



# 2015 Drinking Water Quality Report



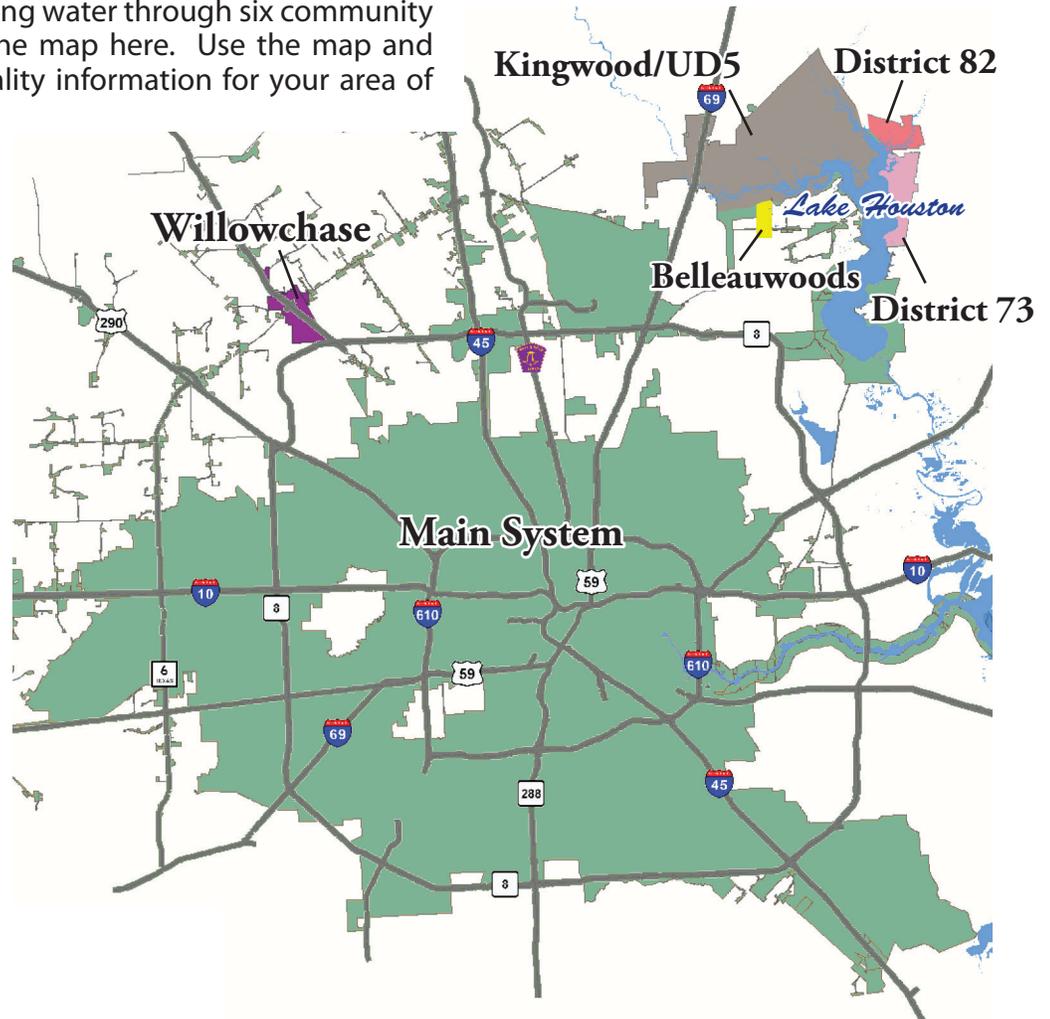
**CITY OF HOUSTON**  
DEPARTMENT OF PUBLIC  
WORKS & ENGINEERING 

## THE CITY OF HOUSTON PUBLIC WATER SYSTEMS

The City of Houston provides drinking water through six community public water systems, shown on the map here. Use the map and table of contents to see water quality information for your area of interest.

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## About this Report

This Report lists all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. Environmental Protection Agency (EPA) requires water systems to test for more than 90 contaminants. If a contaminant was reported in a prior year's report, but is not detected in this report year's samples, that contaminant has been removed from the list.

All drinking water may contain contaminants. When drinking water meets federal standards, there may not be any health based benefits to purchasing bottled water or point of use devices. 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 indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

**En Español**  
Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe, favor de llamar al tel.311 para hablar con una persona bilingüe en español.

**Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:** You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

**AL**

Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**LRAA**

Locational Running Annual Average - The average of results taken at a specific monitoring location during the previous four calendar quarters

**MCLG**

Maximum Contaminant Level Goal - 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. Since MCLGs do not consider limits of detection and available treatment technology, sometimes they are set at a level below MCLs which water systems cannot meet. MCLGs are non-enforceable public health goals.

**MCL**

Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to maximum contaminant level goals as feasible using the best available treatment technology.

**MRDLG**

Maximum Residual Disinfectant Level Goal - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**MRDL**

Maximum Residual Disinfectant Level - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**N/A**

Not Applicable

**ND**

Not Detected

**NTU**

Nephelometric turbidity units - a measure of turbidity, or cloudiness of water.

**pCi/L**

Picocuries per liter - a measure of radioactivity.

**ppm**

Parts per million, or milligrams per liter (mg/L) equivalent to one teaspoon in 1,302 gallons.

**ppb**

Parts per billion, or micrograms per liter (µg/L) equivalent to one teaspoon in 1,302,000 gallons.

**TT**

Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

*-Our Mission -*

*“To plan, design, construct, operate and maintain Houston’s critical public infrastructure systems and establish/enforce the City’s building and development codes in a coordinated manner to provide drinking water, wastewater collection and treatment, stormwater drainage, and streets; and do so responsively, effectively, efficiently, and in an environmentally responsible fashion to serve our customers.”*

*•Department of Public Works and Engineering•*



In 2015 the Main System produced an average of 428 million gallons of water every day: for the City of Houston: 87% from surface water treatment plants and 13% from groundwater plants. Surface water comes from the San Jacinto River through Lake Conroe and Lake Houston, and from the Trinity River, through Lake Livingston, and is treated at one of the system's three large surface water treatment plants. The main system also has more than 100 wells that produce groundwater from the Evangeline and Chicot Aquifers at depths greater than 750 feet.

Monitored at the Water Plants					
Parameter/Substance	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Main System Detections (Sampled in 2015 unless noted otherwise)		
			Minimum	Average	Maximum
Arsenic (ppb) <sup>(1)</sup>	10	0	ND	4.5	5.4
Barium (ppm)	2	2	0.05	0.1	0.4
Cyanide (ppb)	200	200	ND	24	80
Selenium (ppb)	50	50	ND	0.2	4.0
Fluoride (ppm)	4	4	ND	0.25	0.4
Nitrate (ppb)	10	10	ND	0.2	0.9
Atrazine (ppb)	3	3	ND	0.1	0.3
Simazine (ppb)	4	4	ND	0.0	0.2
Xylenes (ppm)	10	10	ND	0.0002	0.0022
Gross Alpha (pCi/L)	15	0	ND	6.0	14.0
Gross Beta (pCi/L)	50	0	ND	2.2	6.4
Combined Radium (pCi/L)	5	0	ND	1.0	2.7
Combined Uranium (ppb)	30	0	ND	1.2	7.8
Turbidity (NTU) <sup>(3)</sup>	TT 95% of samples tested each month ≤ 0.3 NTU	N/A	Lowest percentage ≤ 0.3 NTU: 96.1% Highest Single Measurement: 0.46 NTU		

(1) Arsenic - While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

(2) Subject to reduced monitoring requirements. Detected contaminant within the past five years, in the year indicated.

(3) Turbidity is a measure of the cloudiness of the water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.

Unregulated Contaminants							
Unregulated Contaminant (Units)	Min	Avg	Max	Unregulated Contaminant (Units)	Min	Avg	Max
1,4-Dioxane (ppb) 2014 <sup>(1)</sup>	ND	0.0	0.1	Hexavalent Chromium (ppb) 2013 <sup>(1)</sup>	ND	0.7	5.1
Bromochloromethane (ppb) 2013 <sup>(1)</sup>	ND	0.0	0.1	Molybdenum (ppb) 2014 <sup>(1)</sup>	ND	1	8
Chlorate (ppm) 2013 <sup>(1)</sup>	ND	0.03	0.52	Perfluoroheptanoic acid (PFHpA) (ppb) 2013 <sup>(1)</sup>	ND	0.00	0.01
Chromium (ppb) 2014 <sup>(1)</sup>	ND	0.3	6	Strontium (ppb) 2014 <sup>(1)</sup>	ND	183	650
Cobalt (ppb) (2013)	ND	0.0	2.1	Vanadium (ppb) 2013 <sup>(1)</sup>	ND	1.1	16

(1) Contaminant detected in the year indicated, during the 2013 - 2014 unregulated monitoring sampling period.

**Unregulated contaminants** are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Any unregulated contaminants detected in 2014 are reported in the table below. For additional information and data visit <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr> or call the Safe Drinking Water Hotline at (800) 426-4791.

Parameter/Substance	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Main System Detections (Sampled in 2015 unless noted otherwise)		
<b>Monitored in the Distribution System</b>					
			Minimum	Average	Maximum
Chloramines (Disinfectant)	4.0 (MRDL)	<4.0 (MRDLG)	0.1	2.1	4.2
Total Coliform % Positive <sup>(1)</sup>	5% of monthly samples positive for Total Coliform	0 detections	0%	2.3%	<b>7.5% April 2015<sup>(2)</sup></b> <b>14.8% May 2015<sup>(2)</sup></b>
E.coli	A routine sample and repeat sample are Total Coliform positive, and one is also E.coli positive.	0 detections	Detected E.coli positive results in 8 routine samples, however repeat samples were all negative for E.coli and Total Coliform.		
Haloacetic Acids (ppb)	Yearly Average (LRAA) < 60	N/A	Highest LRAA: 41.3 ppb Individual sample results range from < 6.0 (not detected) to 73.1		
Total Trihalomethanes (ppb)	Yearly Average (LRAA) < 80	N/A	Highest LRAA: 51.8 ppb Individual sample results range from < 4.0 (not detected) to 70.4		
<b>Lead and Copper Monitoring is done at customer's taps.</b>					
Lead (ppb) *	AL = 90% below 15 ppb	0	90% below 4.0 ppb No sample above 15 ppb		
Copper (ppm) *	AL = 90% below 1.3 ppm	1.3	90% below 0.174 ppm No sample above 1.3 ppm		

(1) The percentage of samples collected every month that detect the presence of coliform bacteria.

(2) Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. This system collects and analyzes more than 390 samples for coliform. According to state and federal regulations, no more than 5 percent (%) of the samples are allowed to be positive for coliform. In April 2015 7.5% of samples were coliform positive and in May 2015 14.8% of samples were coliform positive - which is more than the allowed percentage. In the area where the positive samples occurred Drinking Water Operations staff flushed water from the water lines, performed sample investigations and adjusted disinfection treatment at the water plants until we saw an improvement in the distribution test results. The system returned to compliance in June 2015.

\*During the compliance period of January 1, 2013 – December 31, 2015, we completed all required monitoring and testing for lead and copper in August 2015. These monitoring and testing results are required to be submitted to Texas Commission on Environmental Quality (TCEQ) within 10 days after the sampling period. The City of Houston did not submit the results of monitoring and testing to TCEQ by the deadline, and therefore, did not meet the reporting requirements set by TCEQ in Chapter 30, Section 290, Subchapter F. As our customers, you have the right to know what happened and what we did to correct the situation. We have installed a quality control in our reporting process to ensure all future reports are submitted timely. **Nevertheless, the City of Houston wants you to know that all required tests were done timely and the results met the health standards. Your water is SAFE to drink.**

*-Our Vision -*

*To be a rock solid, responsive and respected performance organization for the City of Houston and its citizens; to be the premier public works department in the United States.*  
**•Department of Public Works and Engineering•**



The Willowchase system provides water to approximately 13,500 people and relies solely on groundwater. Groundwater treatment plants receive water from 5 area wells. These wells draw water from the Evangeline and Chicot Aquifers, with typical depths greater than 750 feet. In 2015 this system provided an average of 2.1 million gallons per day to customers.

Parameter/Substance	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Main System Detections (Sampled in 2015 unless noted otherwise)		
<b>Monitored at the Water Plants</b>					
			Minimum	Average	Maximum
Arsenic (ppb) <sup>(1)</sup>	10	0	3.1	3.4	3.6
Barium (ppm)	2	2	0.24	0.25	0.26
Selenium (ppb)	50	50	5.2	6.0	6.9
Fluoride (ppm)	4	4	0.14		
Nitrate (ppm)	10	10	0.20	0.22	0.24
Di(2-ethylhexyl) phthalate (ppb)	6	0	ND	0.2	0.7
Xylenes (ppm)	10	10	ND	0.8	3.4
Gross Alpha (pCi/L)	15	0	4.6	5.5	6.3
Combined Uranium (ppb)	30	0	1.7	2.7	3.6
<b>Monitored in the Distribution System</b>					
Chlorine (Disinfectant)	4.0 (MRDL)	<4.0 (MRDLG)	0.9	1.3	1.7
Total Coliform % Positive	Presence of coliform bacteria in more than one (1) monthly sample	0 detections	0 (zero) samples were found positive for coliform bacteria in 2015.		
Haloacetic Acids (ppb)	Yearly Average (LRAA) < 60	N/A	Highest LRAA: 1.6 ppb Individual sample results range from < 6.0 (not detected) to 6.3 ppb		
Total Trihalomethanes (ppb)	Yearly Average (LRAA) < 80	N/A	Highest LRAA: 6.6 ppb Individual sample results range from < 4.0 (not detected) to 21.8 ppb		
Lead (ppb) 2014 <sup>(2)</sup>	AL = 90% below 15 ppb	0	90% below 1.8 ppb No sample above 15 ppb		
Copper (ppm) 2014 <sup>(2)</sup>	AL = 90% below 1.3 ppm	1.3	90% below 0.17 ppm No sample above 1.3 ppm		

(1) Arsenic - While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

(2) Subject to reduced monitoring requirements. Detected contaminant within the past five years, in the year indicated.

*“Houston Proud? I am proud to be associated with the City of Houston drinking water, over 400 trained professionals working hard, serving the public the best quality water possible.”*

-Assistant Manager, 24 years with the City of Houston

The Kingwood System serves a population of approximately 78,000 and in 2015 provided an average of 7.5 million gallons per day to customers. Water is provided from 15 groundwater wells located throughout the Kingwood area. These are deep wells with typical depths greater than 750 feet, producing water from the Evangeline and Chicot Aquifers.

Parameter/Substance	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Main System Detections (Sampled in 2015 unless noted otherwise)		
<b>Monitored at the Water Plants</b>					
			Minimum	Average	Maximum
Arsenic (ppb) <sup>(2)</sup> 2014 <sup>(3)</sup>	10	0	ND	1.4	2.6
Barium (ppm) 2014 <sup>(3)</sup>	2	2	0.26	0.27	0.28
Fluoride (ppm) 2014 <sup>(3)</sup>	4	4	0.1	0.3	0.5
Nitrate (ppm)	10	10	ND	0.01	0.04
Gross Alpha (pCi/L)	15	0	2.5	2.7	2.8
Uranium (ppb)	30	0	ND	0.8	1.5
<b>Monitored in the Distribution System</b>					
Chlorine (Disinfectant)	4.0 (MRDL)	<4.0 (MRDLG)	0.7	1.4	3.1
Total Coliform % Positive <sup>(1)</sup>	5% of monthly samples positive for Total Coliform	0 detections	0%	0%	2%
Haloacetic Acids (ppb)	Yearly Average (LRAA) < 60	N/A	Highest LRAA: 2.5 ppb Individual sample results range from < 6.0 (not detected) to 7.6 ppb		
Total Trihalomethanes (ppb)	Yearly Average (LRAA) < 80	N/A	Highest LRAA: 3.5 ppb Individual sample results range from < 4.0 (not detected) to 13.8 ppb		
<b>Lead and Copper Monitoring is done at customer's taps.</b>					
Lead (ppb) 2014 <sup>(3)</sup>	AL = 90% below 15 ppb	0	All lead samples were non-detect in 2014.		
Copper (ppm) 2014 <sup>(3)</sup>	AL = 90% below 1.3 ppm	1.3	90% below 0.0314 ppm. No sample above 1.3 ppm.		

(1) The percentage of samples collected every month that detect the presence of coliform bacteria.

(2) Arsenic - While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

(3) Subject to reduced monitoring requirements. Detected contaminant within the past five years, in the year indicated.

Unregulated Contaminants			
Unregulated Contaminant (Units)	Min	Avg	Max
Chromium (ppb) 2014 <sup>(1)</sup>	ND	0.0	1.2
Hexavalent Chromium (ppb) 2013 <sup>(1)</sup>	ND	0.3	1.2
Molybdenum (ppb) 2014 <sup>(1)</sup>	ND	1.9	4.4
Strontium (ppb) 2014 <sup>(1)</sup>	ND	191	350
Vanadium (ppb) 2013 <sup>(1)</sup>	ND	0.5	2.1

**Unregulated contaminants** are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Any unregulated contaminants detected in 2014 are reported in the table below. For additional information and data visit <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr> or call the Safe Drinking Water Hotline at (800) 426-4791.

(1) Contaminant detected in the year indicated, during the 2013 - 2014 sample period for unregulated contaminant monitoring.



District 82 provided an average of 40,000 gallons of water per day in 2015. This system provides water for approximately 670 people and relies solely on groundwater from the Evangeline aquifer through two wells located in the area.

Parameter/Substance	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Main System Detections (Sampled in 2015 unless noted otherwise)		
			Minimum	Average	Maximum
<b>Monitored at the Water Plants</b>					
Barium (ppm)	2	2	0.2		
Fluoride (ppm)	4	4	0.1		
Nitrate (ppm)	10	10	0.2		
<b>Monitored in the Distribution System</b>					
Chlorine (Disinfectant)	4.0 (MRDL)	<4.0 (MRDLG)	0.8	1.3	1.8
Total Coliform	Presence of coliform bacteria in more than one (1) monthly sample	0 detections	0 (zero) samples were found positive for coliform bacteria in 2015.		
Haloacetic Acids (ppb) 2013 <sup>(1)</sup>	Yearly Average (LRAA) < 60	N/A	Highest LRAA: 1.5 ppb Individual sample results range from 1.2 to 1.8 ppb		
Total Trihalomethanes (ppb) 2013 <sup>(1)</sup>	Yearly Average (LRAA) < 80	N/A	Highest LRAA: 5.4 Individual sample results range from 4.9 to 5.8 ppb		
<b>Lead and Copper Monitoring is done at customer's taps.</b>					
Lead (ppb)*	AL = 90% below 15 ppb	0	90% below 5.0 ppb No sample above 15 ppb		
Copper (ppm)*	AL = 90% below 1.3 ppm	1.3	90% below 0.081 ppm No sample above 1.3 ppm		

(1) Subject to reduced monitoring requirements. Detected contaminant within the past five years, in the year indicated.

\*During the compliance period of January 1, 2013 – December 31, 2015, we completed all required monitoring and testing for lead and copper in August 2015. These monitoring and testing results are required to be submitted to Texas Commission on Environmental Quality (TCEQ) within 10 days after the sampling period. The City of Houston did not submit the results of monitoring and testing to TCEQ by the deadline, and therefore, did not meet the reporting requirements set by TCEQ in Chapter 30, Section 290, Subchapter F. As our customers, you have the right to know what happened and what we did to correct the situation. We have installed a quality control in our reporting process to ensure all future reports are submitted timely. **Nevertheless, the City of Houston wants you to know that all required tests were done timely and the results met the health standards. Your water is SAFE to drink.**

*-Our Values-*

*Commitment to excellence through continuous improvement, integrity, competence, innovation, courage and selfless service. Trustworthiness is the essential catalyst for effective teamwork.*

*•Department of Public Works and Engineering•*

District 73 serves approximately 4,300 people through four groundwater wells located throughout the area. These are deep wells with typical depths greater than 750 feet, producing water from the Evangeline and Chicot aquifers. In 2015 this system provided an average of 330,000 gallons per day to customers.

Parameter/Substance	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Main System Detections (Sampled in 2015 unless noted otherwise)		
<b>Monitored at the Water Plants</b>					
			Minimum	Average	Maximum
Arsenic (ppb) <sup>(1)</sup> 2014 <sup>(2)</sup>	10	0	2.6		
Barium (ppm) 2014 <sup>(2)</sup>	2	2	0.3		
Fluoride (ppm) 2014 <sup>(2)</sup>	4	4	0.16	0.17	0.17
Nitrate (ppm)	10	10	0.01	0.03	0.04
Gross Alpha (pCi/L) 2014 <sup>(2)</sup>	15	0	6.5		
Combined Radium (pCi/L) 2014 <sup>(2)</sup>	5	0	0.5		
Uranium (ppb) 2014 <sup>(2)</sup>	30	0	3.5		
<b>Monitored in the Distribution System</b>					
Chlorine (Disinfectant)	4.0 (MRDL)	<4.0 (MRDLG)	0.4	1.3	1.9
Total Coliform	Presence of coliform bacteria in more than one (1) monthly sample	0 detections	0 (zero) samples were found positive for coliform bacteria in 2015.		
<b>Lead and Copper Monitoring is done at customer's taps.</b>					
Lead (ppb) 2014 <sup>(2)</sup>	AL = 90% below 15 ppb	0	90% below 3.3 ppb No sample above 15 ppb		
Copper (ppm) 2014 <sup>(2)</sup>	AL = 90% below 1.3 ppm	1.3	90% below 0.18 ppm No sample above 1.3 ppm		

(1) Arsenic - While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

(2) Subject to reduced monitoring requirements. Detected contaminant within the past five years, in the year indicated.

*-Our Mission-*

*To be the nation's leading Public Utility, champion for the environment, providing reliable service of exceptional quality to the most satisfied customers in the nation.*

*•PWE Public Utilities Division•*

*"It's truly special to live in a city in the world where you can drink water straight from the tap. I'm not sure everyone realizes that, and I am proud to be a part of the effort."*

*-Engineer, 8 years with the City of Houston*



The Belleauwoods Water System serves approximately 800 people and provided an average of 180 thousand gallons per day to customers in 2015. Source water for Belleauwoods includes purchased water from the City of Humble and groundwater from 2 wells located in the area. These are deep wells with typical depths greater than 750 feet, producing water from the Evangeline aquifer.

Parameter/Substance	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Main System Detections (Sampled in 2015 unless noted otherwise)		
<b>Monitored at the Water Plants</b>					
			Minimum	Average	Maximum
Barium (ppm)	2	2	0.3		
Selenium (ppb)	50	50	3.3		
Fluoride (ppm) 2014 <sup>(1)</sup>	4	4	0.2		
Nitrate (ppm)	10	10	ND	0.05	0.13
Ethylbenzene (ppb)	700	700	ND	0.5	0.9
Toluene (ppm)	1	1	ND	0.3	0.6
<b>Monitored in the Distribution System</b>					
Chlorine (Disinfectant)	4.0 (MRDL)	<4.0 (MRDLG)	0.2	0.9	3.8
Total Coliform	Presence of coliform bacteria in more than one (1) monthly sample	0 detections	0 (zero) samples were found positive for coliform bacteria in 2015.		
Haloacetic Acids (ppb) 2013	Yearly Average (LRAA) < 60	N/A	Highest LRAA: 7 ppb Individual sample results range from 1.0 to 17.2 ppb		
Total Trihalomethanes (ppb) 2013	Yearly Average (LRAA) < 80	N/A	Highest LRAA: 24 ppb Individual sample results range from < 4.0 (not detected) to 60.9 ppb		
Xylenes (ppm)	10	10	ND	0.002	0.004
<b>Lead and Copper Monitoring is done at customer's taps.</b>					
Lead (ppb)*	AL = 90% below 15 ppb	0	90% below 5.0 ppb One sample above 15 ppb at 19ppb		
Copper (ppm)*	AL = 90% below 1.3 ppm	1.3	90% below 0.212 ppm No sample above 1.3 ppm		

(1) Subject to reduced monitoring requirements. Detected contaminant within the past five years, in the year indicated.

\*During the compliance period of January 1, 2013 – December 31, 2015, we completed all required monitoring and testing for lead and copper in August 2015. These monitoring and testing results are required to be submitted to Texas Commission on Environmental Quality (TCEQ) within 10 days after the sampling period. The City of Houston did not submit the results of monitoring and testing to TCEQ by the deadline, and therefore, did not meet the reporting requirements set by TCEQ in Chapter 30, Section 290, Subchapter F. As our customers, you have the right to know what happened and what we did to correct the situation. We have installed a quality control in our reporting process to ensure all future reports are submitted timely. **Nevertheless, the City of Houston wants you to know that all required tests were done timely and the results met the health standards. Your water is SAFE to drink.**

*“It is with great pride, that I serve the City of Houston and provide drinking water to our citizens -‘All Day, Every Day.’”*

*- Administrative Assistant, 10 years with the City of Houston*

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land and through the ground, it dissolves naturally-occurring minerals, and in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

CONTAMINANT	POTENTIAL SOURCES
Arsenic	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Asbestos	Erosion of natural deposits; corrosion of asbestos-cement water lines.
Atrazine	Runoff from herbicide used on row crops.
Barium	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chlorine and Chloramines	Water additives used to control microbes.
Combined Radium	Erosion of natural deposits.
Combined Uranium	Erosion of natural deposits.
Copper	Corrosion of household plumbing systems; Erosion of natural deposits.
Ethylbenzene	Discharge from petroleum refineries.
Fluoride	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Gross Alpha	Erosion of natural deposits.
Gross Beta	Decay of natural and man-made deposits.
Hexachlorocyclopentadiene	Discharge from chemical factories manufacturing pesticides, flame retardants, resins, dyes, pharmaceuticals, plastics, etc.
Lead	Corrosion of household plumbing systems; Erosion of natural deposits.
Nitrate / Nitrate	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Simazine	Herbicide runoff.
Toluene	Discharge from petroleum, plastics, paint, and pharmaceutical manufacturing.
Total Haloacetic Acids (HAAs)	By-product of drinking water disinfection.
Total Trihalomethanes (TTHMs)	By-product of drinking water disinfection.
Total Coliform	Naturally present in the environment.
Turbidity	Soil runoff.
Xylenes	Discharge from petroleum factories; Discharge from chemical factories.

### Special Information on Lead in Drinking Water:

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Houston is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

The EPA has set limits for drinking water quality based on scientific studies and calculated risks.

For more information regarding the EPA limits, please visit:

<http://water.epa.gov/lawsregs/rulesregs/sdwa/currentregulations.cfm>.

For more information on EPA calculated risks and scientific studies visit:

<http://water.epa.gov/scitech/drinkingwater/dws/ccl/index.cfm>.



## Questions or concerns about your water? Contact 311.

**311 is Houston's non-emergency service center.**

Customers may use 311 to notify us of any problems they may be experiencing and a water quality investigator will be dispatched within twenty-four hours to respond to and resolve the problem.

- Call 311
- Visit [www.houstontx.gov/311](http://www.houstontx.gov/311)
- Download the 311 app for iPhone and Android



**This Report is available online at:**  
[www.publicworks.houstontx.gov/wq2014](http://www.publicworks.houstontx.gov/wq2014)

**Past year's Water Quality Reports may be found online at:**  
[www.publicworks.houstontx.gov/pud/consumer-confidence.html](http://www.publicworks.houstontx.gov/pud/consumer-confidence.html)

### **Public Participation Opportunities**

Information on City Council meetings is available on the website for the Office of the City Secretary at:  
[www.houstontx.gov/citysec/](http://www.houstontx.gov/citysec/)

To find out more about Drinking Water Operations Education & Outreach group go to:  
[www.publicworks.houstontx.gov/pud/conservation.html](http://www.publicworks.houstontx.gov/pud/conservation.html)