

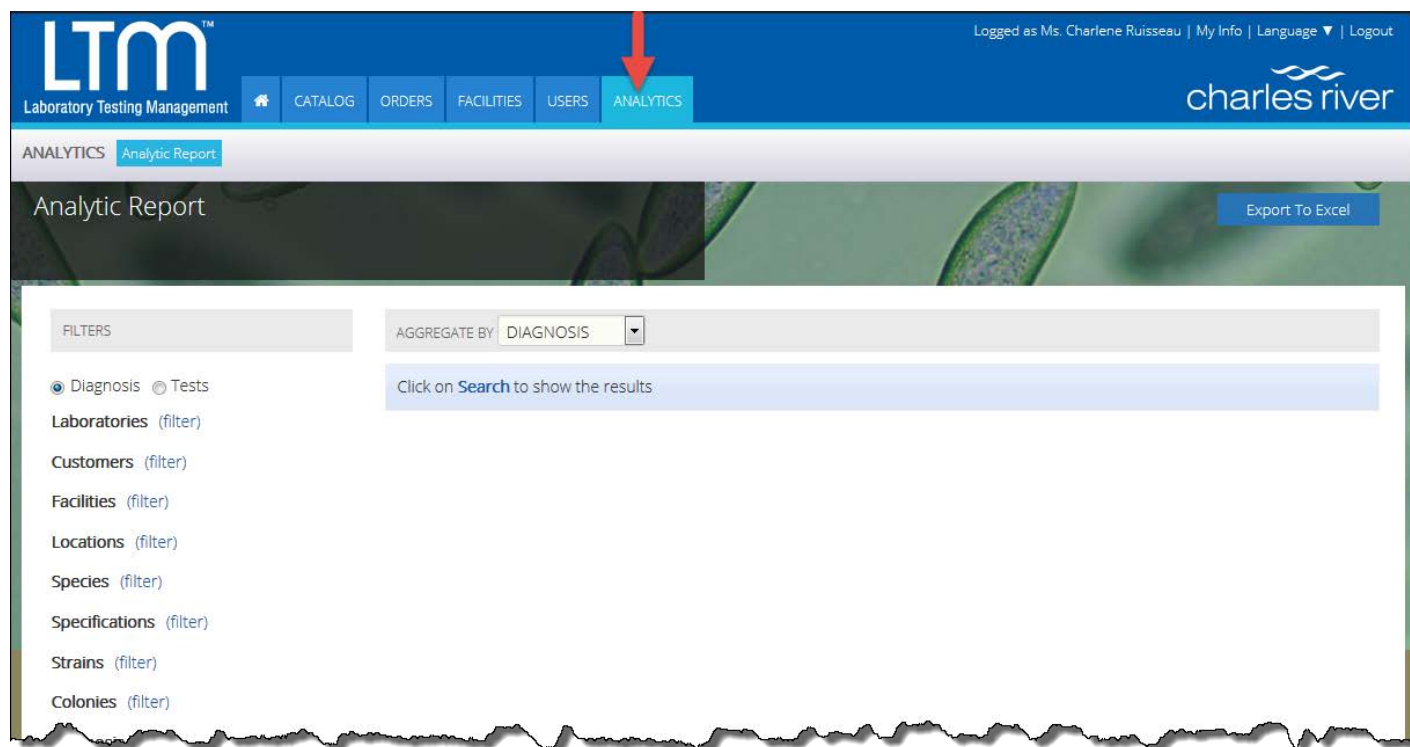


Laboratory Testing Management® (LTM™) User Guide

Using the Analytics page

If you are looking for the answers to questions like: "When was the last time we submitted samples to test for MNV?" or, "Have we ever had a positive finding for Sendai virus in room 48B?" the Analytics page is the place to look for that information.

To get to the Analytics page, click the **ANALYTICS** tab from anywhere in the application.



On the left side you will enter your search filters; on the right side you have the option of deciding if and how you would like the result set, aggregated and then exported to Excel.

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Beginning with the search filters on the left, first specify if you want to search for tests or diagnoses. When searching by tests, you are looking for specific assays performed, such as "MFIA MNV" or "MNV PCR." These are the names of the tests as shown in the Catalog and on the order result reports. If you are searching by diagnosis, you are looking for any assay that tests for MNV, regardless of testing method. So, when you search for MNV, the results return for both the MFIA MNV and MNV PCR assays.



There are number of different advanced options when searching. For example, you can further limit your search by selecting a lab or customer, or colony information. You can scroll through the list, or search in the box to find what you are looking for.

The image shows a search filter interface with a hand-drawn black border. At the top is a grey header labeled "FILTERS". Below it are radio buttons for "Diagnosis" (selected) and "Tests". There are three filter links: "Laboratories (filter)", "Customers (filter)", and "Facilities (filter)". A section titled "Locations" contains a search box with the placeholder text "Type or double-click for list" and a green plus icon. Below the search box is a scrollable list of location names: "QRT 2", "QRT 3", "Room 1", "Room 2", "Room 3", "Room 343", and "Room 4". Below the list is a "Collected From" section with two date input boxes labeled "YYYY-MM-DD" and "to YYYY-MM-DD". At the bottom of the filter section is a "Positives" section with a checkbox labeled "Only positive results". A blue "Search" button is located at the bottom of the entire filter area.

Multiple search terms can be added in each category. Please note that you must click the green plus sign to add the item as a search term and click the black X to remove.

FILTERS

Diagnosis Tests

Laboratories (filter)

Customers (filter)

Facilities (filter)

Locations

Room 3 ✖

Room 4 +

Species (filter)

Specifications (filter)

Strains (filter)

Colonies (filter)

Diagnosis (filter)

Collected From

YYYY-MM-DD to YYYY-MM-DD

Positives

Only positive results

Search

If you only want to look at a certain time period, you have the option to also specify a date range for the testing.

The screenshot displays a 'FILTERS' sidebar with the following sections:

- Diagnosis** (selected) / Tests
- Laboratories** (filter)
- Customers** (filter)
- Facilities** (filter)
- Locations**
 - Room 3 ✖
 - Room 4 ✖
 - Input field with a green '+' icon
- Species**
 - Mice (*General Health Reporting Group - NORTH AMERICA) ✖
 - Input field with text 'Type or double-click for list' and a green '+' icon
- Specifications** (filter)
- Strains** (filter)
- Colonies** (filter)
- Diagnosis** (filter)
- Collected From**
 - 2016-01-01 to YYYY-MM-DD
 - Calendar for November 2016 with the 18th selected

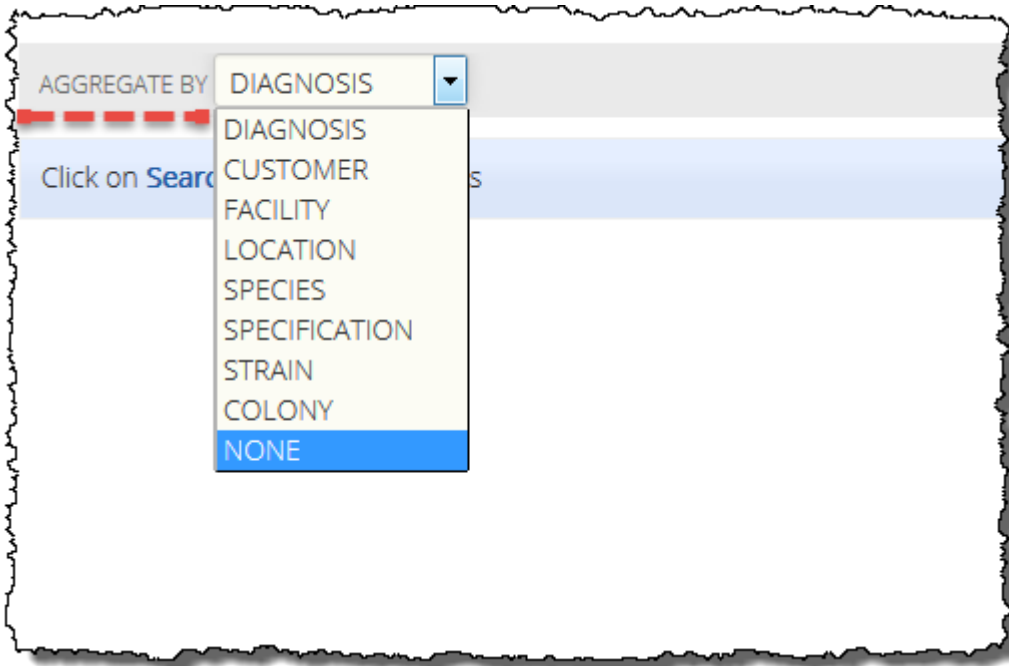
A vertical red dashed line is positioned to the right of the 'Collected From' section.

Lastly, you can limit your search to positive results only.

The screenshot shows a search filter panel with the following elements:

- FILTERS** (header)
- Diagnosis** **Tests**
- Laboratories** (filter)
- Customers** (filter)
- Facilities** (filter)
- Locations**
 - Room 3 ✖
 - Room 4 ✖
 - Type or double-click for list +
- Species** (filter)
- Specifications** (filter)
- Strains** (filter)
- Colonies** (filter)
- Diagnosis** (filter)
- Collected From**
 - 2016-01-01 to 2016-12-31
- Positives**
 - Only positive results
- Search** (button)

Once you have refined your search terms to the data you want to collect, the next step is to select how you would like your data aggregated. If you don't require aggregation and details down to the order level, select NONE. Otherwise, simply make an appropriate selection from the list, such as SPECIES or LOCATION.



Once you have entered in all your search terms and selected how you would like the data aggregated, click the **Search** button (1) to view results. At this time, you can export the data to Excel by clicking the **Export to Excel** button (2).

The screenshot shows the LTM Laboratory Testing Management web interface. At the top, there is a navigation bar with 'ANALYTICS' selected. Below it, the 'Analytic Report' page is displayed. On the left, there are various filter categories: Diagnosis, Tests, Laboratories, Customers, Facilities, Locations, Species, Specifications, Strains, Colonies, and Diagnosis. The 'Locations' filter is active, showing 'Room 3' and 'Room 4'. A 'Search' button is highlighted with a red circle and the number '1'. On the right, there is an 'Export To Excel' button highlighted with a red circle and the number '2'. Below the filters is a table with 14 columns: CUSTOMER, FACILITY, LOCATION, SPECIES, SPEC, STRAIN, COLONY, DIAGNOSIS, ORDER, COLLECTED, POSITIVE, NEGATIVE, EQUIVOCAL, and TESTED. The table contains 8 records of test results.

CUSTOMER	FACILITY	LOCATION	SPECIES	SPEC	STRAIN	COLONY	DIAGNOSIS	ORDER	COLLECTED	POSITIVE	NEGATIVE	EQUIVOCAL	TESTED
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867	K. oxytoca	2016000038	12-Jan-2016	1	1	0	2
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867	K. pneumoniae	2016000038	12-Jan-2016	1	1	0	2
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867	Murine Norovirus (MNV)	2016000046	15-Jan-2016	7	3	0	10
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867	Murine Norovirus (MNV)	2016000038	12-Jan-2016	1	1	0	2
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867	P. pneumotropica-Heyl PCR	2015000645	12-Jan-2016	1	1	0	2
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867	P. pneumotropica-Heyl PCR	2016000046	15-Jan-2016	1	1	0	2
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867	P. pneumotropica-Jawetz PCR	2015000645	12-Jan-2016	1	1	0	2
Training University	Animal Care Facility	Room 4	Mice	None	Sentinel	100868	P. pneumotropica-Heyl PCR	2016000173	29-Apr-2016	1	1	0	2

The screenshot shows an Excel spreadsheet titled 'Diagnosis.xlsx [Read-Only] - Excel'. The spreadsheet contains the same data as the table in the previous screenshot. The columns are labeled A through P, corresponding to the data fields: A (Customer), B (Facility), C (Location), D (Species), E (Specification), F (Strain), G (Colony Number), H (Colony Re), I (Diagnosis), J (Order Number), K (Collection Date), L (Positive), M (Negative), N (Equivocal), O (Tested), and P (Tested). The data is organized into rows, with the first row being the header and the subsequent rows containing the test results.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Customer	Facility	Location	Species	Specification	Strain	Colony Number	Colony Re	Diagnosis	Order Number	Collection Date	Positive	Negative	Equivocal	Tested	Tested
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867		K. oxytoca	2016000038	2016-01-12	1	1	0	0	2
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867		K. pneumoniae	2016000038	2016-01-12	1	1	0	0	2
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867		Murine Norovirus (MNV)	2016000046	2016-01-15	7	3	0	0	10
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867		Murine Norovirus (MNV)	2016000038	2016-01-12	1	1	0	0	2
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867		P. pneumotropica-Heyl PCR	2015000645	2016-01-12	1	1	0	0	2
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867		P. pneumotropica-Heyl PCR	2016000046	2016-01-15	1	1	0	0	2
Training University	Animal Care Facility	Room 3	Mice	None	Sentinel	100867		P. pneumotropica-Jawetz PCR	2015000645	2016-01-12	1	1	0	0	2
Training University	Animal Care Facility	Room 4	Mice	None	Sentinel	100868		P. pneumotropica-Heyl PCR	2016000173	2016-04-29	1	1	0	0	2

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