The Complete Urinalysis Sample Guide

Step 1. Prepare the sample and start the run on the SediVue Dx* Analyzer

1. Prepare the sample and start the run on the IDEXX VetLab* UA* Analyzer

Step 2. Prepare the sample and start the run on the IDEXX VetLab* UA* Analyzer

1. Flood the UA strip making sure that all the test pads are saturated. Do not bend the strip.

2. Tap the long edge and back of the strip on a paper napkin to remove excess urine.

3. Immediately place the strip into the analyzer and press the Start button.

Step 3. Complete the physical evaluation

1. Visually inspect the color and clarity of the sample (e.g., pink, cloudy).

2. Place a drop of sample on a refractometer to obtain urine specific gravity (USG).

3. Note the physical information in the patient’s record using the IDEXX VetLab* Station.

Step 4. Evaluate your results and images

Sample images are an important part of the results and should be reviewed with every sample run in order to validate the numerical data.

<table>
<thead>
<tr>
<th>Bacteria</th>
<th>Consider the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘None to rare’ or ‘suspect presence,’ no or few possible bacteria seen, without clinical signs</td>
<td>Bacteria unlikely; no line smear needed</td>
</tr>
<tr>
<td>‘Suspect presence,’ bacteria are possibly seen, with(out) clinical signs</td>
<td>Perform a line smear to validate (see instructions at right). If patient persists with chronic urinary tract infection, consider culture and sensitivity testing.</td>
</tr>
<tr>
<td>‘Suspect presence’ or ‘present,’ bacteria are obviously seen, without(out) clinical signs</td>
<td>Culture and sensitivity testing; no line smear needed</td>
</tr>
</tbody>
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<tr>
<th>Dilutions</th>
<th>Perform a dilution using these steps:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preanalytic</td>
<td>1. After the patient run has been initiated, tap Run Dilution, specify the desired dilution factor (total parts), and tap Run or Append Results.</td>
</tr>
<tr>
<td>Hematocrit</td>
<td>2. In a test tube, place one part of well-mixed sample with the selected parts of 0.9% normal saline 10 times.</td>
</tr>
<tr>
<td>Cloudy (turbid)</td>
<td>3. Immediately inject 165 µL of the diluted sample into the cartridge fill port.</td>
</tr>
<tr>
<td>Postanalytic: crowded</td>
<td>4. Press the Start button on the analyzer.</td>
</tr>
</tbody>
</table>

Guidelines for success

- Fresh is best—analyze urine samples within 30 minutes of collection.
- Storing urine samples in the refrigerator longer than 2 hours may introduce the in vitro formation of crystals and crystalline debris.
- Transfer voided samples to a urine sample container with a lid.
- Mix the sample immediately before filling the cartridge.

Performing a line smear (dry slide preparation)

1. Centrifuge the sample. Then aspirate it down to the pellet, and then flick the bottom of the tube to resuspend the formed elements.

2. Dispense a drop of sample at the base of a labeled glass slide.

3. Hold a clean glass spreader slide at approximately 30°–40° in front of the drop of urine. Then back it into the drop allowing the material to spread along edge of the spreader slide.

4. Move the spreader slide toward the end of the specimen slide, keeping the two in contact with each other.

5. In the middle of the slide, abruptly stop spreading the urine sample and lift the spreader slide straight up to form a line of material.

6. Air dry thoroughly and then stain the slide using your routine hematology/cytology stain (e.g., Diff-Quik*) and then review microscopically.

Visit idexxlearningcenter.com/dryprep to see these steps in action.