

CITY OF HOUSTON
Department of Health & Human Services
Bureau of Laboratory Services
Water & Dairy Microbiology Laboratory
2250 Holcombe Blvd
Houston, Texas 77030
832.393.3939

**COLLECTION OF DRINKING WATER SAMPLES
AND TREATMENT OF WELLS**

Water Samples

The City of Houston Water & Dairy Environmental Microbiology Lab accepts and tests samples of water intended for human consumption. These samples must be submitted in sterile treated bottles supplied by the City of Houston Health Department, Harris County Health Department, the Texas Department of Health, Texas Commission on Environmental Quality (TCEQ), or your local health authority.

Water samples are accepted from 8:00 am to 4:00 pm Monday through Friday.

Water samples are not accepted on Saturdays, Sundays, or holidays. Samples received on these days, and samples more than 30 hours old when received will not be tested. We do not recommend that samples be mailed to the lab. Samples that are submitted by mail may not arrive within the 30 hour time limit or during the Monday - Friday work week. Mailed samples are also likely to break or leak in transit.

Water is tested for the presence of coliform bacteria only. The analysis takes 24 hours to complete.

The fee for water testing is \$16.50 per bottle. Payment by check, money order, or credit card must accompany the sample. No cash will be accepted.

Collecting the Water Sample

Select a cold water faucet. Remove any screen or other attachment to the faucet, and let the water run for 3 to 5 minutes. Remove the cap from the sample bottle without touching the inside of the cap or the bottle. Fill the bottle above the 100 ml mark within 1/4 inch of the top. Samples with less than 100 mls of water will not be accepted. Do not rinse out or overflow the bottle; it contains a chemical used to neutralize chlorine. Replace the cap carefully and tighten. If the sample has excessive chlorine, it is not suitable for analysis. Another sample and an additional \$16.50 will have to be submitted.

Deliver the sample and form to the laboratory the same day it is collected or refrigerate and deliver it the next day, within **30 hours of the time of collection**.

Fill out the laboratory form, giving complete return address, phone number, county, date, time of collection, and other information requested; print this information using black waterproof ink. Do not photocopy the lab form. A separate form must be filled out for each sample bottle.

Public systems required to submit water sample(s) monthly must indicate their TCEQ issued water system identification number and sample type (distribution, raw, etc.) in the proper places in the form. This is required for the system will be credited with the sample by the TCEQ.

Laboratory Reports

We cannot telephone all test results to you; however we will attempt to contact you if your sample is unsatisfactory or was found to have coliform organisms. You may call the Laboratory for your results at 832.393.3939

Reports are mailed to the address you write on the form. You should receive your report within 5 to 7 days. If your report does not arrive within 2 weeks, please contact the Laboratory by telephone at 832.393.3939

To locate a report we must have:

- The date the sample was submitted AND
- The name of the return addressee exactly the way it was written on the form

Interpretation of Results

If coliform organisms are not found, the water is bacteriologically safe to use at the time of sampling. If "total" coliforms organisms are found, the sample contains bacteria commonly found in runoff or surface water. If **E.coli** organisms are found, the sample contains bacteria commonly found in sewage, which could include other disease producing bacteria. Any water well found to have coliform organisms should be disinfected according to the directions below or treated by a well service company. Water in which **either total coliforms or E. coli** is found should **not** be used for drinking, bathing, brushing teeth, cleaning wounds, or washing food which is to be eaten raw. It is advisable to use bottled water until the water supply is reported to be safe to use. However, contaminated water may be boiled for a minimum of 5 minutes before use.

For questions concerning "Repeat" sampling for public systems receiving a coliform positive report, please contact the TCEQ @ 521.239.4691.

For further information, call the TCEQ Public Drinking Water Section @ 512.239.4691 or Harris County Public Health Environmental Services @ 713.274.6300 For inquiries about water supplied by the City of Houston, call Public Works & Engineering, Water Quality @ 713.842.4000.

Water Well Disinfection

Well disinfection is necessary in the following circumstances:

1. When coliform "found" (total or E. coli) results are obtained from a water well sample.
2. When any work is done to the plumbing or well system.
3. When a well or the surrounding area has been flooded.

Note: Check to make sure the well is pumping clear water before chlorinating. If the water is turbid, run it until it is clear before chlorinating.

1. Locate the wellhead and remove the access plug or bolt so that the area within the well casing is exposed.
2. Using a funnel, pour in an appropriate amount of liquid chlorine bleach (Clorox, Purex, etc.) ½ to 1 gallon of bleach per 100 ft. of well depth is the recommended approximate dosage. Greater amounts are recommended for excessively cloudy water or for hand-dug wells.
3. Using the nearest faucet to the well and a garden hose, allow water to run through the funnel into the well for two or three hours. This will circulate the chlorinated well water and improve the germ-killing action by allowing all fittings and equipment in the well to be exposed to the chlorine solution.
4. After the well water has circulated for a while, the garden hose and funnel may be removed and the access plug replaced. The disinfection process should be extended throughout the entire plumbing system.
5. To disinfect the remainder of the plumbing system, turn on the next available faucet and allow it to run until the bleach odor can be detected, then turn it off. Repeat this step throughout the plumbing system at each faucet, including 1 hot water faucet. Flush each toilet. Then, allow the chlorinated water to remain in the plumbing system over night, or for 24 hours if possible. During this time, the water should not be used for drinking, bathing, or cooking.
6. After disinfecting the well and plumbing system, flush all faucets until the bleach odor can no longer be detected and the water is clear of any debris or color. Flush outside faucets first - you do not want to flood the septic system.
7. Submit another bacteriological sample to determine if the disinfection process was successful.

Keep in mind that a single disinfection may not be sufficient. Certain well systems, particularly shallow wells, hand-dug wells, wells in fissured areas and old wells, are more vulnerable to contamination. Water from these types of systems should be checked by periodically submitting samples for bacteriological analysis. Continuous disinfection equipment should be considered for any water well with repeated samples positive for coliform organisms.

For further information, call the TCEQ @ 512.239.4691 or Harris County Public Health Environmental Services @ 713.274.6300 For inquiries about water supplied by the City of Houston, call Public Works & Engineering, Water Quality @ 713.842.4000.

Drop off hours: 8am-4pm M-F.
Pay by check, money order, CC
or COH Account.

* Sample MUST be received
within 30 hours of collection

Drinking Water Submission Form
Houston Department of Health and Human Services
Bureau of Laboratory Services
www.houstontx.gov

Date & Time received

Water Laboratory 2250 Holcombe Blvd.
Houston, TX 77030 Phone: 832.393.3939
NELAP Certificate # T104704253

USE BLUE OR BLACK INK ONLY NO PENCIL

Public Systems Only: 7-digit PWS ID #

Assigned by TCEQ

Name of Public Water System: _____

Payment Method:

COH Account No:

____/____/____/____/____/____

Check or Money Order
#

Return
Address

Name _____

Address _____

City _____ State _____ Zip _____

Phone (____) _____ Email _____

The results contained in this report
apply **only** to the 1 (one) sample
described below. Please retain this
report for your records.

DATE/TIME
ANALYSIS STARTED

SAMPLE SITE / COLLECTION DATE & TIME (REQUIRED)

Date Collected ____/____/____ Time Collected ____ AM / PM
Month Day Year

Sample Site (address or other description, not sample site #) _____

Sampler Name _____ Phone _____ County _____

SYSTEM TYPE

CHECK ONLY 1 BOX

- Public
- Private/ Individual
- Other: _____

SAMPLE TYPE
PUBLIC WATER SYSTEMS ONLY
CHECK ONLY 1 BOX

- Routine / Distribution
- Raw: well # _____
- Repeat for sample # _____
- Construction
- Special

REPEAT SAMPLES are required
when Coliform organisms are **FOUND**
in Routine / Distribution samples

Water Source:

- Groundwater (well)
Depth of well _____ ft
- Surface Water
(Lake, River)

DISINFECTANT RESIDUAL:

_____ mg / L
 Free chlorine OR Total chlorine

Routine/Distribution samples will NOT be
analyzed with out a Disinfectant Residual
recorded

LABORATORY RESULTS

Test Method Used: SM9223B

Chlorine content of the sample was not determined before analysis

COLIFORM BACTERIA ORGANISMS:

Total Coliform

FOUND NOT FOUND

E. coli

FOUND NOT FOUND

ANALYZED BY: _____ READ BY: _____

UNSUITABLE FOR ANALYSIS (see below)

- Sample too old. Not received within **30 hours** of collection
- Sample leaked / bottle cracked in transit
- Quantity insufficient for analysis (100mL required)
- Form Incomplete / (w/Errors circled)
- Inconclusive result
- Sample has excessive color / turbidity
- Excessive Chlorine residual
- Other reason: DESCRIBE _____

Water of satisfactory bacteriological quality must be free of coliform organisms

NOTE: Data reported meets or exceeds all NELAC required QC criteria unless noted above.

Reported by: _____ Signature: _____ Date: _____

Laboratory Supervisor/Microbiologist / Other

Submit to TCEQ / Public Drinking Water MC – 155, PO Box 13087, Austin, TX 78711512-239-4691

Fax Positive to 512.239.3666