



RESEARCH & ANALYTICAL LABORATORIES, INC.

Analytical/Process Consultations

LEAD AND COPPER - DISTRIBUTION SYSTEM - ANALYSIS

Note: All information must be supplied for compliance credit.

WATER SYSTEM ID #: _____ - _____ - _____ County: _____

Name of Water System: _____

Sample Type: Routine Distribution Special/Non-compliance

Sample Site Type: Tier 1 Tier 2 Tier 3 Other

Location Where Collected: _____

Facility ID No. (Distribution): _____

Sample Point: _____

Location Code: _____

Collected By: _____

(Please Print)

Collection Date	Collection Time
____/____/____	____:_____M
<small>(MM/DD/YY)</small>	<small>(Specify AM or PM)</small>

Mail Results to (water system representative):

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*	ACTION LEVEL
1022	Copper	<u>200.7</u>	0.050 mg/L	<input type="checkbox"/>	____.____ mg/L	1.300 mg/L
1030	Lead	<u>200.9</u>	0.003 mg/L	<input type="checkbox"/>	____.____ mg/L	0.015 mg/L

* Note: If result exceeds action level, 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)

COMMENTS: _____

Laboratory should Mail Results to:

Instructions
LEAD AND COPPER – DISTRIBUTION SYSTEM

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 bottles supplied by the laboratory. When required, preserve with nitric acid (HNO₃) to pH <2. If HNO₃ cannot be used because of shipping restrictions, immediately ship the sample to the laboratory (icing optional). Upon arrival at the laboratory, the sample must be acidified with concentrated HNO₃ to pH <2 and held for at least sixteen (16) hours before analysis.
3. Sample collection procedures and criteria are published in 40 C.F.R. 141.86. Make sure that the water has stood motionless in the pipes for at least six hours before collecting your sample. Samples must be collected at a kitchen or bathroom sink. **Do not remove the faucet aerator screen prior to collecting the tap samples.** For systems with less than five sampling sites, some sites will need to be sampled more than once, on different days, in order to obtain the required minimum five samples. Note: If the sample site is served by a lead service line, the sample collection procedures differ from that specified above [see 40 C.F.R. 141.86 (b)(3)].
4. Place the samples and completed collection form in the shipping container. Forward all samples to the laboratory immediately after collection.
5. After the samples are analyzed, regulations require that the laboratory mail the 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.
6. If the form should be returned to the client marked "Sample Unsatisfactory," this means another sample will have to be collected. The COMMENTS section on the front of the form will give the reason.

SAMPLE TYPES

Routine Distribution: A sample collected in the distribution system from a pool of sampling sites indicated on the system's lead and copper sampling plan (which are those sites having the greatest likelihood of experiencing the highest lead and copper levels). The sample is collected for compliance monitoring.

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

SAMPLE SITE TYPE

For Community Water Systems (CWS):

Tier 1 sampling sites consist of single family structures that:

- contain copper pipe with lead solder that was installed January 1, 1983 through December 31, 1985; and/or
- contain lead pipe or are served by a lead service line (any age structure).
(Note: When multiple family residences comprise at least 20% of the structures served by a water system, the system may count them as Tier 1 sites.)

Tier 2 sampling sites consist of buildings, including multiple-family residences that:

- contain copper pipe with lead solder that was installed January 1, 1983 through December 31, 1985; and/or
- contain lead pipe or are served by a lead service line (any age structure).

Tier 3 sampling sites consist of single family structures that contain copper pipes with lead solder installed before 1983.

Other: If there are insufficient numbers of Tier 1, 2, and 3 sampling sites in a community water system, the system shall complete its sampling pool with representative sites throughout the distribution system. A site is considered a 'representative site' if the plumbing material used at that site would be commonly found at other sites served by the water system.

For Non-Transient Non-Community (NTNC) Water Systems:

Tier I sampling sites consist of buildings that:

- contain copper pipes with lead solder installed January 1, 1983 through December 31, 1985; and/or
- contain lead pipes or are served by a lead service line (any age structure).
(Note that Tier I NTNC sites differ slightly from that of Tier I CWS sites in that the Rule states "buildings" instead of "single family structures.")

Other: A NTNC water system with insufficient Tier I sampling sites shall complete its sampling pool with sampling sites that contain copper pipes with lead solder installed before 1983. If additional sites are needed to complete the sampling pool, the NTNC water system shall use representative sites throughout the distribution system. A 'representative site' is a site in which the plumbing materials used at that site would be commonly found at other sites served by the water system.