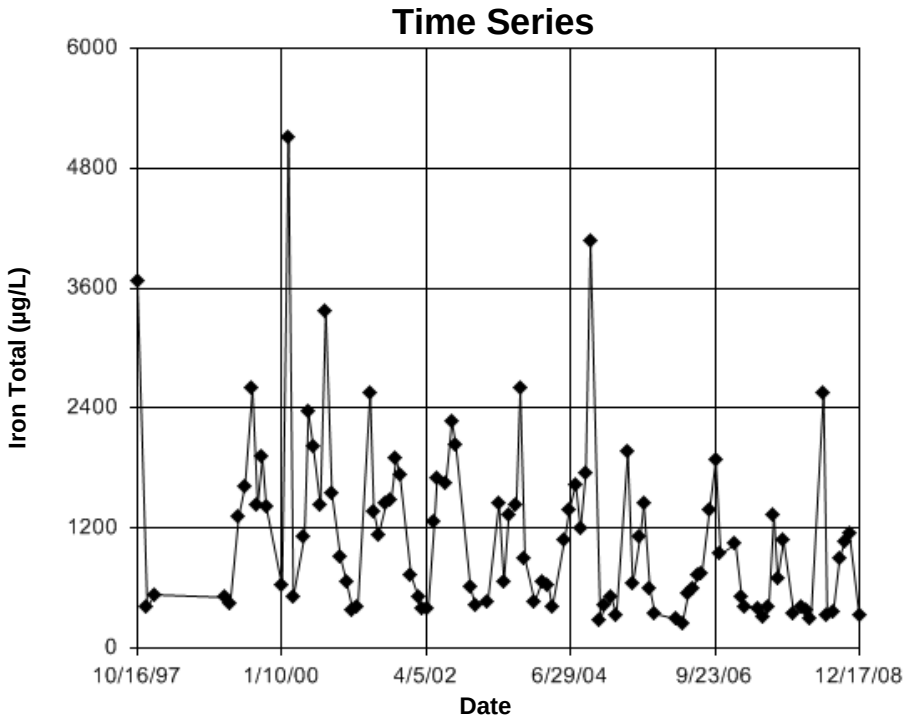


Figure E478 Saskatchewan River: Iron Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 32.66
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 32.66
Adjusted Kruskal-Wallis statistic (H') = 32.66

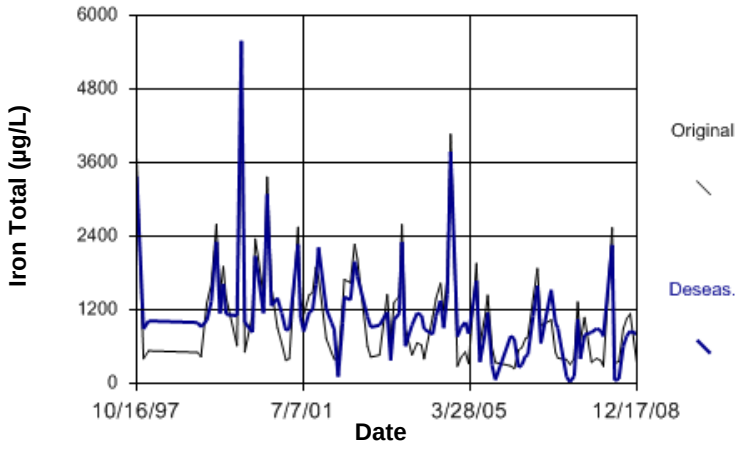


Figure E479 Saskatchewan River: Iron Total

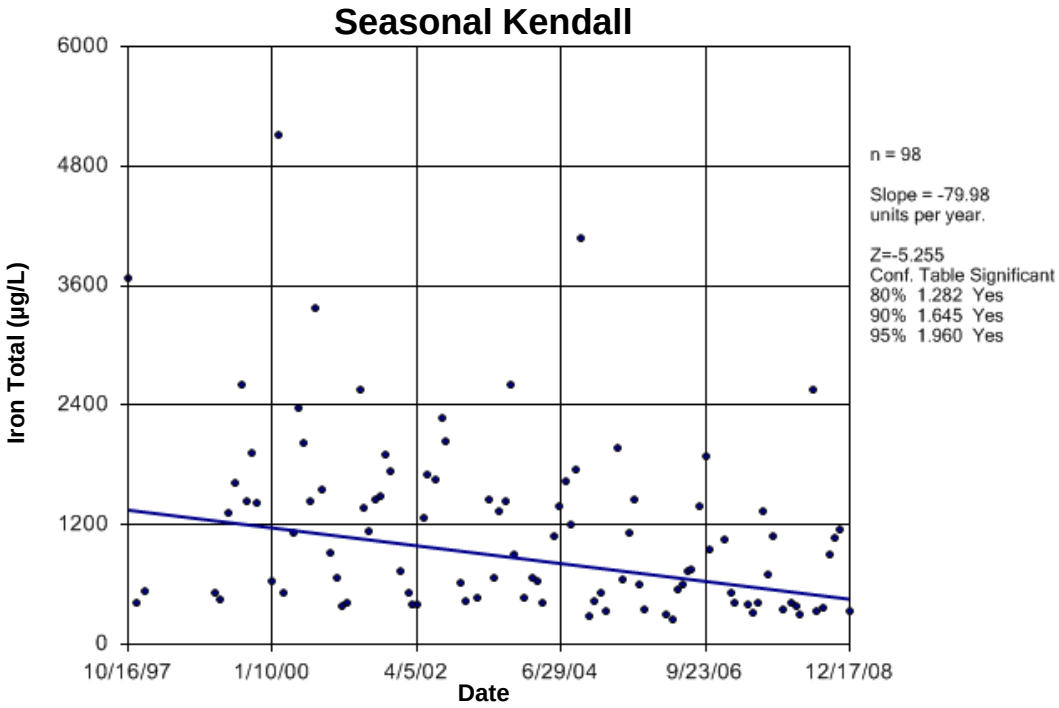


Figure E480 Saskatchewan River: Iron Total

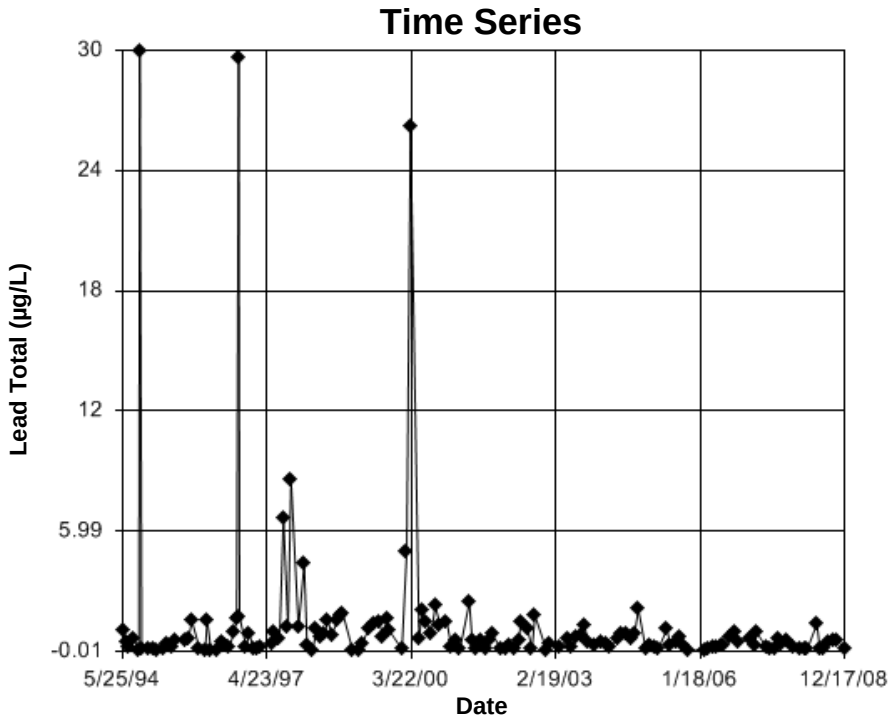


Figure E481 Saskatchewan River: Lead Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 22.78
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 22.78
Adjusted Kruskal-Wallis statistic (H') = 22.78

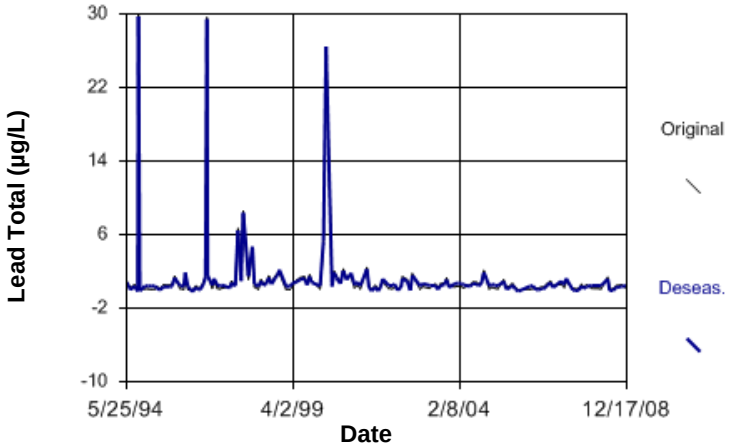


Figure E482 Saskatchewan River: Lead Total

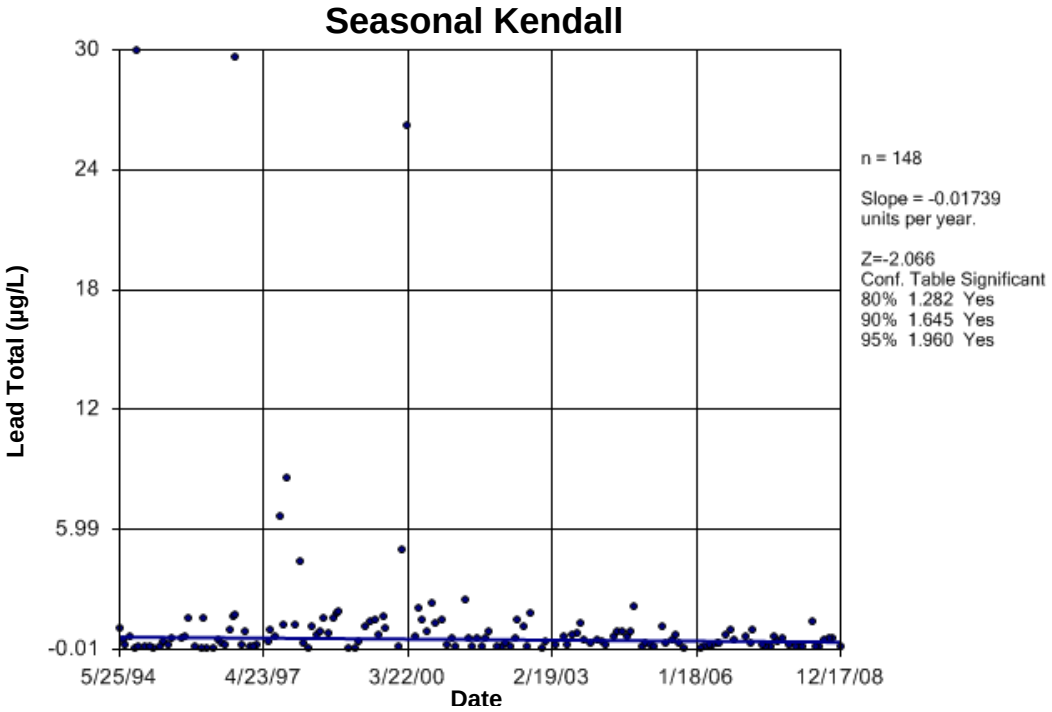


Figure E483 Saskatchewan River: Lead Total

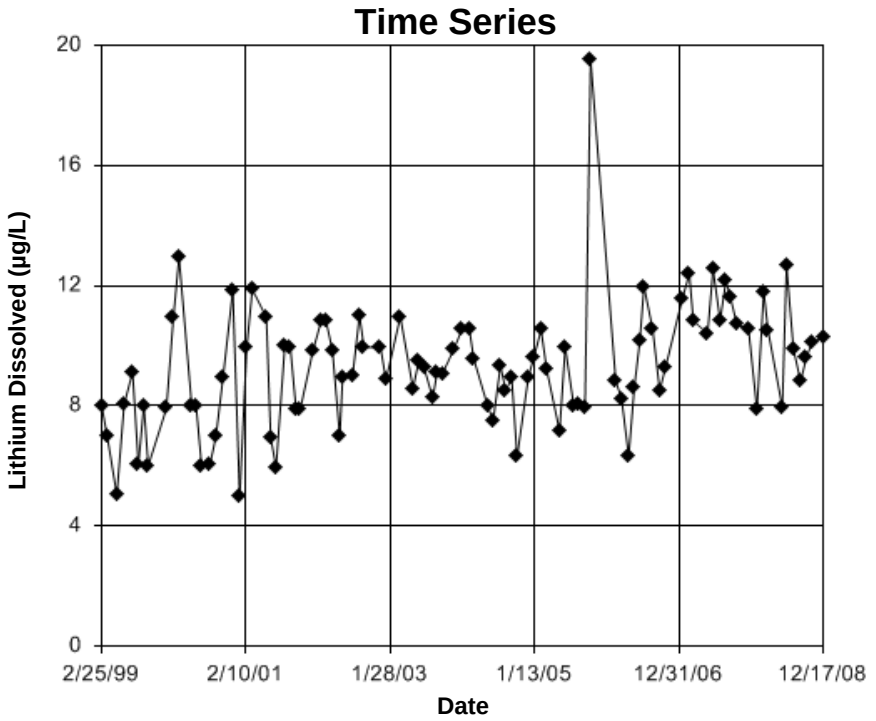


Figure E484 Saskatchewan River: Lithium Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 6.988
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 6.988
Adjusted Kruskal-Wallis statistic (H') = 6.988

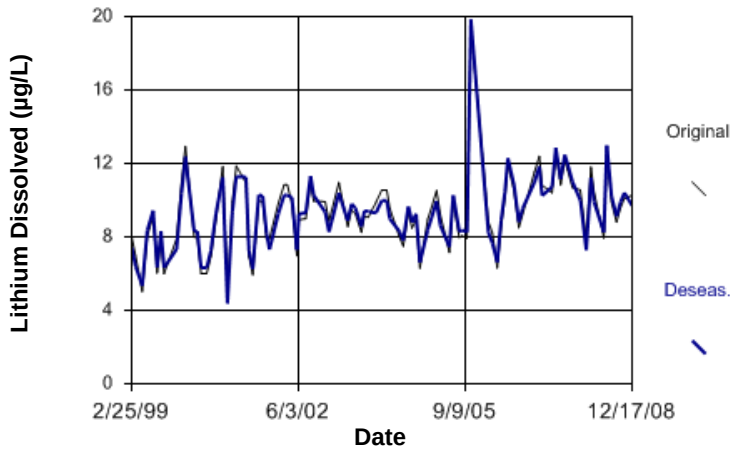


Figure E485 Saskatchewan River: Lithium Dissolved

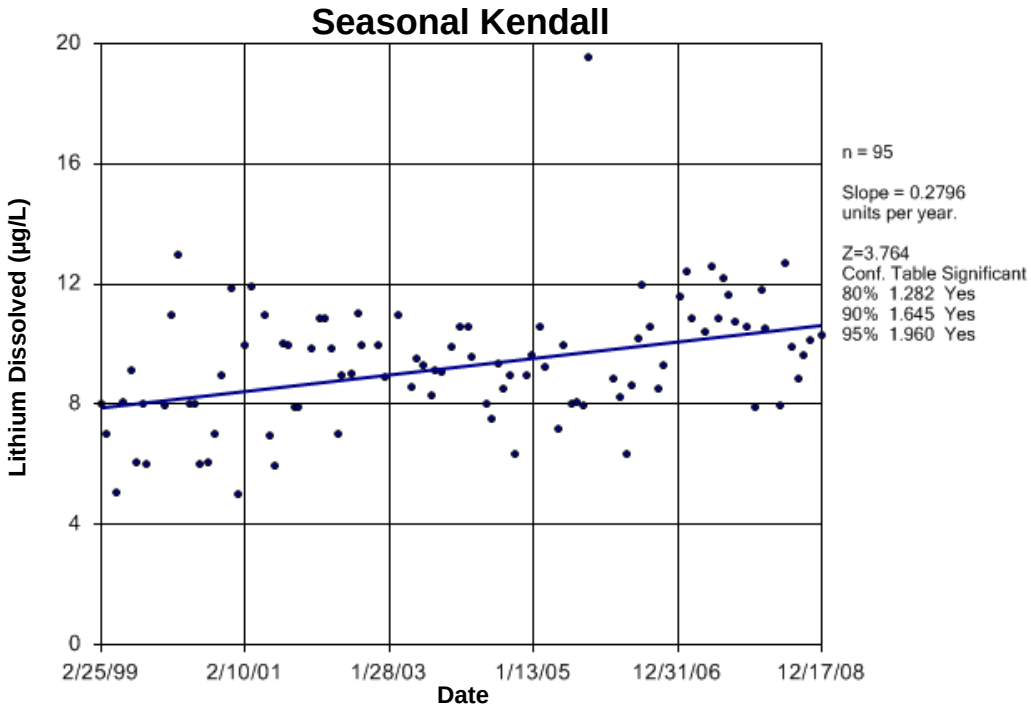


Figure E486 Saskatchewan River: Lithium Dissolved

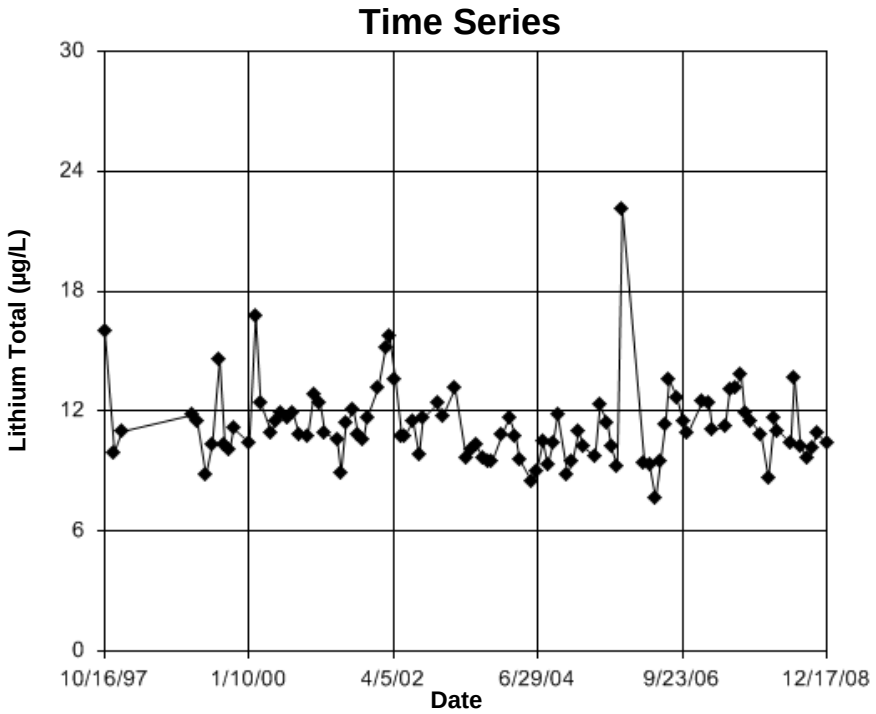


Figure E487 Saskatchewan River: Lithium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 1.515
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 6 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 1.515
Adjusted Kruskal-Wallis statistic (H') = 1.515

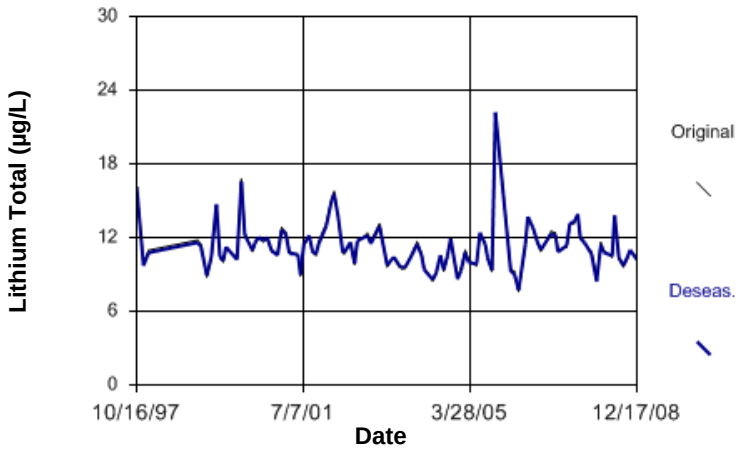


Figure E488 Saskatchewan River: Lithium Total

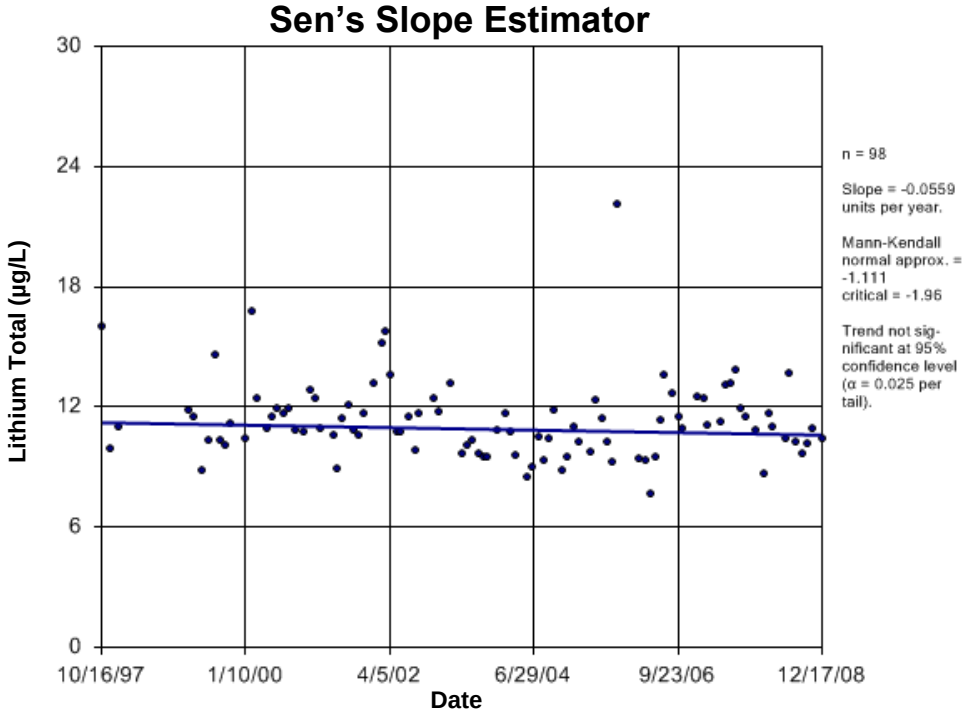


Figure E489 Saskatchewan River: Lithium Total

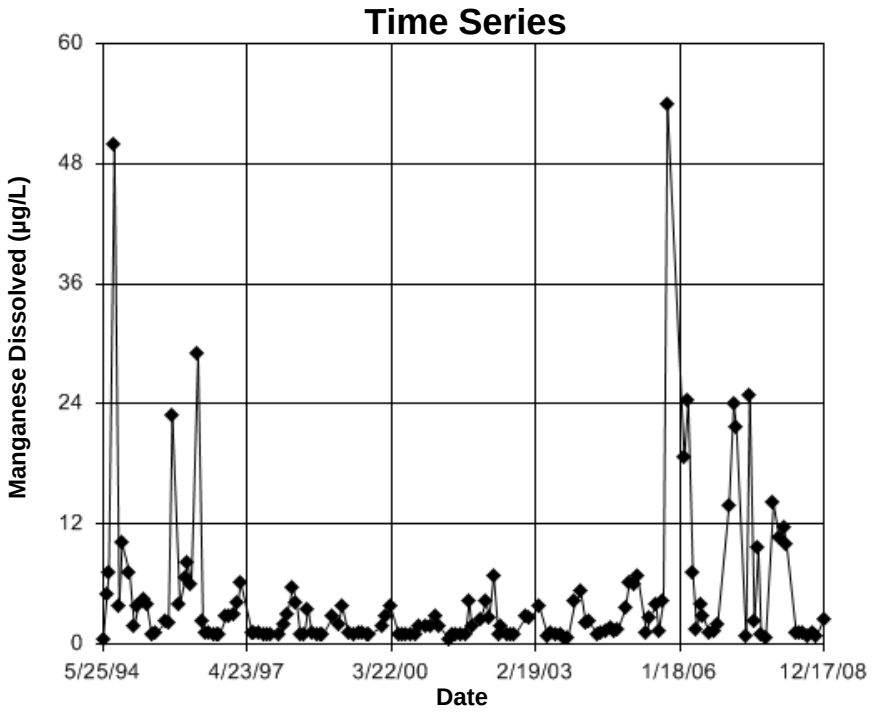


Figure E490 Saskatchewan River: Manganese Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 38.14
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 38.14
Adjusted Kruskal-Wallis statistic (H') = 38.14

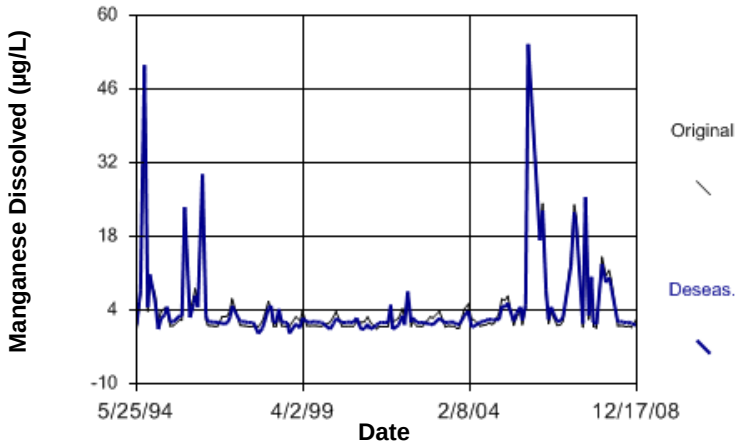


Figure E491 Saskatchewan River: Manganese Dissolved

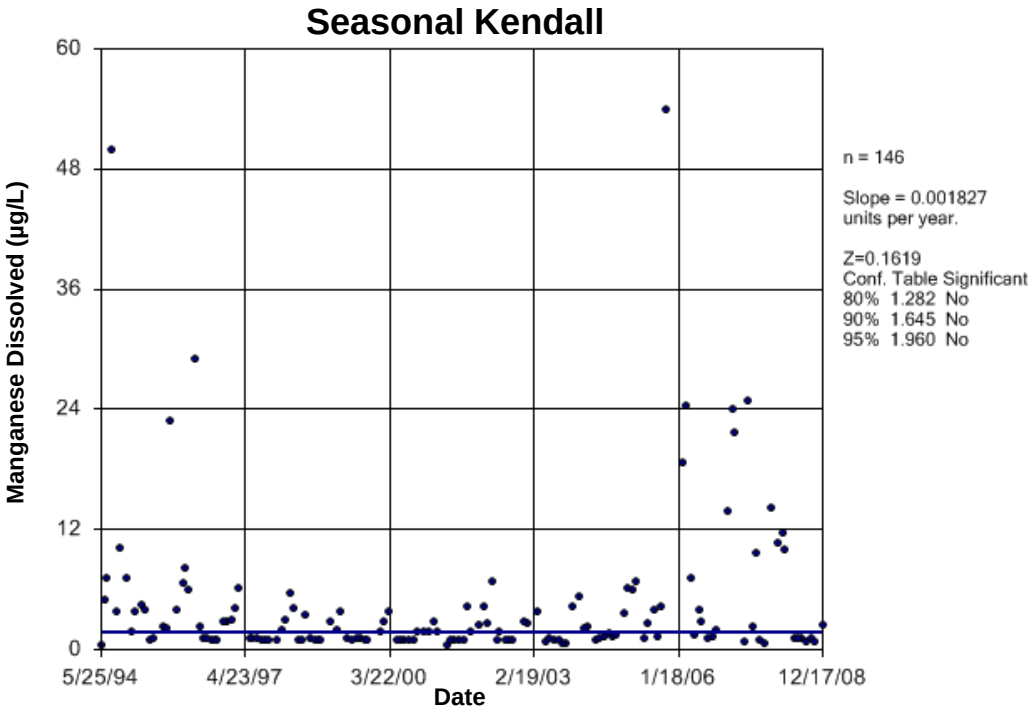


Figure E492 Saskatchewan River: Manganese Dissolved

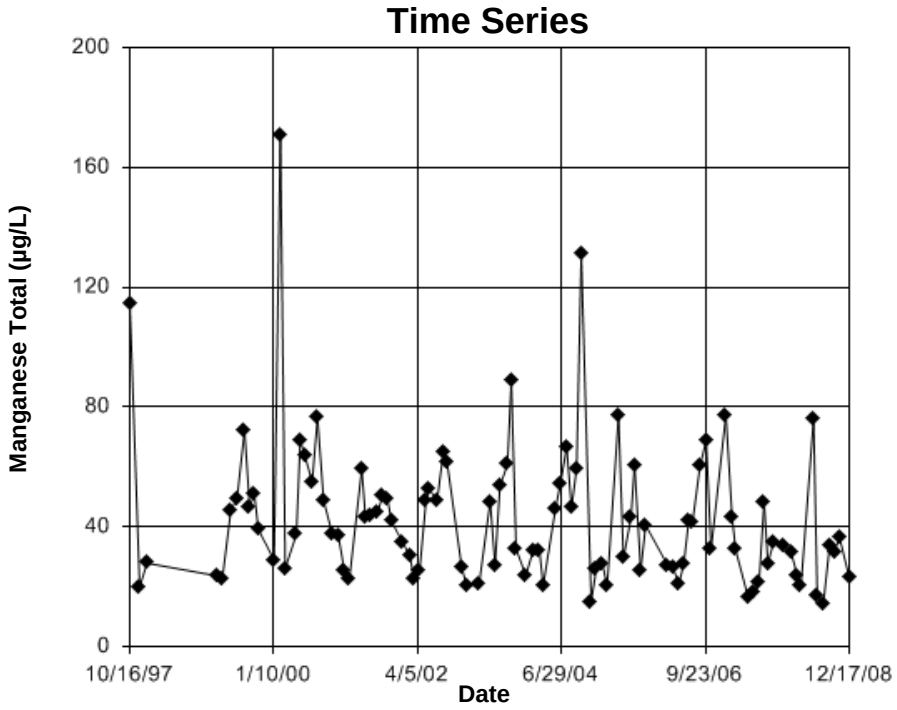


Figure E493 Saskatchewan River: Manganese Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 24.45
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 1 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 24.45
Adjusted Kruskal-Wallis statistic (H') = 24.45

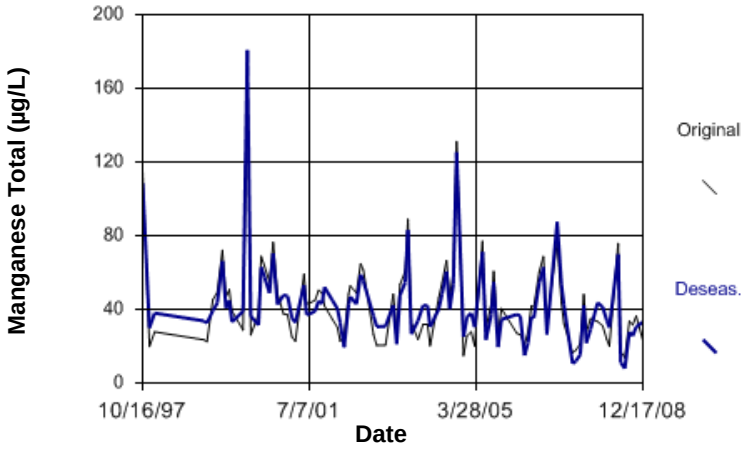


Figure E494 Saskatchewan River: Manganese Total

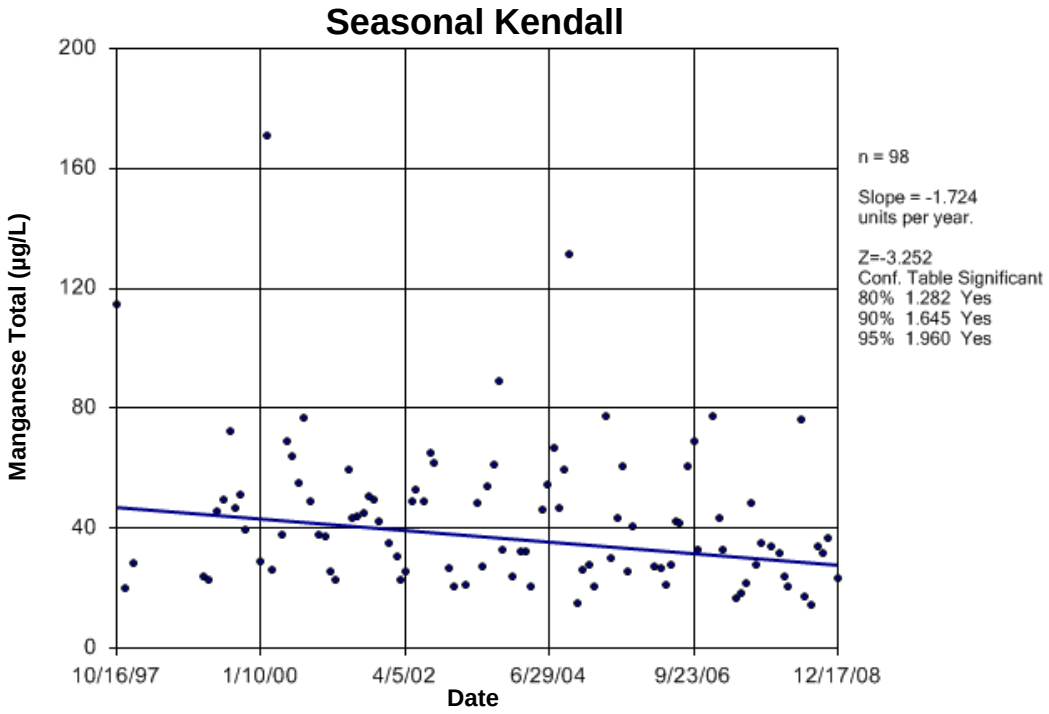


Figure E495 Saskatchewan River: Manganese Total

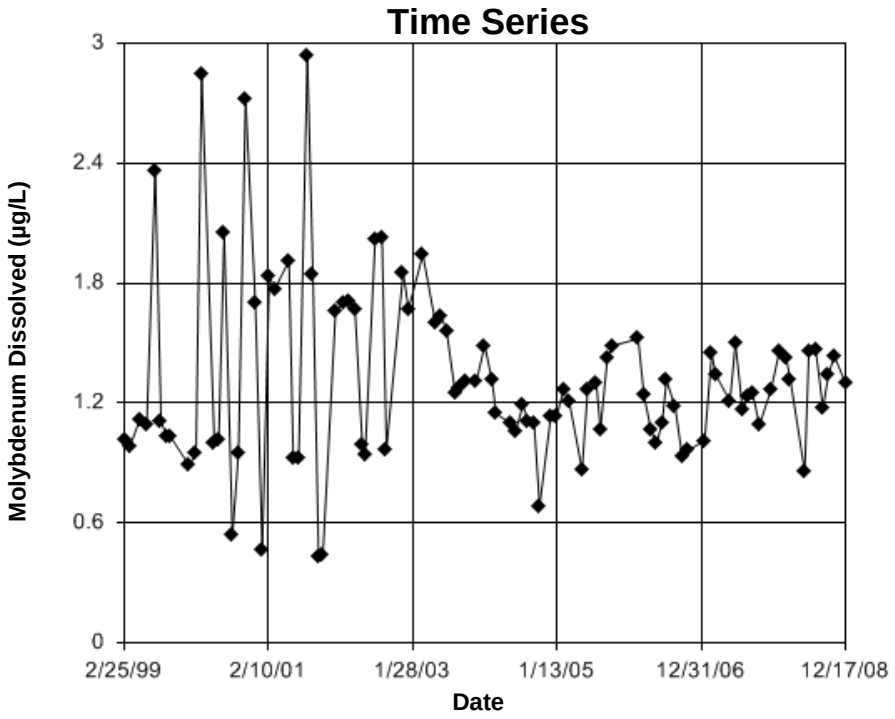


Figure E496 Saskatchewan River: Molybdenum Dissolved

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 3.065
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 3.065
Adjusted Kruskal-Wallis statistic (H') = 3.065

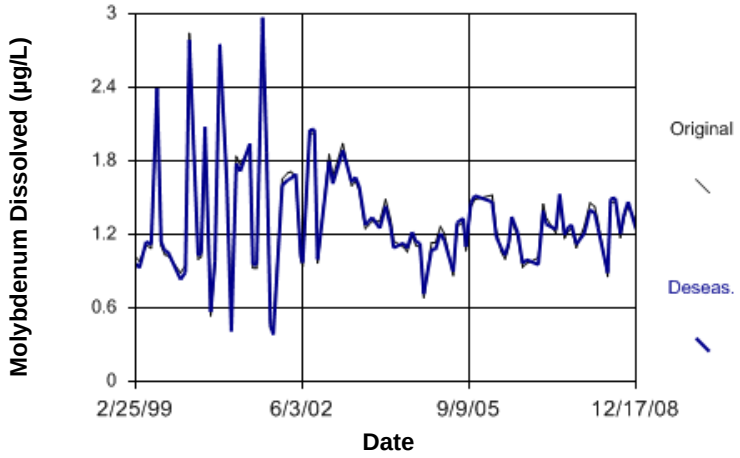


Figure E497 Saskatchewan River: Molybdenum Dissolved

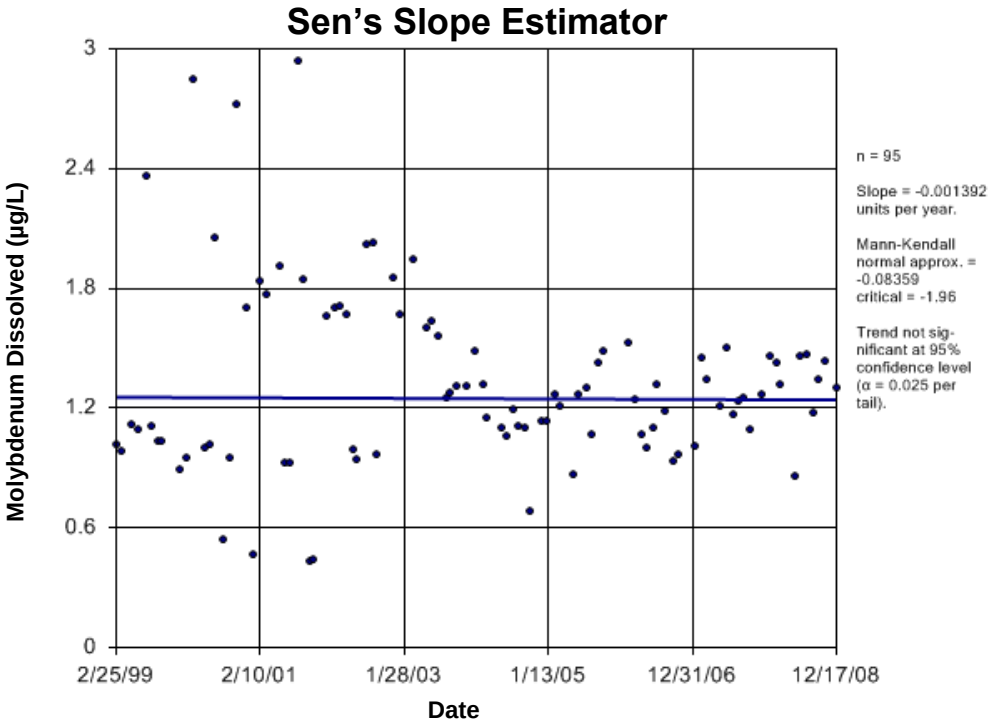


Figure E498 Saskatchewan River: Molybdenum Dissolved

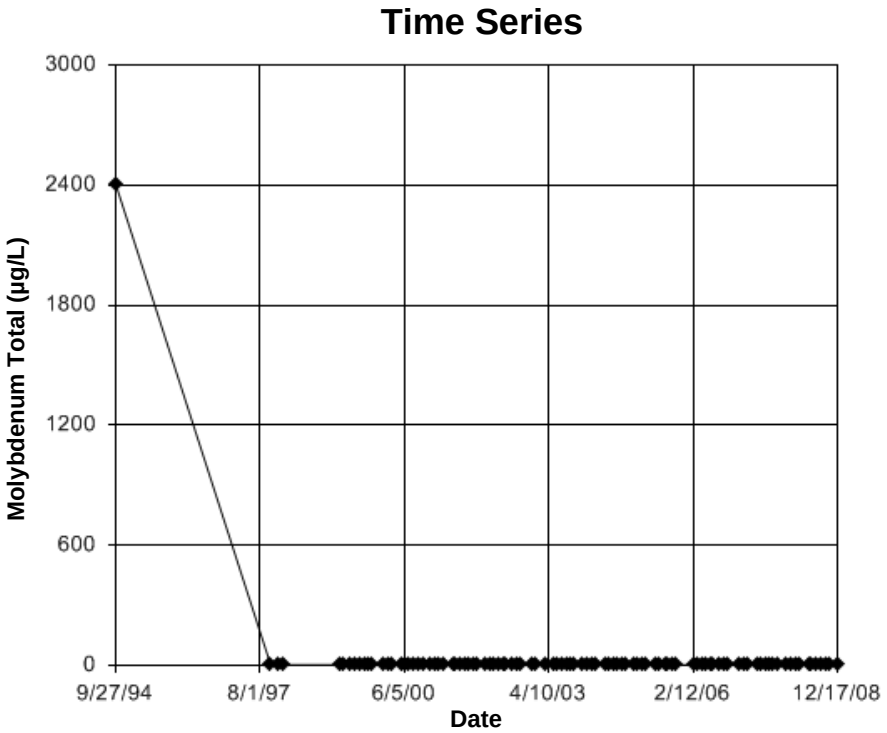


Figure E499 Saskatchewan River: Molybdenum Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates NO SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is less than or equal to the Chi-squared value, we conclude that no season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 3.163
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 3.163
Adjusted Kruskal-Wallis statistic (H') = 3.163

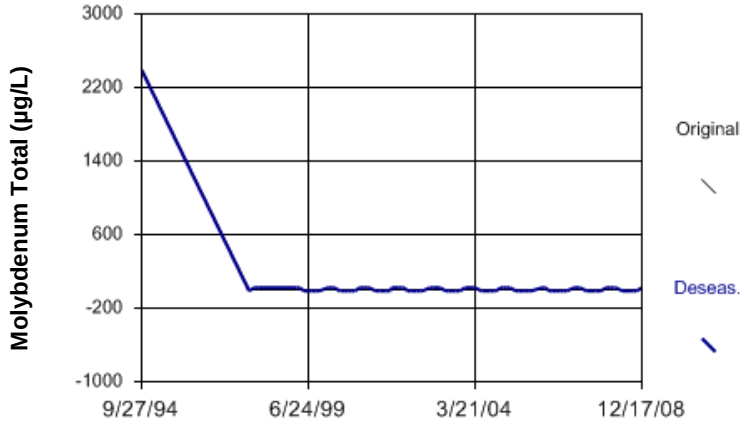


Figure E500 Saskatchewan River: Molybdenum Total

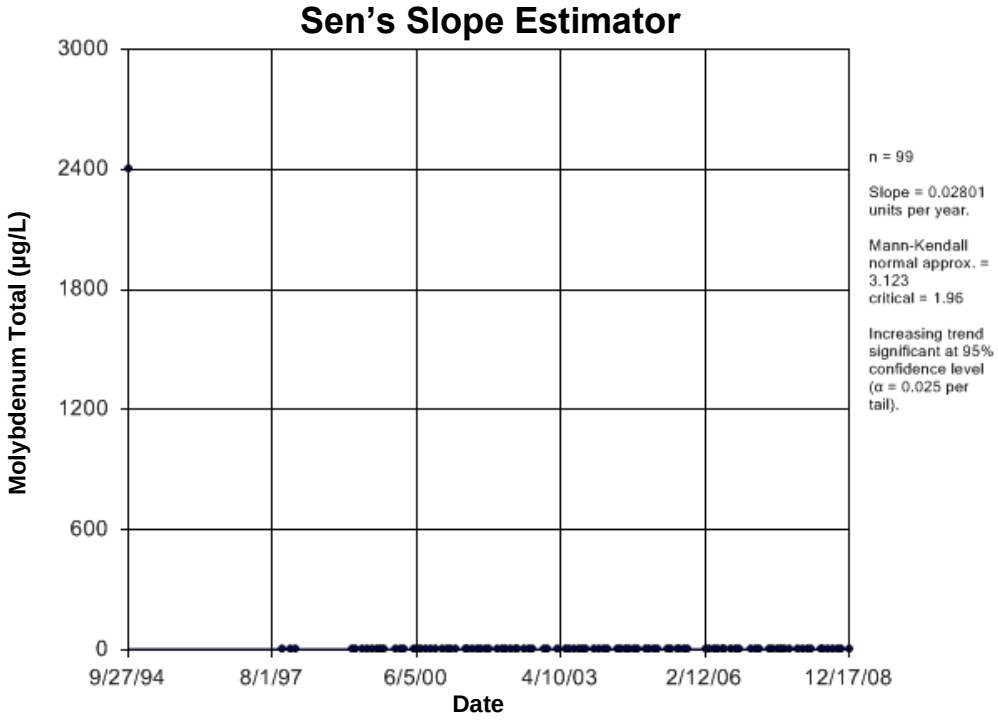


Figure E501 Saskatchewan River: Molybdenum Total

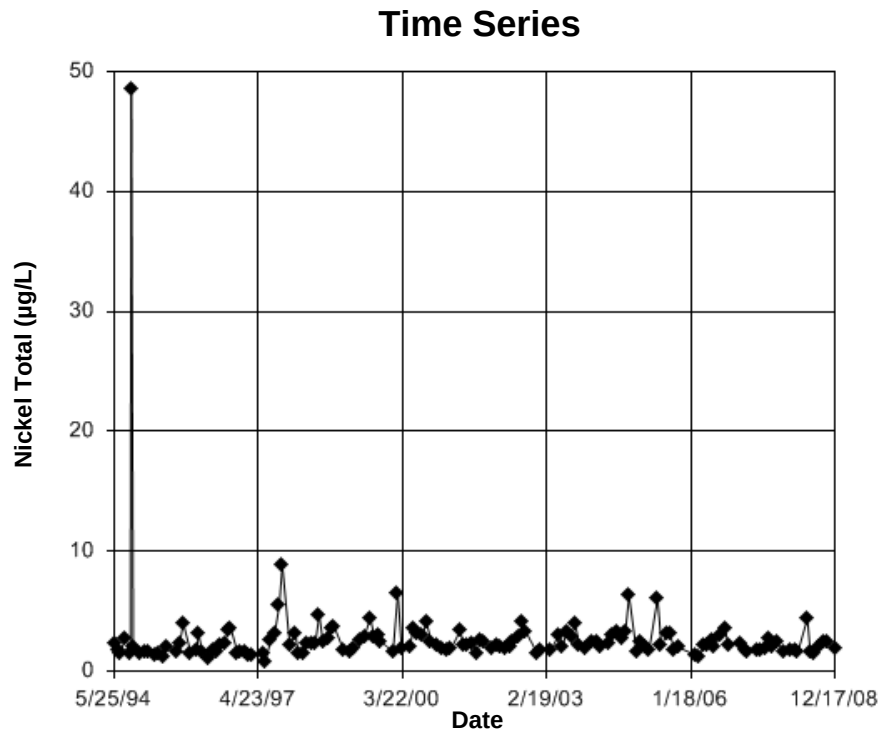


Figure E502 Saskatchewan River: Nickel Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 29.95
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 29.95
Adjusted Kruskal-Wallis statistic (H') = 29.95

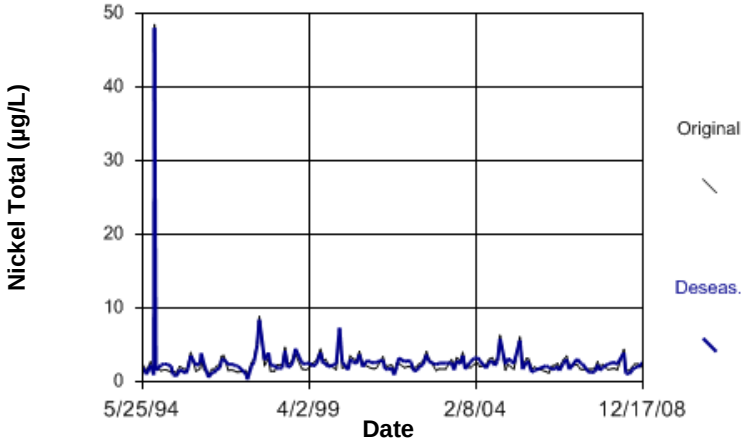


Figure E503 Saskatchewan River: Nickel Total

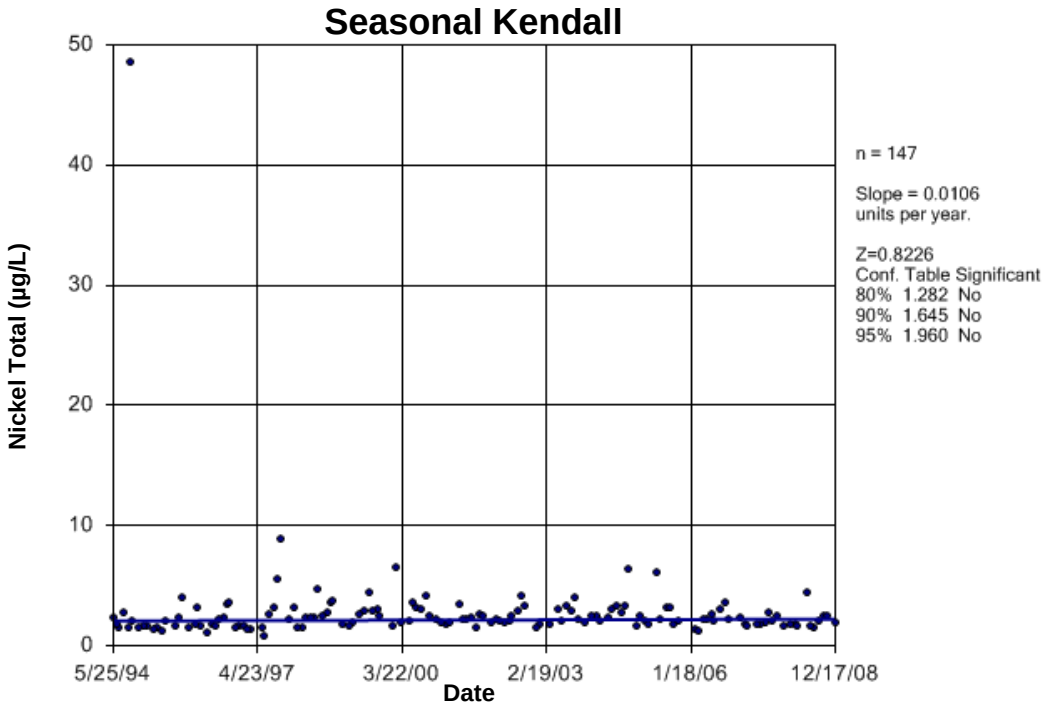


Figure E504 Saskatchewan River: Nickel Total

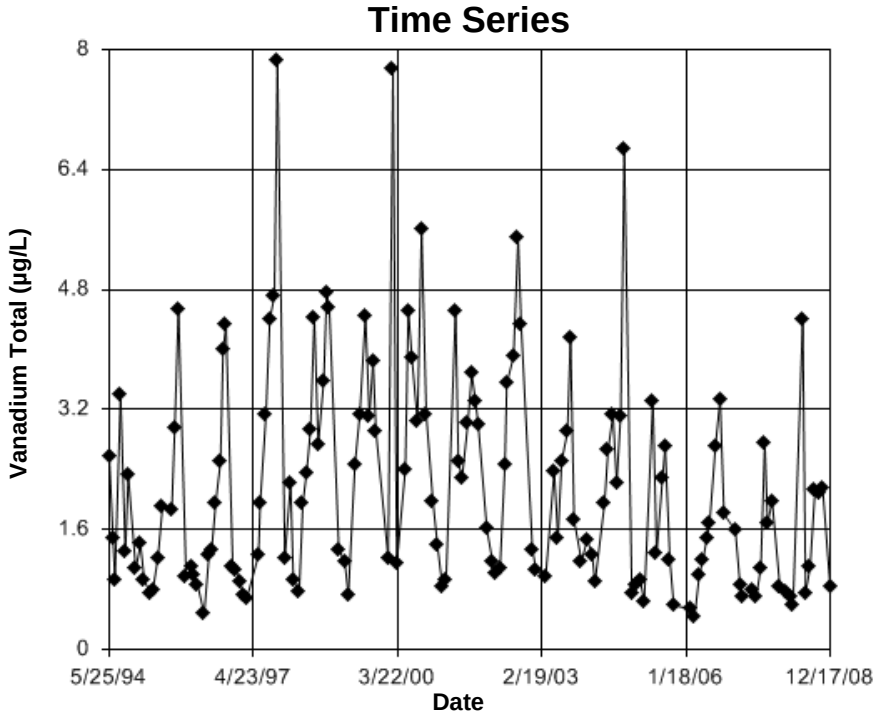


Figure E505 Saskatchewan River: Vanadium Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 51.1
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 2 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 51.1
Adjusted Kruskal-Wallis statistic (H') = 51.1

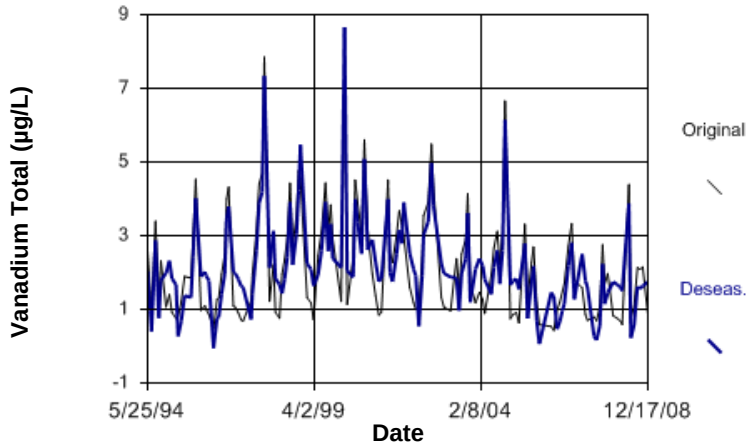


Figure E506 Saskatchewan River: Vanadium Total

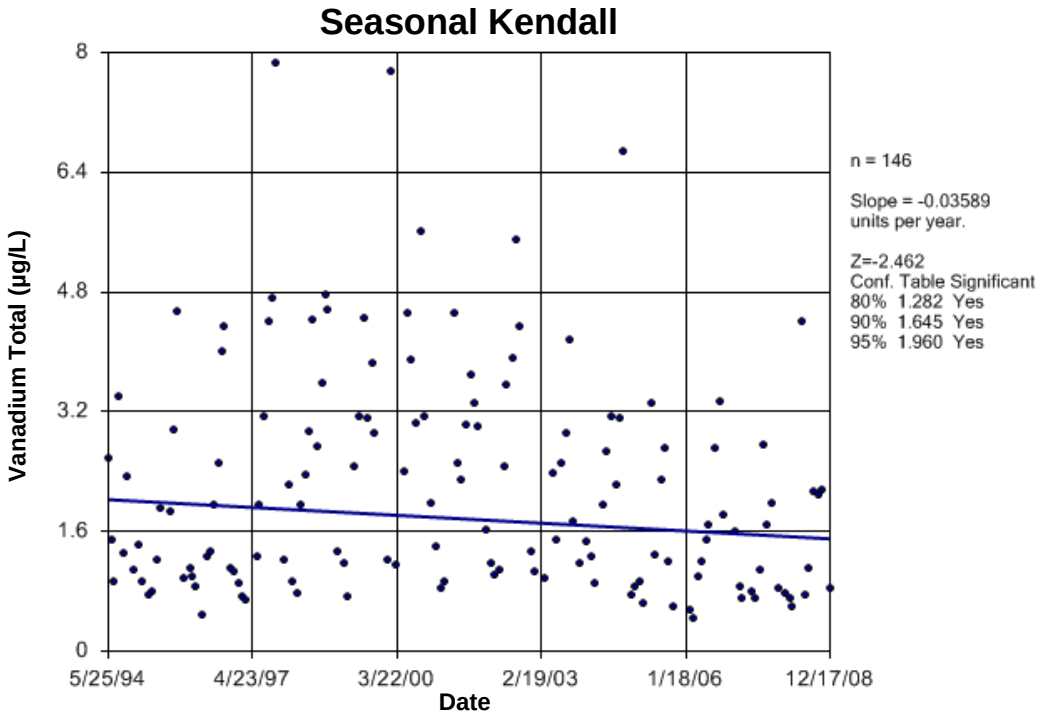


Figure E507 Saskatchewan River: Vanadium Total

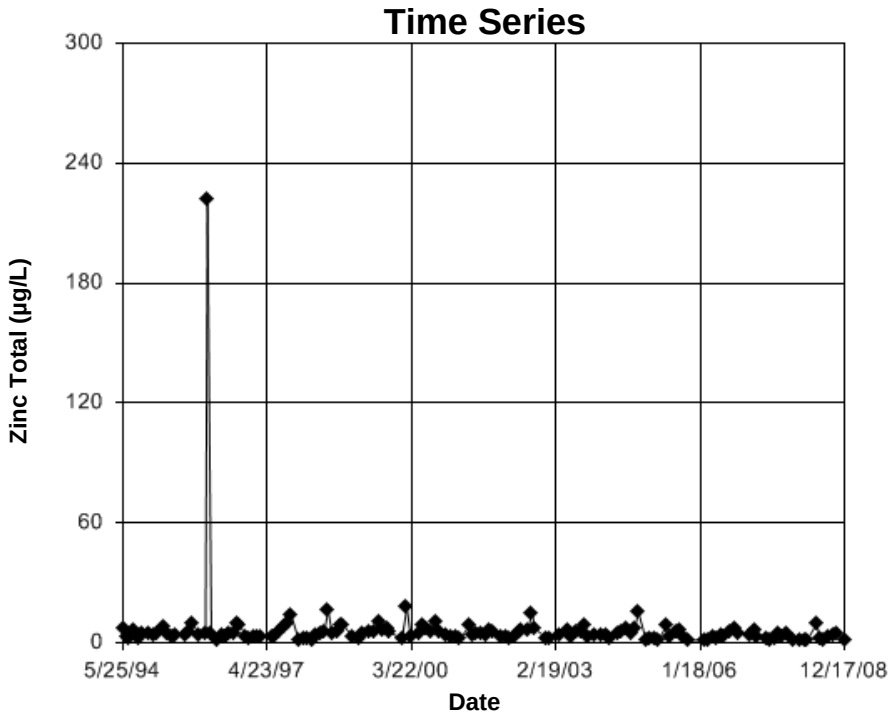


Figure E508 Saskatchewan River: Zinc Total

Seasonality

For the data shown, the Kruskal-Wallis test indicates SEASONALITYat the 5% significance level. Because the calculated Kruskal-Wallis statistic is greater than the Chi-squared value, we conclude that at least one season has a significantly different median concentration of this constituent than any other season.
Calculated Kruskal-Wallis statistic = 27.45
Tabulated Chi-Squared value = 3.841 with 1 degrees of freedom at the 5% significance level.
There were 3 groups of ties in the data, consequently the Kruskal-Wallis statistic (H) was adjusted. The adjusted statistic (H') was utilized to determine if the medians were equal.
Kruskal-Wallis statistic (H) = 27.45
Adjusted Kruskal-Wallis statistic (H') = 27.45

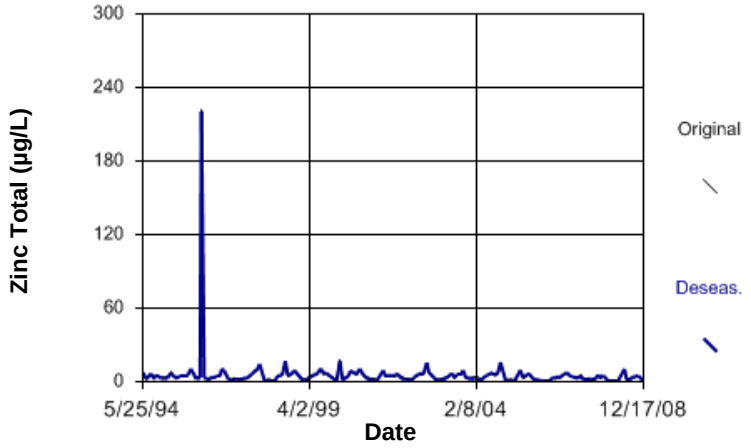


Figure E509 Saskatchewan River: Zinc Total

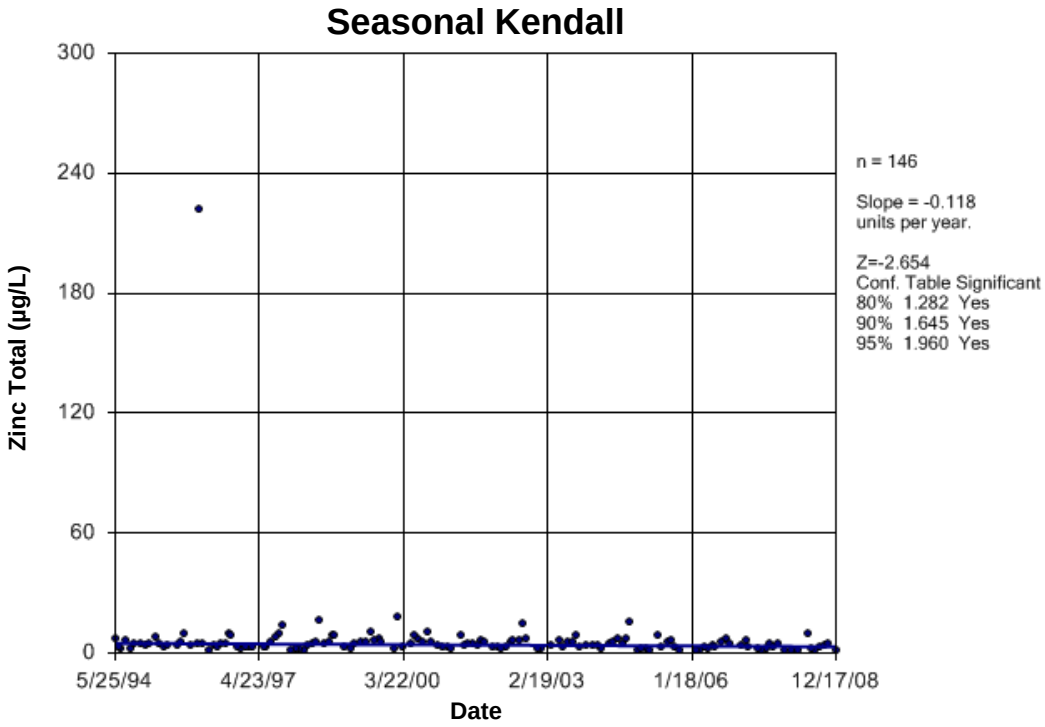


Figure E510 Saskatchewan River: Zinc Total