**Definition**

VistaSAM is an application that retrieves data from the data bases saved by VistaStorage. It allows the user to chart, print, and export data to other applications. VistaSAM also allows the user to perform availability calculations on analyzers and groups of analyzers.

**Purpose**

VistaSAM simplifies and automates the viewing of large amounts of analyzer data which has been stored by VistaSTORAGE. It provides the user with:

- Historical analysis, calibration and benchmark reports
- Ability to graphically trend analysis data for tracking functional performance of the analyzer
- Visual calibration and benchmark data for quick determination of problems with the analysis system or process
- Data that qualifies which analyzer or group of analyzers require the most maintenance
- Data that qualifies the analyzer availability

**Services**

VistaSAM is divided into four functional parts:

- Report Displays
- Analysis Data Trends
- Calibration / Benchmark Data Trends
- Availability Information Displays
Report Display

VistaSAM allows the user to select the inject time and the stream or method of a given analyzer. Streams are selected for regular analysis data. Methods are selected for displaying calibration or benchmark data. Once these parameters are selected, the software application retrieves and displays the selected report from the database. All alarms initiated with the analysis are also displayed. The user has the option of removing data fields that are of no interest. Once the report is selected and formatted, it can be printed.

Analysis Data – Trends Chart

The most powerful tool provided by VistaSAM is the trending of analysis data. Charts can be created with up to 6 different data sets displayed over the same time period with the same or split y axes. Sections of the graph that are of interest can be zoomed. Two different data sets can be plotted in an x versus y format for viewing relationships of the data sets. After selecting the type of graph and time period, the graph can be customized to suit the user. The menu driven format enables the user to change graph titles, display type for data points, scale of the y axes, select number of points displayed, text size, and much more. After the charts are customized, they can be printed.
Calibration/Benchmark Data Trends – SQC Chart

Along with the ability to generate trend charts on analysis data, VistaSAM can also produce charts on the calibration and benchmark data. Charts on the trend data will display the mean, ±2 standard deviations, and ±3 standard deviations. The user also has many of the same customize options that are provided with the trending of the analysis data. The number of points graphed can be changed to account for changes in benchmark and calibration samples.

Availability Information Display – Availability Calculations

VistaSAM provides the user with the ability to isolate problems in their plant analyzer system, through access to graphical data of analyzer or groups of analyzers which have been under maintenance, in an alarm state, or calibration or benchmark. Then, VistaSAM then compares this data to how long the unit has produced good analysis. The results are the analyzer availability presented as a pie chart. This allows the user to determine the percentage of maintenance resources required of an analyzer or group of analyzer. The alarms that flag the analyzer as invalid, or as requiring maintenance are configurable on a per analyzer basis.