

Running Dilutions on the Catalyst One Chemistry Analyzer

When to Dilute

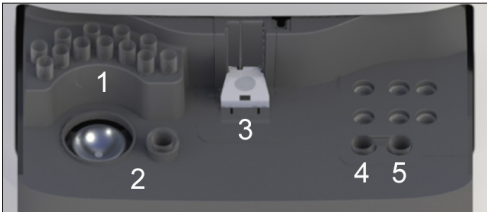
Dilutions should only be performed when a test value is outside the reportable range or when the sample contains interfering substances (e.g., medications) that cause a nonlinear or invalid result. The Catalyst One* Chemistry Analyzer supports automated dilutions (the analyzer mixes the sample and diluent for you) and manual dilutions (you prepare the dilution outside of the analyzer).

IMPORTANT: Do not dilute samples that are undergoing ammonia, phenobarbital, fructosamine, total T₄, SDMA, pancreatic lipase, progesterone, bile acids, cortisol, or electrolyte testing.

Loading Automated Dilution Materials

When prompted, do the following:

1. Load pipette tips.
2. Load the sample.
3. Load the slides.
4. Load an empty sample cup in the left dilution cup holder.
5. Load a sample cup containing 300 µL of diluent (0.9% saline/NaCl) in the right dilution cup holder.



Notes:

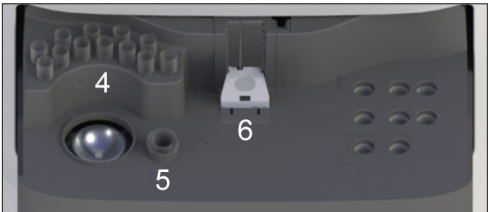
- + Only load the slide(s) that require a dilution. Do not load an entire CLIP.
- + If an exact value is not reported on the initial dilution, rerun the sample with an increase of one dilution factor.

Loading Manual Dilution Materials

1. Accurately measure the desired amount of sample to be diluted and gently transfer it to a sample cup. Then, accurately measure an equal amount of diluent (0.9% saline/NaCl) and transfer it to the sample.
2. Thoroughly mix the sample and diluent, ensuring there are no bubbles in the mixed sample.
3. Initiate the run on the IDEXX VetLab* Station.
4. Load pipette tips.
5. Load the diluted sample created in steps 1 and 2.
6. Load the slides.

Notes:

- + Only load the slide(s) that require a dilution. Do not load an entire CLIP.
- + If an exact value is not reported on the initial dilution, rerun the sample with an increase of one dilution factor.



Manual Dilutions

Volumes are for example only. Fill the sample cup with up to 300 µL of the mixed sample.

Parts Sample + Parts Diluent = Total Parts (Dilution Factor)

Parts Sample	Parts Diluent	Total Parts (Dilution Factor)
1 (100 µL)	0	1 (no dilution)
1 (100 µL)	1 (100 µL)	2
1 (100 µL)	2 (200 µL)	3
1 (100 µL)	3 (300 µL)	4
1 (100 µL)	4 (400 µL)	5
1 (100 µL)	5 (500 µL)	6
1 (100 µL)	6 (600 µL)	7
1 (100 µL)	7 (700 µL)	8
1 (100 µL)	8 (800 µL)	9
1 (100 µL)	9 (900 µL)	10