CITY OF GENOA

ANNUAL WATER QUALITY REPORT FOR THE PERIOD OF JANUARY 1 TO DECEMBER 31, 2013

This report is intended to provide you with important information about your drinking water and the efforts made by the GENOA water system to provide safe drinking water. The source of drinking water used by GENOA is Ground Water.

For more information regarding this report, please contact the Director of Public Works Richard Gentile at (815) 784-2271.

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Source Water Information:

Source Water Name:	Type of Water:
Well 3 (11415)	Ground Water
Well 4 (11416)	Ground Water
Well 5 (01091)	Ground Water

Source of Drinking Water:

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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 pickup 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, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
Inorganic contaminants, such as salts and metals, which 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.
Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems.
Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

- 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 at (800) 426-4791.
- In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.
- 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. EPA/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 (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. We 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.

Source Water Assessment:
- We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings the first and third Tuesday each month starting at 6:30 pm. at City Hall 333 E. First Street. The source water assessment for our supply has been completed by the Illinois EPA. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl. A copy of Genoa's Annual Water Quality report is available at City Hall.
- Based on information obtained in a Well Site Survey published in 1993 by the Illinois EPA, several potential secondary sources of contamination within 1,000 feet of the wells. The Illinois EPA has determined that the Genoa Community Water Supply's source water is not susceptible to contamination. This determination is based on a number of criteria including; monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and available hydrogeologic data on the wells. Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the Genoa Community Water Supply is not vulnerable to viral contamination. This determination is based upon the evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper siting conditions; a hydraulic barrier exists which should prevent pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the community's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics was not considered to be a significant factor in this determination. Hence, well hydraulics were not evaluated for this system ground water supply. The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for your wells. These minimum protection zones are regulated by the Illinois EPA. To further reduce the risk to source water, the community has implemented a wellhead protection program, which includes the proper abandonment of potential routes of groundwater contamination and correction of sanitary defects at the water treatment facility. This effort resulted in the community water supply receiving a special exception permit from the Illinois EPA, which, allows a reduction in monitoring.

2013 Regulated Contaminants Detected:

- Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
- Action Level Goal (ALG): The level of a contaminant in drinking water below, which there is no known or expected risk to health. ALG's allow for a margin of safety.

Lead and copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	9/29/2011	1.3	1.3	0.43	0	ppm	No	Leaching from wood preservatives; Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	9/29/2011	0	15	3.4	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results:

Definitions: The following tables contain scientific terms and measures, some of which may require explanation. Maximum Contaminant Level (**MCL**): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology. Maximum Contaminant Level Goal (**MCLG**):

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety. **ppm**: milligrams per litre or parts per million - or one ounce in 7,350 gallons of water. **ppb**: micrograms per litre or parts per billion - or one ounce in 7,350,000 gallons of water. na: not applicable. Avg: Regulatory compliance with some MCLs is based on running annual average of monthly samples. Maximum Residual Disinfectant Level (**MRDL**): The highest level of disinfectant allowed in drinking water. Maximum Residual Disinfectant Level Goal (**MRDLG**): The level of disinfectant in drinking water below, which there is no known or expected risk to health. MRDLG's allow for a margin of safety.

Regulated Contaminants:

Disinfectants & Disinfection By-Products:	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Chlorine	12/31/2013	1.2	1 – 1.2571	MRDLG=4	MRDL=4	ppm	No	Water additive to control microbes.
Haloacetic Acids (HAA5)	2013	11	11 - 11	No goal for the total	60	ppb	No	By-product of drinking water chlorination.
Total Trihalomenthanes (TThm)*	2013	25.09	25.09 – 25.09	No goal for the total	80	ppb	No	By-product of drinking water chlorination.

Inorganic Contaminants:	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Barium	7/5/2011	0.35	0.19 – 0.35	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	7/5/2011	1.1	0.86 – 1.1	4	4	ppm	No	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	7/5/2011	0.46	0.098 – 0.46		1.0	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion from naturally occurring deposits.
Manganese	7/5/2011	7.5	2.8 – 7.5	150	150	ppb	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion from naturally occurring deposits.
Nitrate (Measured as Nitrogen)	2013	0.02	0 - 0.02	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	7/52011	17	13 - 17			ppm	No	Erosion form naturally occurring deposits: Used in water softener regeneration.
Zinc	7/5/2011	0.023	0 – 0.023	5	5	ppb	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal.
Radioactive Contaminants:	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source Of Contaminant**
Combined Radium (226/228)	2013	1.46	1.46 – 1.46	0	5	pCi/L	No	Erosion of natural deposits.
Gross alpha excluding radon and uranium	6/2/2011	2.76	2.76 – 2.76	0	15	pCi/L	No	Erosion of natural deposits.

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

- **The City did not receive any violations during this CCR reporting period.**