

E. COLI BACTERIA FIELD QUALITY CONTROL CHECKLIST

The following Field Quality Control Checklist is used by the Texas Stream Team Citizen Scientist to verify that the data are collected using approved protocols. Please check all boxes that apply to this sampling event before submitting this form.

General Procedures

- Samples were transported on ice if testing did not occur at monitoring site.
- Gloves were worn or hand sanitizer was applied throughout.
- None of the reagents used for testing were expired.
- All reagents were stored at room temperature or in an environment protected from extreme weather prior to use.
- Sampling was conducted at approximately the same time/day as previous sampling events at this site, preferably before noon or after 4pm (16:00).
- Monitoring sample was collected from the centroid of flow with minimal streambed disturbance.
- All equipment was rinsed twice with sample water before test was conducted.
- All equipment was rinsed twice with deionized water after testing was completed.
- All relevant measurements are recorded in appropriate fields on monitoring form

Field Observations:

- Algae:** Recorded algae observed on the water surface and below the water surface.
- Water Color:** Observed water color in a plastic cup or bucket with a white background.
- Water Clarity:** Observed the relative cloudiness of the water from bridge or banks.
- Water Odor:** Tested by wafting from plastic cup or bucket.
- Present Weather:** Marked cloudy if there is a least one cloud in the sky.

Bacteria Test:

- A field blank is analyzed at least every 10th sample.
- Hold time between sample collection time and incubation time does not exceed 8 hours.
- Incubation time is between 28 to 31 hours.
- Incubation temperature is $33^{\circ}\text{C} \pm 3^{\circ}\text{C}$.
- Optimal colony number is achieved (<200 colonies on plate).
- Dilution factor calculation is correct.
- No colony growth on field blank(s).

Sample Size	Dilution Factor
0.5 mL	$100/0.5 \text{ mL} = 200$
1 mL	$100/1 \text{ mL} = 100$
3 mL	$100/3 \text{ mL} = 33.3$
5 mL	$100/5 \text{ mL} = 20$