

THE MEADOWS CENTER FOR WATER AND THE ENVIRONMENT

Texas Stream Team

ENVIRONMENTAL MONITORING FORM

PLEASE PRINT (Black Ink or #2 Pencil)

Prepared in cooperation with the Texas Commission on Environmental Quality and the United States Environmental Protection Agency.

Send to:
Texas Stream Team
Texas State University
Riverside Apts - Unit C4
601 University Drive
San Marcos, TX 78666-4616
Toll Free: (877) 506-1401
Email: txstreamteam@txstate.edu

Group ID #

Monitor's Name

Station ID #

Site Description

Sample Date
M M D D Y Y

Sample Time (military)
H H M M

Sample Depth (meters)
(not total depth)

Meter Calibration: (Within 24 hours of sampling.) Store and calibrate standard at room temperature.

Calibration	Date	Time	Standard Value	Standard Temp (°C)	Initial Meter Reading	Meter Adjusted To	Post Test
Conductivity							
pH (7.0)							

Core Tests and Measurements:

- CONDUCTIVITY (µS/cm)
 TDS Tester 3 (Low) TDS Tester 4 (High) Other
- WATER TEMPERATURE (°C)
- AIR TEMPERATURE (°C)
- DISSOLVED OXYGEN (mg/L)
Average 1st titration _____ 2nd titration _____
- pH (standard units)
- SECCHI DISK TRANSPARENCY (meters)
- TOTAL DEPTH (meters)
- TRANSPARENCY TUBE (meters)

Reagents/Media: Are any reagents (or media) expired? Yes No
List any expired: _____

Bacteria Test:

E. COLI (cfu/100 mL)
Average Sample 1 _____ Sample 2 _____

INCUBATION: Period (hrs) _____ (28-31 hrs) Temp. (°C) _____ (33+/-3°C)

SAMPLE 1: Sample size _____ mL Dilution factor (100/sample size) _____
Colonies counted _____ x dilution factor _____ = _____ cfu/100 mL

SAMPLE 2: Sample size _____ mL Dilution factor (100/sample size) _____
Colonies counted _____ x dilution factor _____ = _____ cfu/100 mL

FIELD BLANK: Any colony growth (circle one) YES / NO

DATA QUALITY REVIEW: Checklist completed (circle one) YES / NO

Field Observations:

- FLOW SEVERITY: 1-no flow 2-low 3-normal 4-flood
5-high 6-dry
- ALGAE COVER: 1-absent 2-rare (<25%) 3-common (26-50%)
4-abundant (51-75%) 5-dominant (>75%)
- WATER COLOR: 1-no color 2-light green 3-dark green
4-tan 5-red 6-green/brown 7-black
- WATER CLARITY: 1-clear 2-cloudy 3-turbid
- WATER SURFACE: 1-clear 2-scum 3-foam 4-debris
5-sheen
- WATER CONDITIONS: 1-calm 2-ripples 3-waves
4-white caps
- WATER ODOR: 1-none 2-oil 3-acrid (pungent) 4-sewage
5-rotten egg 6-fishy 7-musky
- PRESENT WEATHER: 1-clear 2-cloudy 3-overcast 4-rain
- DAYS SINCE LAST SIGNIFICANT PRECIPITATION (runoff)
- RAINFALL ACCUMULATION (inches, last 3 days)

Additional Tests Conducted (nutrients, etc.):

- TYPE: _____
- FECAL COLIFORM (colonies/100 mL)
Source of readings: Certified Lab Monitor

Coastal Area Salinity Tests and Observations:

- SALINITY (ppt) SAMPLE TEMP (°C)
- TIDE STAGE: 1-low 2-falling 3-slack 4-rising 5-high

Measurement Comments and Field Observations:

Did you find monofilament at your site? Y N (please circle Y or N and size)
Location: _____ Size Removed: 0-5 ft 6-15 ft 16 ft+

minutes TOTAL TIME SPENT SAMPLING AND TRAVELING

miles TOTAL ROUNDTRIP DISTANCE TRAVELED

TOTAL NUMBER OF PARTICIPANTS

I certify that all procedures, including the items listed in the Quality Control Checklist in the Quality Assurance Officer's Manual, have been followed.

CERTIFIED MONITOR'S SIGNATURE

DATE

DATA MANAGER'S SIGNATURE

DATE

Quality Control Checklist

- Sample depth is either 0.3 m or half of the total depth.
- All fields for conductivity meter calibration are filled out.
- Conductivity meter was calibrated within 24 hours of monitoring.
- Conductivity standard temperature is less than 32°C.
- Conductivity meter is calibrated to the value of 10 closest to the standard value.
- Conductivity values are reported in microSiemens per centimeter ($\mu\text{S}/\text{cm}$), not miliSiemens per centimeter (mS/cm).
- Temperature values are reported in Celsius.
- Secchi depth values equal to total depth include the ">" symbol.
- Secchi depth and total depth values are recorded in meters.
- All relevant fields are filled in.

Data Quality Review Checklist for E. coli

- Monitor is certified.
- Media is not expired.
- Incubation temperature is $33^{\circ}\text{C} \pm 3^{\circ}\text{C}$.
- Incubation time is between 28 – 31 hours.
- Optimal colony number is achieved (>200 colonies on plate).
- Dilution factor calculation is correct.
- No colony growth on Field Blank