

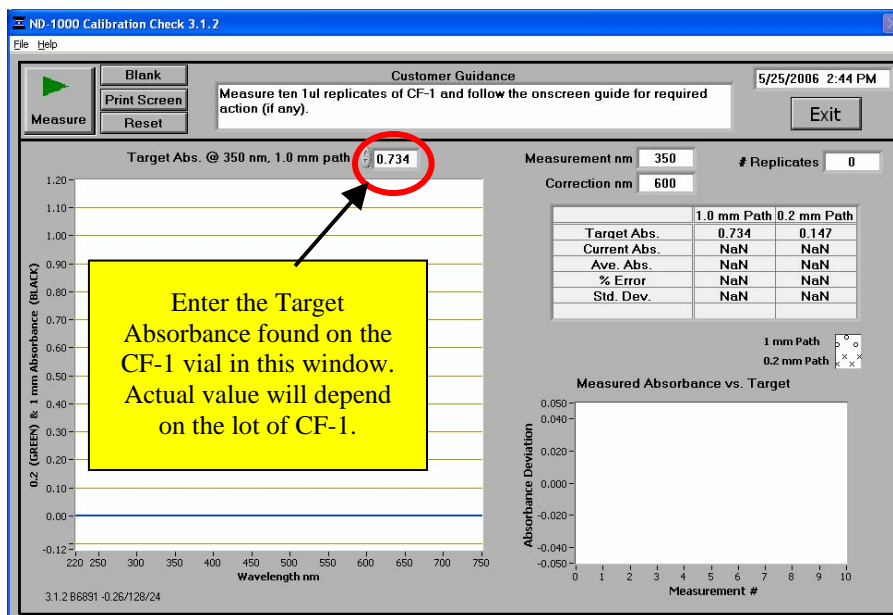
## Calibration Check

A vial of CF-1 (aqueous potassium dichromate ( $K_2Cr_2O_7$ ) solution) is required to run the calibration check procedure for the Thermo Scientific NanoDrop™ 1000 Spectrophotometer.

### PROCEDURE

1. Ensure the measurement pedestals are clean and that a **1ul** water sample “beads” up on the lower pedestal
2. Remove any lint build-up from around the instrument solenoid by following the instructions on the back page of this document.
3. Open the NanoDrop 1000 Calibration Check Software and follow the prompts in the Customer Guidance text box of the software.
4. Enter the Target Absorbance found on the CF-1 vial as directed in the image below.
5. Add **1ul** of deionized water and select “Blank”.
6. Before opening the ampoule of CF-1 Calibration Fluid, shake vigorously to ensure solution is thoroughly mixed. Ensure all solution is collected in the bottom portion of the ampoule.
7. Carefully break the neck of the ampoule to open the CF-1 Calibration Fluid.
8. Follow the on-screen prompts in the Customer Guidance text box. Using individual **1ul** samples of the CF-1 Calibration Fluid, measure 10 replicates.
9. After the 10<sup>th</sup> measurement, the calibration check results will be displayed on-screen in the Customer Guidance text box. If the instrument does not pass the calibration check using **1ul** samples, immediately rerun the procedure (step 6) using **2ul** samples.
10. To print a copy of the results for your records, click the “Print Screen” button. When using the calibration check from within the operating software a .JPG image of the results will automatically be saved in the NanoDrop Data\Calib check folder on the local drive (e.g.: C:\NanoDrop Data\Calib check)
11. If recalibration is required, contact us @ 302-479-7707.

**NOTE:** The CF-1 Calibration Fluid is supplied in a single use vial. The CF-1 must be used within one hour of opening the vial. Exposure to the environment or transferring of the fluid to another container may cause a significant concentration change.



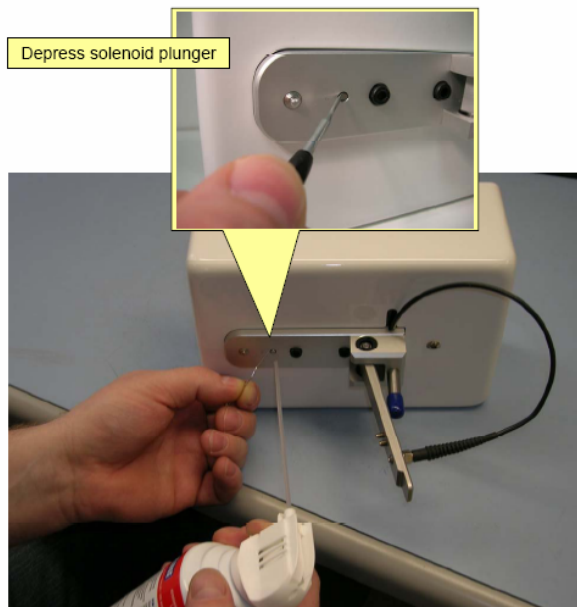
## Sample Accuracy Related to Lint Build-Up

The Thermo Scientific NanoDrop™ 1000 Spectrophotometer uses a patented sample retention technology that employs surface tension alone to hold a sample in place. When a measurement is complete, the sample is simply cleaned off of the pedestal with a dry lab wipe. On occasion, the top and bottom pedestals may require “reconditioning”, which involves rubbing a the pedestals aggressively 30-40 times with a lab wipe. Some brands of lab wipes shred during the process and may result in a build-up of lint under the instrument solenoid. **A significant build-up of lint may alter the absorbance pathlength, resulting in erroneous measurements.**

### Cleaning Procedure

If a substantial amount of lint builds up under the solenoid, the measurement pathlength may be altered. A warning message will then appear, which suggests that either the instrument is out of calibration or that the column broke during the measurement. If you suspect that the problem is due to excess lint around the solenoid—please follow the cleaning steps below:

1. Lay the instrument on its side with the source fiber (black fiber optic cable) facing up.
2. Open the arm of the sampling mechanism.
3. Using a paperclip or a small screwdriver, manually depress the solenoid plunger and spray compressed air down the solenoid plunger hole. Be sure to keep the can of compressed air upright so as not to spray the propellant into the instrument.



### Pedestal Reconditioning using the PR-1 Kit

Use the instrument reconditioning kit, PR-1, as an alternative and rapid means of reconditioning the pedestals when the surface properties have been compromised and liquid columns break during measurement. Using the reconditioning compound significantly reduces the amount of rubbing required to recondition the pedestals, thus decreasing the amount of lint around the solenoid.

For Technical Support, contact us at 302-479-7707 or [info@nanodrop.com](mailto:info@nanodrop.com).