

2015 Consumer Confidence Report

Water System Name: PATTERSON, CITY OF

Report Date: June 2016

The city of Patterson tests the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of the monitoring for the period of January 1 - December 31, 2015.

Type of water source(s) in use: According to SWRCB records, the city of Patterson only source of water is groundwater. This assessment was done using the Default Groundwater System Method.

Your water comes from 7 source(s): Well 02 - North 5th Street, Well 05 - Hartley Street, Well 06 - Poppy Ave., Well 07 - S. Hartley, Well 08 - Orange Ave., Well 09 - Orange Ave. and Well 11 - Sycamore Ave.

For more information about this report, or any questions relating to your drinking water, please call (209) 895-8060 and ask for Maria Encinas.

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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. Environmental Protection Agency (USEPA).

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 Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for the contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for the contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

pCi/L: picocuries per liter (a measure of radiation)

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.

Contaminants that may be present in source water 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,** that 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems
- **Radioactive contaminants,** that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 6 and 7 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

Any violation of MCL, AL or MRDL is highlighted. Additional information regarding the constituent is provided later in this report.

Table 1 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in last sample set)	Sample Date	90th percentile level detected	No. Sites Exceeding AL	AL	PHG	Typical Sources of Contaminant
Lead (ppb)	30 (2015)	0.50	2	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers, erosion of natural deposits
Copper (ppm)	30 (2015)	0.07	0	1.3	.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 2 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Sources of Contaminant
Sodium (ppm)	(2013 - 2014)	121	59 - 162	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	(2013 - 2014)	410	237 - 592	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Table 3 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Sources of Contaminant
Arsenic (ppb)	(2013 - 2015)	3	ND - 5	10	0.004	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Chromium (ppb)	(2013 - 2014)	19	16 - 25	50.0	n/a	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (ppm)	(2013 - 2014)	ND	ND - 0.3	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Hexavalent Chromium (ppb)	(2015)	19.7	13.6 - 38.1	10	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits.
Nitrate as N (ppm)	(2015)	6.6	4.5 - 7.7	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite as N (ppm)	(2011 - 2014)	2.6	0.7 - 7.6	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	(2013 - 2014)	7	ND - 10	50	30	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots/feed additive)
Gross Alpha (pCi/L)	(2010 - 2015)	3.31	1.92 - 4.85	15	(0)	Erosion of natural deposits.
Uranium (pCi/L)	(2010 - 2013)	2.011	ND - 6.86	20	0.43	Erosion of natural deposits
Total Radium 228 (pCi/L)	(2007 - 2015)	ND	ND - 0.508	5	n/a	Erosion of natural deposits

Table 4 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Sources of Contaminant
Chloride (ppm)	(2013 - 2014)	142	33 - 317	500	n/a	Runoff/leaching from natural deposits; seawater influence
Color (Units)	(2013 - 2014)	1	ND - 5	15	n/a	Naturally-occurring organic materials
Iron (ppb)	(2013 - 2014)	111	ND - 300	300	n/a	Leaching from natural deposits; Industrial wastes
Specific Conductance (umhos/cm)	(2013 - 2014)	1297	709 - 1820	1600	n/a	Substances that form ions when in water; seawater influence
Sulfate (ppm)	(2013 - 2014)	323	162 - 500	500	n/a	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	(2013 - 2014)	873	460 - 1260	1000	n/a	Runoff/leaching from natural deposits
Turbidity (NTU)	(2013 - 2014)	0.8	ND - 2.9	5	n/a	Soil runoff

Table 5 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Typical Sources of Contaminant
Boron (ppm)	(2013 - 2014)	0.5	0.3 - 0.6	1	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.
Vanadium (ppm)	(2013 - 2014)	0.007	0.004 - 0.01	0.05	The babies of some pregnant women who drink water containing vanadium in excess of the action level may have an increased risk of developmental effects, based on studies in laboratory animals.

Table 6 - DETECTION OF FEDERAL DISINFECTANT/DISINFECTANT BYPRODUCT RULE

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL (MRDL)	PHG (MCLG)	Violation	Typical Sources of Contaminant
Total Trihalomethanes (TTHMs) (ppb)	(2015)	19.2	2.1 - 22.6	80	n/a	No	By-product of drinking water disinfection

Additional General Information on Drinking Water

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 Safe Drinking Water Hotline (1-800-426-4791).

Lead Specific Language for Community Water Systems: 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 the service lines and home plumbing. *City of Patterson Drinking Water* 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 <http://www.epa.gov/lead>.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

About our Lead: Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.

About our Hexavalent Chromium: Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.

About our Specific Conductance: The conductivity of your water was found at levels that exceed the secondary MCL. The secondary MCLs were set to protect you against unpleasant aesthetic affects such as color, taste and odor. Violating this MCL does not pose a risk to public health.

About our Total Dissolved Solids: The TDS or Total Dissolved Solids in your water was found at levels that exceed the secondary MCL. The TDS MCLs was set to protect you against unpleasant aesthetic affects such as color, taste or hardness. Violating this MCL does not pose a risk to public health.

FULL REPORT IS AVAILABLE ONLINE AT [HTTP://WWW.CL.PATTERSON.CA.US/203/CONSUMER-CONFIDENCE-REPORT](http://www.clpatterson.ca.us/203/CONSUMER-CONFIDENCE-REPORT) OR AT CITY HALL, 1 PLAZA, PATTERSON CA.

ESTE INFORME CONTIENE INFORMACIÓN MUY IMPORTANTE SOBRE SU AGUA POTABLE. TRADÚZCALO Ó HABLE CON ALQUIEN QUE LO ENTIENDA BIEN.