

## 2009 Water Quality Chart

This water quality chart shows results from tests conducted at approved and certified laboratories. In addition, the City of Independence Water Department performs over 50,000 tests each year before, during, and after treatment.

Regulated compounds include the Federal Maximum contaminant Level (MCL). Unregulated compounds show only the results of tests done on City of Independence water.

It is the City of Independence Water Department's pleasure to provide this information to our customers. If you have any questions about this chart, please call us at 816-325-7708.

### Organic Compounds

There are a number of organic compounds that are of concern in drinking water. This group includes volatile organic compounds that vaporize easily and are called VOC's; pesticides and herbicides that run off or percolate through soil to groundwater supplies; and compounds that occur as a by-product when water is disinfected.

<b>Organic Compounds</b>		
<b>Values in milligrams/liters</b>		
<b>Compound</b>	<b>Federal MCL</b>	<b>Independence Result</b>
Alachlor	0.002	ND
Atrazine	0.003	ND
Benzene	0.005	ND
Benzo (A) pyrene	0.002	ND
Carbofuran	0.04	ND
Carbon Tetrachloride	0.005	ND
Chlordane	0.002	ND
Chlorobenzene	0.1	ND
2, 4-D	0.07	ND
Dalapon	0.02	ND
Di (2-Ethylhexyl) Adipate	0.5	ND
Di (2-Ethylhexyl) Phthalate	0.006	ND
Dibromochloropropane (DBCP)	0.0002	ND
Para-Dichlorobenzene	0.075	ND
Ortho-Dichlorobenzene	0.6	ND
1, 2 -Dichloroethane	0.005	ND
1,1-Dichloroethylene	0.007	ND

cis-1, 2-Dichloroethylene	0.07	ND
Trans-1,2-Dichloroethylene	0.1	ND
Dichloromethane (Methylene Chloride)	0.005	ND
1,2-Dichloropropane	0.005	ND
Dinoseb	0.007	ND
Diquat	0.02	ND
Endothall	0.1	ND
Endrin	0.002	ND
Ethylbenzene	0.7	ND
Ethylene Dibromide (EDB)	0.00005	ND
Glyphosate (Rodeo, Roundup)	0.7	ND
Total Haloacetic Acids	0.06	0.0099
Heptachlor	0.0004	ND
Heptachlor Epoxide	0.0002	ND
Hexachlorobenzene	0.001	ND
Hexachlorocyclopentadiene	0.05	ND
Lindane	0.0002	ND
Methoxychlor	0.04	ND
Oxamyl (Vydate)	0.2	ND
Pentachlorophenol	0.001	ND
Picloram	0.5	ND
PCBs	0.0005	ND
Simazine	0.004	ND
Styrene	0.1	ND
2,3,7,8-TCDD (Dioxin)	0.00000003	ND
Tetrachloroethylene	0.005	ND
Toluene	1	ND
Toxaphene	0.003	ND
2,4,5-TP (Silvex)	0.05	ND
1,2,4-Trichlorobenzene	0.07	ND
1,1,1-Trichloroethane	0.2	ND
1,1,2-Trichloroethane	0.005	ND
Trichloroethylene	0.005	ND
Total Trihalomethanes	0.1	ND
Vinyle Chloride	0.002	ND
total Xylenes	10	ND
DDT	NE	ND
Freon	NE	ND
<b>MCL</b> - Maximum Contaminant Levels		
<b>ND</b> - None detected above quantifiable limits of current analytical method		
<b>NE</b> - None Established		

### Microbiological Quality

Bacteria and other harmful organisms are removed by physical processes and disinfection chemicals. The efficiency of these treatment techniques is monitored to assure the absence of these organisms and the clarity of the finished water (turbidity).

<b>Microbiological Quality</b>		
<b>Compound</b>	<b>Federal MCL</b>	<b>Independence Result</b>
Cryptosporidia	TT	ND
Giardia Lambia	TT	ND
Total Coliform	less than 5% positive	0.13%
Turbidity	0.3 NTU	0.1
<b>TT</b> - Treatment Technique		
<b>NTU</b> - Turbidity Units. 95% of samples must be below MCL.		

### **Radiological Quality**

Radiological quality standards are set for specific compounds and for the total radioactive element content.

### **Radiological Quality**

#### **Values in Picocuries/liter unless otherwise noted**

<b>Compound</b>	<b>Federal MCL</b>	<b>Independence Result</b>
Gross Alpha	15	ND
Gross Beta	50	5.9
Combined Radium (226 & 228)	5	0.023
Radon	300	72.1
Uranium (in micrograms/Liter)	30	0.13

### **Inorganic Compounds**

The Environmental Protection Agency sets standards for a number of chemical compounds that can affect our health.

### **Inorganic Compounds**

#### **Values in milligrams/liters**

<b>Compound</b>	<b>Federal MCL</b>	<b>Independence Result</b>
Antimony	0.006	ND
Arsenic	0.01	ND
Asbestos	7 million fibers/L	ND
Barium	2	0.042
Beryllium	0.004	ND

Cadmium	0.005	ND
Chloramines	4	2.19
Chlorite	1	ND
Chromium	0.1	ND
Copper	1.3	ND
Cyanide	0.2	ND
Fluoride	4	0.21
Lead	0.015	ND
Mercury	0.002	ND
Nitrate (as N)	10	0.17
Nitrite (as N)	1	ND
Selenium	0.05	ND
Thallium	0.002	ND

### Additional Parameters

The Water Department tests hundreds of additional substances to assess their presence in drinking water, including the following compounds.

<b>Additional Parameters</b>	
<b>Values in milligrams/liters unless otherwise stated</b>	
<b>Compound</b>	<b>Independence Result</b>
Alkalinity	70
Aluminum	ND
Ammonia	0.36
Calcium	16.9
Chloride	28.6
Iron	ND
Magnesium	16
Manganese	0.00065
MTBE	ND
N-Nitrosodimethylamine (NDMA)	0.0000038
Odor (T.O.N.)	1
Ortho Phosphate	ND
pH (S.U.)	9.75
Perchlorate	ND
Potassium	6.1
Silica	14
Silver	ND
Sodium	46
Sulfide	ND
Surfactants	ND
Total Chlorine	2.19
Total dissolved solids	170
Total Hardness	120

total Organic Carbon	1.69
Zinc	ND
<b>S.U.</b> - Standard Unit	
<b>T.O.N.</b> - Threshold Odor Number	

### Lead and Copper rule Testing

The Federal Lead and Copper rule mandates a household testing program. According to the 1994 rule, 90% of the samples from high-risk homes in Independence must have levels less than 0.015 milligrams of lead per liter and 1.3 milligrams of copper per liter. In 2009, samples taken from high-risk homes averaged <0.0005 milligrams per liter for lead and <0.0005 for copper.

### Units of Measure

One part per million indicates that one pound of a substance can be found in one million pounds of water or that one milligram of the substance can be detected in a liter of water.

### Additional Definitions

**EPA**- United States Environmental Protection Agency.

**MDNR**- Missouri Department of Natural Resources.

**MCL**- Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology.

**MCLG**- Maximum Contaminant Level Goal- A non-enforceable goal set by EPA and MDNR. This is set at the level at which no known or anticipated adverse health effects would occur and which allows a margin of safety. The MCL equals the MCLG unless specifically noted.