



North of the River Municipal Water District

4000 Rio Del Norte Street • Oildale, CA 93308 • Office (661) 393-5411 • FAX (661) 399-8911



2012 Consumer Confidence / Water Quality Report

Este informe contiene información importante sobre su agua potable.
Traducirlo o hablar con alguien que lo entiende.

Since 1990, community water systems in California have been providing an Annual Water Quality Report to customers under regulations adopted in 1989 by the California Department of Health Services. However, the 1996 amendments to the Federal Safe Drinking Water Act and recently adopted federal regulations now require a "Consumer Confidence Report". In addition, California law now requires a similar report to consumers.

This report must contain information on the quality of water delivered by the system and characterize any risks from exposure to contaminants detected in the drinking water. Contaminant levels have previously had a Maximum Contaminant Level (MCL). The Federal Government has now established a Maximum Contaminant Level Goal (MCLG) for each constituent that has an MCL. The State of California is currently establishing their own Public Health Goal (PHG) for each of the same contaminants. Where the State has not yet set a PHG, the requirement levels noted in the tables on the following pages refer to the federal MCLG. Definitions of these terms are as follows:

Maximum Contaminant Level (MCL) – the highest level of a contaminant allowed in drinking water. Primary MCL's are set as close to the PHG's or MCLG's as is economically and technologically feasible. Secondary MCL's are set to protect the odor, taste and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG) – level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's are set by the US Environmental Protection Agency (US EPA)

Maximum Residual Disinfectant Level (MRDL) – level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG) – level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLG's are set by the US Environmental Protection Agency (US EPA)

Primary Drinking Water Standard (PDWS) – MCL's for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

Public Health Goal (PHG) – level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the CA Environmental Protection Agency (Cal EPA)

Regulatory Action Level (RAL) – concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

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

Variations and Exemptions (V&E) – State or EPA permission to exceed an MCL or not comply with a treatment technique under certain conditions.

In 2012, the North of the River Municipal Water District supplied approximately 2167 acre/feet of treated surface water and pumped approximately 11 acre/feet from the District owned wells. Approximately 7584 acre/feet was sold to Oildale Mutual Water Company as our Wholesale water customer. The primary source of your drinking water is treated water from the Henry C. Garnett Treatment Plant via the Friant Kern Canal, State Water Aqueduct, Kern River and some groundwater. 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 human activity. Contaminants that may be present in source water include:

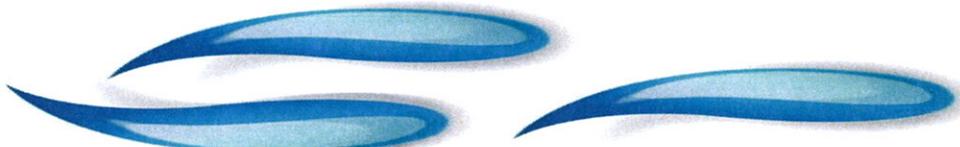
Microbial Contaminants (viruses and bacteria) – may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

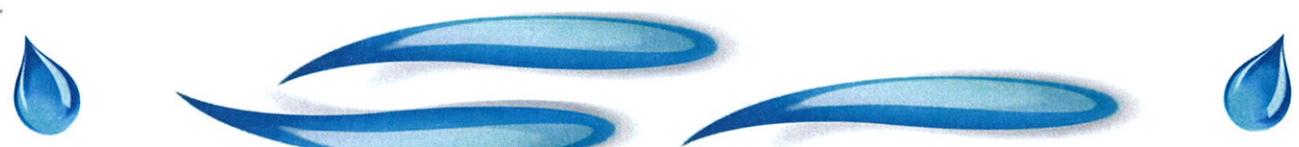
Organic Chemical Contaminants – including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production but can also come from gas stations, urban stormwater runoff and septic systems.

Inorganic Contaminants (salts and metals) – can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges or farming

Pesticides and Herbicides – may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

Radioactive Contaminants – can be naturally occurring or be the result of oil and gas production.





The North of the River Municipal Water District has one potable water well known as The Holson Well and two inactive water wells known as Well #1 and Well #2. The Holson Well is tested every 3 years for various constituents, the most recent test being conducted February 8, 2011. The Holson Well has been tested for all parameters listed above in accordance with all applicable State and Federal Regulations. This well was also tested for synthetic and volatile organic chemicals. All analysis results for synthetic and volatile organic chemicals were less than the detection limit. In addition, this well was tested for nitrates. A source water assessment was conducted for the Holson Well of the North of the River Municipal Water District water system in 2001. The source is considered most vulnerable to the following activities not associated with any detected contaminants: Chemical/Petroleum Pipelines. A copy of the complete assessment may be viewed at North of the River Municipal Water District, 4000 Rio Del Norte Street, Oildale, CA 93308. You may request a summary of the assessment be sent to you by contacting: David Aranda, General Manager by phone (661) 393-5411, by fax (661) 399-8911 or by e-mail at daranda@normwd.org.

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

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 United States Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

The North of the River Municipal Water District vigilantly safeguards its water supplies, and once again we are proud to report that our system did NOT violate a maximum contaminant level. For 2012, as in years past, your tap water met all USEPA and State drinking water health standards. In July 2011, Lead and Copper tests were taken and our District met the Federal and State requirements.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons (e.g., 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 at (800) 426-4791.

In our continuing efforts to maintain a safe and dependable water supply, and to comply with State and Federal regulations, it may be necessary to make improvements to your water system. The costs may be reflected in the rate structures because rate adjustments may be necessary in order to make these improvements. We thank you for your understanding.

This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to USEPA and State standards. We are committed to providing you with this information because informed customers ARE our best allies.

If you have any questions or need more information, you may attend the District's regularly scheduled Board meetings (3rd Wednesday of every month @ 4:30 p.m.), or call the District General Manager - David Aranda at (661) 393-5411. We look forward to continued efforts in providing you with high quality water.



Average Residential Water Use



Treated Water and Holson Well Groundwater

In the preceding tables, you will find many terms and abbreviations that you may not be familiar with. To help better understand these terms, we are providing the definitions below:

+ = Indicates Secondary Drinking Standard Levels
 * = Fluoride Standard Depends on Temperature
 MCL = Maximum Contaminant Level
 Highest level allowed in drinking water
 MRDLG = Maximum Residual Disinfectant Level Goal
 Level of disinfectant added below where no known risk
 mrem/yr = Millirems Per Year
 Measures radiation absorbed by the body
 mic = micromhos
 Measurement of water conductivity
 pCi/l = Picocurie Per Liter
 Measures radioactivity in the water
 PPB = Parts Per Billion or Micrograms Per Liter (ug/L)
 A single penny in \$10,000,000
 PPQ = Parts Per Quadrillion or Picograms Per Liter (pg/L)
 -A single penny in \$10,000,000,000,000
 RAL = Regulatory Action Level
 Concentration of contaminant which triggers treatment
 V&E = Variances & Exemptions
 State or EPA permission to exceed an MCL or not comply with treatment techniques under certain conditions
 NT = Not Tested
 NR = Not Required

** = Federal Lead & Copper Rule Action Level
 DLR = Detection Limit for Reporting Purposes
 MCLG = Max Contaminant Level Goal
 Level in drinking water where there's no known health risk
 MRDL = Maximum Residual Disinfectant Level
 Level of disinfectant added for water treatment
 mfl = Million Fibers Per Liter
 Measures presence of asbestos fibers
 NTU = Nephelometric Turbidity Units
 Measures the clarity of water
 PHG = Public Health Goal (State)
 Level of contaminant added below where no known risk
 PPM = Parts Per Million or Milligrams Per Liter (mg/L)
 A single penny in \$10,000
 PPT = Parts Per Trillion or Nanograms Per Liter (ng/L)
 A single penny in \$10,000,000,000
 TT = Treatment Technique
 Process to reduce levels of contaminants
 NA = Not Applicable
 ND = None Detectable





Microbiological Contaminants

Name	Last Sampled	Units	MCL	PHG (MCLG)	Treated Water	Range	Holson Well
Total Coliform Bacteria	T 12/12 - W 12/12	NA	More than 1 positive sample in a month.	0	0	0	0
<i>Typical Source: naturally present in the environment</i>							
Fecal Coliform or Ecoli	T 12/12 - W 12/12	NA	Routine and repeat samples detect total Coliform and either sample also detects Fecal Coliform or Ecoli	NA	0	0	0

Typical Source: human and animal fecal waste

Radioactive Contaminants

Name	Last Sampled	Units	MCL	PHG (MCLG)	Treated Water	Range	Holson Well
Gross Alpha Activity	T 10/10 – W 5/04	pCi/L	15	NA	NT	.91 - 2.32	ND
Radium 226	T 10/10 – W 5/04	pCi/L	NA	0.5	NT	.022-.088	ND
Radium 228	T 10/10 – W 5/04	pCi/L	NA	0.019	NT	.208-.337	ND
Uranium	T 10/10 – W 5/04	pCi/L	20	0.43	NT	.87 - 2.41	ND

Typical Source: erosion of natural deposits

Metals

Name	Last Sampled	Units	# Samples Collected	90th Percentile	AL	PHG (MCLG)	Holson Well
Lead	July 2011	ppb	20	ND	ND	ND	NT

Typical Source: internal corrosion of household water plumbing systems; discharge from industrial manufacturers; erosion of natural deposits. 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. North of the River Municipal Water District 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 minimized exposure is available from the Safe Drinking Water Hotline or online at www.epa.gov/safewater/lead

Copper	July 2011	ppm	20	ND	ND	ND	< 10
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Typical Source: internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives. We are required to monitor your drinking water fro specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Please note, the results in 2011 were within normal range and thus compliant.

Disinfectant Residuals

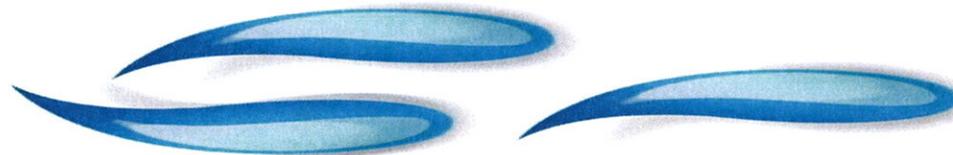
Name	Last Sampled	Units	MCDL	MRDLG	Treated Water	Range	Holson Well
Chlorine	T 12/12	ppm	4	4	1.47	0.7 - 1.8	NT

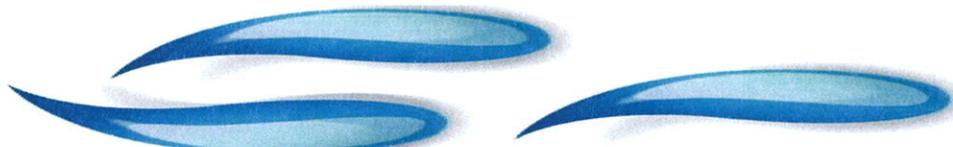
Typical Source: drinking water disinfectant added for treatment

Disinfection By-products

Name	Last Sampled	Units	MCL	PHG (MCLG)	Treated Water	Range	Holson Well
Total Trihalomethanes (TTHM)	T 10/12	ppb	80	NA	37	26 - 52	NT
LRAA - 409 Camwood Avenue					84.4	41.5 - 114.5	
LRAA - Kern County Airport					83.1	39 - 124.1	
LRAA - Sunnyside Well 2INAC					80.9	32.4 - 115.8	
LRAA - 2908 Worthington Ave.					68.5	16.2 - 41.7	
Haloacetic Acids (HAA5)	T 10/12	ppb	60	NA	22	15 - 25	NT

Typical Source: By-product of drinking water chlorination





General Mineral and Physical Contaminants

Name	Last Sampled	Units	MCL	PHG (MCLG)	Treated Water	Range	Holson Well
Total Alkalinity (as CaCO ₃)	T 12/12	ppm	NA	NA	61	48 - 83	NT
Bicarbonate	T 12/12 – W 1/11	ppm	NA	NA	73.8	58.6 - 101	120
Calcium	T 12/12 – W 1/11	ppm	NA	NA	20.6	12.3 - 35.9	31
Magnesium	T 12/12 – W 1/11	ppm	NA	NA	5.06	2.15 - 13.5	3.9
Potassium	T 12/12	ppm	NA	NA	1.98	1.25 - 3.27	NT
<i>Typical Source: erosion of natural deposits</i>							
pH	T 12/12 – W 1/11	units	NA	NA	7.33	7.10 - 7.75	7.94
<i>Typical Source: inherent characteristic of water</i>							
Total Hardness (as CaCO ₃)	T 12/12 – W 1/11	ppm	NA	NA	72.1	39.7 - 101	93
Sodium	T 12/12 – W 1/11	ppm	NA	NA	32.2	14.4 - 71.7	24
<i>Typical Source: generally found in ground and surface water</i>							

Inorganic Contaminants

Name	Last Sampled	Units	MCL	PHG (MCLG)	Treated Water	Range	Holson Well
Aluminum	T 12/12	ppm	1	0.6	0.105	ND - 0.105	NT
<i>Typical Source: erosion of natural deposits; residue from some surface water treatment processes</i>							
Fluoride *	T 12/12	ppm	2	1	0.14	ND - 0.21	NT
<i>Typical Source: erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories</i>							
Foaming Agents (MBAS)	T 12/12 – W 1/11	ppb	0.5	ND	ND	ND	< .100
<i>Typical Source: municipal and industrial waste discharges</i>							
Nitrate+Nitrate (Sum of Nitrogen, N)	T 12/12 – W 2007	ppm	10	10	0.46	ND – 1.85	ND
Nitrate (as NO ₃)	T 12/12 - W 1/12	ppm	45	45	2.04	ND - 8.16	2.10
<i>Typical Source: runoff/leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards.</i>							
Odor	T 12/12 – W 1/11	units	3	NA	2	2 - 2	ND
Color	T 12/12 – W 1/11	units	15	NA	< 2.5	< 2.5 - <2.5	2
Total Dissolved Solids	T 12/12 – W 1/11	ppm	1000	NA	179	90 - 317	180
Specific Conductance	T 12/12 – W 1/11	mic	1600	NA	318	158 - 598	287
Chloride	T 12/12 – W 1/11	ppm	500	NA	44.9	7.42 - 134	10
Sulfate	T 12/12	ppm	500	NA	29.9	16.2 - 46.6	NT
Turbidity	T 12/12 – W 1/11	NTU	5	NA	0.05	0.04 - 0.06	0.130
Zinc	T 12/12 – W 1/11	ppb	5	NA	0.025	ND - 0.050	< 50

Additional Analyses

Name	Last Sampled	Units	MCL	PHG (MCLG)	Treated Water	Range	Holson Well
Silica	T 12/12	ppm	NA	NA	9.4	5.76 - 17.3	NT
Phosphate	T 12/12	ppm	NA	NA	0.22	ND - 0.45	NT

~ Quick Family Fun Facts ~

- Did you know that the water cycle involves water evaporating, turning into a gas, rises into the sky, cools & condenses into tiny drops of water or ice crystals that we see as clouds, falls back to Earth as rain, snow or hail before evaporating & continuing the cycle?
- Found in the Pacific Ocean, the Mariana Trench is the deepest known point in the world's oceans. WOW! Did you know that?





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Inside Is Your Water District's 2012 Annual Water Quality - Consumer Confidence Report



Greetings from the North of the River Municipal Water District

Each year, as required by law, the District mails the attached notice called the Consumer Confidence Report. For most people, it is a good deal of numbers that do not mean much of anything. For water agencies such as the North of the River Municipal Water District, the numbers correlate to various levels of what the State and Federal Government set as "safe" standards.

To all of our retail customers, we want to assure you that the North of the River Municipal Water District is providing safe drinking water that is monitored on a regular basis. Should you have any questions or wish explanations in regard to this report please do not hesitate to contact me, David Aranda, General Manager at 661-393-5411.

I also wish to remind you that the District is divided into five Divisions with an elected official for each Division. Should you wish to speak to your elected representative for the District please contact us and staff will be happy to provide the name and a contact number of your elected Director. The North of the River Municipal Water District operates with a five person Board of Directors that meets the third Wednesday of every month.

In an effort to reduce costs in the future, please note the District's website www.normwd.org and please feel free to provide us with your e-mail address. It is hoped that significant savings in regard to postage, paper and printing can be obtained in the future by providing documents such as this Consumer Confidence Report electronically.