City of Tolleson Distribution System:

Substance:	MCL	MCLG	Distribution System	Major Sources in Drinking Water
Total Coliform Bacteria	Presence of coliform bacteria in 5% or more of monthly samples	0.0	0.0%	Naturally present in the environment
Fecal Coliform and E. coli	A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	0.0	0.0%	Human and animal fecal waste

Detected Substances:

				City of Phoenix Water		City of Tolleson Ground Water		
Substance:	**Units**	**MCL**	**MCLG**	**Low**	**High**	**Low**	**High**	**Major Sources in Drinking Water**
1. Arsenic	ppb	10	NA	ND	16.1*****	ND	3.9***	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
2. Barium	ppm	2	2	ND	0.22	.049***	.081***	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
3. Beryllium	ppb	4	4	ND	1.0	ND	ND	Discharge from metal refineries and coal burning factories; Discharge from electrical, aerospace, and defense industries.
4. Chromium	ppb	100	100	ND	82.1	ND	ND	Discharge from steel and pulp mills; Erosion of natural deposits.
5. Di (2-ethylhexyl) phthalate	ppb	6	0	ND	0.9	ND	ND	Common laboratory and field contaminant; Discharge from rubber and chemical factories.
6. Fluoride	ppm	4	4	ND	0.97	.35***	.52***	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
7. Hexachlorocyclopentadiene	ppb	50	50	ND	0.11	ND	ND	Discharge from chemical factories.
8. Nitrate (as N)	ppm	10	10	ND	8.1******	.77	2.0	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
9. Copper	ppm	AL= 90% of taps must not exceed 1.3 ppm	1.3 ppm	0 out of 52 taps sampled were above AL	N/A	***90% of taps sampled were less than .08 ppm	*** 0 taps out of 20 taps sampled were above AL	Corrosion of household plumbing systems.
10. Lead	ppb	AL= 90% of taps must not exceed 15 ppb	0	0 out of 52 taps sampled were above AL	N/A	*** 90% of taps sampled were less than to 2.7 ppb	*** 0 taps out of 20 taps sampled were above AL	Corrosion of household plumbing systems.

**** Some people who drink water containing Arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. Please note that as of January 23, 2006 the arsenic MCL was lowered to 10 ppb. The results reported in the table above were collected in 2005 when the 50 ppb MCL still applied.***

*****Nitrate in drinking water at levels greater than 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.***

*****2003 Results**

Radioactive Contaminants:

				City of Phoenix Water			**City of Tolleson Ground Water**			
Substance	Units	MCL	MCLG	Lowest Level	Highest Level	Highest Average	Low	High	Average	Major Sources in Drinking Water
Alpha Emitters	pCi/l	15	0	1.5*****	5.2*	5.2*****	1.5**	2.9**	2.9**	**Erosion of natural deposits**
Combined Radium	pCi/l	5	0	ND**	0.4**	0.4**	ND**	ND**	ND**	**Erosion of natural deposits**
Uranium	ppb	30	0	ND**	5.0**	5.0**	ND**	ND**	ND**	**Erosion of natural deposits**

* (collected 2004) Most of the City drinking water sources were sampled in the year designated above; however, in 2005 a new well was put into service and monitored. The data above represent the new drinking water source as well as the other drinking water sources. The state allows monitoring for these substances less than once per year because the concentrations do not change frequently.

** (collected 2003)

2005 City of Phoenix Disinfection By-product Monitoring in the Distribution System

Substance	Units	MCL	MCLG	Lowest Level	Highest Level	Running Annual Average	Major Source in Drinking Water
Chlorine	ppm	MRDL=4.0	MRDL=4.0	.1	3.7	1.1	Water additive used to control microbes
Total Organic Carbon Removal Ratio	NA	TT= 1 or greater running annual average	N/A	.7	3.6	1.0 (lowest running annual average)	Naturally present in the environment
Total Trihalomethane (TTHM)	ppb	80 – Running Annual Average	NA	ND	167	78	By-product of drinking water disinfection.
Haloacetic Acids (HAA)	ppb	60 - Running Annual Average	NA	ND	148	36	By-product of drinking water disinfection.

To determine formation of Disinfection ByProducts in the distribution system, the city monitors for Trihalomethanes (THMs) and Halocetic Acids (HAAs) which are DBPs that may cause long term health effects at certain concentrations. THMs and HAAs are sampled throughout the distribution system every quarter. Then, a running annual average of all samples is calculated to determine compliance with the Maximum Contaminant Level (MCL). Based on those sampling criterion, the city's running annual average was below the MCL.

2005 City of Tolleson Disinfection By-product Monitoring in the Distribution System

Substance	Units	MCL	MCLG	Lowest Level	Highest Level	Running Annual Average	Major Source in Drinking Water
Chlorine	ppm	MRDL=4.0	MRDL=4.0	.58	1.27	.94	Water additive used to control microbes
Total Trihalomethane (TTHM)	ppb	80 – Running Annual Average	NA	15	120	60	By-product of drinking water disinfection.
Haloacetic Acids (HAA)	ppb	60 - Running Annual Average	NA	1	89	11	By-product of drinking water disinfection.

To determine formation of Disinfection ByProducts in the distribution system, the city monitors for Trihalomethanes (THMs) and Halocetic Acids (HAAs) which are DBPs that may cause long term health effects at certain concentrations. THMs and HAAs are sampled throughout the distribution system every quarter. Then, a running annual average of all samples is calculated to determine compliance with the Maximum Contaminant Level (MCL). Based on those sampling criterion, the city's running annual average was below the MCL.

2005 Turbidity Monitored after Treatment at the Phoenix Water Treatment Plants

Substance	*Treatment Technique applies Instead of MCL*	*MCLG*	*High*	*Lowest Monthly %*	*Major Source in Drinking Water*
Turbidity	No value can exceed 1 NTU and at least 95% of monthly measurements must be Less than or equal to 0.3 NTU	N/A	2.5 NTU	96 % of monthly measurements were less than or equal to .3 NTU	Soil run-off

In January 2005, heavy runoff from severe rainfall created filtration challenges at the Valvista Water Treatment Plant resulting in higher than normal turbidity levels. From January 23 to January 25, there were times when turbidity levels exceeded the regulator standard of 1 NTU. The City of Phoenix was in contact with the Maricopa County Environmental Services Department (MCESD), which provided guidance during the event. For detailed information on this event, please contact the City of Phoenix Water Services Department at 602-262-6251.

The City of Tolleson received 88% of its drinking water from the City of Phoenix in the year 2005.

2005 City of Phoenix Aesthetic Water Quality from the Distribution System

Substance	*Units*	*MCL*	*Secondary Guideline**	*Lowest Detected Level*	*Highest Detected Level*
Alkalinity	ppm	NA	NA	83	134
pH	NA	NA	6.5 – 8.5	7.0	8.1
Sodium	ppm	NA	NA	23	160
Temperature	°C °F	NA	NA	14 57	39 102
Total Dissolved Solids (TDS)	ppm	NA	500	254	666
Total Hardness	ppm grains/gallon	NA	NA	138 8	271 16

2005 City of Tolleson Aesthetic Water Quality from the Distribution System

Substance	*Units*	*MCL*	*Secondary Guideline**	*Lowest Detected Level*	*Highest Detected Level*
pH	NA	NA	6.5 – 8.5	6.8	8.2
Sodium	ppm	NA	NA	NA	73
Temperature	°C °F	NA	NA	14.9 58.8	32.3 90.1
Total Dissolved Solids (TDS)	ppm	NA	500	252	666
Total Hardness	ppm	NA	NA	84	250

* Non-Enforceable Guidelines Recommended by EPA.

Abbreviations used in tables

NA – not applicable
ND – not detected
AL – action level
MCL – maximum contaminant level
MCLG – maximum contaminant level goal
MDL – method detection level
MFL – million fibers per liter
mrem / year – millirems per year (a measure of radiation absorbed by the body)
pCi/l – picocuries per liter (a measure of radioactivity)
ppm – parts per million, or milligrams per liter (mg/l)
ppb – parts per billion, or micrograms per liter (μg/l)
ppt – parts per trillion, or nanograms per liter
ppq- parts per quadrillion, or picograms per liter
TT – treatment technique

Remember…

Please Conserve Water. Water is a Precious Resource!

Free Water Conservation kits and information are available upon request.

One kit per residence and business

623-478-8729

The City of Phoenix Water Quality Report may be accessed on the Internet:

http://www.phoenix.gov/WATER/qualrept.html

Or

By calling the Phoenix Water Services' Customer Services Division at 602-262-6251.