MOORE TWINING ASSOCIATES, INC.

Nitrate Sampling Procedures

Nitrates and Nitrites – General Information:

Nitrate (NO3) is a form of nitrogen combined with oxygen, which can be converted in the body to nitrite (NO2). It can get into the water if a well is improperly constructed, or located where it is subject to contamination sources. Typical sources of nitrate include: sewage disposal systems, run-off from barnyards or fertilized fields, industrial wastes, or it may be naturally found in the soil. Nitrates in large amounts may bond with hemoglobin in the red blood cells of infants, the elderly, or imunosuppressed individuals, and prevent it from carrying oxygen to the cells. This can cause a condition called methemoglobinemia or "blue baby syndrome." The condition, if not treated immediately, can be fatal. Also, because nitrates may be found in sewage or animal waste, excessive levels in drinking water may indicate the presence of other types of potentially harmful contaminants. The MCL for nitrates as NO3 is 45 mg/L.

Sampling Procedures:

1. **Collect samples just prior to delivery to the laboratory. Samples should be taken early in the week as they must be analyzed within 48 hours of sampling.**
2. **Use the proper sample container obtained from the laboratory. This sample required a minimum of 250 mls of sample collected in a clean plastic container.**
3. **Sample must be pulled prior to any treatment. The best location is at a tap located at the well.**
4. **Flush the tap for 3-5 minutes prior to sampling. Use the flush time to completely fill out the COC paperwork and label the sample container.**
5. **Adjust the tap to a pencil-sized stream and fill the container to the neck. Place samples in an ice chest and transport to the laboratory immediately.**

Please contact our Client Services Department for a bottle order or any additional questions at (800) 268-7021!

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