TIBCO Spotfire® Software for Inorganic Water Dashboard

Introduction
With the increasing number of regulatory limits and need for quick sample throughput, it is important to keep your data organized and well-structured. The TIBCO Spotfire® for Inorganic Water Dashboard provides faster, more efficient data analysis. With its many features, the Inorganic Water Dashboard, powered by TIBCO Spotfire®, will give your laboratory a new edge in analysis, saving both time and money.

Key Benefits:
- View location data of water samples over an image
- Quickly pinpoint suspect results
- Identify trends in the presence of heavy metal contaminants
- Interact with the data across all visualizations

Features

Map Chart
With the Map Chart, sample data can be plotted for geographical reference. The markers can be formatted to characterize data by color, shape, and size. If desired, rules can be created to color data by specified contaminant ranges. Location data can be overlaid on an image vs. a standard map by simply uploading the file and creating your own custom coordinates. The Map Chart can be seen in the top right corner of Figure 1.

Pie Charts
The Pie Charts, which can be seen in the top left corner of Figure 1, are separated by sample location. This feature is known as trellising. These charts can be formatted to color, as well as set the sector size, by a given column from the data table. This functionality allows you to view select contaminant ratios in comparison to each location of interest.
Combination Chart
A Combination Chart provides you with the ability to view trends in your data that may not be as evident in other visualizations. Both lines and bars can be used to denote your data in the fashion you feel represents it best. If desired, horizontal lines can be added to the chart to display the average result for each column of data. The Combination Chart can be seen in the bottom left corner of Figure 1.

Scatterplots
2D Scatterplots have been created to target suspect sample data. A color by rule has been implemented to color all result values above a specified limit red and all those below green. A horizontal line has also been added at the contaminant limit value for quick reference. The metal of choice may easily be changed through the selection panel along the Y-axis. These visualizations are shown in Figure 2.

Interactivity
Each visualization has been created from the data within the SpotfireInorganicWaterv1 Data Table meaning each visualization has the capability of interacting with the others. A unique showcase of this feature is that data displayed above a contaminant limit in a Scatterplot can be highlighted and easily analyzed though drill down of the visualizations on other pages of the dashboard. Simultaneous marking makes it easy to pinpoint suspect data at any step of your analysis.

Instructions are included on the final page of the dashboard to guide you through uploading and customizing your water quality data.

Figure 2. 2D Scatterplots displaying contaminant levels by sample ID and location.