

- To prevent any chemical residues from forming, do not use detergents or alcohol.
- After cleaning the bucket with tap water, rinse it with distilled water and shake off excess.
- Place the bucket in a spare CAL bag and fasten it with a twist tie.

3.2.3.2 Changing Dry-Side Buckets and Cleaning Foam Lid Seal

1. When you change the dry-side bucket, take the replacement bucket (that was cleaned as detailed in Section 3.2.3.1), a squeeze bottle with distilled water, and some lint-free tissues to the field site. If you do not have a replacement bucket, remove a clean bucket from your supply of mailers. Label it plainly with a permanent marker: *DRY-SIDE USE ONLY*, and use it as one of two dry-side buckets. Return the empty mailer to the CAL to be refilled and sent back to you.
2. Before operating the collector, remove the “old” dry-side bucket, set it aside, and note the presence of any precipitation.
3. Remove the wet-side bucket according to the instructions in Section 3.2.2.
4. While both buckets are out of the collector:
 - Assuming the sensor is wet, dry it, and if it is dry, wet it to cause the collector lid to move. When the lid is halfway between the wet-side and dry-side buckets, unplug the power to the collector.
 - Wipe the underside of the lid seal to remove any accumulated debris. Use a clean, lint-free tissue dampened with distilled water.
 - Let the foam lid seal air dry.
 - Wipe the top of the roof, the frame of the collector, and the sensor to remove bird droppings or other accumulations that could enter into the sample bucket from these surfaces.
5. Install the new *DRY-SIDE USE ONLY* bucket. Plug in the collector.
6. Install the new wet-side bucket.
7. Note which surfaces have been cleaned in Block 10 of the FORF.

If it is snowing, raining, or the site is experiencing freezing temperatures, you may not be able to use the lint-free tissue dampened with distilled water to wipe the underside of the lid seal. In these cases, dry wipe the lid seal, the top of the collector lid, the collector frame, and the sensor.

3.2.4 Nonstandard Sample Periods

Severe weather that renders the site inaccessible or unsafe may make it impossible to follow a standard sampling period. Any sampling period longer than 194 hours is invalid for NTN data summaries. However, any sample changed early, especially when heavy precipitation threatens to overflow the field bucket, is valid.

If a sample has a nonstandard period, process it, perform the field chemistry measurements, and submit it. It will be analyzed at the CAL, and the data will be made available to users on request.

Always note any variance from standard sampling in Block 10 of the FORF and adjust the Precipitation Record (Block 7) to show the precipitation amount for each day of the sampling period whether long or short. Use the following procedures to minimize the problems of nonstandard sampling periods:

- To ensure standardization among sites, samples should be from 6 to 8 days in duration. If you cannot change the bucket on Tuesday, replace it Monday (preferably late in the day) or Wednesday (preferably early in the day). This should not be a frequent practice, however.
- If heavy rain or snow threatens to fill the field bucket before the sampling period reaches 144 hours, break the sampling period into two periods. Change the bucket before it overflows (about 9 inches of rainfall), especially if more precipitation is forecast. Process each bucket independently with a separate FORF and ship it to the CAL as soon as possible. Annotate the FORF to describe incidents of snow mounding over the bucket or potential water loss due to overflow.
- When the site is inaccessible or conditions make travel unsafe, it may be necessary to collect a sample for an extended period. In this situation, change the field bucket as soon as possible. Do not skip the week and collect a 2-week sample. The raingage clock may stop and other equipment problems may result.

3.2.5 Servicing the Belfort Recording Raingage

Caution: The purple ink used in the raingage pens will stain your hands and clothes. USE CARE WHEN HANDLING IT. You may want to wear a pair of disposable gloves if extensive pen maintenance is required.

1. Open the raingage access door and move both pens up and down to mark their stop positions on the chart (Figure 3-8). The top pen is the event recorder pen, which records the openings of the collector. The bottom pen records the amount of precipitation. Note: The event recorder pen should be in the *down* position if the collector is covering the wet-side bucket and *up* if closed over the dry-side bucket. If this is not the case, call the CAL.
2. Lift the pens from the chart by pulling the pen shifter toward the access door.
3. Remove the chart drum. Record the time and date off in the appropriate place on the chart.

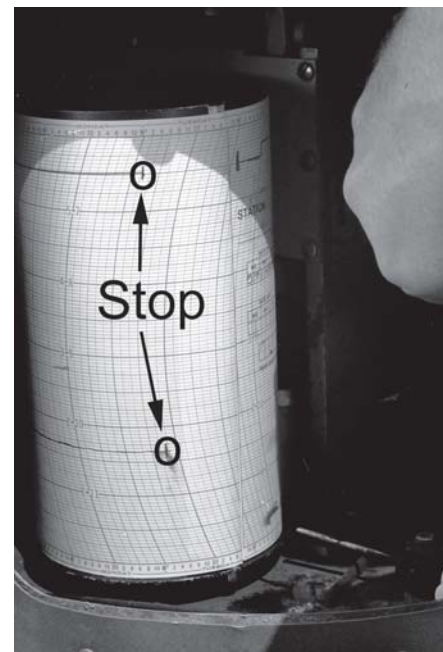


Figure 3-8. Mark the pen position.