

LIMNIC ERUPTIONS STATION #1B

KWLA Question: Why is Lake Nyos “layered” or stratified?

Investigation: How does the concentration of dissolved gases affect the layering of the Lake?

Materials:

- 500 mL of carbonated seltzer water colored red
- 500 mL of distilled water colored blue
- Density box¹⁰
- Vernier LabQuest⁹
- Vernier Conductivity probe⁹

Procedure:

1. Connect the Conductivity Probe to CH 1 of the LabQuest. (**CAUTION: Do not immerse the Conductivity probe in the water past the top of the probe. Do not place the conductivity probe in the same container with any other probe.**)
 2. Set the switch on the conductivity probe box to the 0-200 μS range (2000 μS = 1000 mg/L TDS).
 3. Turn on the LabQuest. You should see the red meter screen.
 4. Test the conductivity of the seltzer water and the distilled water. Dry probe between solutions. Record values.
 - a. Seltzer water _____
 - b. Distilled water _____
 5. **SIMULTANEOUSLY** pour seltzer water into the side of the density box and pour distilled water into the other side of the density box.
 6. Remove the divider in the density box. Make observations:
-

Outcome: (Analyze in your Limnologist’s Journal.)

*See Sources page for footnote references.