

<b>Title</b>	<b>Pesticides</b>
<b>Test Explanation:</b>	<p>The Pesticide method includes crop chemicals such as Atrazine that are used extensively in Indiana and may be found in well water from runoff. The drinking water limit for atrazine is 0.003 mg/L (ppm). Atrazine found above this level may cause cardiovascular or reproductive problems.</p> <p>The Pesticide Method can detect dozens of chemicals. Some of these compounds are known persistent organic pollutants (POP), classified among the "dirty dozen" and banned by the 2001 <u>Stockholm</u> Convention on Persistent Organic Pollutants</p>
<b>Specimen Requirements</b>	<p>Samples for Pesticide analysis will only be accepted from the Indiana State Department of Health and other government agencies.</p> <p>If you require a test for a specific pesticide, please ask.</p> <p>Contact: Mark Starzynski 317-921-5580 for sample containers and instructions.</p>
<b>Sampling Materials</b>	<p>Water must be collected in one liter glass bottles with teflon lined caps, both of which were previously rinsed with solvents. Solids are collected in solvent rinsed pint glass jars with clean aluminum foil between the jar and the cap.</p>
<b>Procedural Notes</b>	<p><b>Sample Collection</b> -- When sampling from a water tap, open the tap and allow the system to flush until the water temperature has stabilized (usually about two minutes). Adjust the flow so that it is smaller than the bottle opening, and collect the sample from the flowing stream. Keep samples sealed from collection time until analysis.</p> <p>When sampling from an open body of water, fill the sample container with water from a representative area. Sampling equipment, including automatic samplers, must be free of plastic tubing, gaskets, and other parts that may leach interfering analytes into the water sample. Automatic samplers that composite samples over time should use refrigerated glass sample containers if possible.</p> <p><b>Sample Dechlorination and Preservation</b> -- All samples should be iced or refrigerated at 4°C and kept in the dark from the time of collection until extraction. Residual chlorine should be reduced at the sampling site by addition of 40-50mg of sodium sulfite (this may be added as a solid with stirring or shaking until dissolved) to each water sample. It is very important that the sample be dechlorinated prior to adding acid to lower the pH of the sample. Adding sodium sulfite and hydrochloric acid to the sample bottles prior to shipping to the sampling site is not permitted. Hydrochloric acid should be used at the sampling site to retard the microbiological degradation of some analytes in water. The sample pH is adjusted to &lt;2 with 6 N hydrochloric acid. This is the same pH used in the extraction, and is required to support the recovery of acidic compounds like pentachlorophenol.</p> <p>If <b>Cyanazine</b> is to be determined, a separate sample must be collected. Cyanazine degrades in the sample when it is stored under acidic conditions or when sodium sulfite is present in the stored sample. Samples collected for Cyanazine determination <b>MUST NOT</b> be dechlorinated or acidified when collected. They should be iced or refrigerated as described above and analyzed within 14 days. However, these samples <b>MUST</b> be dechlorinated and acidified immediately prior to fortification with internal standards and surrogates, and extraction using the same quantities of acid and sodium sulfite described above.</p> <p><b>Prometon</b> is not efficiently extracted from water at pH 2 due to what appears to be its ionization in solution under acidic conditions. In order to determine this analyte accurately, a separate sample must be collected and dechlorinated with sodium sulfite, but no acid should be added. At neutral pH, this compound is recovered from water with efficiency greater than 90%.</p> <p>For <b>Water Samples</b> - fill 2 of the one liter glass bottles to the top.</p> <p>For <b>Solid</b> - fill 1 or 2 of the pint glass jars with the solid.</p>
<b>Shipping Instructions</b>	<p>Samples must be kept refrigerated at 4°C from the time of collection to the time of analysis. Samples should be delivered to the laboratory within 1 day of collection. Ship samples by an overnight service with ice packs and adequate padding to prevent breakage, or hand-deliver to the lab.</p>

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**Reporting and  
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Results will be e-mailed to the submitter normally within 30 days.