Running Dilutions on the **Catalyst One*** Chemistry Analyzer

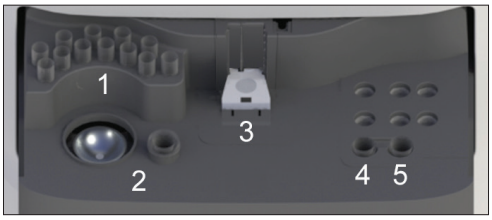
When to Dilute

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 T_4, SDMA, progesterone, bile acids, or electrolyte testing.

Loading Automated Dilution Materials

When prompted, do the following:



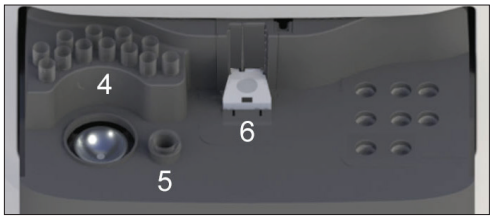
1. Load pipette tips.
2. Load the sample.
3. Load the slides.
4. Load an empty sample cup in the left dilution cup holder.
5. Load a sample cup containing 300 µL of diluent (0.9% saline) in the right dilution cup holder.

   Note: Only load the slide(s) that require a dilution. Do not load an entire CLIP.

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) 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.

   Note: Only load the slide(s) that require a dilution. Do not load an entire CLIP.



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