

DAIT-COVID-19-002

**A PROSPECTIVE COHORT STUDY TO ASSESS LONGITUDINAL IMMUNE RESPONSES IN
HOSPITALIZED PATIENTS WITH COVID-19**

IMMUNOPHENOTYPING ASSessment IN A CCOVID-19 COHORT (IMPACC)

LDMS User Guide

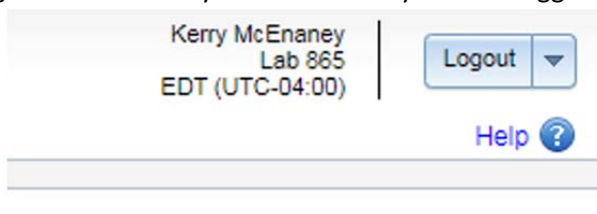
Sample Tracking and Labeling Guidelines

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1. Accessing LDMS

- 1.1. LDMS is a web-based database that can be accessed from any internet-connected computer by connecting to: <https://www.ldms.org/> and entering your unique username/password. Click on **LDMS LOGIN** in the top right corner.
- 1.2. To request a new user account, please contact Kerry McEnaney at Kerry.McEnaney@childrens.harvard.edu
- 1.3. The Lab# for the IMPACC study build is #865. If you have access to more than one lab in LDMS, please make sure you are signed into Lab 865 when processing IMPACC study samples. This is indicated in the top right corner under your name once you have logged in.

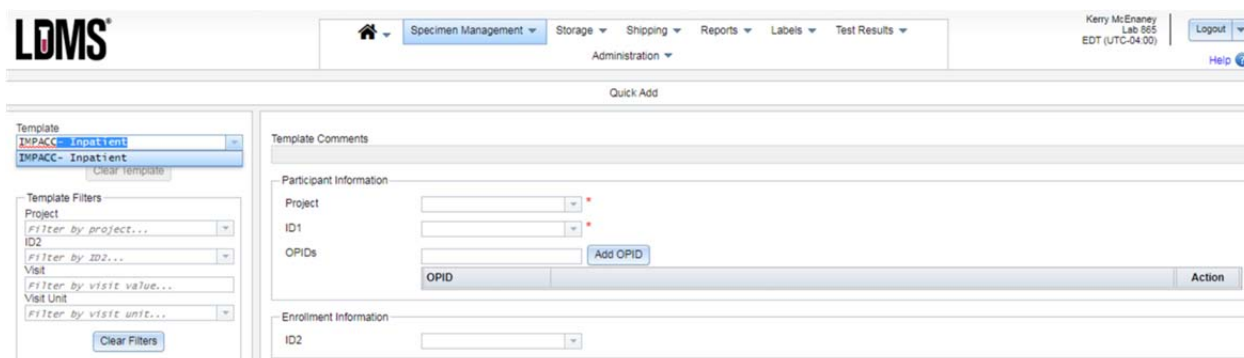


- 1.4. If you need to change labs, click the **Change** link next to the lab name in the upper-right corner, then select #865.

2. Adding samples to LDMS

2.1. Quick Add Templates

- 2.1.1. Data is entered into LDMS in a top-down fashion (i.e. Project->Patient->Primary Collection Tube-> Aliquot). It is highly recommended that Quick Add templates be used to enter visit data all at once. An **IMPACC-Inpatient** template has been set up for this project.
- 2.1.2. Under the **Specimen Management** menu, click on **Quick Add** which will bring up a blank Quick Add template. From the Templates dropdown menu on the left side, start typing and select **IMPACC-Inpatient** and then click **Confirm** to populate the Quick Add form with study specific primary collection tubes and aliquots.



2.2. Modifying Template to Match Recorded Values

- 2.2.1. Primary collection tubes and aliquots will be pre-populated (including expected volumes and sample condition) on the IMPACC-Inpatient template. These values should be updated with sample specific volumes/conditions etc. as recorded on the SPF.

2.2.1.1. Enter new data, or confirm/update pre-populated data in the following template data fields. These data are all reported on the SPF.

2.2.1.1.1. Enter **ID1/PTID** in the “Participant Information” box.

Participant Information

Project: IMPACC

ID1 / PTID: [dropdown] *

OPIDs: [input] Add OPID

OPID

2.2.1.1.2. Enter **ID2/Collection Kit ID** in the “Enrollment Information” box.

Enrollment Information

ID2 / Collection Kit ID: [dropdown]

2.2.1.1.3. Update **ID3/Visit ID** in the “Visit Information” box. Please enter one of the following Visit IDs: Visit 1, Visit 2, Visit 3, Visit 4, Visit 5, Visit 6, 24 Hour Care Escalation, or 96 Hour Care Escalation.

2.2.1.1.4. **Clinic** should be left blank

2.2.1.1.5. Enter **Collection Date** in dd/mm/yyyy format (or click on the dropdown arrow to bring up a calendar in order to select the date). Click **Confirm** to assign this collection date to all primary collection tubes.

2.2.1.1.6. Enter **Visit Value** by entering the Visit Number (or 24/96 if a Care Escalation visit).

2.2.1.1.7. Confirm **Visit Units** are set to “Vst” for a scheduled visit, or Update to “Uns” for an unscheduled visit (i.e. Care Escalation visit).

Visit Information

ID3 / Visit ID: ENTER VISIT ID

Clinic: [dropdown]

Collection Date: dd/MM/yyyy *

Visit Value: [input]

Visit Units: Vst

2.2.1.1.8. Update **Condition** based on the observed condition of the primary sample tube in the “Primary Information” box.

2.2.1.1.9. Enter **Collection Time** in 24hr format for each of the primary collection tubes in the “Primary Information” box.

2.2.1.1.10. Enter **Received Time** (time samples were received in lab) in 24hr format for each of the primary collection tubes in “Primary Information” box.

- 2.2.1.1.11. Confirm **Volume and Volume Units** (which are pre-populated) match what was actually observed/recorded on the SPF.
- 2.2.1.1.12. Enter **Additional Time** (processing time as calculated and reported on SPF) in minutes.
- 2.2.1.1.13. If any primary samples were not collected (e.g. Endotracheal Aspirate for non-intubated patients), **Delete** a primary collection tube by clicking on the dropdown arrow next to the “Edit” menu on the same line as the sample and select “Delete.”
- 2.2.1.1.14. Click on each row in the “Primary Information” box to bring up the predefined aliquots in the “Aliquots for Primary X” box below.
- 2.2.1.1.15. Confirm aliquot **Condition** or update if anything other than “SAT” for satisfactory.
- 2.2.1.1.16. Confirm aliquot **Volume** or update if volume is different than pre-populated/protocol defined volume.
- 2.2.1.1.17. After all primary and aliquot samples have been updated, click **ADD** to add primary and aliquot information to LDMS.

The screenshot displays the LDMS interface. The top section, titled "Primary Information", contains a table with columns: #, Primary Type, Additive Type, Condition, Collection Time, Received Date, Received Time, Volume, Volume Units, Additional Time, Additional Time Units, and Other Specime. There are four rows, with row 4 highlighted in blue. A red arrow points to row 4. Below this table is a section titled "Aliquots for Primary #4" which contains a table with columns: Total Aliquots, Derivative Type, Sub A/D Type, Condition, Volume, Volume Units, and Other Specimen ID. There is one row in this table. At the bottom of the interface, there is a blue "Add" button highlighted with a red box.

3. Generating Labels at Time of Processing

- 3.1. After adding samples from the **Quick Add** page, you will be brought to a confirmation page indicating successful upload of each of the aliquots entered on the previous page. Confirm the aliquots were added correctly. Then click **Print Labels** to access the Label Generation pop-up window.

Quick Add

Template
Select a template...

Clear Template

Template Filters
Project
Filter by project...
ID2
Filter by ID2...
Visit
Filter by visit value...
Visit Unit
Filter by visit unit...
Clear Filters

Successfully Added for IMPACC/000-1111/TEST2
8x BLD/SST/SER @ 100 UL
2x BLD/EDT/BLD @ 270 UL
2x BLD/EDT/CEL @ 50 UL
1x BLD/EDT/PLA @ 500 UL
1x TCA/NON/NON @ 1 EA
3x TCA/NON/NON @ 500 UL
4x NON/NON/NON @ 1 EA

Print labels

Participant Information
Project
ID1
OPIDs
Add OPID
OPID

- 3.2. From the **Print Labels** pop-up window, select "IMPACC-Inpatient" from the "Format" dropdown.
- 3.3. "Size" should be set to "Barcode Label 19 – 1" x 1" – Brady 300 MVP Freezerbondz II (8 rows).
- 3.4. Click **Generate Labels** on the left hand side to generate a PDF of the aliquot labels associated with this visit. The PDF can then be sent to your label printer for printing. Be sure to not click "Close" at the bottom of the Print Labels pop-up until you have generated the label PDF.

Print Labels

webldms.org/Labels/Print/PrintLabelsForSpecimens

Print Labels

Project
IMPACC

Use Defaults
☒

Format
IMPACC-Inpatient

Barcode Content
LDMS Standard

Size
Barcode Label 19 - 1" x 1" - Brady 300 MVP Freezerbondz II (8 rows)

0

Generate Labels

Close

- 3.5. Label each aliquot tube with the appropriate sample label.
- 3.6. IMPACC Sample Label

2D Barcode

Global Specimen ID

Collection Date

Assay to be run

IMPACC

0865-00005G00-001

000-1111 VISIT 2

23/Apr/2020

BLD SST

ANTI-SARS-COV2

Study Name

Patient ID and Visit Number

Primary and Additive

4. Reprinting Labels

4.1. Labels can be printed from multiple screens after samples have been added to LDMS.

4.2. From Storage:

4.2.1. Navigate to the box containing the sample you would like to reprint a label for. From the dropdown menu, select **Print Labels** to open up the **Print Labels** pop-up window. Select the samples you would like to reprint labels for, and follow label generation steps above.



4.3. From Specimen Management:

4.3.1. Using the filters on the left hand side, filter to the Patient->Study Visit you would like to reprint labels for.

4.3.1.1. From here, you can either choose to print all aliquot labels from a given visit by selecting **Print Labels** from the dropdown menu associated with the Visit.

Visits for ID2 / Collection Kit ID TEST2

Visit	Collection Date	ID3 / Visit ID	Clinic	Action
2 Vst	23/Apr/2020	VISIT 2		Edit

Primary Specimens for Visit 2 Vst, 23/Apr/2020

Global Specimen ID	Status	Collection Time	Primary Type	Additive Type	Specimen Condition	Available Volume	Other Specimen ID	Specimen ID	Additional Time	Action
										Add New Primary Print Labels Delete

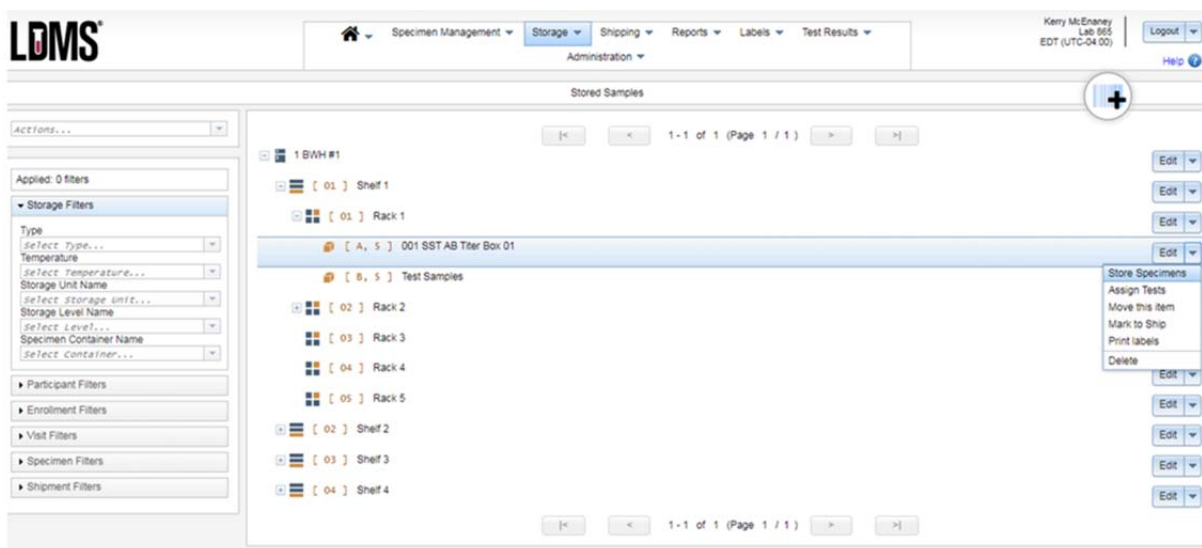
4.3.1.2. OR you can generate labels for individual aliquots as needed, by selecting the **Print Labels** from the dropdown menu associated with a given aliquot.

Global Specimen ID	Status	Derivative Type	Sub Add/ Der Type	Specimen Condition	Available Volume	Other Specimen ID	Specimen ID	Action
0865-00005G00-001		SER	NON	SAT	100 UL	ANTI-SARS-COV2		Edit
0865-00005G00-002		SER	NON	SAT	100 UL	OLINK		Assign Tests Mark to Ship Print Labels Delete
0865-00005G00-003		SER	NON	SAT	100 UL	ANTI-RBD/ISOTYP		
0865-00005G00-004		SER	NON	SAT	100 UL	ANTI-RBD/ISOTYP		

4.3.2. This will bring up the **Print Labels** pop-up window. Follow directions above to generate labels from here.

5. Storing Samples

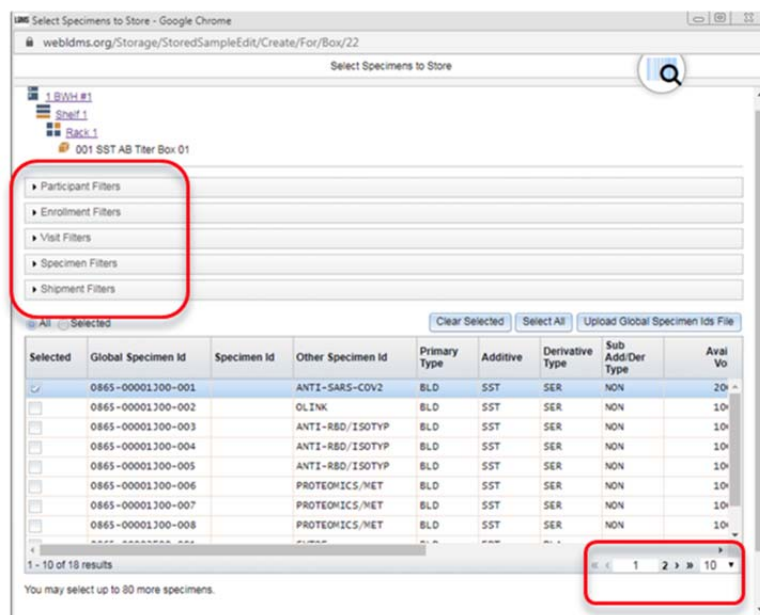
5.1. From the **Storage** menu, select **Stored Samples** to be brought to the storage tree. Navigate to the Shelf and Rack and storage Box in your Study Center's freezer where you would like to store the sample. From the dropdown menu on the same line as the box you would like to store the sample in, click **Store Specimens**.



5.2. The **Store Specimens** window will open. From here, you can choose to do one of the following:

5.2.1. Use filters to find specimens to limit the specimens displayed at the bottom of the page (If you can't find the specimen you are looking for, confirm your display is not limiting your results)

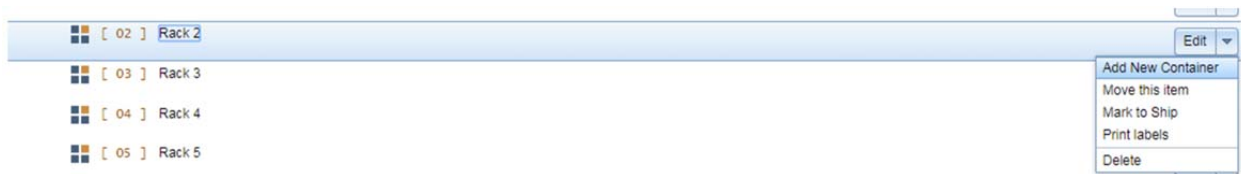
5.2.2. Scan a specimen barcode by clicking on the barcode icon at the top of the window.



- 5.2.3. If you do not see your sample, make sure that you are not limited by the display parameters. These can be adjusted in the bottom right corner of the **Store Specimens** box.
- 5.3. For each specimen to be stored, select the check box in the **Selected** column. You can also click **Select All** to store all currently displayed specimens.
- 5.3.1. If you change filters at this point, any specimens selected will remain selected.
- 5.4. At the bottom of the **Select Specimens** window, click **Continue** (this will store your samples in the desired location).
- 5.5. Boxes are configured to autofill Left to Right, Top to Bottom (e.g. A1, A2, A3...B1, B2, B3, etc). If you need to rearrange a sample location within a box, click **Edit** on the sample row edit menu and the **Edit Stored Specimen** box will open up. Click the appropriate cell in the box where you would like to store your sample and click **Save** to save the new sample location.
- 5.5.1. Purple = current specimen location
- 5.5.2. Grey = unavailable- contains another specimen
- 5.5.3. Light blue = selected NEW specimen location

6. Creating Containers (Boxes) Using Storage Template

- 6.1. From the **Storage Tree**, navigate to the location in your freezer/ambient storage where you would like to add a new container. Click on **Add New Container** from the dropdown edit menu associated with that storage location. This will bring up the **Create Storage Container** pop up.



- 6.2. From the **Create Storage Container** pop-up, enter the number of boxes you would like to create in this location at this time. Select "Freezer Box" from the template dropdown to auto populate a 9x9 alphanumeric labeled box. Select **Continue** to create the box.

Create Storage Container

001 BWH Freezer #1

- Shelf 1
- Rack 2

Number to Add: 1

From Template: Freezer Box

Number of Rows: 9

Number of Columns: 9

Positions Only: ☐

Coordinate Order: Row/Column

Column Labeling: Numeric Left to Right

Row Labeling: Alphabetic Top to Bottom

Fill Order: Left to Right, Top to Bottom Reset

Excluded Positions:

Preview

	1	2	3	4	5	6	7	8	9
A	A,1	A,2	A,3	A,4	A,5	A,6	A,7	A,8	A,9
B	B,1	B,2	B,3	B,4	B,5	B,6	B,7	B,8	B,9

6.3. The box will now appear in your storage tree. To rename the box, click on EDIT (not the dropdown) to bring up the **Edit Storage Container** pop-up window. From here you can enter the new name of the box per naming structure outlined below. Click **Save** to save changes.

webldms.org/Storage/BoxEdit/Edit/366

Edit Storage Container

001 BWH Freezer #1

- Shelf 1
- Rack 2
- BOX 1

Reports

Name: BOX 1

Number of Rows: 9

Number of Columns: 9

Positions Only: ☐

Coordinate Order: Row/Column

Column Labeling: Numeric Left to Right

Row Labeling: Alphabetic Top to Bottom

Fill Order: Left to Right, Top to Bottom Reset

Excluded Positions:

Preview

	1	2	3	4	5	6	7	8	9
A	A,1	A,2	A,3	A,4	A,5	A,6	A,7	A,8	A,9
B	B,1	B,2	B,3	B,4	B,5	B,6	B,7	B,8	B,9
C	C,1	C,2	C,3	C,4	C,5	C,6	C,7	C,8	C,9

7. Box Labels

7.1. Two sets of labels for each box are provided by the CDCC as they cannot be generated in LDMS. Box labels should be affixed to the large face on the top of the box top, as well as to the

side wall of the box bottom (to ensure easy identification from a top or side view, as well as identify the contents of the box if the top and bottom of the box get separated).

- 7.2. Box names consist of Study Center # followed by the Primary sample collection tube identifier (e.g. SST, WB), the assay to be performed (e.g. AB Titer, Olink, AB Isotype, etc.) and finally the box number.

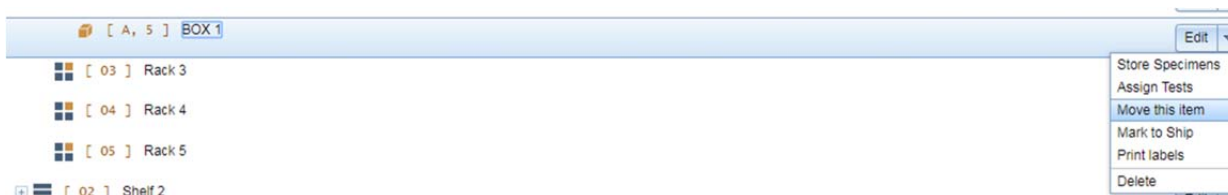
Box Name	Assay	Tube/Color Coder	Samples per visit
(Center #) SST AB Titer Box 01	Serum AB titer	Blue	1
(Center #) SST Olink Box 01	Serum Olink	Green	1
(Center #) SST AB Isotype Box 01	Serum AB Isotype	Purple	3
(Center #) SST ProtMet Box 01	Serum P/M	Brown	3
(Center #) WB RNA-seq Box 01	WB Bulk RNA-seq	Crystal Gen	2
(Center #) WB ProtMet Box 01	WB P/M	Yellow	1
(Center #) WB GWAS Box 01	WB GWAS	Pink	1*
(Center #) WB CyTOF Box 01	WB CyTOF	Gray	1
(Center #) Swab Box 01	SWAB	Zymo tube and swab	1
(Center #) TCA RNA-seq Box 01	TA Bulk RNA-seq	Zymo tube	2
(Center #) TCA CyTOF Box 01	TA CyTOF	Orange	1

*GWAS = 1 sample per patient, taken at an early timepoint (preferably Visit 1)

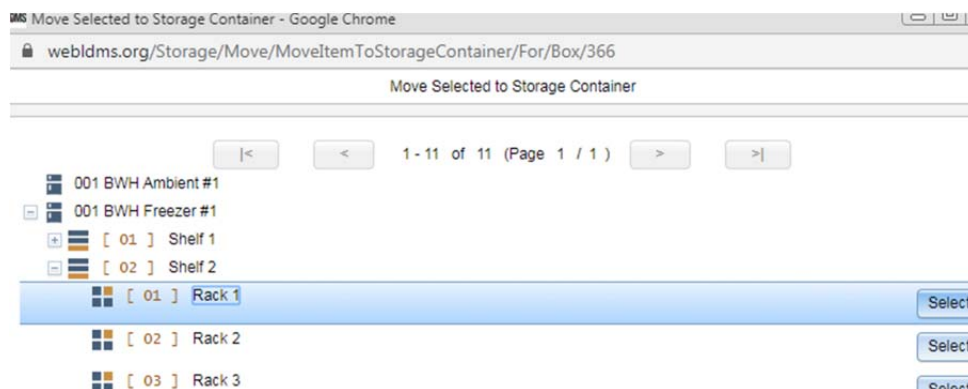
- 7.3. If you required additional box labels, please contact Kerry McEnaney (Kerry.McEnaney@childrens.harvard.edu) as soon as possible so that there will be enough time to ship these labels to your site.

8. Moving Boxes in Freezer or Ambient Storage

- 8.1. To move boxes from one location to another within the storage tree, select **Move This Item** from the edit drop down on the line associated with the box you would like to move. This will open the **Move Selected Storage Container** box.



- 8.2. From the **Move Selected Storage Container** box, navigate to the new location you would like to move the box to. Navigate to the new storage container location from the storage tree, and click **Select** to move the box to this new location. Your box will move to the new location.



9. Adding Freeze Time for Samples Previously Stored at Ambient Temperature

- 9.1. From the Specimen Management menu, navigate to and select the sample you want to add the freezing time to. Double check the Visit ID and the Sample ID match your intended selection.
- 9.2. Click on the “Edit” menu on the same line as your selected sample.

OPIDs

ID2 / Collection Kit ID

[Edit ID2 / Collection Kit ID](#)

Visits for ID2 / Collection Kit ID TEST

Visit	Collection Date	ID3 / Visit ID	Clinic	Action
1 Vst	23/Apr/2020	VISIT ID		Edit

Primary Specimens for Visit 1 Vst, 23/Apr/2020

Global Specimen ID	Status	Collection Time	Primary Type	Additive Type	Specimen Condition	Available Volume	Other Specimen ID	Specimen ID	Action
0865-00001J00-000		11:15	BLD	SST	SAT	7.5 ML			Edit
0865-00002F00-000		11:00	BLD	EDT	SAT	2.5 ML			Edit
0865-00004B00-000		11:00	NPH	NON	SAT	1 EA			Edit

- 9.3. This will open the “Edit Specimen” pop-up window. Confirm the Global Specimen ID in this pop-up window matches the Global Specimen ID on the sample label.

IMPACC 000-0000
 TEST
 1 Vst VISIT ID 23/Apr/2020
 0865-00004B00-000
 0865-00004B00-001

Global Specimen ID	0865-00004B00-001		
Specimen ID			
Other Specimen ID	NPH SWAB		
Enrollment	IMPACC/TEST *		
Derivative Type	SWB *		
Sub Add/Der Type	Sub Add/Der Type	Sub Add/Der Reagent	
	NON *		
Is Available	<input checked="" type="checkbox"/>		
Original Volume	Original Volume	Original Volume Units	
	1.00 *	EA *	
Available Volume	Available Volume	Available Volume Units	
	1.00 *	EA *	
Condition	Specimen Condition	Secondary Condition	
	SAT *		
Specimen Processing Details	Processing Tech Initials	Processing Date	Processing Time
	KM	23/Apr/2020	HH:mm
Frozen	Frozen Date	Frozen Time	
	13/Jul/2020	10:00	

Barcode



IMPACC
 0865-00004B00-001
 000-0000 VISIT ID
 23/Apr/2020
 NPH NON
 NPH SWAB

Global Specimen ID
 matching the barcode

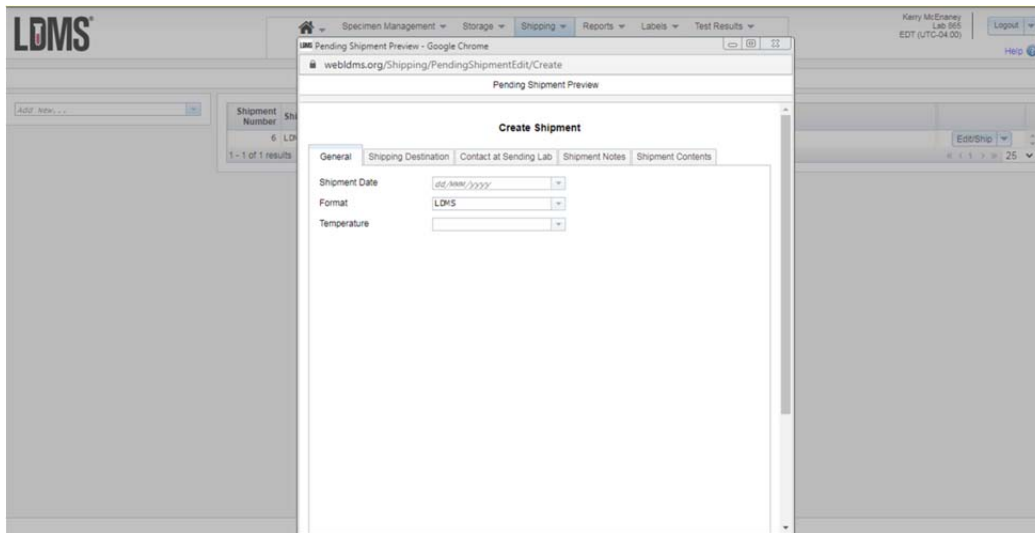
9.4. Update the Frozen Date and Frozen Time in this pop-up window with information recorded for specimen freeze time.

Frozen	Frozen Date	Frozen Time
	13/Jul/2020	10:10
Additional Time	Additional Time	Additional Time Units
Total Cell Count		
	×10 ⁶	
Tube Count		
Thaw Count	0 *	
Stored	No	
Shipped	No	
Imported	No	
Reason Specimen Not Collected		
Assigned Tests		
Comments	Frozen at a later date	

- 9.5. Update the Comment to indicate “Frozen at a later date”
- 9.6. Save

10. Creating a Shipment

- 10.1. Select “Pending Shipments” from the Shipping Menu Dropdown.
- 10.2. From left-hand side, select “Create Shipment” from the Action Bar. This will open a new “Create Shipment” pop-up window.



- 10.3. Under the “General” tab:
 - 10.3.1. Enter the **Shipping Date** (or expected shipping date)
 - 10.3.2. Select **File Format** of .CSV
 - 10.3.3. Select **Temperature** of Dry Ice for all samples
- 10.4. Under the “Shipping Destination” tab:
 - 10.4.1. Select the desired core lab shipping contact information for the sample type you are shipping.
- 10.5. Under the “Contact at Sending Lab” tab:
 - 10.5.1. Enter your **Name**
 - 10.5.2. Enter your **Phone Number**
 - 10.5.3. Enter your **Email Address**
- 10.6. Under the “Shipment Notes” tab:
 - 10.6.1. Enter and **Comments** or **Disclaimers** related to this shipment (e.g. known missing samples, partially empty box, intentionally skipped cell in box, etc.)
- 10.7. Under the “Shipment Contents” tab:
 - 10.7.1. Select “Add New” Storage Container which will open the Storage Structure pop-up window. Navigate down through the storage units, shelves, and racks to the box(es) you would like to ship.

LDMS Pending Shipment Preview - Google Chrome

webldms.org/Shipping/PendingShipmentEdit/Create

Pending Shipment Preview

Create Shipment

General Shipping Destination Contact at Sending Lab Shipment Notes **Shipment Contents**

Shipment Size: 0 specimens (max: 3500)

0%

Shipping Containers [Add New](#)

# of Specimens	Rows	Columns	Labeling Order	Labeling Method	Fill Order

Storage Containers [Add New](#)

# of Specimens	Container

[Shipping Manifest Report](#) [Shipment Storage Report](#) [Shipping Container Report](#) [Print Labels](#)

10.7.2. Select the check box next to the right of each box you would like to ship. Once all boxes are selected, click on “Add Selected to Shipment” and the selected boxes will now be listed in the Shipment Contents tab.

LDMS Storage Containers - Google Chrome

webldms.org/Shipping/PendingShipmentEdit/StorageContainer/0

Storage Containers

Applied: 0 filters

Storage Container Filters

[Clear Selections](#) [Add Selected to Shipment](#)

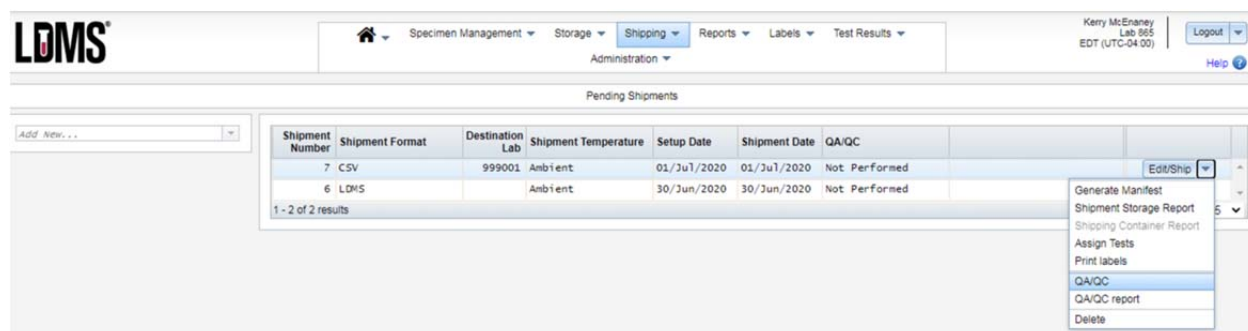
1 - 20 of 20 (Page 1 / 1)

- ☐ 001 BWH Ambient Storage
- ☐ 001 BWH Freezer #1
 - ☐ [01] Shelf 1
 - ☐ [01] Rack 1
 - ☒ [A, 5] 001-SST-AB Titer Box 01
 - ☐ [B, 5] 001-SST-Olink-Box 01
 - ☐ [C, 5] 001-SST-AB Isotype-Box 01
 - ☐ [D, 5] 001-ProtMet-Box 01
 - ☐ [A, 4] 001-WB RNA-seq- Box 01
 - ☐ [B, 4] 001-WB ProtMet- Box 01
 - ☐ [C, 4] 001-WB GWAS-Box 01
 - ☐ [D, 4] 001-WB CyTOF-Box 01
 - ☐ [A, 3] 001-TCA RNA-seq- Box 01
 - ☐ [B, 3] 001-TCA CyTOF-Box 01

10.7.3. Save

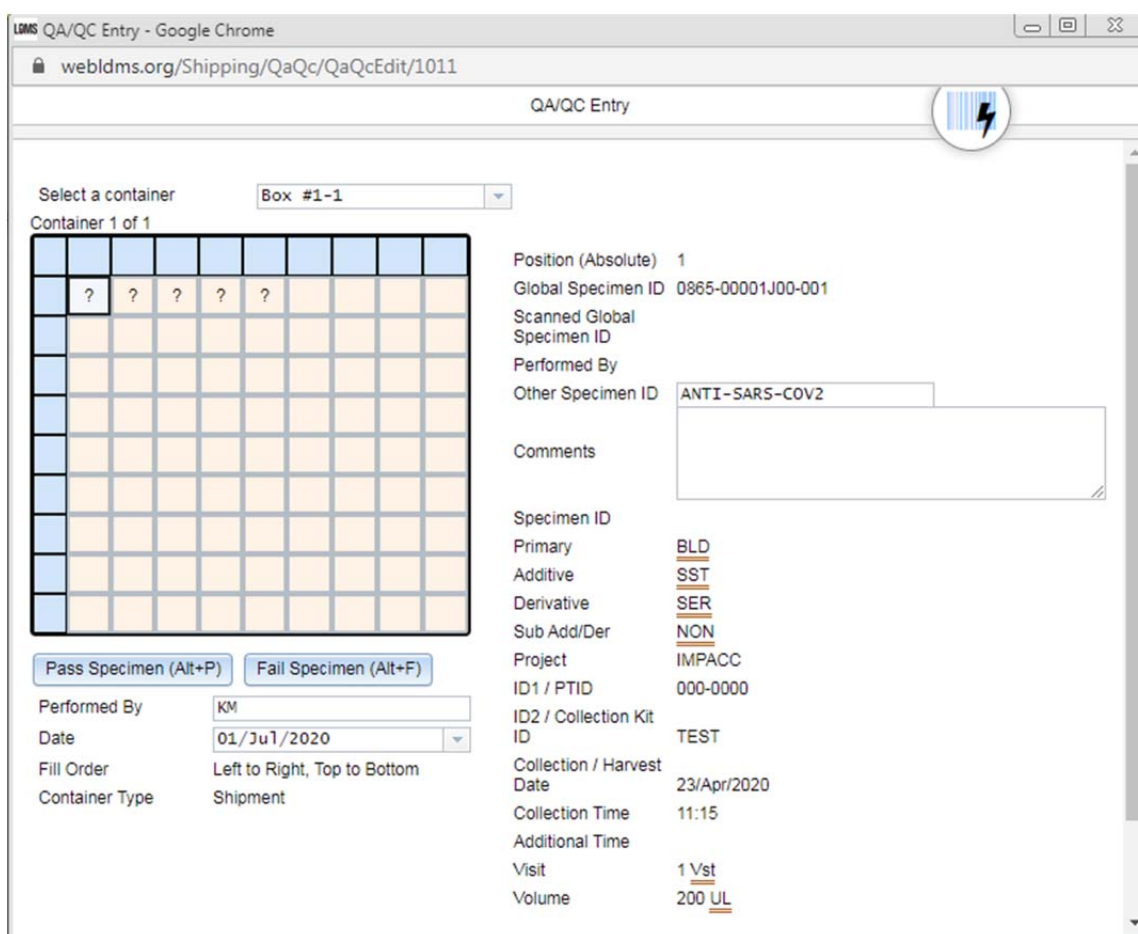
11. Shipping QA/QC process

- 11.1. The QA/QC process is designed to confirm the samples listed in LDMS are the samples that are being shipped. You will need a barcode scanner capable of scanning 2D barcodes for this process.
- 11.2. Select QA/QC from the down arrow menu next to the saved shipment in order to open the QA/QC pop-up window.



The screenshot shows the LDMS web application interface. At the top, there is a navigation bar with the LDMS logo and several menu items: Specimen Management, Storage, Shipping, Reports, Labels, and Test Results. A user profile for Kerry McEnaney is visible in the top right corner. Below the navigation bar, there is a section titled "Pending Shipments" which contains a table with columns: Shipment Number, Shipment Format, Destination Lab, Shipment Temperature, Setup Date, Shipment Date, and QA/QC. Two shipments are listed: Shipment 7 (CSV format, 999001 destination, Ambient temperature, Setup Date 01/Jul/2020, Shipment Date 01/Jul/2020, QA/QC Not Performed) and Shipment 6 (LDMS format, Ambient temperature, Setup Date 30/Jun/2020, Shipment Date 30/Jun/2020, QA/QC Not Performed). A dropdown menu is open next to Shipment 6, showing options: Generate Manifest, Shipment Storage Report, Shipping Container Report, Assign Tests, Print Labels, QA/QC (highlighted), QA/QC report, and Delete.

- 11.3. Select the container you are verifying against the shipment manifest from the "Select a Container" drop down.

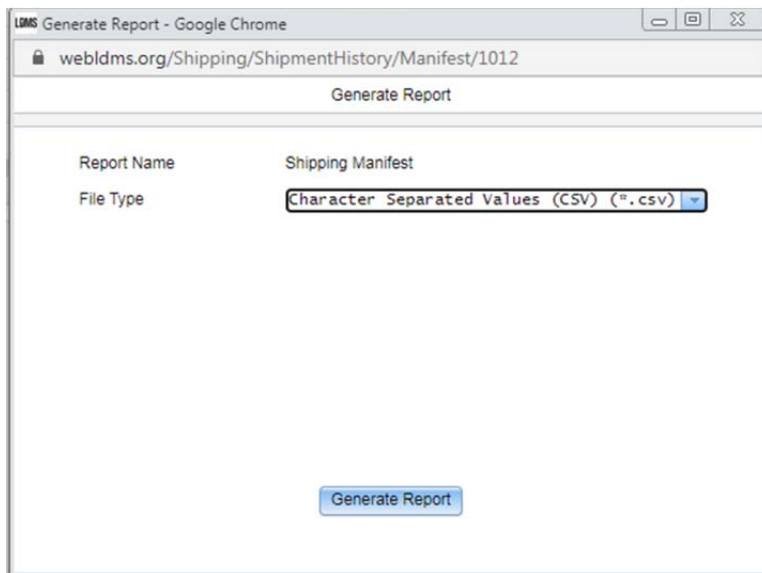


The screenshot shows the LDMS QA/QC Entry form in a Google Chrome browser window. The browser address bar shows the URL: webldms.org/Shipping/QaQc/QaQcEdit/1011. The form title is "QA/QC Entry". On the left, there is a "Select a container" dropdown menu with "Box #1-1" selected. Below this is a "Container 1 of 1" label and a grid of 10 columns and 10 rows. The first row has question marks in the first five columns. To the right of the grid, there are several input fields and labels: "Position (Absolute) 1", "Global Specimen ID 0865-00001J00-001", "Scanned Global Specimen ID", "Performed By", "Other Specimen ID ANTI-SARS-COV2", "Comments", "Specimen ID", "Primary BLD", "Additive SST", "Derivative SER", "Sub Add/Der NON", "Project IMPACC", "ID1 / PTID 000-0000", "ID2 / Collection Kit ID TEST", "Collection / Harvest Date 23/Apr/2020", "Collection Time 11:15", "Additional Time", "Visit 1 Vst", and "Volume 200 UL". At the bottom left, there are two buttons: "Pass Specimen (Alt+P)" and "Fail Specimen (Alt+F)". Below these buttons, there are input fields for "Performed By" (KM), "Date" (01/Jul/2020), "Fill Order" (Left to Right, Top to Bottom), and "Container Type" (Shipment).

- 11.4. Highlight the first position in the 2D box layout diagram.
- 11.5. Scan the barcode of the first sample stored in the position you just highlighted. The “?” will update to “OK” when a sample has been scanned. You may save and come back to the process if you need to.
- 11.6. Scan all samples in each box, and all boxes in each shipment.
- 11.7. Save.

12. Creating Shipping Files and Shipping Manifests

- 12.1. To create a Shipping File, select “Edit/Ship” next to the shipment you are ready to send to a Core Lab.
 - 12.1.1. On the bottom of the pop-up window, select “Ship.”
 - 12.1.2. Save the Shipping File to a designated folder on your computer.
 - 12.1.3. Close the pop-up window.
- 12.2. To create a Shipping Manifest, from the Shipping Menu, select “Shipment History”
 - 12.2.1. Find your Shipment and select the down arrow next to the “View” button, then select “Generate Manifest.”



The screenshot shows a web browser window titled "LIMS Generate Report - Google Chrome". The address bar displays "webldms.org/Shipping/ShipmentHistory/Manifest/1012". The page has a header "Generate Report". Below this, there are two labels: "Report Name" and "File Type". The "Report Name" field contains the text "Shipping Manifest". The "File Type" field is a dropdown menu currently showing "Character Separated Values (CSV) (*.csv)". At the bottom of the form is a blue button labeled "Generate Report".

- 12.2.2. Save file in .CSV format
- 12.2.3. Save manifest to a designated folder on your computer so that the file can be sent electronically to the Core Lab.