

# A Veterinary Technician's Guide to the SediVue Dx\* Analyzer



## Sample collection

For best results, it is recommended that samples have the least amount of debris and contamination possible. Samples should be uncentrifuged and run within 30 minutes of collection, or stored refrigerated in an air-tight container for up to 2 hours.

## Cystocentesis/urine catheterization

Samples obtained via cystocentesis or urine catheterization can remain in the syringe.

1. Remove the needle, if applicable, and replace with a new SediVue\* Syringe Tip.
2. Add ~0.5 cc of air to the syringe, and then slowly invert the syringe 10 times, ensuring the urine is mixed thoroughly.
3. IMMEDIATELY after inversion, purge all the air from the syringe and inject 165  $\mu$ L of urine into the cartridge fill port. The sample should fill to the first curve of the overflow chamber.

## Free catch

1. Transfer the sample to a sample tube or urine container with a lid.
2. Place a new SediVue\* Pipette Tip onto the SediVue\* Pipette.
3. Invert the sample tube 10 times to ensure the sample is mixed thoroughly.
4. IMMEDIATELY after inversion, aspirate 165  $\mu$ L from the bottom third of the sample tube using the SediVue Pipette.
5. Place the pipette tip into the cartridge fill port and slowly and evenly dispense the sample. The sample should fill to the first curve of the overflow chamber.

## Sample pipetting tips

- Hold the pipette vertically.
- ONLY depress plunger to the first stop.
- Use only IDEXX-supplied pipette tips.



## Sample dilutions

Samples that contain a large amount of sediment may require a dilution.

## Before analysis

The color and clarity of a sample can be used to predict when a sample should be diluted prior to analysis. For samples that are opaque or contain obvious hematuria, consider diluting 1:5 prior to analysis.

## After analysis

The numerical results will not be reported (images will be provided) when the sample is crowded with overlapping elements, and a sample message will prompt you to review the images and consider a dilution.

There are times when the images will provide clinical insight and numerical results may not be required. In this case, add comments to the patient record by tapping **Add Comment** on the patient results screen. Comments will be saved to the patient record and sent to VetConnect\* PLUS.

If numerical results are desired:

- For moderate overlapping of elements in the images, perform a 1:5 dilution.
- For marked overlapping of elements in the images, perform a 1:10 dilution.

## Performing a dilution

It is essential that the diluted urine sample be prepared correctly. Follow the guidelines below for best results.

1. Mix the uncentrifuged sample thoroughly using the sample preparation guidelines above.
2. Immediately after mixing, add one part sample to a clean, untreated sample tube.
3. Add the desired parts of 0.9% normal saline (e.g., 1 part sample + 4 parts saline = 1:5 dilution) to the same sample tube used in step 2.

Note: It is very important that the volumes used in step 2 and 3 are precise. Use the SediVue Pipette or a syringe for accurate measurement.

4. Queue the patient on the IDEXX VetLab\* Station, select the SediVue Dx, and tap **Run Dilution** on the Instruments screen.
5. **IMPORTANT:** Select the correct dilution factor that corresponds with your sample dilution preparation, then tap **Run**.

6. Invert the sample tube gently 10 times to ensure the diluted sample is mixed thoroughly.
7. IMMEDIATELY after inversion, inject 165  $\mu\text{L}$  of the diluted sample into the cartridge fill port.

## Sample messages

Check the end of the patient report for possible sample messages. Below are two of the more common SediVue Dx sample messages you may see—for a full list, see the *SediVue Dx Urine Sediment Analyzer Operator's Guide*.

### Review images to confirm results.

This message indicates the analyzer was unable to verify the quality of focus in some of the images due to very little sediment (e.g., “normal” samples) or air bubbles, or because the analyzer optics are dirty. Results will be provided with an asterisk. If expected results do not align with image review, rerun the sample. If this message appears with several consecutive samples, the analyzer may require cleaning.

### Confirm with one of the following: image review, air dried, stained cytological preparation (“dry prep”), or urine culture.

This message indicates follow up is needed; confirm the bacteria result with a line smear if images do not provide clinical insight.

## Maintenance

It is recommended to perform regular maintenance on the SediVue Dx to ensure optimal performance.

### Monthly cleaning

Cleaning the internal components of the SediVue Dx should be completed monthly, at minimum. You will receive a reminder once a month to clean the internal components. Urine buildup due to increased usage and/or overfilled cartridges may lead to a recommendation for cleaning more frequently.

To clean the internal components:

1. Tap the **SediVue Dx** icon on the IDEXX VetLab Station Home screen.
2. Tap **Settings**.
3. Tap **Clean** and then follow the on-screen instructions.

### As-needed cleaning

When sample has been inadvertently dispensed on top of a cartridge or a cartridge has been overfilled, it is recommended to clean the sample dispense area before pressing the Start button to prevent urine from being dragged into the analyzer.

To clean the sample dispense area:

1. Open the analyzer door.
2. Use an optical tissue to absorb the urine on top of the cartridge.
3. Remove and dispose of the cartridge.
4. Use an alcohol prep pad to clean the dispense area.

5. Dry the area with an optical tissue.
6. Close the analyzer door. Once the SediVue Dx icon has a green “ready” status, tap the patient icon and then tap **Start Run** to load a new cartridge.

## Quality control

The purpose of quality control is to verify the integrity of your results and images. IDEXX recommends you run quality control once a month, after cleaning.

**Note:** Keep SediVue\* QC in the refrigerator—DO NOT freeze.

1. Tap the **SediVue Dx** icon on the IDEXX VetLab Station Home screen.
2. Tap **Quality Control**, select the QC lot you are using (or scan the insert to add the new lot), and then tap **Run QC**.
3. Gently invert the vial 10 times.
4. Using the SediVue\* Pipette with a new pipette tip, aspirate 165  $\mu\text{L}$  of L1 QC fluid and inject into a cartridge fill port.
5. Press the **Start** button on the analyzer.
6. Verify results are passing and images appear clear.
7. Repeat the above steps for the L2 QC vial.

## Installing the cartridge sleeve

The IDEXX VetLab Station will alert you when a new SediVue\* V70i Cartridge sleeve needs to be installed.

1. Tap **Replace Cartridges** when prompted, or tap the **SediVue Dx** icon on the IDEXX VetLab Station Home screen and then tap **Replace Cartridges**.
2. Remove the new cartridge sleeve from the box, scan the barcode on the plastic wrap, and then tap **Continue**.
3. Follow the on-screen instructions to remove the empty sleeve and install the new sleeve.  
**IMPORTANT: Do not remove the tape** from the new sleeve until it is firmly locked into place with the text facing you. If cartridges are inadvertently dropped on the floor, discard them and call IDEXX to update your inventory.
4. Tap **OK** to confirm that the installation is complete.

### Tips for successfully scanning the barcode and installing a new cartridge sleeve:

- Ensure the CAPS LOCK function on the keyboard is turned off.
- Ensure you are scanning the barcode located on the plastic wrap and **not** on the cartridge sleeve box.
- **Always** scan the barcode and install a new sleeve **at the same time**.
- Always scan and install a new cartridge sleeve when the “Cartridge sleeve is empty” alert appears—even when there are cartridges remaining.

**IDEXX is here for you!** Our field and sales teams are accompanied by skilled veterinarians who are available to provide training and answer questions—just ask!