



miniiSED® SAMPLE PROCESSING

Analyzer Operational Training

THE IMPORTANCE OF SAMPLE MIXING

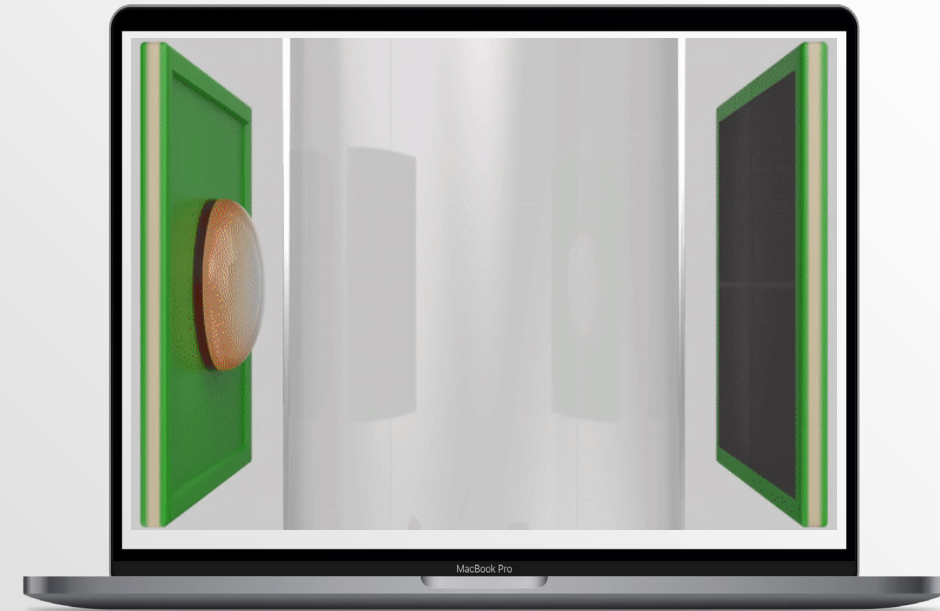
To ensure **accurate results**, patient samples must be **well mixed prior to testing as disaggregation of RBCs is essential for aggregation.**

If automated mixing is not enabled on the analyzer, patient samples must be mixed by mechanical rocker **for a minimum of three (3) minutes before testing.**

Testing **must** occur **immediately after mixing** to ensure accuracy of the results.

Hand mixing is NOT a supported practice with ALCOR® Scientific analyzers.

If workflow permits, enable automated mixing on your miniSED using the **onboard mixing protocol 1017-28-007.**



SAMPLE REQUIREMENTS



Sample Volume

The total sample volume required to perform ESR on the iSED is as follows:

- Routine tubes: approximately 500 µL.
- Pediatric tubes: approximately 350 µL.
- **For all sample's aspirated volume is only 100 µL.**



Sample Type

- Whole blood in a capped 13 x 75 mm tube with **K3-EDTA or K2 EDTA** anti-coagulant (*lavender top tube*).
- Sample tube should be gently mixed at collection to avoid clots and other aggregates (DO NOT MIX VIGOROUSLY).



Sample Temperature and Stability

- Samples are stable for up to 28 hours at room temperature or 48 hours refrigerated.
- Sample must be brought to room temperature for at least 15 minutes if refrigerated.



US customers: contact ALCOR® Scientific Technical Support for a full list of compatible tubes with known dead volumes.

Customers outside of the US, please contact your local distributor.

CONSUMABLES

Test Card

Test Credits are required to use the analyzer. A Test Card contains a pre-determined quantity of Test Credits. Test Cards do not expire and are available in various denominations to satisfy all testing volumes.

miniiWASH[®]

The miniiWASH Wash Fluid is required to ensure proper functioning of the analyzer.

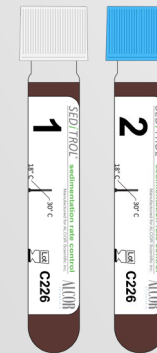
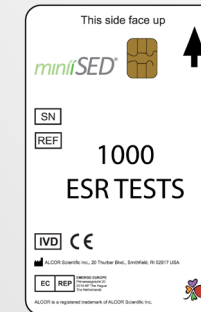
SEDiTROL[®] Quality Control, Levels 1&2

The SEDIROL Quality Controls are required as the external controls for the analyzer.

deepCLEAN[®] Cleaning Solution (optional)

The deepCLEAN Cleaning Solution is used for the Deep Cleaning procedure, which is important for proper functioning of the analyzer.

iLEARN



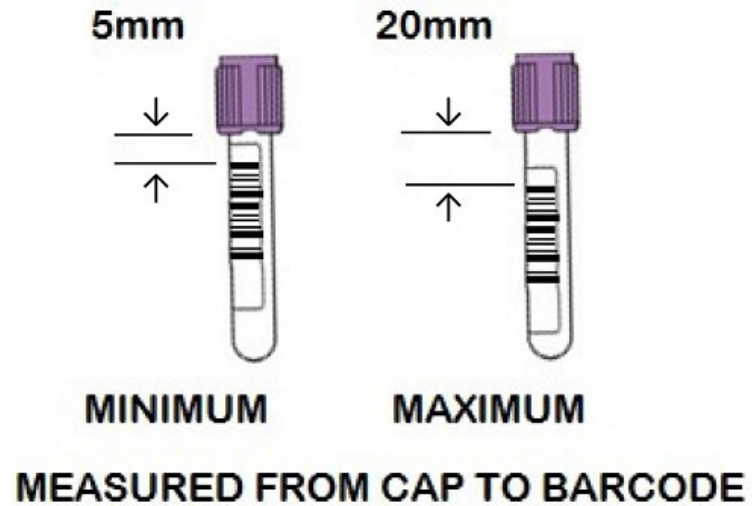
CONTINUOUS OPERATION MODE

It is always recommended that the instrument **remains on and ready for use**. Should the instrument need to be powered off for any reason, run a wash cycle prior powering off the unit.

The miniiSED is programmed to perform a self-cleaning wash after being idle for 15 minutes following the last sample tested. The process takes approximately one (1) minute and utilizes approximately 2.5 mL of miniiWASH for each wash cycle. Once completed, testing can resume as normal.

PATIENT IDENTIFICATION

Patient samples are read and identified automatically by the internal barcode reader as they are loaded into the instrument. All common laboratory barcodes are supported, including Code 39, UPC and Code 93 formats.

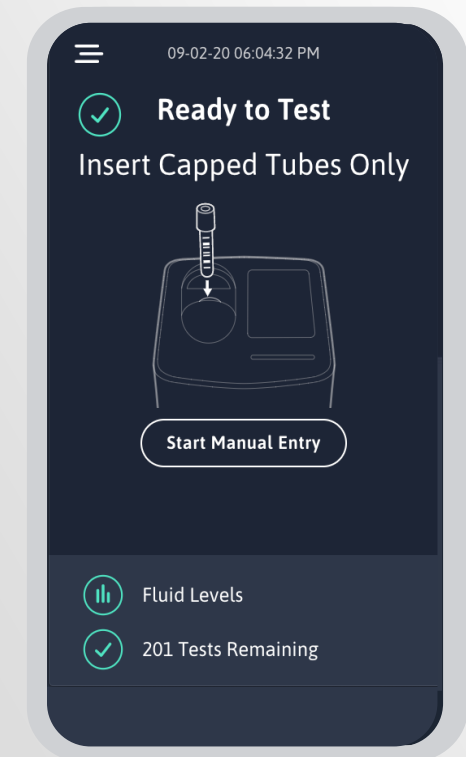


When patient identification cannot be read by the internal barcode reader or if there is no barcode present, the operator may enter patient data manually.

PROCESSING OVERVIEW


The following will occur after the tube is inserted:

- The tube is moved into the analyzer and the testing process begins. The sample will continue to mix as the testing takes place.
- When testing is complete, the tube is returned to the loading port for retrieval, and the test result is displayed on the Touch Screen.
- Time to result after mixing is 15 seconds.
- The analyzer result range is 1 to 130 mm/hr.
- The analyzer will return to the Home Screen once the tube has been removed.

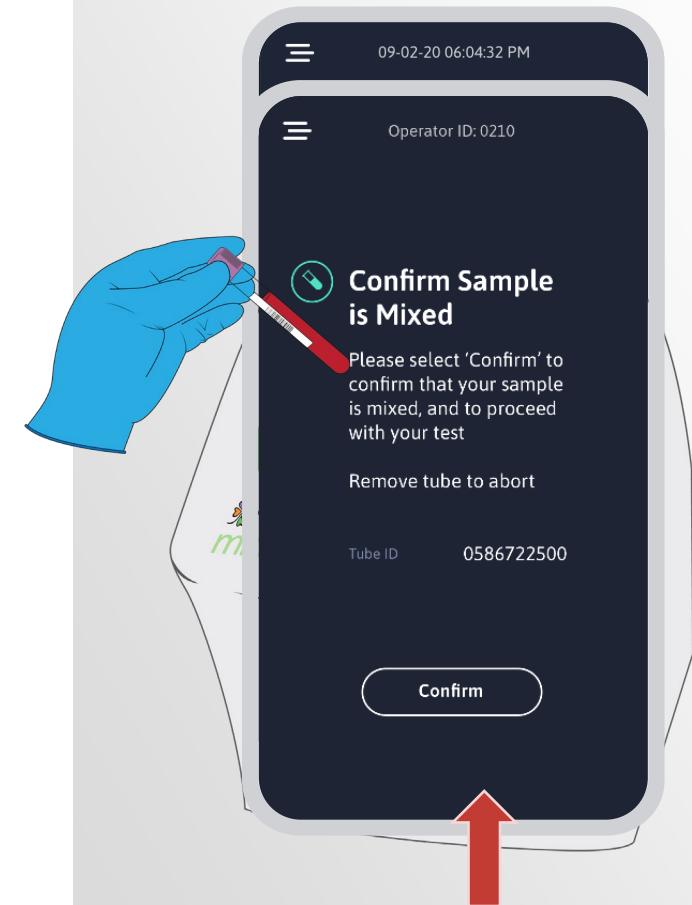


PROCESSING BARCODED SAMPLES

To process barcoded samples:

1. Ensure the touch screen is on the Home screen that says “Ready to Test.”
2. Insert the barcoded tube with the barcode oriented down. A red light will illuminate, and distinctive beep will sound when the barcode is successfully recognized.
3. If automated mixing **IS** enabled, miniSED will continue to mix for three (3) minutes before processing.
4. If automated mixing is **NOT** enabled, select  on the touch screen to confirm that the sample has been adequately mixed prior to insertion.

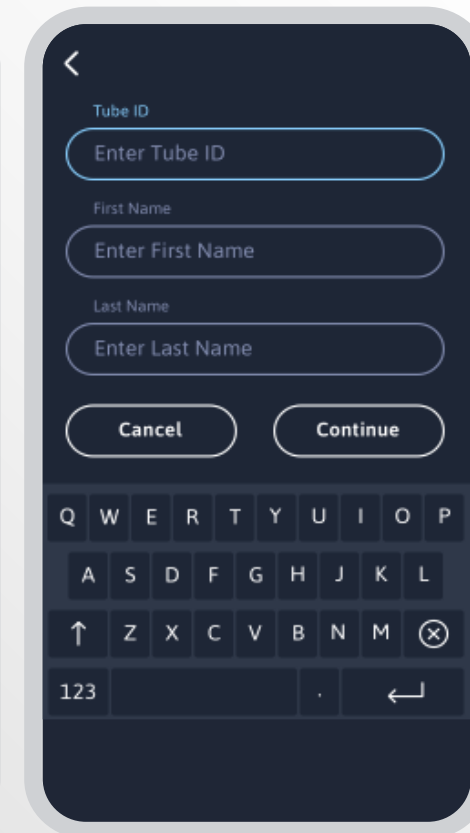
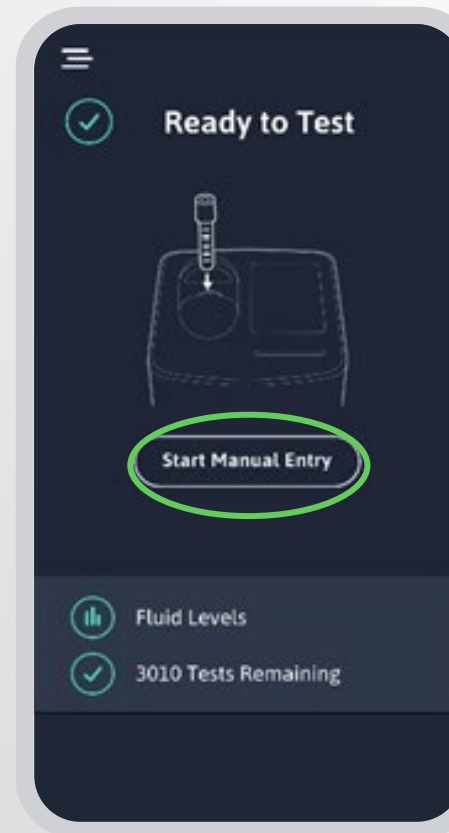
Note: To ensure accurate results patient samples must be well mixed prior to testing. If automated mixing is not available (or enabled) on the analyzer, samples must be mixed manually or by mechanical rocker for a minimum of three (3) minutes before testing. Testing should occur immediately after mixing to ensure accuracy of the results.



PROCESSING NON-BARCODED SAMPLES



To process non-barcoded samples:

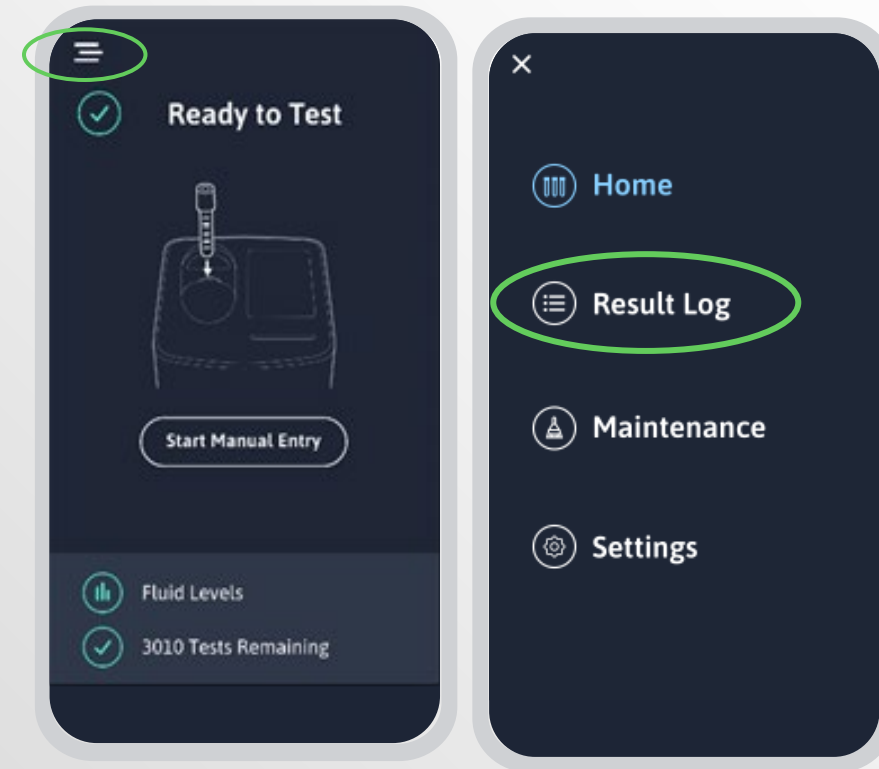
1. Select the **Start Manual Entry** icon from the home screen and the data entry screen will open.
2. Using the keypad, enter in the Tube ID, First Name, and Last Name, then select the **Continue** icon.
3. If automated mixing **IS** enabled, insert the closed tube into the loading port, and miniiSED will mix the sample for three (3) minutes before processing.
4. If automated mixing is **NOT** enabled, select the **Confirm** icon on the Touch Screen to confirm that the sample has been adequately mixed prior to insertion then insert the closed, pre-mixed primary tube into the loading port.



NAVIGATE TO RESULT LOG MENU

The **Result Log** is organized starting with the most recent test results shown at the top.





- Select the  icon in the upper left corner on the Home screen to navigate to the Main Menu
- From the Main Menu, select the  **Result Log** icon to view results



VIEW AND EDIT RESULTS

The most recent result will display in **expanded view** at the top of the screen with easy view of the **result, date, time, tube ID, and name.**

To edit and view results:


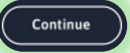
- Select the  icon to make edits and update the tube ID for non-barcoded tubes, first name, and last name.
- The blue circle  icon represents an **individual test result** of a patient record.
- Select the  icon to collapse current result.
- The white circle  icon represents a **SEDiTROL or Proficiency Test** result.
- Use the scroll bar at the right of the page to scroll through results.

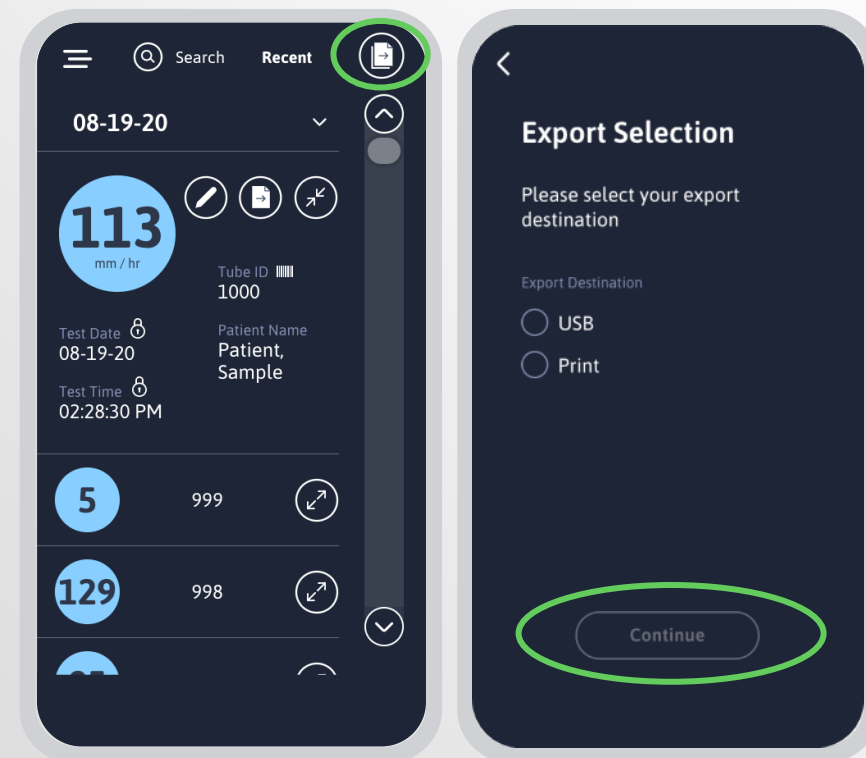


EXPORTING RESULTS

Individual results, or results from the **last 7 days** can be exported. Once the  icon is selected, it will bring up the Export Selection screen. Results can be **printed or exported** electronically via USB. If the miniSED is connected to the **LIS** this will also become an option within the export selection.


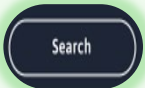
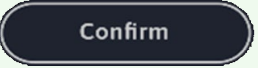
To export results:

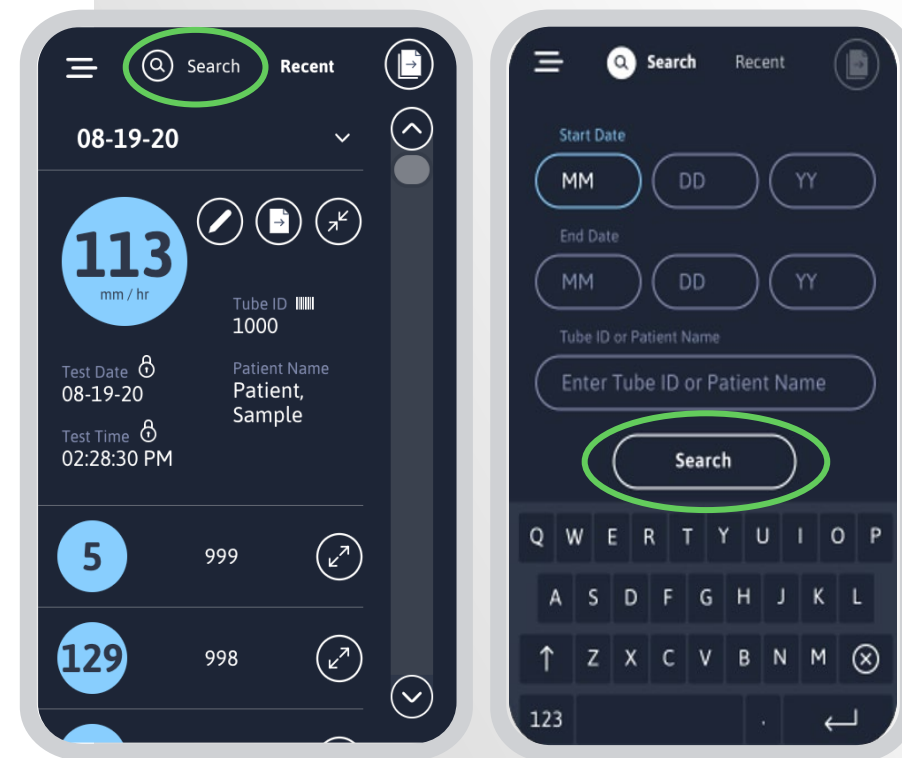
- Select the  icon on the Results Log to bring up the Export Selection screen.
- Select **USB**, **Print** or **LIS** for the export destination.
- Touch  to complete the Export function.



SEARCH FOR RESULTS

To search for results:

- Select the  icon at the top of the Results Log to open the Search screen.
- Results can be searched by Tube ID or Patient Name during a specified date range. 
- Once entered, select  to confirm.



RESULT PRINTOUTS

Results Format

Results are shown on screen after analysis and can be printed with the optional external printer. If **miniSED** is unable to analyze the sample and report results, the printout will replace the 'ESR (mm/h):' field with an error message.

```
=====
Sample type:    PATIENT or QC
Date format:   Month/Day/Year
Time format:   Hour/Minute/Second
Sample ID:     Barcoded sample identification
Result format: ESR value in mm/hour
=====
```



REFERENCE VALUES

The reference values shown are averages found in men and women. An increase in these values can be a sign of multiple different health issues that should be diagnosed by a physician or qualified individual.

The ranges provided are for reference only.

All laboratories should follow their own protocol for establishing reference ranges.

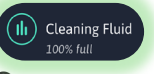
ESR Reference Values (mm/hr)*	
Males < 50 yrs old	<15
Males > 50 yrs old	<20
Females < 50 yrs old	<20
Females > 50 yrs old	<30

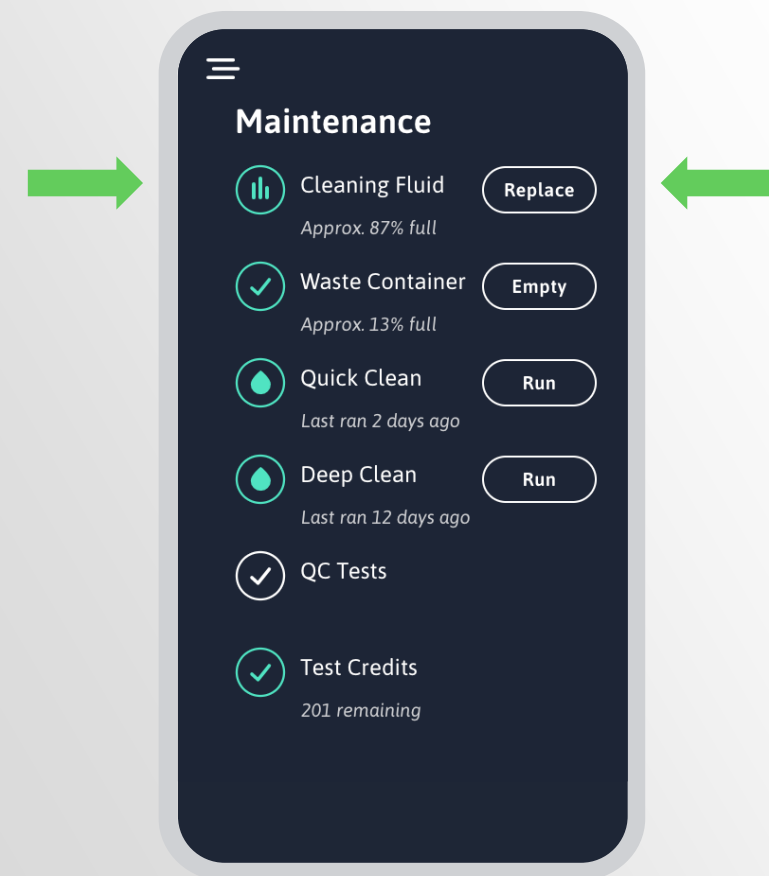
*Keohane EM, Otto CN, Walenga JM. Rodak's Hematology: Clinical Principles and Applications Sixth Edition. Elsevier; 2019.

ROUTINE WASH CYCLE

The miniiWASH Wash Fluid is **required** to ensure analyzer performance. A **quick clean or wash cycle** is run 15 minutes after the last sample or can be performed on-demand as needed.

miniiWASH Tips:

- The analyzer utilizes 2.5 mL of wash **per wash cycle**.
- Wash cycles are **not required** to run after each test.
- **Wash cycles should always be run prior to turning off the instrument.** Press the power button located on the back of miniiSED and a wash cycle will automatically begin prior to shutting down.
- The  icon displays the approximate volume of the miniiWASH bottle.
- The wash counter must be reset after replacing the miniiWASH bottle. Select the icon to reset.
- A **prime cycle** is required following a wash cycle. The prime cycle is automatic and uses an additional 20µL of sample from the first sample run following the wash cycle.



CLEANING FLUID & WASTE CONTAINER ICONS

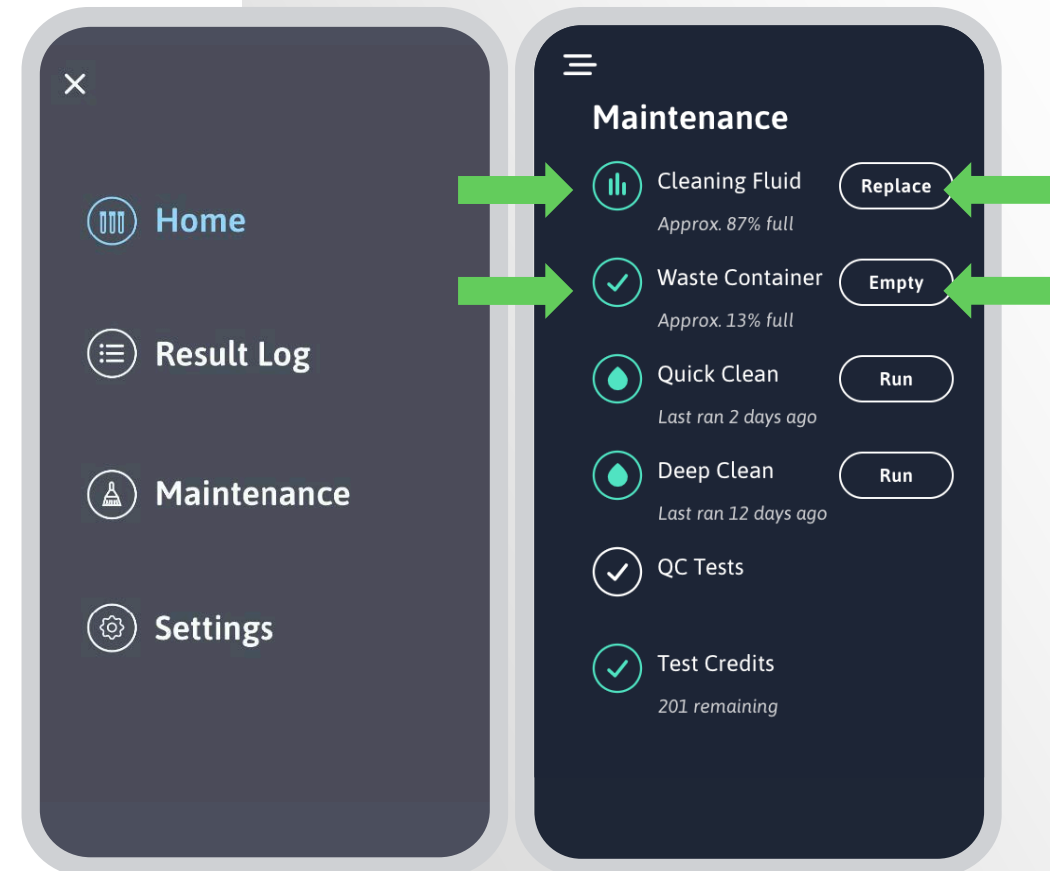
The  Maintenance Menu provides an easy dashboard to display all maintenance functions.

The purpose of the  Cleaning Fluid and  Waste Container visual indicators is to display current approximate volume of each bottle.

The icons  Replace  Empty are used to reset the visual indicators.

- The indicators are based on cycle counts.
- As wash fluid is consumed, the percentage full of Cleaning Fluid will decrease.
- As the waste bottle fills, the Waste Container percentage full will increase.
- When a bottle is changed, remember to reset the volume indicator by tapping the icon to the right of it.

Note: If the volume counter is not reset after a bottle is changed, it will cause the alarms to trigger erroneously.



THANK YOU!



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