## Water Report

#### **Annual Drinking Water Quality Report**

We're pleased to bring you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you a dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is now Indianapolis Water Co. and has bee since July 17, 1998.

We have a source water protection plan available from our office that provides more information such as potential sources of contamination. I am pleased to report that our drinking water is safe and meets all federal and state requirements. This report shows our water quality and what it means. If you have any questions about this report or your water utility, please contact our office at 892-3326. We want our valued customers to be informed about their water utility. If you would like to learn more please attend any of our regularly scheduled meetings. They are held on the second Tuesday of every month.

The Pittsboro Water Co. routinely monitors for contamination in your drinking water according to federal and state laws. This table shows the results of our monitoring for the period of January 1, 2003 to June 30, 2003. As water travels travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you may find some of the terms and abbreviations unfamiliar. To help you better understand these terms we have provided the following definitions.

Non-Detect (ND)	Laboratory analysis indicates that the contaminant is not present
Parts per million (ppm) or milligrams per liter (mg/l)	ppm corresponds to one minute in two thousand years or one penny in \$10,000,000
Action Level	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Maximum Contaminant Level	(mandatory language) The "Maximum Allowed" or MCL is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
Maximum Contaminant Level Goal	(mandatory language) The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no know risk to health. MCLG's allow for a margin of safety.

Contaminant (units)	90th Percentile	Action Level	Maximum Contaminant Level Goal	Major sources in drinking water
Copper (ppm) June 30th to Dec 31 2002	1.3 1 of 20 above action	1.3	1.3	Corrosion of Household plumbing systems; erosion of

	level			natural deposits;leaching from wood preservatives
Copper (ppm) June 30 to Dec 31 2002	1.3 1 of 20 above action level	1.3	1.3	Corrosion of Household plumbing systems; erosion of natural deposits;leaching from wood preservatives
Lead (ppb) Jan 31 to July 2002	3.9 4 of 20 above action level	15	0	Corrosion of Household plumbing systems; erosion of natural deposits
Lead (ppb) July 31 to Dec 31 2002	1.5 1 of 20 above action level	15	0	Corrosion of Household plumbing systems; erosion of natural deposits
Lead (ppb) Jan 1 to July 2003	2.9 1 of 20 above action level	15	0	Corrosion of Household plumbing systems; erosion of natural deposits

\*\* Copper violation: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of AL over many years could suffer liver or kidney damage. The sources of drinking water (both tap and bottle water) includes rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels through through ground or on the surface, it dissolves naturally- occurring minerals and in some cases radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

\*Microbial contaminants. such as viruses

and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

\*Inorganic contaminants, such as salts and metals, which can be naturally occuring or a result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

\*Pesticides and herbicides, which may come from a variety of sources agriculture, storm water runoff, and residential uses.

\*Organic Chemicals, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

\*Cryptosporidium is a single celled protozoan that lives in the intestines of animals and people. When ingested, this microscopic pathogen may cause a disease called cryptosporidiosis, which has flu like symptoms. There has been none of these cells found in any of IWC plants.

\*Radioactive Materials, which can be naturally occuring or can be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily mean that the water poses a health risk. More

information about contaminants and potential health effects can be obtained by calling the environmental protection Agency's Safe Drinking Water Hotline at :

#### 1-800-426-4791

Some people may be more vulnerable to to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer and undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water form their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available form the Safe Drinking Water Hotline.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than at other homes in your community as a result of your home's plumbing. If you are concerned about elevated levels in your home's water you may wish to have your water tested, and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available is from the Safe Drinking Water Hotline.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

IWC tests for the following and their results below.

Substance	MCLG	MCL	System Wide (finished drinking water data)	Possible source
Arsenic(ppb)	0 ppb*	50 ppb†	ND	Natural Deposits
Atrazine(ppb)	3 ppb	3 ppb	ND*-1.4	Herbicide runoff from farming
Barlum(ppb)	2	2 ppm	0.094	Natural Deposits
Copper(AL)	1.3 ppm	1.3 ppm	0.24 ppm (0 of 53 > Action Level)	Corrosion of customer plumbing
Cis-1,2 Dichloroethylene (ppb)	70 ppb	70 ppb	ND*-0.69	Discharge from industrial chemical factories
Fecal Coliform	0	1	ND*	Human and Animal fecal waste
Fluoride(ppm)	2 ppm	2 ppm	1.0	Natural Deposits and treatment additive
HAA-5 -average (ppb)	0	60 ppb	37	By product of Chlorination Treatment
Lead (AL)	0	15 ppb	9 ppb (2 of 53 > Action Level)	Corrosion of customer plumbing
Nitrate(ppm)	10.0 ppm	10.0 ppm	ND*-3.8	Fertilizer, septic tank leachate
TTHM-average(ppb)	0	80 ppb	42	By-product of chlorination treatment
Total coliform	0	5%	<5% System Wide (0- 3.7%)	Naturally present in environment

## Indianapolis Water 2002 Treated Water Quality Data

 $\ast$  effective in 2006  $\dagger$  will reduce to 10 ppb in 2006

### 2002 Table of Additional Substances (Surface Water)

Substance (ppm)	White River	Fall Creek	T.W. Moses	White River N.
Alkalinity	220	200	130	240
Ammonia (as N)	0.56	0.43	0.39	0.5
Calcium (as Ca)	89	74	53	110
Chloride	81	47	39	57
Conductivity (umhos)	790	620	470	820
Hardness as CaCO3	350	280	200	400
Hardness as CaCO3 (grains per gallon)	20	16	12	23
Iron	ND*	ND*	ND*	ND*
Magnese	31	28	18	34
pH (std. units)	7.58	7.34	7.52	7.59
Sodium	22	23	20	16
Sulfate	62	69	63	150
Total Solids	570	340	250	590

\* not detected

Substance (ppm)	Geist	Harding	South Well field	Ford Road
Alkalinity	260	260	280	300
Ammonia	0.31	0.44	0.4	0.49
Calcium	86	96	110	100
Chloride	81	73	53	77
Conductivity (umhos)	590	770	760	840
Hardness as CaCO3	320	360	400	390
Hardness as CaCO3 (grains per gallon)	19	21	23	23
Iron	0.03	0.02	0.03	ND*
Magnese	ND*	ND*	ND*	ND*
pH (std. units)	7.71	7.61	7.72	7.88
Sodium	10	8.5	22	40

# 2002 Table of Additional Substances (Ground Water)

Sulfate	24	51	65	50
Total Solids	350	460	470	500

\*not detected

#### **Surface Water Treatment**

The surface ground water treatment process is more complicated than ground water. Facilities that treat surface water are continually staffed by certified operators during operation. Steps involved include screening, coagulation, flocculation, sedimentation and filtration. Chemicals used in these steps are chlorine for disinfection, along with aluminum sulfate and polymer for particulate removal. Ammonia and fluoride are used for the reasons noted for ground in groundwater treatment. On occasion, powdered activated carbon is used to remove herbicides or other organic chemicals that wash into surface water.