

## DETAILED FIELD-AUDIT INSTRUCTIONS

### ONLY SUBMIT A FIELD-AUDIT SAMPLE AFTER A WEEK WITH NO PRECIPITATION AT YOUR SITE

**\*\* THIS PROCEDURE REQUIRES 24 HOURS FOR COMPLETION \*\***

- A) **On Tuesday, remove the wet-side field bucket from the field as you normally do.**
- See section 3 of the NTN Site Operation Manual (SOM) up through section 3.2.
- B) **Verify that no precipitation occurred.**
- Make sure that not even a trace of precipitation was measured by the rain gage (SOM sec. 3.3.7.4).
  - Verify the collector worked properly.
  - Lid openings **are allowed** so long as you ensure that no precipitation occurred. Explain any lid openings due to humidity, dew or fog in the remarks section (Block 10) of the FORF.
  - Inspect the wet-side field bucket to ensure that it is dry (with the exception of CAL rinse water that may have been present when the bucket was installed).
  - Check the appropriate box in “Part A” on the “FIELD-AUDIT RECORD” postcard, either “CAL rinse water present in bucket” or “bucket was dry”, depending on what you found when you inspected the wet-side field bucket.
- C) **Pour 75% of the field-audit sample into the wet-side field bucket you retrieved.**
- Always wear laboratory gloves and be careful not to contaminate the sample in any way.
  - Pour 75% of the field-audit sample (down to the line marked on the bottle) into the wet-side field bucket.
  - Recap the field-audit sample bottle containing the remaining 25% and place it in the plastic bag in which it was shipped. You will send this bottle to the CAL for analysis.
  - Cover the bucket securely with its snap-on lid.
  - At your lab,** Swirl and shake the bucket and set aside for at least 24 hours (but no longer than 6 days).
  - Weigh the bucket+lid+sample, and record the weight on the bucket-sample FORF (instructions for completing the FORFs are outlined in Section E).
  - Record the date and time that you transferred 75% of the sample into the bucket in “Part A” on the green “FIELD-AUDIT RECORD” postcard.
- D) **Process the field-audit sample as if it were a precipitation sample.**
- Follow standard NADP/NTN protocols in section 3.3 of the SOM, and take the same care with the field-audit sample as you would with the weekly precipitation sample.
  - Transfer the field-audit sample from the wet-side field bucket into a clean 1-liter sample bottle provided by the CAL. During sample transfer, be sure that the lip of the bucket does not touch the lip of the bottle. Place the 1-liter sample bottle into a NADP orange ziploc bag. Label the bag with the bucket date and time off and affix a barcode label (as you normally do).
  - Affix the next barcode label in the sequence on the outside of the bottle bag containing the remaining 25% of the solution in the original field-audit bottle and a corresponding label as indicated above Block 1 of the white copy of the bottle FORF.
- E) **Complete two separate FORFs for the field-audit bucket and bottle portions.**
- Please use the FORFs that are included with the field-audit sample. The FORF labeled ‘Bucket Portion’ in the Remarks section should be used for the sample that was poured into the bucket. Affix the CAL barcode label above Block 1 of this FORF that matches the barcode on the Ziploc bag for the 1-liter NADP sample bottle.
  - The other FORF labeled ‘Bottle Portion’ in the Remarks section is for the 25% of the solution that remained in the original field-audit bottle. Affix the CAL barcode label above Block 1 of this FORF that matches the barcode on the Ziploc bag for the original bottle.

- Fill out the following information on both FORFs:

<b>1. SITE</b>	Enter your site name and site ID
<b>2. OBSERVER</b>	Print your name and initials
<b>3. BUCKET ON/BUCKET OFF</b>	Record the On and Off dates and times
<b>4. SITE OPERATIONS</b>	Check appropriate boxes for items 1, 2, and 3
<b>5. SAMPLE CONDITION</b>	Check the appropriate box and be sure to note if handling contamination was accidentally introduced
<b>6. BUCKET SAMPLE WEIGHT</b>	<b>Bucket FORF:</b> Weigh the (bucket+lid+sample) and record the weight, calculate the appropriate sample depth. NOTE: This value will not agree with the total raingage depth value because no precipitation was recorded, leave the box: “Do these values agree within $\pm 5\%$ ?” <u>blank</u> <b>Bottle FORF:</b> Blank
<b>7. PRECIPITATION RECORD</b>	<b>Bucket FORF:</b> Record the precipitation record off the raingage chart. These values should be zero for the week. <b>Bottle FORF:</b> Blank
<b>8. SAMPLE BOTTLE USE</b>	<b>Bucket FORF:</b> Yes, sample poured into bottle. <b>Bottle FORF:</b> Blank
<b>9. SUPPLIES</b>	<b>Bucket FORF:</b> Check any needed supplies. <b>Bottle FORF:</b> Blank
<b>10. REMARKS</b>	Record remarks as you normally would.

FORF recap:

- Bucket FORF: Complete all fields.
- Bottle FORF: Complete fields #1-5. Skip fields 6-9. Add remarks in field 10.
- Use 4 barcode labels for the 2 portions of the field-audit sample (2 barcodes for FORFs, 2 barcodes for each sample bag).
- DO NOT SEND A SEPARATE EMPTY SAMPLE BOTTLE and FORF FOR THE DRY WEEK!!!**

F) **Fill out postcard to USGS**

Please mail the “FIELD-AUDIT RECORD” postcard promptly to the USGS.

G) **Mail both portions of the field-audit sample to the CAL. Use an appropriately sized box for both bottles or tape together the original shipping box for the field audit sample and a standard NADP box.**

Enclose the rain gage chart, and the white copy of the FORF for both field-audit samples. Retain the pink copies for your records. Affix the FedEx postage slip on the box.

Please make sure the following items are in the box:

- The 1-liter sample bottle sealed in a plastic ziploc shipping bag labeled with:
  - bucket off date and time and
  - barcode that matches the bucket-sample FORF and barcode.
- The remaining 25% of sample in original field-audit sample bottle sealed in the ziploc bag labeled with:
  - barcode that matches the bottle-sample FORF and barcode.
- The raingage chart
- White copy of the FORF for the **bucket** portion of the field-audit sample
- White copy of the FORF for the **bottle** portion of the field-audit sample
- DO NOT SEND A SEPARATE FORF IN A DRY WEEK ENVELOPE TO THE CAL!**

**The sample you have been sent should be submitted between January 29, 2021 and January 28, 2022**

If this time period passes without a **full dry week**, please enter “No Dry Week” between January 29, 2021 and January 28, 2022 on the enclosed postcard. If this time period passes without a full dry week, simply discard the liquid and recycle the bottle. If you have questions please contact Greg Wetherbee at (303) 236-1837, wetherbe@usgs.gov.

**Thank you for your time and participation in the Field-Audit Program.**