UCD IMPROVE Technical Information #251N

A Tray Checking

Interagency Monitoring of Protected Visual Environments
Air Quality Research Center
University of California, Davis

July 15, 2022 Version 3.0

Prepared By:	Docusigned by: Anthony tawamoto 3A49A57FF666452	Date:	10/4/2022
Reviewed By:	DocuSigned by: JASON GIALOMO B62B01F81613421	Date:	10/4/2022
Approved By: _	DocuSigned by: Marcus Langston 0A10CECE79B0452	Date:	10/4/2022



1A Tray Checking UCD TI #251N, Version 3.0 July 15, 2022 Page 2 of 6

DOCUMENT HISTORY

Date Modified	Initials	Section/s Modified	Brief Description of Modifications
02/28/2022	SRS	All	Previously anthologized version separated into individual TIs.
4/14/2022	GRM	All	Updated wording to accommodate new procedures. Deleted retired sections 5.1- 5.3

TABLE OF CONTENTS

1.	Pur	pose and Applicability	. 4
2.		mmary of the Method	
		utions	
		sonnel Qualifications	
		ocedural Steps	
		Inventory A	
		Running the Macros	
	5.3	Entering the Macro Information	
	5.4	Printing the Pages	
4	5.5	Tray Checking	
4	5.6	FT-IR Tray Files.	
4	5.7	Managing Contractor Files	5
4	5.8	Managing Inventory Sets	

1A Tray Checking UCD TI #251N, Version 3.0 July 15, 2022 Page 4 of 6

1. PURPOSE AND APPLICABILITY

The purpose of this TI is to describe the procedure for preparing 1A filters for FT-IR. This procedure is applicable to 1A IMPROVE network filters that sampled from January 2011 and on.

2. SUMMARY OF THE METHOD

After 1A filters have been post-weighed, they are placed in Petri dishes and labeled with a sticker designating the site name and sample date of the filters. Through this process, they are separated by months. Then, they are put into labeled Petri trays. When the trays are full, they are placed on a designated shelf near the weighing area. Weekly checks for level zero mass validation are performed by a lead lab technician. The inventory is then ran for the appropriate filter type and a tray check list is generated.

Filters are checked and arranged to match the order of the list. Trays are labeled with stickers to indicate set, month, and tray number, and a hard copy of the tray list is printed and stored in the tray.

3. CAUTIONS

Pay close attention when entering information into any macro. The information must be in the exact format as the example shown in the input box. If an incorrect format is entered, the macro will not work correctly, and an error will occur. If an error does occur, close the files and start over.

Be sure to enter the correct set number, month, and the correct first filter information when generating tray check lists. A mistake in entering either one of these can cause significant confusion later in the process.

4. PERSONNEL QUALIFICATIONS

Only trained lead laboratory technicians generate tray check lists for the 1A filters.

5. PROCEDURAL STEPS

5.1 Inventory A

- 1. Go to the Inventory section of the Web App and create the tray files for the trays to be inventoried. The same method used to make the 2B and 3C inventory sheets will be followed, with the exception that the 1A trays may not be a full set of 8. In addition, the corresponding month will have to be selected. Look through each inventory page to make sure there are no filters from other months. Move, Remove, and Add filters as necessary.
- 2. Go to the 'Inventory Box Details' page and download the master list.

5.2 Running the Macros

Located U:\IMPROVE_Lab\Lab_Gravimetric\Applications and Macros, open MACROS.xls. While on the set master list access the macros menu, press **ALT-F8**. Select the "A_Filter_Inventory" macro. Click "Run" after selecting the appropriate macro.

5.3 Entering the Macro Information

The macro will ask a series of questions to generate the appropriate tray check list. Follow the instructions in the input boxes. Be careful to enter the information in the exact format as the example. Following is a list and screenshots of the parameters that both macros will ask.

- Year-Month. Enter the desired year in number format. Example: 2021-OCT
- **Set.** Enter the desired set in number format. Example: 1.
- Tray. Enter the desired starting tray in number format. Example: 1.

5.4 Printing the Pages

Select all completed "A_Sheet_[#]" tabs. Go to the File tab and choose "Print." The type of filter and the set, month, and tray number should already be printed at the top of the page(s).

5.5 Tray Checking

After the lists have been printed, confirm that the contents of each tray match its corresponding list. Check that the site name, Module, Status, and sample date is correct for each position in the tray. Initial and date the list and then fold it up and place it in the corresponding tray after the check is complete. Check that the tray is properly labeled. Place the trays in the designated location the holding rack or FT-IR shelf.

5.6 FT-IR Tray Files

- 1. After tray check is complete go to the Tray Details page of each tray that was checked and click the FT-IR button.
- 2. Save each file here: U:\FTIR Tray Files from Lab\IMPROVE

5.7 Managing Contractor Files

- 1. After tray check is complete, go to the "U:\IMPROVE_Lab\Lab_Gravimetric\Applications and Macros\XRF" directory. Move the corresponding Excel file for the set to the correct closed year folder (named "[YYYY] Closed") and correct month folder (named YYY-MM XXX). If this folder does not exist, create it. Moving files into these folders eliminates the risk of them being overwritten.
- 2. Go into the current closed year folder, open the 'YYY MasterList A filter

1A Tray Checking UCD TI #251N, Version 3.0 July 15, 2022 Page 6 of 6

Months' file and the tray file that was just made. Copy the master list for the trays inventoried to the master list.

5.8 Managing Inventory Sets

When a full set of 8 A trays is complete, go to the Inventory Box Details page, click **Edit** and update Final Inventory Date.