RESEARCH & ANALYTICAL LABORATORIES, INC.
Analytical/Process Consultations

LEAD AND COPPER ANALYSIS - Distribution System

Note: All information must be supplied for compliance credit.

Water System Number: ___ ___ - ___ ___ - ___ ___ ___ County: _____

Name of Water System: _____

Sample Type: ☐ Routine Distribution (Compliance) ☐ Non-compliance

Sample Site Type: ☐ Tier 1 ☐ Tier 2 ☐ Tier 3 ☐ Other

Location Code: ___ Tap Location: _____ Street Address: _____ City: _____

Check (√) if sample site is owned or controlled by water system. ☐

Check (√) if sample site is a daycare or a K-12 school. ☐

Facility ID No. (Distribution): D 0 1

Sample Point: LCR

Collected By: _____
(Please Print)

Collection Date	Collection Time
__/__/__	__:__, ____M
(MM/DD/YY)	(Specify AM or PM)

Mail Results to (water system representative):

_____

_____

_____

Phone #: (____) _____

Fax #: (____) _____

Responsible Person's email:

_____

Laboratory ID #: 3 7 7 0 1

Contam Code	Contaminant	Method Code	Required Reporting Limit (R.R.L)	Analysis Started	Analysis Ended	Not Detected (i.e.< R.R.L)	Quantified Results*	Action Level
1022	COPPER	200.8	0.050 mg/L			☐	mg/L	1.3 mg/L
1030	LEAD	200.8	0.003 mg/L			☐	mg/L	0.015 mg/L

* **Note:** If result exceeds the action level, the laboratory must report the analytical results to the State within 48 hours.

Laboratory Log #: _____ **Certified By:** _____
(Print and sign name)

COMMENTS: _____

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Instructions

LEAD AND COPPER – DISTRIBUTION SYSTEM

1. THE CLIENT IS RESPONSIBLE FOR COMPLETING ALL INFORMATION ABOVE THE DOUBLE LINE. Be sure to indicate the Location Code, Tap Location, Street Address, and City. Also, be sure to check the appropriate boxes regarding whether or not the sample site is owned or controlled by the water system, and whether or not the sample site is a daycare or a K-12 school. Note that the Facility ID for all distribution system samples is "D01" and the Sample Point is "LCR" and are already indicated on the form. 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 (HNO_3) to pH <2. If HNO_3 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 HNO_3 to pH <2 and held for at least sixteen (16) hours before analysis.

3. Sample collection procedures and criteria are published in 40 CFR. §141.86. Make sure that the water has stood motionless in the pipes for at least six hours before collecting your sample. Pre-stagnation flushing should not be performed. 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 CFR. §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 electronically submit the results of all compliance **and** special / non-compliance samples to the Public Water Supply Section. A copy will be sent to the client, and the client shall retain the copy for at least twelve (12) years.

SAMPLE TYPES

Routine Distribution (Compliance): 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).

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 1 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 1 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.