

How to Read The 2003 Water Quality Tables

The following tables show the results of water quality analyses performed for the period of January 1 through December 31, 2003, unless otherwise noted. Every EPA-regulated contaminant that was detected in the water, even in the most minute trace, is listed here. The table contains the name of each substance, if the concentration was in violation of EPA regulations, the amount detected, the highest level allowed by regulation (MCL), the ideal goals for public health, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement.

The definitions of MCL and MCLG are important. The Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. The Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

KEY TO WATER QUALITY TABLES

AL	=	Action Level (that level of a contaminant which, if exceeded, triggers water treatment)
MCL	=	Maximum Contaminant Level
MCLG	=	Maximum Contaminant Level Goal
NTU	=	Nephelometric Turbidity Units (measure of water clarity)
pCi/L	=	picocuries per liter (measure of the radioactivity in water)
ppm	=	parts per million, or milligrams per liter (approximately one minute in two years)
ppb	=	parts per billion, or micrograms per liter (approximately one minute in 2000 years)
na	=	not applicable
<	=	less than

Grand Junction Water Plant, Colorado Public Water Supply # CO0139321

CONTAMINANT	VIOLATION?	UNIT	LEVEL	RANGE	MCL	MCLG	MAJOR SOURCES
Arsenic	No	ppb	1.0	na	50	na	Erosion of natural deposits
Barium	No	ppm	0.055	na	2	2	Erosion of natural deposits
Copper	No	ppm	0.29 ¹	0.00 – 0.46	AL=1.3	1.3	Corrosion of household plumbing systems
Fluoride	No	ppm	0.99	na	4	4	Water additive which promotes strong teeth
Haloacetic acids	No	ppb	48 ⁶	30 - 68	60	0	By-product of drinking water chlorination
Lead	No	ppb	8 ^{1,2}	0 – 27	AL=15	0	Corrosion of household plumbing systems
Nitrate	No	ppm	0.04	na	10	10	Erosion of natural deposits
Turbidity	No	NTU	0.05 ³	0.01 – 0.27	0.30	na	Soil runoff
Trihalomethanes	No	ppb	43 ⁶	38 – 63	80	0	By-product of drinking water chlorination
Alpha emitters ⁴	No	pCi/L	5.9	na	15	0	Erosion of natural deposits
Alpha emitters ⁵	No	pCi/L	<3	na	15	0	Erosion of natural deposits
Beta emitters ⁴	No	pCi/L	2.7	na	50	0	Decay of natural and man-made deposits
Beta emitters ⁵	No	pCi/L	<8	na	50	0	Decay of natural and man-made deposits

GRAND JUNCTION WATER QUALITY TABLE FOOTNOTES

¹ 90th Percentile of all samples tested. Year tested – 2002. ² One household had water exceeding the lead action level. ³ Annual average; 100% of turbidity tests were within the compliance limit. ⁴ Tested in 2001. ⁵ Additional voluntary testing, June 2001, not EPA mandated. ⁶ Running annual average (RAA); RAA should not exceed the MCL.

Kannah Creek Water Plant, Colorado Public Water Supply # CO0139434

CONTAMINANT	VIOLATION?	UNIT	LEVEL	RANGE	MCL	MCLG	MAJOR SOURCES
Arsenic	No	ppb	1.0	na	50	na	Erosion of natural deposits
Barium	No	ppm	0.053	na	2	2	Erosion of natural deposits
Copper	No	ppm	0.03	0.01 – 0.03	AL=1.3	1.3	Corrosion of household plumbing systems
Fluoride	No	ppm	0.12	na	4	4	Not added; erosion of natural deposits
Lead	No	ppb	<2	0	AL=15	0	Corrosion of household plumbing systems
Nitrate	No	ppm	0.02	na	10	10	Erosion of natural deposits
Turbidity	No	NTU	0.08 ²	0.03 – 0.49	0.50	na	Soil runoff
Alpha emitters ¹	No	pCi/L	0.13	na	15	0	Erosion of natural deposits
Beta emitters ¹	No	pCi/L	2.4	na	50	0	Decay of natural and man-made deposits

KANNAH CREEK WATER QUALITY TABLE FOOTNOTES

¹ Tested in 2001. ² Annual average; 100% of turbidity tests were within the compliance limit.

Other Monitoring Performed

In 2003 the City water laboratory performed over 16,000 tests for substances in drinking water. Of all the substances that are regulated by the EPA, only the ones that are listed in the table above were found. In addition to required testing by the EPA and State, our water system voluntarily tests for hundreds of additional compounds and microscopic organisms to make certain your water is safe and of high quality. If you are interested in a more detailed water quality report for 2003, contact our Water Quality Laboratory at (970) 243-9636.