

Colorado Department of Public Health and Environment | Retail Food Program

## Division of Environmental Health and Sustainability

# Sample Thermometer Calibration Log

### How to Calibrate a Thermometer

1. Fill a Container with ice (crushed ice works best) and add water. There should be more ice than water.
2. Place the thermometer in the water so it is submerged past the indication on the stem (the indent).
3. Wait at least 1 minute for the thermometer to adjust.
4. Read the Thermometer and record the temperature.
  - A. If the thermometer reads 32°F +/- 2°F your thermometer is calibrated.
  - B. If the temperature does not read 32°F +/- 2°F then it needs to be adjusted.
    - i. For dial thermometers, the nut below the dial can be adjusted with a wrench to read 32°F.  
Note: Some sleeve covers have a build in tool that can be used to make the adjustment.
    - ii. For digital thermometers, contact the manufacturer for recalibration.



| Device        | Date   | Reading | Corrective | Initials | Date   | Reading | Corrective | Initials | Date   | Reading | Corrective | Initials |
|---------------|--------|---------|------------|----------|--------|---------|------------|----------|--------|---------|------------|----------|
|               |        |         | Action     |          |        |         | Action     |          |        |         | Action     |          |
| Thermometer 1 | 17-Mar | 36°     | 1          | ST       | 24-Mar | 32°     | N/A        | BN       | 31-Mar | 40°     | 1          | RN       |
|               |        |         |            |          |        |         |            |          |        |         |            |          |
|               |        |         |            |          |        |         |            |          |        |         |            |          |
|               |        |         |            |          |        |         |            |          |        |         |            |          |
|               |        |         |            |          |        |         |            |          |        |         |            |          |
|               |        |         |            |          |        |         |            |          |        |         |            |          |
|               |        |         |            |          |        |         |            |          |        |         |            |          |
|               |        |         |            |          |        |         |            |          |        |         |            |          |
|               |        |         |            |          |        |         |            |          |        |         |            |          |

Devices include: dial probe thermometers, digital thermometers, thermocouples etc.

Corrective Actions:

(1) Manually Calibrated      (Z) Manufacture Calibration      (3) Discarded or removed from use      N/A No calibration is needed

Reviewed By: \_\_\_\_\_



TWIN CITY PRODUCE · SPRINGDALE  
**TRUCK TRAILER CALIBRATION RECORD**

|                    |                                                          |                                                                               |                                                                    |
|--------------------|----------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------|
| <b>EQUIPMENT#:</b> | <b>EQUIPMENT NAME:</b><br>Delivery Truck w/Refrigeration | <b>MASTER/STANDARD USED:</b><br>ISO 9001Standards for Temperature Calibration | <b>CAL. PROCEDURE:</b><br>Maintenance Apparatus: Calibrating Probe |
|--------------------|----------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------|

**CALIBRATION MEASUREMENT DATA**

| DATE | COMPLETED BY | READING OR VALUE |          |           | LIMITS+/- 4° |      | TEAM VERIFICATION                                        |                                                          |           |
|------|--------------|------------------|----------|-----------|--------------|------|----------------------------------------------------------|----------------------------------------------------------|-----------|
|      |              | NOMINAL          | MEASURED | CORRECTED | MIN          | MAX  | ISSUE NCR                                                | STATUS                                                   | NEXT DATE |
|      |              |                  |          |           | 38°F         | 42°F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 38°F         | 42°F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 38°F         | 42°F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 38°F         | 42°F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 38°F         | 42°F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |

| EQUIPMENT DESCRIPTION | ASSIGNED NUMBER | MAKE | MODEL | DATE ACQUIRED | SERIAL/VIN NUMBER | LOCATION ASSIGNED |
|-----------------------|-----------------|------|-------|---------------|-------------------|-------------------|
| Truck Trailers        |                 |      |       |               |                   |                   |
| Truck Trailers        |                 |      |       |               |                   |                   |
| Truck Trailers        |                 |      |       |               |                   |                   |
| Truck Trailers        |                 |      |       |               |                   |                   |
| Truck Trailers        |                 |      |       |               |                   |                   |
| Truck Trailers        |                 |      |       |               |                   |                   |
| Truck Trailers        |                 |      |       |               |                   |                   |

Completed by:

Reviewed by:

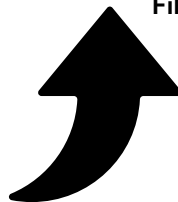
Filed by:

Date:

Date:

Date:

You no longer have to maintain individual equipment logs with each truck listed. The trucks are all listed and maintained in the app.



But just in case the app doesn't work, you can download this form and still use it (contingency built-in).

## COOLER TEMPERATURE CALIBRATION RECORD

|                                |                                                |                                                                                   |                                                                                       |
|--------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>EQUIPMENT#:</b><br>Cooler 1 | <b>EQUIPMENT NAME:</b><br>Refrigerated Storage | <b>MASTER/STANDARD USED:</b><br>ISO 9001 Standards for Temperature<br>Calibration | <b>CAL. PROCEDURE:</b><br>Maintenance Apparatus: Calibrating Probe<br>Iced Water Test |
|--------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|

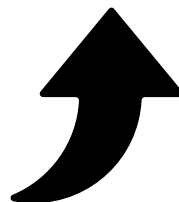
### CALIBRATION MEASUREMENT DATA

| DATE | COMPLETED BY | READING OR VALUE |          |           | LIMITS+/- 4• |      | TEAM VERIFICATION                                        |                                                          |           |
|------|--------------|------------------|----------|-----------|--------------|------|----------------------------------------------------------|----------------------------------------------------------|-----------|
|      |              | NOMINAL          | MEASURED | CORRECTED | MIN          | MAX  | ISSUE NCR                                                | STATUS                                                   | NEXT DATE |
|      |              |                  |          |           | 35•F         | 42•F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 35•F         | 42•F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 35•F         | 42•F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 35•F         | 42•F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 35•F         | 42•F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |

| EQUIPMENT DESCRIPTION | ASSIGNED NUMBER | MAKE      | MODEL | DATE ACQUIRED | SERIAL/VIN NUMBER | LOCATION ASSIGNED |
|-----------------------|-----------------|-----------|-------|---------------|-------------------|-------------------|
| Thermometer           | 1               | Sure Temp | 3621  | 2010          | N/A               | Cooler 1          |
| Thermometer           | 2               | Sure Temp | 3621  | 2010          | N/A               | Cooler 2          |
| Thermometer           | 3               | Sure Temp | 3621  | 2020          | N/A               | Cooler 2a         |
|                       |                 |           |       |               |                   |                   |
|                       |                 |           |       |               |                   |                   |
|                       |                 |           |       |               |                   |                   |
|                       |                 |           |       |               |                   |                   |

|               |  |       |  |
|---------------|--|-------|--|
| Completed by: |  | Date: |  |
| Reviewed by:  |  | Date: |  |
| Filed by:     |  | Date: |  |

We now have a digital cooler readout that send reports digitally. We maintain the Sure Temps as a contingency and counter measure to the output. Check both when calibrating the coolers.



But just in case the app doesn't work, you can download this form and still use it (contingency built-in).

## COOLER TEMPERATURE CALIBRATION RECORD

|                                |                                                |                                                                                   |                                                                                       |
|--------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>EQUIPMENT#:</b><br>Cooler 2 | <b>EQUIPMENT NAME:</b><br>Refrigerated Storage | <b>MASTER/STANDARD USED:</b><br>ISO 9001 Standards for Temperature<br>Calibration | <b>CAL. PROCEDURE:</b><br>Maintenance Apparatus: Calibrating Probe<br>Iced Water Test |
|--------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|

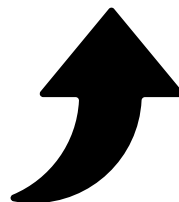
### CALIBRATION MEASUREMENT DATA

| DATE | COMPLETED BY | READING OR VALUE |          |           | LIMITS+/- 4° |      | TEAM VERIFICATION                                        |                                                          |           |
|------|--------------|------------------|----------|-----------|--------------|------|----------------------------------------------------------|----------------------------------------------------------|-----------|
|      |              | NOMINAL          | MEASURED | CORRECTED | MIN          | MAX  | ISSUE NCR                                                | STATUS                                                   | NEXT DATE |
|      |              |                  |          |           | 35°F         | 42°F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 35°F         | 42°F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 35°F         | 42°F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 35°F         | 42°F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 35°F         | 42°F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |

| EQUIPMENT DESCRIPTION | ASSIGNED NUMBER | MAKE      | MODEL | DATE ACQUIRED | SERIAL/VIN NUMBER | LOCATION ASSIGNED |
|-----------------------|-----------------|-----------|-------|---------------|-------------------|-------------------|
| Thermometer           | 1               | Sure Temp | 3621  | 2010          | N/A               | Cooler 1          |
| Thermometer           | 2               | Sure Temp | 3621  | 2010          | N/A               | Cooler 2          |
| Thermometer           | 3               | Sure Temp | 3621  | 2020          | N/A               | Cooler 2a         |
|                       |                 |           |       |               |                   |                   |
|                       |                 |           |       |               |                   |                   |
|                       |                 |           |       |               |                   |                   |
|                       |                 |           |       |               |                   |                   |

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|---------------|--|-------|--|
| Completed by: |  | Date: |  |
| Reviewed by:  |  | Date: |  |
| Filed by:     |  | Date: |  |

We now have a digital cooler readout that send reports digitally. We maintain the Sure Temps as a contingency and counter measure to the output. Check both when calibrating the coolers.



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## COOLER TEMPERATURE CALIBRATION RECORD

|                                 |                                                |                                                                                   |                                                                                       |
|---------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>EQUIPMENT#:</b><br>Cooler 2a | <b>EQUIPMENT NAME:</b><br>Refrigerated Storage | <b>MASTER/STANDARD USED:</b><br>ISO 9001 Standards for Temperature<br>Calibration | <b>CAL. PROCEDURE:</b><br>Maintenance Apparatus: Calibrating Probe<br>Iced Water Test |
|---------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|

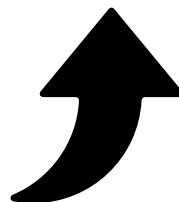
### CALIBRATION MEASUREMENT DATA

| DATE | COMPLETED BY | READING OR VALUE |          |           | LIMITS+/- 4• |      | TEAM VERIFICATION                                        |                                                          |           |
|------|--------------|------------------|----------|-----------|--------------|------|----------------------------------------------------------|----------------------------------------------------------|-----------|
|      |              | NOMINAL          | MEASURED | CORRECTED | MIN          | MAX  | ISSUE NCR                                                | STATUS                                                   | NEXT DATE |
|      |              |                  |          |           | 35•F         | 42•F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 35•F         | 42•F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 35•F         | 42•F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 35•F         | 42•F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 35•F         | 42•F | <input type="checkbox"/> NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |

| EQUIPMENT DESCRIPTION | ASSIGNED NUMBER | MAKE      | MODEL | DATE ACQUIRED | SERIAL/VIN NUMBER | LOCATION ASSIGNED |
|-----------------------|-----------------|-----------|-------|---------------|-------------------|-------------------|
| Thermometer           | 1               | Sure Temp | 3621  | 2010          | N/A               | Cooler 1          |
| Thermometer           | 2               | Sure Temp | 3621  | 2010          | N/A               | Cooler 2          |
| Thermometer           | 3               | Sure Temp | 3621  | 2020          | N/A               | Cooler 2a         |
|                       |                 |           |       |               |                   |                   |
|                       |                 |           |       |               |                   |                   |
|                       |                 |           |       |               |                   |                   |
|                       |                 |           |       |               |                   |                   |

|               |  |       |  |
|---------------|--|-------|--|
| Completed by: |  | Date: |  |
| Reviewed by:  |  | Date: |  |
| Filed by:     |  | Date: |  |

We now have a digital cooler readout that send reports digitally. We maintain the Sure Temps as a contingency and counter measure to the output. Check both when calibrating the coolers.



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## SCALE CALIBRATION RECORD

|                    |                                          |                                                                          |                                                                        |
|--------------------|------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>EQUIPMENT#:</b> | <b>EQUIPMENT NAME:</b><br>Produce Scales | <b>MASTER/STANDARD USED:</b><br>ISO 9001 Standards for Scale Calibration | <b>CAL. PROCEDURE:</b><br>Maintenance Apparatus: Coin Calibrating Test |
|--------------------|------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------|

### CALIBRATION MEASUREMENT DATA

| DATE | COMPLETED BY | READING OR VALUE |          |           | LIMITS+/- 4" |      | TEAM VERIFICATION                 |                                                          |           |
|------|--------------|------------------|----------|-----------|--------------|------|-----------------------------------|----------------------------------------------------------|-----------|
|      |              | NOMINAL          | MEASURED | CORRECTED | MIN          | MAX  | ISSUE NCR                         | STATUS                                                   | NEXT DATE |
|      |              |                  |          |           | 52°F         | 70°F | 0 NO 0 YES                        | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 52°F         | 70°F | 0 NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 52°F         | 70°F | 0 NO <input type="checkbox"/> YES | <input type="checkbox"/> OK 0 NCR                        |           |
|      |              |                  |          |           | 52°F         | 70°F | 0 NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |
|      |              |                  |          |           | 52°F         | 70°F | 0 NO <input type="checkbox"/> YES | <input type="checkbox"/> OK <input type="checkbox"/> NCR |           |

| EQUIPMENT DESCRIPTION | ASSIGNED NUMBER | MAKE | MODEL | DATE ACQUIRED | SERIAL/VIN NUMBER | LOCATION ASSIGNED |
|-----------------------|-----------------|------|-------|---------------|-------------------|-------------------|
| Scale                 | 1               |      |       |               | N/A               | Spice Room        |
| Scale                 | 2               |      |       |               | N/A               | Cooler 2          |
|                       |                 |      |       |               |                   |                   |
|                       |                 |      |       |               |                   |                   |
|                       |                 |      |       |               |                   |                   |
|                       |                 |      |       |               |                   |                   |
|                       |                 |      |       |               |                   |                   |

|               |  |       |  |
|---------------|--|-------|--|
| Completed by: |  | Date: |  |
| Reviewed by:  |  | Date: |  |
| Filed by:     |  | Date: |  |

You no longer have to maintain individual equipment logs with each truck listed. The trucks are all listed and maintained in the app.

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To calibrate a coin scale using a nickel (which weighs 5 grams), first ensure the scale is clean and in a stable position. Then, turn on the scale and allow it to warm up. Set weight to grams. Place a known weight, such as a nickel on the scale. If it does not read 5, the scale is out of calibration.