City of San Jacinto
2019 Annual Water Quality Report

The City of San Jacinto is pleased to provide our customers with its Annual Water Quality Report

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse City of San Jacinto a (951) 487-7381 para asistirlo en español.

This report contains information about the sources and quality of drinking water we deliver to our customers. This includes details about where the City of San Jacinto water originates, what it contains, and how it compares to standards set by regulatory agencies. In 2019, your drinking water has met all U.S. Environmental Protection Agency (USEPA) and State of California drinking water standards. The City of San Jacinto's source of water for 2019 is from three deep wells. These wells are located in the San Jacinto Groundwater Basin. 1.7 % of 2019 production was purchased from Eastern Municipal Water District (EMWD).

The San Jacinto City Council meets the first and third Tuesday of each month in the San Jacinto Community Center located at 625 S. Pico Avenue San Jacinto, CA. 92583. These meetings provide an opportunity for public participation in decisions that may affect the quality of your water. For more information, please contact the City of San Jacinto Water Utilities Superintendent, Arthur Mullen at (951) 487-7381.

Information on City of San Jacinto Water Quality Monitoring

The City of San Jacinto routinely monitors for contaminants in your drinking water in accordance with USEPA and the State Water Resources Control Board (State Water Board), Division of Drinking Water. The table in this report shows the results of our monitoring for calendar year 2019 and earlier since the State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants in groundwater do not change frequently. Therefore, some of our data, although representative, are more than one year old. The table lists all the contaminants **detected** in your drinking water that have federal and state drinking water standards. Detected unregulated contaminants of interest are also included. Although we have learned through our monitoring and testing that some contaminants have been detected, **the USEPA has determined that your water IS SAFE at these levels.**

What May Be Present in Sources of Drinking Water?

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 storm water 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 storm water runoff, and residential uses.
- **Radioactive contaminants,** which can be naturally-occurring or be the result of oil and gas production and mining activities.
- **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 storm water runoff, agricultural application and septic systems.

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

An assessment of the drinking water sources for the City of San Jacinto was completed in May 2001, October 2004, May 2008 and September 2017. The sources are considered to be most vulnerable to the following activities not associated with contaminants detected in the water supply: septic system and gasoline stations. A copy of the complete assessment is available by written request through the City Clerk's office.

What are Water Quality Standards?

In order to ensure that tap water is safe to drink, the USEPA and the State Water Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. Additional information on bottled water is available on California Department of Public Health's website at https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx.

Drinking water standards established by USEPA and the State Water Board set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

- **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 feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
- **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.
- **Primary Drinking Water Standard (PDWS):** MCLs, MRDLs and treatment techniques (TTs) for contaminants that affect health, along with their monitoring and reporting requirements.
- **Regulatory Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

In addition to mandatory water quality standards, USEPA and the State Water Board have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The chart in this report includes three types of water quality goals:

- **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 USEPA.
- **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.
- **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.

What causes the brownish discoloration in our water?

IRON & MANGANESE: These natural minerals are found in the water that is produced by the three City well sites. Although these minerals produce no known health concerns, they are aesthetically unpleasant and can cause unwanted color, taste and odors. Iron and Manganese at high concentrations can also stain clothing and fixtures at home. The City operates a groundwater treatment plant for removal of Iron and Manganese, and we have implemented a comprehensive water flushing program to keep any build up in our Water Distribution System to a minimum.

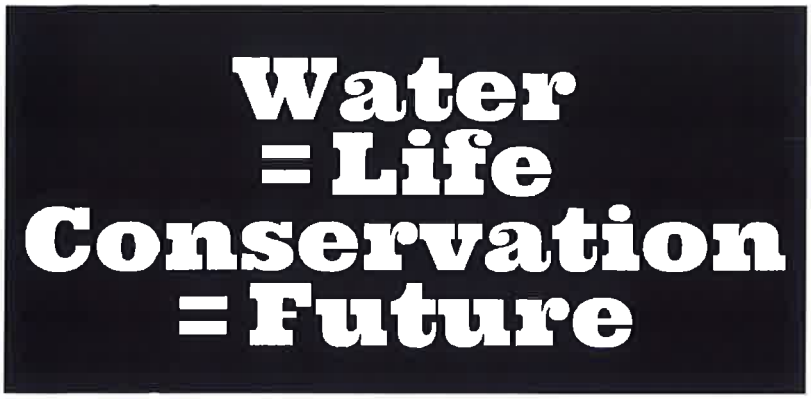
Water Disinfection

All well sites are visited daily and chlorine residual samples are collected throughout the distribution system to ensure disinfection equipment is working properly. The average chlorine residual in the distribution system for samples collected during 2019 was 1.4 mg/l. A total of 265 samples were collected in the distribution system for bacteriological analysis.

Educational Information

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).

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 San Jacinto 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/safewater/lead.



CITY OF SAN JACINTO 2019 DRINKING WATER QUALITY

(Results are from the most recent testing performed pursuant to state and federal drinking water monitoring regulations)

CONSTITUENT AND (UNITS)	MCL or [MRDL]	PHG (MCLG) or [MRDLG]	GROUNDWATER SOURCES		MOST RECENT TESTING	MCL VIOLATION?	TYPICAL ORIGINS OF DETECTED CONSTITUENTS
			AVERAGE (a)	RANGE			
Primary Drinking Water Standards -- Health Related Standards							
MICROBIOLOGICAL CONTAMINANTS (b)							
Total Coliform Bacteria (State Total Coliform Rule)	No more than 1 positive monthly sample	(0)	0	NA	2019	No	Naturally present in the environment
DISINFECTANT AND DISINFECTION BY-PRODUCTS (c)							
Chlorine Residual (mg/l)	[4.0 as Cl2]	[4.0 as Cl2]	1.4	0.9 - 1.8	2019	No	Drinking water disinfectant
Total Trihalomethanes (µg/l)	80	NA	31.6	14 - 30	2019	No	By-product of drinking water chlorination
Haloacetic Acids (HAAs) (µg/l)	60	NA	15.5	ND - 17	2019	No	By-product of drinking water chlorination
RADIOCHEMICALS							
Gross Alpha (pCi/L) (d)	15	0	3.4	3.4	2019	No	Erosion of natural deposits
Uranium (pCi/L) (d)	20	0.43	1.1	1.1	2013	No	Erosion of natural deposits
INORGANIC CHEMICALS							
Barium (mg/l)	1	2	ND	ND - 0.15	2019	No	Leaching of natural deposits
Fluoride (mg/l)	2	1	0.19	0.18 - 0.21	2019	No	Leaching of natural deposits
Copper (mg/l) (e)	AL = 1.3	0.3	0.61	None of the 34 Samples Exceeded	2017	No	Corrosion of household plumbing system; erosion of natural deposits
Lead (µg/l) (e) (f)	AL = 15	0.2	ND	2 of the 31 Samples Exceeded the Action	2017	No	Corrosion of household plumbing system; erosion of natural deposits
Secondary Drinking Water Standards - Aesthetic Standards, Not Health-Related							
Iron (µg/l) (g)	300	NA	ND	ND	2019	No	Leaching of natural deposits
Manganese (µg/l) (g)	50	NA	ND	ND - 36	2019	No	Leaching of natural deposits
Turbidity (NTU) (h)	5	NA	0.3	0.18 - 0.91	2019	No	Soil runoff
Color (NTU) (h)	15	NA	ND	ND	2019	No	Naturally occuring organic material
Sulfate (mg/l)	500	NA	27	6.8 - 48	2019	No	Leaching of natural deposits
Total Dissolved Solids (mg/l)	1,000	NA	243	200 - 290	2019	No	Leaching of natural deposits
Specific Conductance (µS/cm)	1,600	NA	380	320 - 460	2019	No	Substances that form ions when in water
Chloride (mg/l)	500	NA	14	11 - 15	2019	No	Leaching of natural deposits
Other Consituents of Interest							
Hardness as CaCO3 (mg/l)	NA	NA	89	120 - 180	2019	No	Naturally occuring cations present in water, generally magnesium and calcium
Sodium (mg/l)	NA	NA	25	21 - 27	2019	No	Salt present in water; naturally occuring

mg/l = parts per million or milligrams per liter
µg/l = parts per billion or micrograms per liter
µS/cm = microsiemens per centimeter
AL = Action Level

MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
MRDL = Maximum Residual Disinfectant Level
MRDLG = Maximum Residual Disinfectant Level Goal

ND = Not Detected at DLR (Detection Limit for purposes of Reporting)
NTU = Nephelometric Turbidity Units
PHG = Public Health Goal
NA = Not Applicable

Footnotes

(a) The results reported in the table are average concentrations of the constituents tested during 2019 or from the most recent tests, except for Total Trihalomethanes, Haloacetic Acids, Chlorine Residual, Iron, Manganese, Lead and Copper, which are described below.

(b) Samples were collected in the distribution system. The highest number of positive samples collected in any one month for 2019 is presented.

(c) Samples were collected in the distribution system. The highest locational running annual average and the range of the individual results for 2019 are presented. Compliance with the MCL is based on a locational running annual average, calculated for each individual sample site.

(d) At Lake Park Well, Uranium was detected in 2013, and Gross Alpha was detected in 2019.

(e) Thirty-one (31) Lead and Copper Rule compliance samples were collected at representative residential taps in 2017. The 90th percentile concentration of Lead and Copper is reported in the table.

(f) The City also conducted Lead sampling at six (6) schools in 2017 (through voluntary cooperation between the school district and water system).

(g) Test results are from treated water samples. Wells are treated to remove Iron and Manganese which exceed the secondary standards in raw groundwater.

(h) Samples were collected in the distribution system.

Eastern Municipal Water District Water Quality Data for 2019 WELLS 17, 25, 26, 29, 33, 34, 35, 36, 90, 91, 92

DETECTED CONSTITUENTS			2019	2019
Constituent	**Units**	**DLR Value**	**Range**	**Average**
PRIMARY STANDARDS				
Fluoride	mg/L	0.1	0.2 - 0.4	0.3
Nitrate as N	mg/L	0.4	ND - 4.0	1.2
Gross Alpha	pCi/L	3	No Range	3.6
Uranium	pCi/L	1	ND - 4.5	1.4
SECONDARY STANDARDS				
Chloride	mg/L	null	9.9 - 97	31
EC - Specific Conductance	umhos/cm	null	280 - 940	470
Foaming Agents (MBAS)	mg/L	null	No Range	0.07
Sulfate	mg/L	0.5	9.3 - 220	68
Total Dissolved Solids	mg/L	null	180 - 630	300
Turbidity, Laboratory	NTU	0.1	0.1 - 1.1	0.3
OTHER PARAMETERS				
Aggressive Index (Corrosivity)	units	null	11.6 - 12.6	12.3
Alkalinity, Total as CaCO3	mg/L	null	110 - 170	140
Bicarbonate (HCO3)	mg/L	null	110 - 170	140
Calcium	mg/L	null	34 - 87	53
Hardness	mg/L	null	96 - 280	150
Hardness	gr/gal	null	5.6 - 16	8.8
Langelier Index	units	null	-0.260 - 0.708	0.416
Magnesium	mg/L	null	2.3 - 16	6.1
pH, Laboratory	pH unit	null	7.2 - 8.2	8.1
Potassium	mg/L	null	2.6 - 7.4	4.2
Silica	mg/L	null	17 - 25	21
Sodium	mg/L	null	29 - 91	44
Total Organic Carbon (TOC)	mg/L	0.3	ND - 0.6	0.3

NON-DETECTED CONSTITUENTS			2019	2019
Constituent	**Units**	**DLR Value**	**Range**	**Average**
1,1-Dichloroethane	ug/L	0.5	No Range	ND
1,1-Dichloroethene	ug/L	0.5	No Range	ND
1,1,1-Trichloroethane	ug/L	0.5	No Range	ND
1,1,2-Trichloroethane	ug/L	0.5	No Range	ND
1,1,2,2-Tetrachloroethane	ug/L	0.5	No Range	ND
1,2-Dibromo-3-Chloropropane	ug/L	0.01	No Range	ND
1,2-Dichlorobenzene	ug/L	0.5	No Range	ND
1,2-Dichloroethane	ug/L	0.5	No Range	ND
1,2-Dichloropropane	ug/L	0.5	No Range	ND
1,2,3-Trichloropropane (TCP)	ug/L	0.005	No Range	ND
1,2,4-Trichlorobenzene	ug/L	0.5	No Range	ND
1,3-Dichloropropene (Total)	ug/L	0.5	No Range	ND
1,4-Dichlorobenzene	ug/L	0.5	No Range	ND
2,3,7,8-TCDD (Dioxin)	pg/L	5	No Range	ND
2,4-D	ug/L	10	No Range	ND
2,4,5-TP	ug/L	1	No Range	ND
Alachlor	ug/L	1	No Range	ND
Aluminum	ug/L	50	No Range	ND
Antimony	ug/L	6	No Range	ND
Arsenic	ug/L	2	ND - 4.2	ND
Atrazine	ug/L	0.5	No Range	ND
Barium	ug/L	100	No Range	ND
Bentazon	ug/L	2	No Range	ND
Benzene	ug/L	0.5	No Range	ND
Benzo (a) pyrene	ug/L	0.1	No Range	ND
Beryllium	ug/L	1	No Range	ND
Bis(2-ethylhexyl)adipate	ug/L	5	No Range	ND
Bis(2-ethylhexyl)phthalate	ug/L	3	No Range	ND
Boron	ug/L	100	ND - 230	ND
Cadmium	ug/L	1	No Range	ND

NON-DETECTED CONSTITUENTS			2019	2019
Constituent	**Units**	**DLR Value**	**Range**	**Average**
Carbofuran	**ug/L**	**5**	**No Range**	**ND**
Carbonate (CO3)	mg/L	null	No Range	ND
Carbon Tetrachloride	ug/L	0.5	No Range	ND
Chlordane	ug/L	0.1	No Range	ND
Chlorobenzene	ug/L	0.5	No Range	ND
Chromium (Total)	ug/L	10	No Range	ND
cis-1,2-Dichloroethene	ug/L	0.5	No Range	ND
Color - Apparent	units	3	No Range	ND
Copper	ug/L	50	No Range	ND
Cyanide	ug/L	100	No Range	ND
Dalapon	ug/L	10	No Range	ND
Dinoseb	ug/L	2	No Range	ND
Diquat	ug/L	4	No Range	ND
Endothall	ug/L	45	No Range	ND
Endrin	ug/L	0.1	No Range	ND
Ethylbenzene	ug/L	0.5	No Range	ND
Ethylene Dibromide (EDB)	ug/L	0.02	No Range	ND
Gross Beta	pCi/L	4	No Range	waived
gamma-BHC (Lindane)	ug/L	0.2	No Range	ND
Glyphosate	ug/L	25	No Range	ND
Heptachlor	ug/L	0.01	No Range	ND
Heptachlor epoxide	ug/L	0.01	No Range	ND
Hexachlorobenzene	ug/L	0.5	No Range	ND
Hexachlorocyclopentadiene	ug/L	1	No Range	ND
Hydroxide (OH)	mg/L	null	No Range	ND
Iron	ug/L	100	ND - 230	ND
Lead	ug/L	5	No Range	ND
Manganese	ug/L	20	ND - 240	ND
Mercury	ug/L	1	No Range	ND
Methoxychlor	ug/L	10	No Range	ND
Methyl-Tert-Butyl-Ether (MTBE)	ug/L	3	No Range	ND
Methylene Chloride	ug/L	0.5	No Range	ND
Molinate	ug/L	2	No Range	ND
Nickel	ug/L	10	ND - 25	ND
Nitrite as N	mg/L	0.4	No Range	ND
Odor at 60 degrees C	TON	null	ND - 1	ND
Oxamyl	ug/L	20	No Range	ND
PCBs-Total	ug/L	0.5	No Range	ND
Pentachlorophenol	ug/L	0.2	No Range	ND
Perchlorate	ug/L	4	No Range	ND
Picloram	ug/L	1	No Range	ND
Radium 226	pCi/L	1	No Range	ND
Radium 228	pCi/L	1	No Range	ND
Selenium	ug/L	5	ND - 17	ND
Silver	ug/L	10	No Range	ND
Simazine	ug/L	1	No Range	ND
Styrene	ug/L	0.5	No Range	ND
Tetrachloroethene	ug/L	0.5	No Range	ND
Thallium	ug/L	1	No Range	ND
Thiobencarb	ug/L	1	No Range	ND
Toluene	ug/L	0.5	No Range	ND
Toxaphene	ug/L	1	No Range	ND
trans-1,2-Dichloroethene	ug/L	0.5	No Range	ND
Trichloroethene	ug/L	0.5	No Range	ND
Trichlorofluoromethane	ug/L	5	No Range	ND
Trichlorotrifluoroethane	ug/L	10	No Range	ND
Vinyl Chloride	ug/L	0.5	No Range	ND
Xylenes (Total)	ug/L	0.5	No Range	ND
Zinc	ug/L	50	No Range	ND