Mango Project

Feature Review

&

Test Results

CS550: Software Design and Development Spring 2024

Prepared by:

Jessy Jacob Mesapam

Team members:

Prachi Lotake, Durga Venkata Vamsi Akula, Jashitha Boyapati, Deepthi Yanamala

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1. Report Charts Functionality

1.1.Feature Description

This feature aims to improve on the existing feature by providing the user the ability to add y-reference line (float value) and labels (of max char length 64) for each axis. This feature also gives the user the option to generate scatter or line plots. In the current version, the user can generate a report, and has the option to select the Point name, Data type, Colour, Consolidated chart. Individuals can then view the chart by clicking the "View Charts" button once the report is generated.

1.2.Test Case Review

1. Data Report chart Functionality						
Requirement Mapping		Test Cases			Testing Results	
Requirements ID	Test ID	Requirements	Test Instructions	Pass Cases	Test Result	Date
1.4.1, 1.4.2, 1.4.3, 1.4.4	1.1	Improved Descriptive labels and Reference lines check	1. Log into Mango server using valid credentials. 2. Click on "Reports" icon in navigation bar. This takes you to reports page. 3.Under "Report templates" window, select desired sensor point template.	In addition to Point name, Data type, Colour and Consolidated chart, "Report criteria" window shall include Chart Type, Title, x axis label, Y axis label and Y Reference Line.	Pass	04/20/2024
1.4.1.1	1.2	Chart Type Radio buttons	Repeat test instructions stated in Test ID – 1.1	Under Chart Type, there shall be radio buttons to select either Line plot or scatter plot.	Pass	04/20/2024

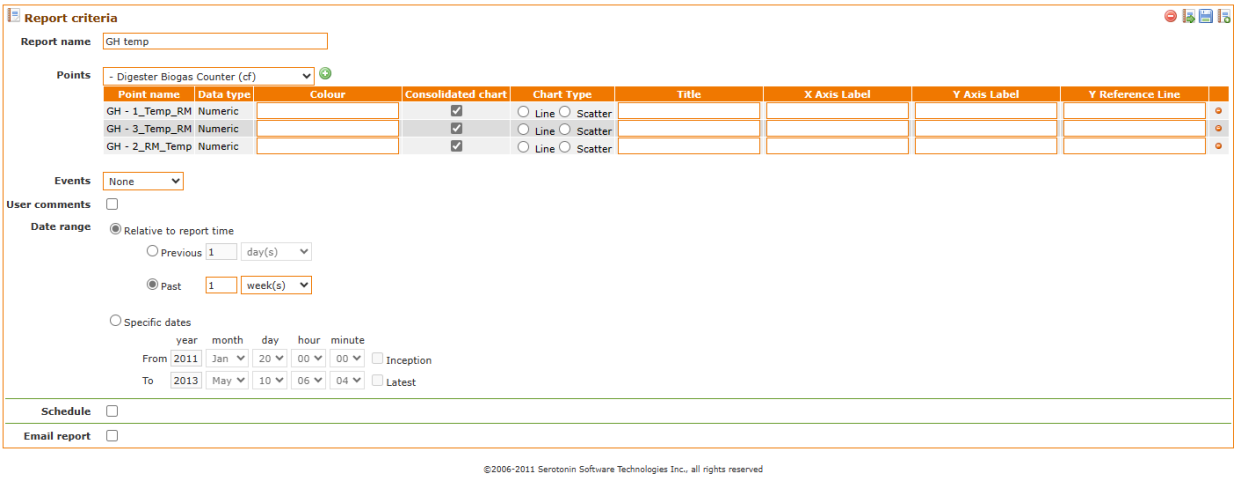
1.4.2	1.3	'Title' field input length check	1.Repeat test instructions stated in Test ID – 1.1 2. Input any string of length greater than 64 in Title field	The 'Title' field shall take input of only 64 characters.	Pass	04/20/2024
1.4.2.1	1.4	'Title' field Input check	1.Repeat test instructions stated in Test ID – 1.1 2. Input any string of length less than 64 in Title field. Include lower- and upper-case alphanumeric chars along with '_' in the string.	The 'Title' input field shall take alphanumeric characters and '_' special character only as a valid input.	Pass	04/20/2024
1.4.3.1	1.5	X & Y Axis labels input length check	1.Repeat test instructions stated in Test ID – 1.1 2. Input any string of length greater than 32 in X and Y axis label fields.	The 'X-axis Label' and 'Y-axis Label' fields shall take input of only 32 characters.	Pass	04/20/2024
1.4.3.2	1.6	X & Y Axis labels Input check	1.Repeat test instructions stated in Test ID – 1.1	The 'X and Y axis label' input field shall take alphanumeric	Pass	04/20/2024

			2. Input any string of length less than 32 in X and Y axis label field. Include lower- and upper-case alphanumeric chars along with '_' in the string.	characters and '_' special character only as a valid input.		
1.4.4.2	1.7	Y Reference line field input(float/int)	1.Repeat test instructions stated in Test ID – 1.1 2. Input float/int values in Y Reference line field.	'Y Reference line' field shall take float and int value as input.	Pass	04/20/2024
1.4.4.2	1.8	Y Reference line field input	1.Repeat test instructions stated in Test ID – 1.1 2. Input string in Y Reference line field.	Mango shall not allow string as input in Y Reference line field.	Pass	04/20/2024
1.4.4.3	1.9	Reference line in Report charts	1.Repeat test instructions stated in Test ID – 1.1 2.Provide all relevant values in respective fields under 'Report	1. Charts shall have reference line in it if a value is provided under 'Y Reference line' tab.	Pass	04/20/2024

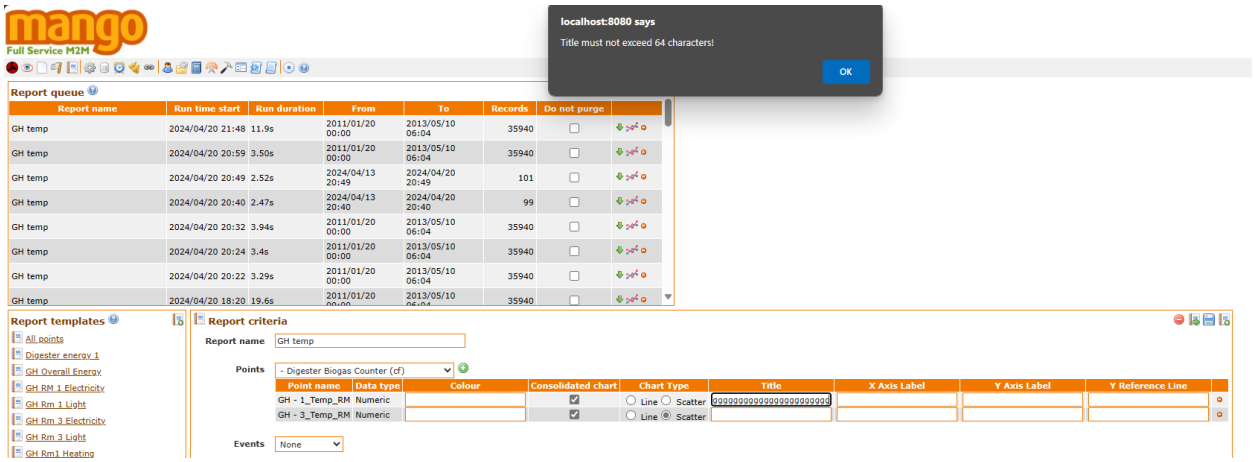
			Templates' window. 3.Click on 'Run Now' button present on top right side under 'Report Templates' window. This queues the chart in 'Report Queue'. 4. Click on 'view charts' button to generate charts.	2. In the absence of this value, there shall be no reference line seen in the plot.		

1.3.Results

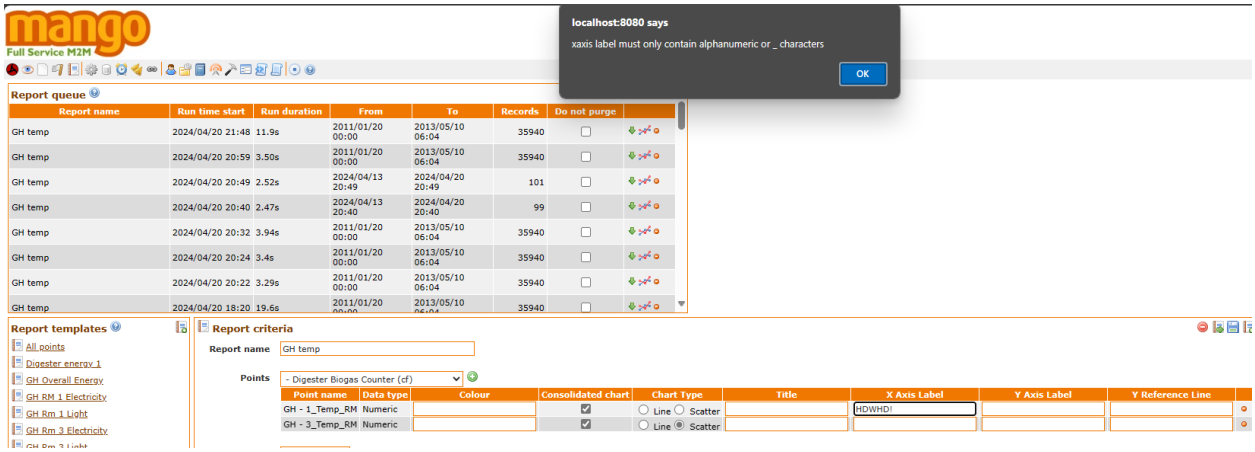
1.3.1. Report Criteria Box in Report Chart Page



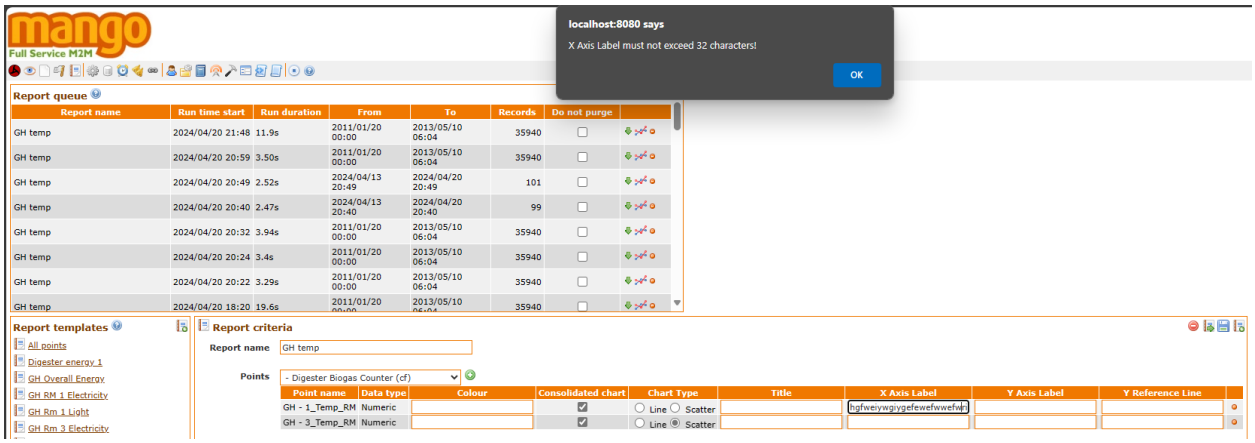
1.3.2. Title Input length check



1.3.3. Title, X Axis Label, Y Axis Label Input field check

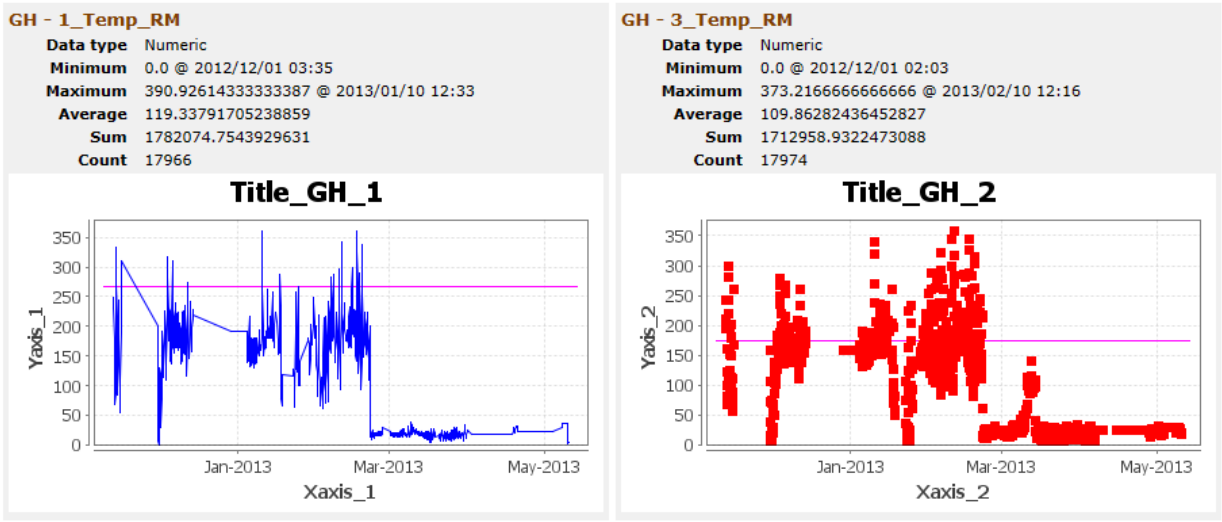


1.3.4. X Axis Label, Y Axis Label Input length check

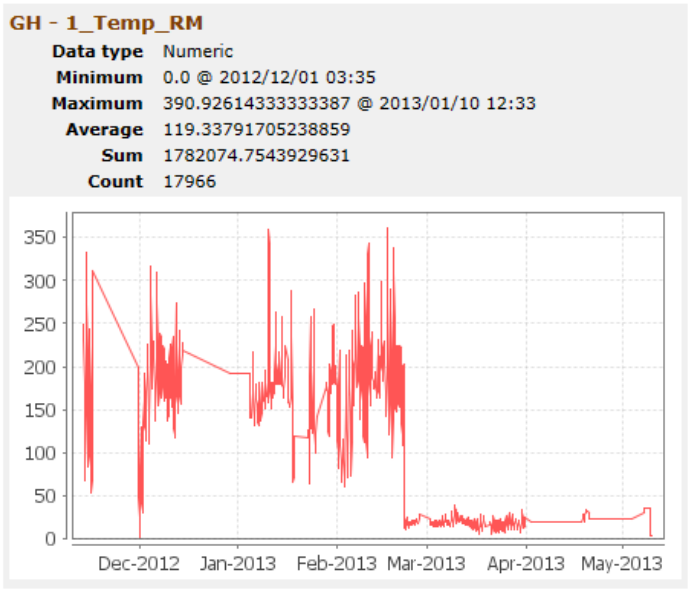


1.3.5. Y Reference Line Input field check

1.3.6. Chart generated with the newly added properties.



1.3.7. Chart generated with default conditions (to check previous functionality)



2. Landing Page functionality

2.1.Feature Description

This feature aims to create a customized landing page with a watchlist on the right half of webpage and a description of mango and the sensors used in the database on the left. The current version has the default landing page set to watchlist page and the user has an option to set or reset any page as the landing page with 'Make this my default page' button on the top-right of the navigation bar. A new 'Landing Page' button to reach the customized landing page is to be added to the navigation bar.

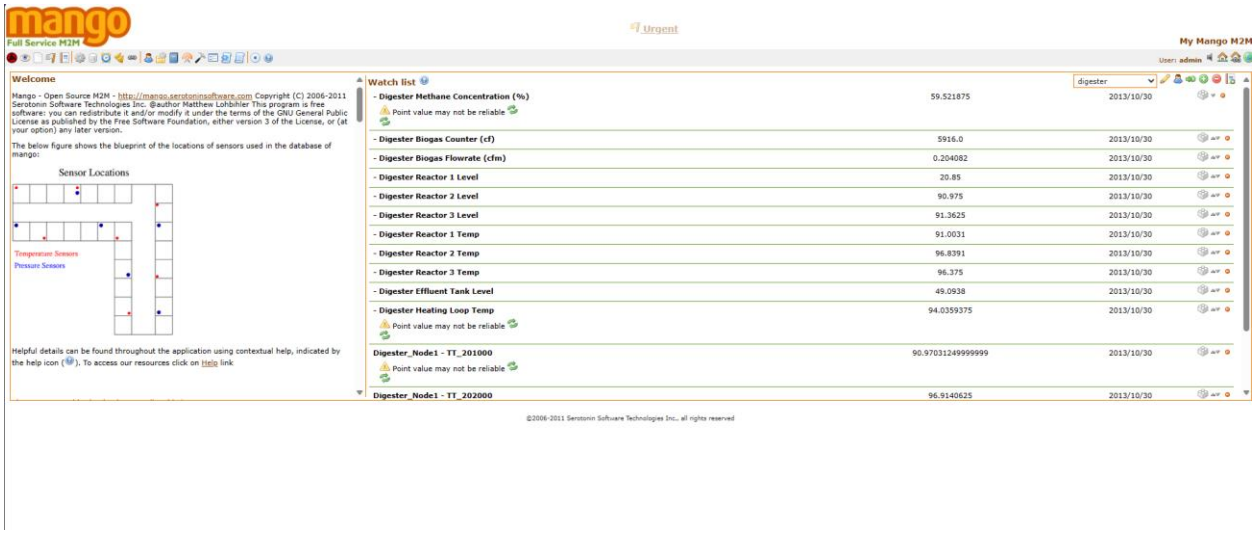
2.2.Test Case Review

2. Landing Page Functionality						
Requirement Mapping		**Test Cases**			**Testing Results**	
Requirement ID	**Test ID**	**Requirements**	**Test Instructions**	**Pass Cases**	**Test Result**	**Date**
2.4.1.1	2.1	Default landing page upon user login.	1. Log into the Mango server using valid credentials. 2. Check the landing page upon successful user login.	The left half shall have Mango software and sensor details and the right shall have watchlist.	Pass	04/15/2024
2.4.1.1.1	2.2	Left half of landing page upon successful login.	1. Log into the Mango server using valid credentials. 2. Check the left half of landing page upon successful user login.	1. The left half of webpage shall include a hyperlink with a message 'To access our resources, click on the "Help" link.' 2. The left half shall also have	Pass	04/15/2024

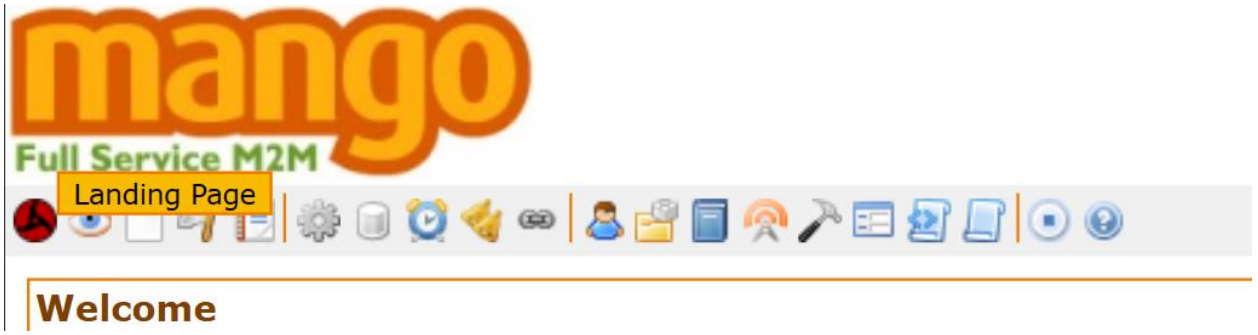
				descriptive diagram of the sensors included in the database.		
2.4.1.2	2.3	Right half of landing page upon successful login (user already selected sensor points of interest)	1. Log into the Mango server using valid credentials. 2. Check the right half of landing page upon successful user login.	Right half includes watchlist interface to allow the user to monitor sensor points.	Pass	04/15/2024
2.4.1.2	2.4	Right half of landing page upon successful login (user did not select sensor points of interest)	1. Log into the Mango server using valid credentials. 2. Check the right half of landing page upon successful user login.	There should be a message on the right window stating, 'Click on points to add them to the watchlist'.	Pass	04/15/2024
2.4	2.5	Landing page icon on Navigation bar	1. Log into the Mango server using valid credentials. 2. Check the Navigation bar	The navigation bar shall have a hyperlink icon at the left most corner with name as landing page.	Pass	04/15/2024

2.3.Results

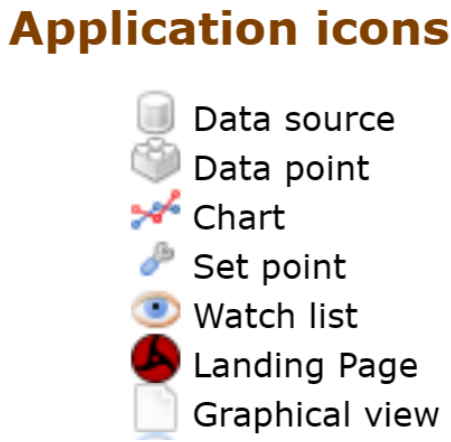
2.3.1. Mango New Landing Page



2.3.2. Landing Page icon in Navigation Bar



2.3.3. Additional information in Mango help page



3. Horizontal CSV functionality

3.1.Feature Description

This feature aims to alter the way data is spread across a CSV file that is produced when exporting a report generated such that each sensor has its own set of output parameters. The current version shows the data of all the sensor under the same five columns, while the updated feature will have these 5 columns separately for each sensor and can be read easily in a horizontal format. while the data for each individual sensor will be read in vertical.

3.2.Test Case Review

3. Horizontal CSV functionality						
Requirement Mapping		**Test Cases**			**Testing Results**	
Requirement ID	**Test ID**	**Requirements**	**Test Instructions**	**Pass Cases**	**Test Result**	**Date**
3.4.1	3.1	CSV file format check	1. Follow first three steps of Test ID – 1.1. 2. Select point, point names and the data range of time of your choice under the report tab. 3. Click on 'Run Now' button present on top right side under 'Report Templates' window. This queues the chart in 'Report Queue'. 2. Now click on 'Export Data' button to download csv file.	There shall be an addition of a new set of columns ("Point Name", "Time", "Value", "Rendered", "Annotation") adjacent to the previous columns in the report with every new point name identified. Check if all the selected sensor points are present in the generated CSV.	Pass	04/15/2024

3.3.Results

3.3.1. Generated CSV file from mango.

Point name	Time	Value	Rendered	Annotation	Point name	Time	Value	Rendered	Annotation
GH - 1_Temp_RM	11/13/2012 11:25	249	249		GH - 3_Temp_RM	11/13/2012 11:23	351	351	
GH - 1_Temp_RM	11/13/2012 11:25	249	249		GH - 3_Temp_RM	11/13/2012 11:25	351	351	
GH - 1_Temp_RM	11/13/2012 11:35	254.1293	254.1293		GH - 3_Temp_RM	11/13/2012 11:35	257.1063	257.1063	
GH - 1_Temp_RM	11/13/2012 11:45	252.9124	252.9124		GH - 3_Temp_RM	11/13/2012 11:45	227.0708	227.0708	
GH - 1_Temp_RM	11/13/2012 11:55	250.1249	250.1249		GH - 3_Temp_RM	11/13/2012 11:55	225.0708	225.0708	
GH - 1_Temp_RM	11/13/2012 12:05	248.6792	248.6792		GH - 3_Temp_RM	11/13/2012 12:05	224	224	
GH - 1_Temp_RM	11/13/2012 12:15	251.8709	251.8709		GH - 3_Temp_RM	11/13/2012 12:15	226.0583	226.0583	
GH - 1_Temp_RM	11/13/2012 12:25	252.6708	252.6708		GH - 3_Temp_RM	11/13/2012 12:25	228.1167	228.1167	
GH - 1_Temp_RM	11/13/2012 12:35	250.2374	250.2374		GH - 3_Temp_RM	11/13/2012 12:35	227.0208	227.0208	
GH - 1_Temp_RM	11/13/2012 12:45	244.3832	244.3832		GH - 3_Temp_RM	11/13/2012 12:45	222.3958	222.3958	
GH - 1_Temp_RM	11/13/2012 12:55	242.0041	242.0041		GH - 3_Temp_RM	11/13/2012 12:55	218.7062	218.7062	
GH - 1_Temp_RM	11/13/2012 13:05	242.4459	242.4459		GH - 3_Temp_RM	11/13/2012 13:05	215.7708	215.7708	
GH - 1_Temp_RM	11/13/2012 13:15	243.7292	243.7292		GH - 3_Temp_RM	11/13/2012 13:15	214.6854	214.6854	
GH - 1_Temp_RM	11/13/2012 13:25	245.0751	245.0751		GH - 3_Temp_RM	11/13/2012 13:25	214.3167	214.3167	
GH - 1_Temp_RM	11/13/2012 13:35	246.1125	246.1125		GH - 3_Temp_RM	11/13/2012 13:35	214.0167	214.0167	
GH - 1_Temp_RM	11/13/2012 13:45	247.2292	247.2292		GH - 3_Temp_RM	11/13/2012 13:45	214.0167	214.0167	
GH - 1_Temp_RM	11/13/2012 13:55	247.6208	247.6208		GH - 3_Temp_RM	11/13/2012 13:55	213.85	213.85	
GH - 1_Temp_RM	11/13/2012 14:05	247.3	247.3		GH - 3_Temp_RM	11/13/2012 14:05	212.8542	212.8542	
GH - 1_Temp_RM	11/13/2012 14:15	247.5333	247.5333		GH - 3_Temp_RM	11/13/2012 14:15	212.0833	212.0833	
GH - 1_Temp_RM	11/13/2012 14:25	247.15	247.15		GH - 3_Temp_RM	11/13/2012 14:25	211.8521	211.8521	