

# 2015 Consumer Confidence Report

Water System Name: ZONNEVELD DAIRIES Report Date: 06/12/2016

*We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2015 and may include earlier monitoring data.*

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.**

Type of water source(s) in use: GROUNDWATER WELLS

Name & general location of source(s): WELL 2 (CEDAR) WELL 3 (CERINI)

Drinking Water Source Assessment information: <http://swap.des.ucdavis.edu/TSinfo/output/ps1000369-002.pdf>

Time and place of regularly scheduled board meetings for public participation: TO BE ANNOUNCED

For more information, contact: Tyler Thomas, Water System Operator Phone: (559) 246-7513

## TERMS USED IN THIS REPORT

**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 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 contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards (SDWS):** MCLs for 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.

**Variations and Exemptions:** State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**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)

**ppt:** parts per trillion or nanograms per liter (ng/L)

**ppq:** parts per quadrillion or picogram per liter (pg/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 State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

**Tables 1, 2, 3, 4, 5, 7, and 8 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 State Board 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.

**TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	CEDAR(1)	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(0)	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

**TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	07/01/15	5	0.031	1	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	07/01/15	5	<0.050	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm) Cedar Well Cerini Well	10/13/14 4/25/13	50.4 87	NA	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm) Cedar Well Cerini Wel	10/13/14 4/25/13	2.5 20.6	NA	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

\*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

**TABLE 4 – 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 Source of Contaminant
Arsenic (ppb) Cedar Well Cerini Well	2015 2015	*33.17 *14	*28-41 *0-21	10	.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Gross Alpha (pCi/L) Cedar Well Cerini Well	2/10-5/10 2015	2.9 *20.9	*16.4-24.3	15	(0)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Chromium, Hexavalent (ppb) Cerini Well	12/14/14	.2	NA	10	.02	Some people who drinking water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.
Cadium (ppb) Cedar Well	1/22/14	1.00	NA	5	.04	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints
Fluoride (ppm) Cedar Well Cerini Well	1/22/14 1/19/13	.9 .4	NA	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Uranium (pCi/L) Cedar Well Cerini Well	2/10-5/10 2015	.995 23.5	.94-1.05 *15-32	20	.43	Erosion of natural deposits
Radium 228 (pCi/L) Cedar Well Cerini Well	2/10-5/10	.21 .31	.19-.24 .27-.35	2	.019	Erosion of natural deposits
Nitrate (ppm) Cerini Well Cedar Well	2015 2015	46 4.95	42-49.5 0-9.9	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

**TABLE 5 – 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 Source of Contaminant
Odor (units) Cerini Well	4/25/13	1.0	NA	3	NA	Naturally-occurring organic materials
Chloride (ppm) Cedar Well Cerini Well	10/13/14 4/25/13	6.9 19.2	NA	500	NA	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm) Cedar Well Cerini Well	10/13/14 4/25/13	12.4 28.9	NA	500	NA	Runoff/leaching from natural deposits; industrial influence
Specific Conductance (µS/cm) Cedar Well Cerini Well	10/13/14 4/25/13	221 470	NA	1600	NA	Substances that form ions when in water; seawater influence
Turbidity (Units) Cedar Well	10/13/2014	1.6	NA	5	NA	Soil Runoff
Total Dissolved Solids (ppm) Cedar Well Cerini Well	10/13/14 4/25/13	153 300	NA	1000	NA	Runoff/leaching from natural deposits.

Aluminum ug/L Cedar Well	1/22/14	233	NA	200	NA	Erosion of natural deposits; residual from surface water treatment processes.
Color (Units) Cedar Well	10/13/14	15	NA	15	NA	Naturally-occurring organic materials

\*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

### 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 service lines and home plumbing. Zonneveld 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. [Optional: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] 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>.

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Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

*Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.*

During the months of April, September, and December Coliform bacteria was detected in the Cedar distribution system routine monthly sample. Further investigation and sampling determined that there was no ongoing issues with bacteria detected.

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

<b>VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT</b>				
<b>Violation</b>	<b>Explanation</b>	<b>Duration</b>	<b>Actions Taken to Correct the Violation</b>	<b>Health Effects Language</b>
<b>Nitrate MCL Violation in the Cerini well</b>	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	<b>2015</b>	<b>Zonneveld Dairies has conducted a Pilot Study to determine the best way to supply safe drinking water.</b>  <b>Drinking water was supplied</b>	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.
<b>Arsenic MCL Violation in both Cedar and Cerini Wells</b>	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	<b>2015</b>	<b>Zonneveld Dairies has conducted a Pilot Study to determine the best way to supply safe drinking water.</b>  <b>Drinking water was supplied</b>	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.
<b>Gross Alpha MCL Violation in the Cerini Well</b>	Decay of natural and man-made deposits	<b>2015</b>	<b>Increased monitoring to determine if it is an ongoing issue.</b>  <b>Drinking water was supplied</b>	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.