

WIMS 7.5 Update



Multi-facility management and improved analysis tools

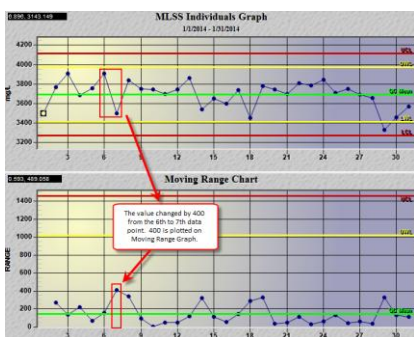
Hach WIMS has always provided a wide range of tools to easily generate reports, create useful dashboards, and perform in-depth analysis. These tools make your data meaningful so you can quickly see your key performance indicators, evaluate your chemical and power usage and generally assess the efficiency of your operations.

Enhanced with even more powerful tools, WIMS 7.5 brings new Statistical Analysis (SPC) tools and new, comprehensive ways to look at your data from across multiple facilities. Other new features included are better visibility for Entry Limit Exceedances and Daily Limit Violations with new highlighted background colors

New Statistical Process Control (SPC) Tools: SPC concepts help to identify when a process variation occurs due to outside forces or if they are inherent to the process. Now it is even easier to differentiate process variations so you can dig deeper to find the root cause when warranted. The tools consist of new reports and a number of new charts to help you visualize your process to detect outliers, analyze data for predictions, see how variables influence each other, etc.

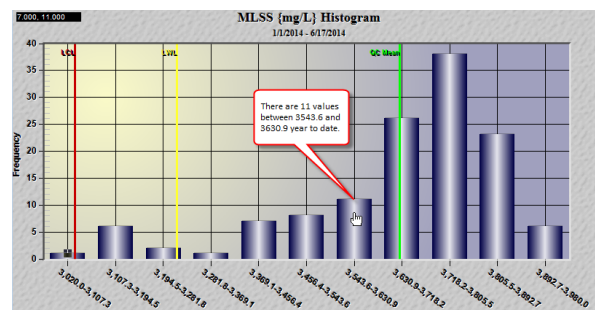
A correlation heat map shows what variables correlate to the variable being analyzed to gain better insight into how specific parameters relate to each other.

Variable	Linear Regression Equation	Coef of Cor	geometric Equation	Coef of Cor	Exp
V4018 Eff BOD Duplicate	$Y = 0.937890 * V4018 + 2.22294$	0.964575	$Y = 1.328633 * V4018^{0.91777}$	0.922591	$Y = 11.954809 * \text{exp}(0.000000 * X)$
V1021 MLSS	$Y = -0.070807 * V1021 + 284.471$	0.733320	$Y = 25.199751 * 704.133800000$	0.634341	$Y = 10.069762307 * \text{exp}(0.000000 * X)$
V1022 Total MLSS Mass	$Y = -0.003396 * V1022 + 284.471$	0.733320	$Y = 1.584539 * 964.000000000$	0.634341	$Y = 10.069762307 * \text{exp}(0.000000 * X)$
V1023 MLVSS	$Y = -0.088373 * V1023 + 299.171$	0.714984	$Y = 111.697318 * 983.034000000$	0.611917	$Y = 12.996647234 * \text{exp}(0.000000 * X)$
V1035 Aeration Basin Energy	$Y = -0.037993 * V1035 + 101.151$	0.632263	$Y = 4.648780 * 580373 * V1035^{0.582186}$	0.582186	$Y = 128.990962 * \text{exp}(0.000000 * X)$
V1031 Aeration Basin Dissolved	$Y = 11.029547 * V1031 + 0.3761$	0.607843	$Y = 13.061873 * V1031^{0.6874}$	0.459367	$Y = 12.223725 * \text{exp}(0.000000 * X)$
V4081 Effluent pH	$Y = 44.491037 * V4081 - 289.261$	0.541145	$Y = 0.000001 * V4081^{1.84625}$	0.509981	$Y = 0.005258 * \text{exp}(1.111111 * X)$
V4017 BOD Standard GGA	$Y = 0.572854 * V4017 - 83.5679$	0.418552	$Y = 0.000329 * V4017^{2.11967}$	0.319522	$Y = 2.637953 * \text{exp}(0.000000 * X)$
V1151 Final Clarifier Blanket Heig	$Y = 4.509926 * V1151 + 5.46871$	0.411913	$Y = 8.707182 * V1151^{0.63344}$	0.379801	$Y = 13.238195 * \text{exp}(0.000000 * X)$
V1001 FAS Flow	$Y = 32.359936 * V1001 - 34.1371$	0.366733	$Y = 7.032695 * V1001^{1.84625}$	0.378140	$Y = 3.887927 * \text{exp}(0.000000 * X)$
V1103 Sludge Volume Index	$Y = 0.513852 * V1103 - 14.3771$	0.364606	$Y = 0.103984 * V1103^{1.22921}$	0.356792	$Y = 7.266222 * \text{exp}(0.000000 * X)$



The individuals-moving range (I-MR) chart creates a picture of how the system changes over time.

The histogram shows the frequency of certain data values in a bar chart – this graph shows that most of the data for MLSS is between 3600 – 3893. Perhaps a discussion is needed?



New tools for working across multiple facilities: Multi-facility queries have been added to make it easier to view data from across facilities. Multiple facility databases can now be easily interrogated to create reports, aggregate variables for analysis and to get a high level view across facilities by looking at pertinent statistics like min, max and averages.

The example below shows all Flow data for any facilities we have in New Mexico.

Facility	VarNum	Variable Name	Units	Date	DDW	Time	Value	Test Value
1 Albuquerque	1011	WAS Flow	MGD	07/01/2014	Tue	12:00 AM	0.0120	0.012
2 Albuquerque	4001	Effluent Flow	MGD	07/01/2014	Tue	12:00 AM	2.542	2.542
3 Albuquerque	1	Influent Flow	MGD	07/01/2014	Tue	12:00 AM	2.610	2.610
4 Albuquerque	1001	RAS Flow	MGD	07/01/2014	Tue	12:00 AM	1.7500	1.75
5 Albuquerque	4001	Effluent Flow	MGD	07/02/2014	Wed	12:00 AM	2.675	2.675
6 Los Alamos	1011	WAS Flow	MGD	07/02/2014	Wed	12:00 AM	0.0110	0.011
7 Los Alamos	1001	RAS Flow	MGD	07/02/2014	Wed	12:00 AM	1.7500	1.75
8 Los Alamos	1	Influent Flow	MGD	07/02/2014	Wed	12:00 AM	2.750	2.75
9 Los Alamos	1	Influent Flow	MGD	07/03/2014	Thu	12:00 AM	3.200	3.2
10 Las Cruces	4001	Effluent Flow	MGD	07/03/2014	Thu	12:00 AM	3.115	3.115
11 Las Cruces	1001	RAS Flow	MGD	07/03/2014	Thu	12:00 AM	1.7500	1.75
12 Las Cruces	1011	WAS Flow	MGD	07/03/2014	Thu	12:00 AM	0.0150	0.015
13 Las Cruces	1	Influent Flow	MGD	07/04/2014	Fri	12:00 AM	3.800	3.8
14 Santa Fe	4001	Effluent Flow	MGD	07/04/2014	Fri	12:00 AM	1.717	1.717

Data can be viewed on the screen, copied to the clipboard, or exported to Excel.

To learn more about these new features and about additional ways to get even more out of your Hach WIMS system, ask your Hach representative about Hach's comprehensive training program.

For more information contact: your local sales representative, www.hach.com (search for WIMS), or call us at 800 677 0067.

FOR TECHNICAL ASSISTANCE, PRICE INFORMATION AND ORDERING:

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