THE BOEING COMPANY, SITE 1 - WATER QUALITY REPORT - 2014

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

Last year, Boeing collected over 91 water samples and conducted more than 123 tests in total on your drinking water and it met all State and Environmental Protection Agency (EPA) drinking water health standards.

This document is provided to all employees as required under the California Health and Safety Code, Division 1, Section 116470 and the California Code of Regulations, Title 22, Section 64463. For more information regarding your drinking water contact Mr. Philip W. Morlan Jr., Grade D1, Water Operator at (661) 265-2181 or the State Water Resources Control Board, Division of Drinking Water at (818) 551-2004 for summaries of water assessments performed annually.

Your drinking water originates from three wells sunk approximately 500-600 feet into an underground source of water called the Lancaster Sub Aquifer. These wells are referred to as Well 01 (South), Well 03(South) and the Well 04(North). Boeing does not have any active connection with the Palmdale Water System. The Lancaster Sub Aquifer is Boeing's sole source of drinking water (bottled water is also available). Your water system undergoes treatment via chlorination to protect you against microbial contaminants.

System No. 1910137 – Drinking Water Source Assessment for The Boeing Company, Well 01 Well 03 and Well 04. The California State Water Resources Control Board, Division of Drinking Water, Hollywood District has in the past conducted assessments of the Well 01, Well 03 and Well 04 for the Boeing Company. The purpose of the assessment was to determine the vulnerability of your source(s) to "possible contaminating activities".

Well 01 (South). A source water assessment was conducted for the Well 01 of The Boeing Company in December 2001. No contaminants have been detected in the water supply, however the source is considered most vulnerable to the following activities:

Airports – Maintenance/fueling areas
Historic Gas Stations
Known Contaminant Plumes
Military Installations

Well 03 (South). A source water assessment was conducted for the Well 03 of The Boeing Company in November 2002. No contaminants have been detected in the water supply, however the source is considered most vulnerable to the following activities:

Airports – Maintenance/fueling areas
Historic Gas Stations
Military Installations

Well 04 (North). A source water assessment was conducted for the Well 04 of The Boeing Company in March 2013. No contaminants have been detected in the water supply, however the source is considered most vulnerable to the following activities:

Airports – Maintenance/fueling areas
Historic Gas Stations
Military Installations

A copy of the complete assessments may be viewed at:

State Water Resources Control Board
Division of Drinking Water
500 North Central Avenue, Suite 500
Glendale, CA 91203

You may request a summary of the assessment be sent to you by contacting Mr. Paul Williams, North Hollywood District Engineer, at (818) 551-2049.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer 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 from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA Safe Drinking Water Hotline (800-426-4791).

The 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 or through the ground, 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.

Boeing's drinking water begins as groundwater, which is generally regarded as a cleaner source of water than surface water. Although unlikely, contaminants that may be present in source water before we treat it include:

- ***Microbial contaminants***, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- ***Inorganic contaminants***, such as salts and metals that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- ***Pesticides and herbicides***, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

- ***Organic chemical contaminants***, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- ***Radioactive contaminants***, which can be naturally occurring or be the result of oil and gas production and mining activities.

The presence of contaminants does not necessarily indicate that water poses a health risk. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than a year old. A current history of all sample results collected in 2014, including results from additional sampling for unregulated contaminants and contaminants sampled less than once a year, are provided in the Annual Report To The Drinking Water Program, Appendix 1, as Attachment A. Unregulated contaminant monitoring helps the EPA and the State Water Resources Control Board, Division of Drinking Water to determine whether the contaminants need to be regulated and where certain contaminants occur. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

In order to ensure that tap water is safe to drink, the U.S. EPA and the California State Water Resources Control Board, Division of Drinking Water has established regulations that limit the amount of certain contaminants in water provided by public water systems. State Water Resources Control Board, Division of Drinking Water regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

The State Water Resources Control Board, Division of Drinking Water prescribes regulations that limit the amount of certain contaminants in drinking water. State and federal agencies have set forth-primary drinking water standards (PDWSs) to establish monitoring, reporting, and water treatment requirements and define maximum contaminant levels (MCLs) for water contaminants that affect health. Our water treatment system is designed to meet these requirements and regular water sampling ensures that we maintain compliance. The following table, titled WATER QUALITY DATA, lists the regulated drinking water contaminants that we detected during the 2014 calendar year unless otherwise noted. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk.

SOURCEWATER QUALITY DATA

Contaminant	Units	MCL	PHG (MCLG)	South Well01	South Well03	South Well04	Range of Detection	Examples of Major Sources of Contaminants in Drinking Water
Regulated Organic Chemicals								
Trichloro-ethylene (TCE)	ug/L	5	1.7	ND	ND	ND	0	Historically discharge from metal degreasing sites and other factories. Results: Well0, Well03 and Well04 on 09-04-2014
Regulated Substances								
Arsenic	ug/L	6	20	ND	2.65	3.00	0-3.00	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes. Results: Well01, Well03 and Well04 on 6-25-2014.
Fluoride (F) Natural Source	mg/L	2	0.3	0.116	0.215	0.190	.116-.215	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories Results: Well01, Well03, and Well04N on 6-25-2014.
Total Chromium	ug/L	50	(100)	ND	11.7	11.8	0-11.8	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits: Well01, Well03, and Well04N on 6-25-2014.
Chromium+6	ug/L	10	0.02	4.25	7.53	4.96	4.25-7.53	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits: 12-04-2014
Radium 226	pCi/L			0.000	0.059	0.118	.000-.118	Erosion of natural deposits Well01, Well03 and Well04N on 6-25-2014.
Radium 228	pCi/L			0.000	0.237	0.000	0-0.237	Erosion of natural deposits Well01, Well03 and Well04N on 6-25-2014.
Uranium	pCi/L	20	0.43	ND	ND	ND	0	Erosion of natural deposits Well01, Well03 and Well04N on 6-25-2014.
Secondary Standards								
Chloride	mg/L	500	*	2.48	2.37	2.47	2.37-2.48	Runoff; leaching from natural deposits; seawater influence. Results: Well01, Well03, and Well04 on 6-25-2014.
Iron	ug/L	300	*	ND	99	ND	99	Runoff; leaching from natural deposits, industrial wastes. Results: Well01 on 6-25-2014. Well03 and Well 04 on 11-18-2014.
Sulfate	mg/L	500	*	14.2	14.0	13.3	13.3-14.2	Runoff; leaching from natural deposits; industrial wastes. Results: Well01, Well03, and Well04 on 6-25-2014.
Specific Conductance	umhos/cm	1600	*	225	219	214	214-225	Substances that form ions when in water; seawater influence. Results: Well01, Well03, and Well04 on 6-25-2014.
Total Dissolved Solids	mg/L	1000	*	137	129	130	129-137	Runoff; leaching from natural deposits. Results: Well01, Well03, and Well04 on 6-25-2014.

** No MCL or MCLG.

DISTRIBUTION SYSTEM WATER QUALITY DATA

Contaminant Units	MCL	PHG (MCLG)	Average # Positive	Range of # Positive	Examples of Major Sources of Contaminants in Drinking Water
Microbial					
Total Coliform Bacteria ------	<1 Positive	0	0	0	Naturally present in the environment
E. Coli	0	0	0	0	Human and animal fecal waste

Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors						
Free Chlorine	mg/L	MRDL = 4.0	MRDL = 4.0	0.91-2.20	Average: 1.73	Disinfection process.
TTHM [Total Trihalomethanes]	ug/L	80	3.25	1.12-5.38	No	Byproduct of drinking water disinfection. Results: Distribution System sampled in 2014.
Haloacetic Acids	ug/L	60	2.28	ND-4.56	No	Byproduct of drinking water disinfection. Results: Distribution System sampled in 2014.

Contaminant	Units	MCL	PHG (MCLG)	South Well01	South Well03	South Well04	Range of Detection	Examples of Major Sources of Contaminants in Drinking Water
Odor	Threshold Odor Number	3		ND	ND	ND		Naturally-occurring organic materials
Color	Units	15		6	**52** **0.00**	7		Naturally-occurring organic materials. Rerun: 11-18-2014
Turbidity	NTU	5		1.37	**13.9** **0.310**	1.23		Soil runoff. Rerun: 11-18-2014
Sodium	mg/L	**		19.3	32.1	27.6		Well01, Well03 on 6-10-2011, Well04N on 6-25-2014.
Hardness (Total) as CaCO3		**		77.0	40.0	45.0		Well01, Well03 on 6-10-2011, Well04N on 6-25-2014.
Zinc	mg/L	5		ND	52.3	283	0-283	Well01, Well03 on 6-10-2011, Well04N on 6-25-2014.

* PHGs are not set for Secondary Standards.

XX Samples were rerun and were within limits. Flushing eliminated the issue.

Terms & Abbreviations:

- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically.
- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.
- **MRDL = Maximum Residual Disinfectant Level**
- **MRDLG = Maximum Residual Disinfectant Level Goal**
- **pCi/L = picocuries per liter (a measure of radioactivity)**
- **Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.
- **Primary Drinking Water Standards or PDWS:** MCL's for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- **mg/L:** milligrams per liter or parts per million (ppm)
- **ND**: not detectable at testing limit
- **Regulatory Action Level (AL):** The concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.
- **Secondary MCLs (**):** Set to protect the odor, taste, and appearance of drinking water. Secondary MCLs do not have PHGs because secondary MCLs are set to protect the aesthetics of water; since PHGs are based on health concerns, there are none for secondary MCL contaminants.
- **ug/L:** micrograms per liter or parts per billion (ppb)
- **umhos/cm:** micromhos per centimeter

About Trichloroethylene (TCE): The drinking water standard and Maximum Contaminant Level Goal (MCL) for TCE is 5.0 ug/L. During 2014 the latest results for TCE in Well01, Well03 and Well04 taken 4-30-2014 was non-detect (ND). With concurrence of the State Water Resources Control Board, Division of Drinking Water all three wells are in a weekly rotation. Studies show that some people who drink or cook with water containing TCE ***in excess*** of the MCL over many years may experience liver problems, and may have an increased cancer risk. Although according to the drinking water quality standards set by the US EPA and the State Water Resources Control Board, Division of Drinking Water, trace amounts of TCE when detected ***do not*** pose a health hazard.

To maintain the highest quality of water, the United States Air Force continues to investigate the sources of TCE contamination at AF Plant 42 and has installed monitoring and extraction wells. The extracted water will pass through Granular Activated Carbon (GAC) and then be injected back into the aquifer. Well01 (south), Well 03 and Well 04 (north) will continue to be sampled at a minimum of once every three months for TCE. Boeing will continue on a weekly basis to rotate the operation of Well01 (south), Well 03 (south) and the newer Well04 (north).