



RESEARCH & ANALYTICAL LABORATORIES, INC.

Analytical/Process Consultations

TTHM/HAA5 - Stage 1 Disinfection Byproducts Analysis

Note: All information must be supplied for compliance credit.

WATER SYSTEM NO. _____ - _____ - _____ County: _____

Name of Water System: _____

Sample Type: Routine Distribution Special/Non-compliance

Location Where Collected: _____

Facility ID No. D01

Sample Point: Maximum Residence Time (MAXRES1) Average Residence Time (AVGRES1) Special/Non-compliance

Location Code: _____

Collected By: _____
(Please Print)

Mail Results to (water system representative):

| | |
|---|--|
| <u>Collection Date</u> | <u>Collection Time</u> |
| ____/____/____ <small>(MM/DD/YY)</small> | ____:____, ____ M <small>(Specify AM or PM)</small> |

Phone #: (____) _____

Fax #: (____) _____

Responsible Person's email:

LABORATORY ID #: 37701

SAMPLE UNSATISFACTORY RESAMPLE REQUIRED

| CONTAM CODE | CONTAMINANT | METHOD CODE | REQUIRED REPORTING LIMIT (R.R.L.) | NOT DETECTED (i.e. < R.R.L.) (X) | QUANTIFIED RESULTS* | ALLOWABLE LIMIT |
|-------------|------------------------|--------------|-----------------------------------|----------------------------------|---------------------|-----------------|
| 2950 | Total Trihalomethanes | <u>524.2</u> | 0.0010 mg/L | <input type="checkbox"/> | ____. _____ mg/L | 0.080 mg/L |
| 2456 | Total Haloacetic Acids | <u>552.2</u> | 0.0020 mg/L | <input type="checkbox"/> | ____. _____ mg/L | 0.060 mg/L |

*Note: If result exceeds allowable limit, the laboratory must fax analytical results to the State within 48 hours.

| | | |
|----------------------------|---|--|
| | DATE: | TIME: |
| ANALYSES BEGUN: | ____/____/____ <small>(MM/DD/YY)</small> | ____:____, ____ M <small>(Specify AM or PM)</small> |
| ANALYSES COMPLETED: | ____/____/____ <small>(MM/DD/YY)</small> | ____:____, ____ M <small>(Specify AM or PM)</small> |

Laboratory Log #: _____

Certified By: _____
(Print and sign name)

COMMENT: _____

Laboratory should Mail Results to:

Public Water Supply Section, Attn: Data Entry, 1634 Mail Service Center, Raleigh, NC 27699-1634
Fax: 919.715.6637

Instructions

TTHM/HAA5 – Stage 1 Disinfectants and Disinfection Byproducts Rule

1. THE CLIENT IS RESPONSIBLE FOR COMPLETING ALL INFORMATION ABOVE THE DOUBLE LINE. Failure to complete all the information may result in rejection of the samples. Please print all information and make sure the information is legible.
2. The samples must be collected in the glass bottles supplied by this laboratory. Use the clear bottles for the TTHM samples and the amber for the HAA5s. There is a preservative in the bottles so do not rinse the bottles. Samples must be immediately packed with ice upon collection and be kept at 4.0° C. Samples being shipped must also be on ice. **SAMPLES NOT ADEQUATELY CHILLED UPON DELIVERY TO THE LAB WILL BE REJECTED AND WILL NOT BE TESTED.**
3. Let the water run from the tap at almost full flow for at least five (5) minutes. Reduce the flow, then fill each glass sample bottle slowly (in order to prevent air bubbles from passing through the sample) to just overflowing taking care not to flush out the sample preservative that is already in the bottle. After collecting the sample in the bottle containing the preservative, seal the bottle with the screw cap. There should be no air bubbles present. If air bubbles exist, open the bottle, add a few drops of water and seal again. Shake or agitate by hand for 1 minute.
4. Collect both TTHM and HAA5 samples from an established sampling location within the distribution system at the same location and time. (This established sampling location must be designated as the “Location Code” on the lab form.) Systems collecting only one sample per quarter or per year must collect the sample from the location representing the water’s MAXIMUM RESIDENCE TIME. When more than one distribution sample is collected per entry point or plant during a monitoring period, at least twenty-five percent (25%) of those samples collected must be from maximum residence time locations. The remaining seventy-five percent (75%) of those samples collected may be from representative distribution locations (average residence time locations). All distribution samples collected for TTHM/HAA5 compliance purposes must have the “Sample Point” marked as either “Maximum Residence Time (MAXRES1)” or “Average Residence Time (AVGRES1).”
5. Place the samples and completed sample collection form in the shipping container. Forward all samples to the laboratory immediately after collection to avoid exceeding the allowable holding time to begin the analysis.
6. After the samples are analyzed, regulations require that the laboratory mail the original results of all compliance samples to the Public Water Supply Section (Attention: Data Entry), 1634 Mail Service Center, Raleigh, NC 27699-1634. A copy will be sent to the client, and the client shall retain the copy for at least twelve (12) years.
7. If the form should be returned to the client marked “**Sample Unsatisfactory**,” this means another sample must be collected. The COMMENTS section on front of the form will give the reason.
8. Calculation of the Total Trihalomethanes or Total Haloacetic Acids is determined by adding the quantified results of the individual contaminants within each group. A contaminant having a “Not Detected” value is calculated as a “zero.” If all the contaminants for either the TTHM or HAA5 are “Not Detected,” then the Total will also be marked as “Not Detected.”

SAMPLE TYPE

Routine Distribution: A sample collected from a point in the distribution system, if used for compliance monitoring.

Special/Non-compliance: A sample collected for special purposes and is not for compliance monitoring.

SAMPLE POINT

Maximum Residence Time: A sample collected from a point in the distribution system that represents the water’s maximum residence time for compliance monitoring.

Average Residence Time: A sample collected from a point in the distribution system that represents average flow conditions for compliance monitoring.

Special/Non-compliance: A sample collected for special purposes and is not for compliance monitoring.