



DEPARTMENT OF THE AIR FORCE
42D AIR BASE WING (AETC)
MAXWELL AIR FORCE BASE ALABAMA

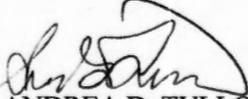
28 July 2015

MEMORANDUM FOR CATEGORIES 1 THROUGH 5

FROM: 42 ABW/CC

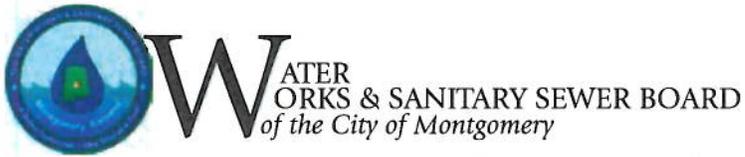
SUBJECT: 2014 Annual Consumer Confidence Report on Drinking Water for Maxwell-Gunter AFB and Maxwell-Gunter AFB Recreational and Training Sites

1. Each year, in accordance with AFI 48-144, *Safe Drinking Water Surveillance Program*, all Air Force drinking water systems are required to send out an annual Consumer Confidence Report (CCR) highlighting the previous calendar year's sample results and water treatment processes. As in the past, our water continues to be healthy and meet all Safe Drinking Water Act requirements.
2. In accordance with AFI 48-144, installations which receive a Water Quality Report/CCR from a local water supplier will provide the Water Quality Report/CCR to the base population. The Maxwell-Gunter AFB community receives its water from the Montgomery Water Works and Sanitary Sewer Board (MWWSSB); Lake Martin Maxwell-Gunter Recreational site receives its water from Walnut Hill Water Authority; Vigilant Warrior training site near Lake Jordan receives its water from Central Elmore Water and Sewer Authority; and Midbay Shores Recreational site receives its water from Okaloosa County Water Authority, Florida. Each of the respective Water Quality Reports/CCRs is attached for your review. (Attachments 1 through 4)
3. In addition to the sampling performed by the local water suppliers, our Bioenvironmental Engineering (BE) Flight collected an additional 180 drinking water samples in 2014, analyzing for pH, chlorine, fluoride and total coliforms (bacteriological contaminants). Every sample collected and analyzed by our BE Flight met all Safe Drinking Water Act requirements and indicates the water supplied to the Maxwell-Gunter recreational and training sites is safe for consumption.
4. Please take the time to review the attached Water Quality Reports/CCRs. Additionally, an e-copy of the Water Quality Reports/CCR is available for all base residents to review/download at the Maxwell-Gunter's homepage (<http://www.maxwell.af.mil/>) by following the "Water Quality Report" link.
5. Rest assured the water provided to the Maxwell-Gunter Community and the Maxwell-Gunter recreational and training sites is of the highest quality. If there are any questions concerning this letter, please contact the BE at 953-5848 or email 42AMDS.SGPB.OrgMailbox@us.af.mil.


ANDREA D. TULLOS, Colonel, USAF
Commander, 42d Air Base Wing

4 Attachments:

1. MWWSSB, 2014 Water Quality Report
2. Walnut Hill Water Authority, 2014 Water Quality Report
3. Central Elmore Water and Sewer Authority, 2014 Water Quality Report
4. Okaloosa County Water Authority, 2014 Water Quality Report



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2014
water quality report

SOURCE OF MONTGOMERY'S WATER

For years, Montgomery's only source of water was its well fields in West and North Montgomery. These well fields withdraw groundwater from several underground aquifers and provide high quality, clean water that requires less treatment than surface water. However, the cost of transporting and maintaining the wells is also higher than using surface water. Considering this fact and Montgomery's growing population, in 1965 the C.T. Perry Water Purification Plant was built on the Tallapoosa River. Today, this plant has a capacity of 60 million gallons of water per day (MGD) and accounts for 60% of Montgomery's water supply. The Day Street Pump Station (20 MGD), the Hanan Water Treatment Plant (12.5 MGD), and all well fields account for the remaining 40%. Together, our water sources provide water for Montgomery and surrounding areas.

A source water assessment was conducted for the water supply of Montgomery Water Works including both the surface water and groundwater. An investigation of potential sources of contamination located within our water supply area was conducted. Each source was examined individually to determine the possible impact on the raw water supply. The majority of sources identified during the investigation pose little or no significant threat to our water supply. For more information about the source water assessment or to view a copy of the reports resulting from this investigation, please contact us at (334) 206-1600.

CONTACT INFORMATION

22 Bibb Street
Montgomery, AL 36104
(334) 206-1600
www.mwwssb.com

Thomas R. Morgan
General Manager

BOARD OF DIRECTORS

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BOARD MEETINGS

Regular Board of Directors meetings are held the third Tuesday of every month at 1:15 p.m. in the Murphy House Parlor at 22 Bibb Street.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

TABLE OF PRIMARY CONTAMINANTS

PRIMARY STANDARDS		MWWSSB	Rolling Hills
Bacteriological	MCL	Highest Detected Level	Highest Detected Level
Total Coliform Bacteria	<5%	coliform absent	coliform absent
Radiological*	MCL	Highest Detected Level	Highest Detected Level
Gross Alpha	15 pCi/L	8.5	ND
Radium 228	5 pCi/L	0.8	0.2
* Results are from the most recent testing done in 2013 in accordance with applicable regulations.			
Turbidity	MCL	Highest Single Measurement	Highest Single Measurement
Turbidity	TT	0.30	-
Inorganic Chemicals	MCL	Highest Detected Level	Highest Detected Level
Antimony	6 ppb	ND	ND
Arsenic	10 ppb	ND	ND
Barium	2 ppm	0.1	ND
Beryllium	4 ppb	ND	ND
Cadmium	5 ppb	ND	ND
Chromium	100 ppb	ND	ND
Copper	AL = 1.3 ppm	90th percentile value = 0.132	-
Cyanide	200 ppb	ND	ND
Fluoride	4 ppm	1	ND
Lead	AL = 15 ppb	90th percentile value = ND	-
Mercury	2 ppb	ND	ND
Nitrate	10 ppm	0.6	ND
Nitrite	1 ppm	ND	ND
Selenium	50 ppb	ND	ND
Thallium	2 ppb	ND	ND

LEGEND FOR TABLES:

AL	action level
MCL	maximum contaminant level
MCLG	maximum contaminant level goal
MWWSSB	Montgomery Water Works & Sanitary Sewer Board
n/a	not applicable
ND	not detected
NS	no standard exists
NTU	nephelometric turbidity unit
pCi/L	picocuries per liter
ppb	parts per billion
ppm	parts per million
ppt	parts per trillion
TON	threshold odor number
TT	treatment technique
uS/cm	micromhos per centimeter

DIOXIN & ASBESTOS MONITORING STATEMENT

Based on a study conducted by ADEM with the approval of the EPA a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for these contaminants was not required.

Organic Chemicals	MCL	Highest Detected Level	Highest Detected Level
2,4-D**	70 ppb	ND	ND
2,4,5-TP (Silvex)**	50 ppb	ND	ND
Alachlor**	2 ppb	ND	ND
Atrazine**	3 ppb	ND	ND
Benzo(a)pyrene (PAHs)**	200 ppt	ND	ND
Carbofuran**	40 ppb	ND	ND
Chlordane**	2 ppb	ND	ND
Dalapon**	200 ppb	ND	ND
Di(2-ethylhexyl)adipate**	400 ppb	ND	ND
Di(2-ethylhexyl)phthlate**	6 ppb	ND	ND
Dinoseb**	7 ppb	ND	ND
Diquat**	20 ppb	ND	ND
Endothal**	100 ppb	ND	ND
Endrin**	2 ppb	ND	ND
Glyphosate**	700 ppb	ND	ND
Heptachlor**	400 ppt	ND	ND
Heptachlor epoxide**	200 ppt	ND	ND
Hexachlorobenzene**	1 ppb	ND	ND
Lindane**	200 ppt	ND	ND
Methoxychlor**	40 ppb	ND	ND
Oxamyl (Vydate)**	200 ppb	ND	ND
PCBs**	500 ppt	ND	ND
Pentachlorophenol**	1 ppb	ND	ND
Picloram**	500 ppb	ND	ND
Simazine**	4 ppb	ND	ND
Toxaphene**	3 ppb	ND	ND
Benzene	5 ppb	ND	ND
Carbon Tetrachloride	5 ppb	ND	ND
Chlorobenzene	100 ppb	ND	ND
o-Dichlorobenzene	600 ppb	ND	ND
p-Dichlorobenzene	75 ppb	ND	ND
1,2-Dichloroethane	5 ppb	ND	ND
1,1-Dichloroethylene	7 ppb	ND	ND
cis-1,2-Dichloroethylene	70 ppb	ND	ND
trans-1,2-Dichloroethylene	100 ppb	ND	ND
Dichloromethane	5 ppb	ND	ND
1,2-Dichloropropane	5 ppb	ND	ND
Ethylbenzene	700 ppb	ND	ND
Haloacetic Acids	60 ppb	32	-
Styrene	100 ppb	ND	ND
Tetrachloroethylene	5 ppb	ND	ND
1,2,4-Trichlorobenzene	70 ppb	ND	ND
1,1,1-Trichloroethane	200 ppb	ND	ND
1,1,2-Trichloroethane	5 ppb	ND	ND
Trichloroethylene	5 ppb	ND	ND
Total Trihalomethanes	80 ppb	59	-
Toluene	1 ppm	ND	ND
Vinyl Chloride	2 ppb	ND	ND
Xylenes	10 ppm	ND	ND
Total Organic Carbon	TT (ppm)	1.2	-
Chlorine Dioxide	800 ppb	699	-
Chlorite	1 ppm	0.800	-

** Results are from the most recent testing done in 2012 in accordance with applicable

Since 1999, as required by EPA, we have provided our customers with a water quality report. And, as we have done every year since, we are proud to announce that our water meets or exceeds all state and federal drinking water standards. Our own certified lab analyzes water and wastewater samples every single day, without exception, testing for approximately 140 potential contaminants to ensure the water we provide is safe for your use. In addition to the 2014 lab data, included within this report is information on the sources of our water as well as vital health information.

We are excited to offer our customers another option to conveniently pay your water bill. Payment machines are now available at our main office located at 116 Coosa Street. Kiosks are set up inside our customer service area, along with our outside machine that is available 24 hours a day, 7 days a week. Both machines accept all payments except money orders and cashier's checks.

The Montgomery Water Works and Sanitary Sewer Board takes our responsibility of providing clean and safe drinking water very seriously. And this tradition will continue for many years to come.

Thomas R. Morgan
General Manager
Montgomery Water Works & Sanitary Sewer Board

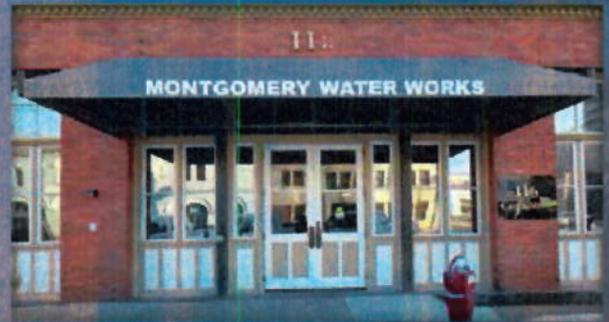


TABLE OF DETECTED CONTAMINANTS

PRIMARY STANDARDS	Units	MCL	MCLG	MWWSSB		Rolling Hills		Likely Sources
				Highest Detected Level	Range of Detected Levels	Highest Detected Level	Range of Detected Levels	
Radiological*								
Gross Alpha	pCi/L	15	0	8.5	0.4 - 8.5	ND	ND	Erosion of natural deposits
Radium 228	pCi/L	5	0	0.8	ND - 0.8	0.2	0.2	Erosion of natural deposits

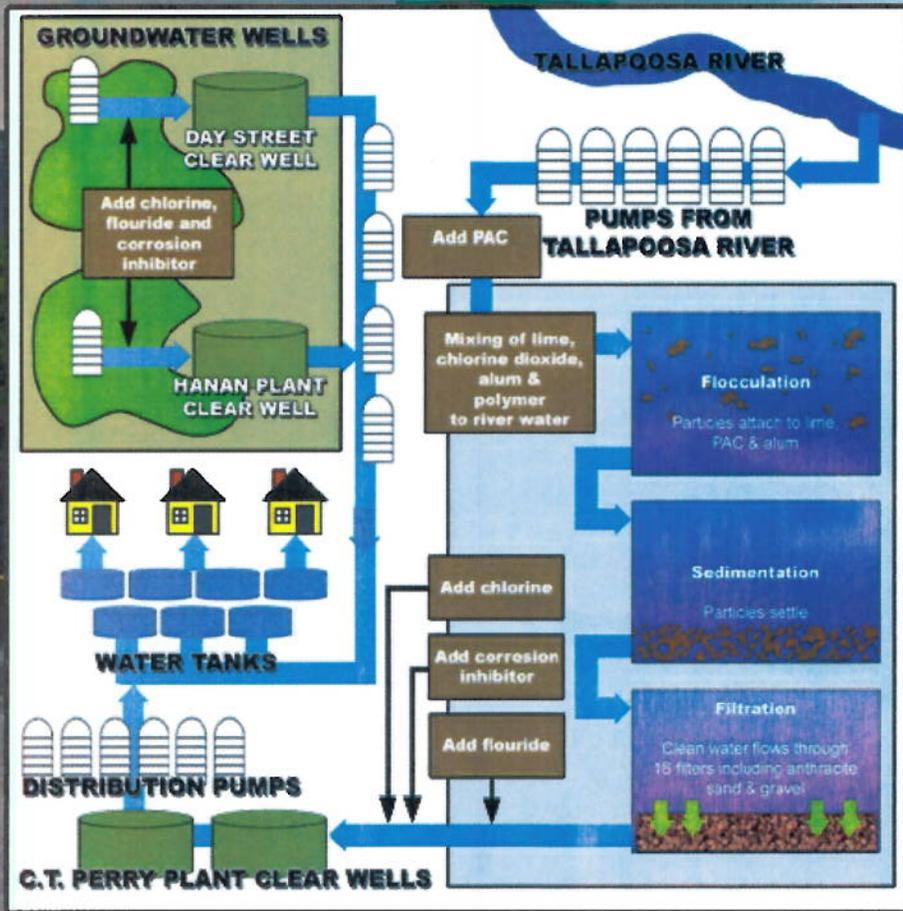
* Results are from the most recent testing done in 2013 in accordance with applicable regulations.

Turbidity	Units	MCL	MCLG	Highest Single Measurement	Samples Meeting Limits	Highest Single Measurement	Samples Meeting Limits	Likely Sources
Turbidity	NTU	TT	n/a	0.30	100%	-	-	Soil runoff

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

Inorganic Chemicals	Units	MCL	MCLG	Highest Detected Level	Range of Detected Levels	Highest Detected Level	Range of Detected Levels	Likely Sources
Barium	ppm	2	2	0.1	ND - 0.1	ND	ND	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	ppm	AL = 1.3	1.3	90th Percentile Value = 0.132	Zero sites above action level	-	-	Corrosion of household plumbing systems; erosion of natural deposits; leaching from
Fluoride	ppm	4	4	1	ND - 1	ND	ND	Water additive which promotes strong teeth; erosion of natural deposits; discharge from
Nitrate	ppm	10	10	0.6	ND - 0.6	ND	ND	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural

Water Purification Process



CRYPTOSPORIDIUM AND GIARDIA

Cryptosporidium and Giardia are microscopic organisms that are relatively widespread in the environment. Surface waters, such as lakes and rivers, that contain a high amount of sewage contamination or animal wastes are more susceptible to increased numbers of these parasites. The Montgomery Water Works and Sanitary Sewer Board is taking steps to make sure that these organisms do not pose a problem in your drinking water. Current protection measures taken at the C.T. Perry Water Purification Plant include chlorination, filtration, and monitoring turbidity levels and particle sizes. Additionally, routine backwashing of the filters helps to eliminate the chances of finding these organisms in treated water. Occasionally, we have found these organisms in the raw water, but neither Cryptosporidium nor Giardia has ever been detected in the finished water. We will continue to monitor for these and other contaminants and take all necessary precautions to ensure that your water is safe for your use.

Organic Chemicals	Units	MCL	MCLG	Highest Detected Level	Range of Detected Levels	Highest Detected Level	Range of Detected Levels	Likely Sources
Chlorine Dioxide	ppb	800	800	699	2 - 699	-	-	Water additive used to control microbes
Chlorite	ppm	1	0.8	0.8	0.3 - 0.8	-	-	Byproduct of drinking water disinfectant
Disinfection Byproducts	Units	MCL	MCLG	Highest Detected Levels	Range of Detected Levels	Highest Detected Levels	Range of Detected Levels	Likely Sources
Haloacetic Acids	ppb	60	0	32	ND - 32	-	-	Byproduct of drinking water chlorination
Total Trihalomethanes	ppb	80	0	59	ND - 59	-	-	Byproduct of drinking water chlorination
SECONDARY STANDARDS		MWWSSB				Rolling Hills		
Inorganic Chemicals	Units	MCL	MCLG	Highest Detected	Range of Detected	Highest Detected	Range of Detected	Likely Sources
Aluminum	ppb	200	-	33	ND - 33	ND	ND	Erosion of natural deposits
Chloride	ppm	250	-	28	6 - 28	14	14	Water additive used to control microbes
Color	units	15	-	7	1 - 7	1	1	
Foaming Agents	ppb	500	-	92	ND - 92	80	80	
Iron	ppb	300	-	173	ND - 173	ND	ND	Erosion of natural deposits
Manganese	ppb	50	-	21	ND - 21	ND	ND	Erosion of natural deposits; Runoff from landfills
Sulfate	ppm	250	-	21	4 - 21	17	17	Erosion of natural deposits
Total Dissolved Solids	ppm	500	-	248	51 - 248	211	211	Erosion of natural deposits

IMPORTANT HEALTH INFORMATION FROM THE EPA

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

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 radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immunocompromised, such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV / AIDS positive or other immune system disorders, some elderly, and infants can be particularly at risk from infections. People at risk 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water.

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. Montgomery Water Works & Sanitary Sewer Board 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 your 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>.

TERMS TO KNOW

Primary Standards – Used as guides to protect public health. Primary standards include maximum contaminant levels, maximum contaminant level goals, action levels, and treatment techniques.

Secondary Standards – Guidelines to assure good aesthetic quality of water. Secondary standards apply to contaminants that affect the taste, odor or color of water, stain sinks or bathtubs, or interfere with treatment processes.

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 allow for a margin of safety.

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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.

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

Action Level – The concentration of a contaminant that triggers treatment or other requirement a water system shall follow.

Inorganic Chemicals (unregulated)**	Units	MCL	MCLG	Average Detected Levels	Range of Detected Levels	Average Detected Levels	Range of Detected Levels	Likely Sources
Alkalinity, Total	ppm	NS	NS	120	20 - 210	178	178	Alkalinity comes from the bicarbonate, hydroxide components of a natural or treated water supply
Calcium	ppm	NS	NS	14	2 - 45	7	7	Erosion of natural deposits
Carbon Dioxide	ppm	NS	NS	2	ND - 5	6	6	Erosion of natural deposits
Conductivity	uS/cm	NS	NS	316	109 - 502	419	419	
Hardness, Total	ppm	NS	NS	39	5 - 133	22	22	Calcium carbonate occurs as erosion of
Magnesium	ppm	NS	NS	1.3	0.1 - 5.2	1.0	1.0	Erosion of natural deposits
pH	std units	NS	NS	8.0	7.6 - 8.7	7.8	7.8	pH identifies the presence of acid or base in water
Sodium	ppm	NS	NS	43	3 - 88	75	75	Erosion of natural deposits
Organic Chemicals (unregulated)**	Units	MCL	MCLG	Average Detected Levels	Range of Detected Levels	Average Detected Levels	Range of Detected Levels	Likely Sources
Total Organic Carbon	ppm	NS	NS	1.1	1.0 - 1.2	-	-	Naturally present in the environment

* Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

2015 Annual Drinking Water Quality Report

Walnut Hill Water Authority

January-December 2014

Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (USEPA) and the Alabama Department of Environmental Management (ADEM) drinking water health standards. Your local water officials vigilantly safeguard its water supplies and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standards. We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our source water comes from the Adams Filter Plant, which is located in Alex City. The water we supply to our customers requires no specialized treatment. However, Chlorine is added to the water as disinfectant and the required residual is maintained to protect your drinking water from any possible outside contaminants.

The Walnut Hill Water Authority routinely completes a water storage facility inspection plan, and utilizes a Bacteriological Monitoring Plan and a Cross Connection Policy is in place to insure good safe drinking water for our customers. Alexander City has completed a Source Water Assessment Plan, which is available at their office for review. This report provides information about potential sources of contamination and is set up to help protect our source.

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Board meetings. They are held on the 3rd Monday of the month at the Walnut Hill Water Authority office that is located at 7791 Hwy 50 and begin at 6:30 p.m.

The members of the Board of Directors are: Ben Sands, Chairman, Sandra Carlisle, Ernie Barnes

Important Drinking Water Definitions:

Action Level (AL) - The concentration of a contaminant that triggers treatment or other requirements that a water system shall follow.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs 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. MCLGs allow for a margin of safety.

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.

Millirems per year (mrem/yr) - Measure of radiation absorbed by the body.

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (µg/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (ng/L) - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (pg/L) - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

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

Threshold Odor Number (T.O.N.) - The greatest dilution of a sample with odor-free water that still yields a just-detectable odor.

Variances & Exemptions - ADEM or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Explanation of reasons for variance/exemptions

Based on a study conducted by ADEM with the approval of the EPA a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus monitoring for these contaminants was not required.

The Walnut Hill Water Authority routinely monitors for contaminants in your drinking water according to Federal and State laws. Unless otherwise noted, the data presented in the following tables show the results of our monitoring period of January 1st to December 31st, 2014.

Table of Primary Drinking Water Contaminants

At high levels some primary contaminants are known to pose a health risks to humans. This table provides a quick glance of any primary contaminant detections.

CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED
Bacteriological			Chloramines (ppm)	4	ND
Total Coliform Bacteria	< 5%	ND	Chlorite (ppm)	1	ND
Turbidity (NTU)	TT	0.29	Endothall (ppb)	100	ND
Fecal Coliform & E. coli	0	ND	Endrin (ppb)	2	ND
Radiological			Epichlorohydrin (ppb)	TT	ND
Beta particle and photon (mrem/yr)	4	ND	Glyphosate (ppb)	700	ND
Gross Alpha particle (pCi/L)	15	1.3+-0.7	Heptachlor (ppt)	400	ND
Combined radium 226 & 228 (pCi/L)	5	ND	Heptachlor Epoxide (ppt)	200	ND
Tritium (pCi/L)	20,000	ND	Hexachlorobenzene (ppb)	1	ND
Strontium 90 (pCi/L)	8	ND	Hexachlorocyclopentadiene (ppb)	50	ND
Uranium (ppb)	30	ND	Lindane (ppt)	200	ND
Inorganic			Methoxychlor (ppb)	40	ND
Antimony (ppb)	6	ND	Oxamyl [Vydate] (ppb)	200	ND
Arsenic (ppb)	10	ND	Polychlorinated Biphenyls (PCBs)(ppt)	500	ND
Asbestos (MFL)	7	ND	Pentachlorophenol (ppb)	1	ND
Barium (ppm)	2	ND	Picloram (ppb)	500	ND
Beryllium (ppb)	4	ND	Simazine (ppb)	4	ND
Cadmium (ppb)	5	ND	Toxaphene (ppb)	3	ND
Chromium (ppb)	100	ND	Benzene (ppb)	5	ND
Copper (ppm)	AL=1.3	0.018	Carbon Tetrachloride (ppb)	5	ND
Cyanide (ppb)	200	ND	Monochlorobenzene (ppb)	100	ND
Fluoride (ppm)	4	0.34	Dibromochloropropane (ppt)	200	ND
Lead (ppb)	AL=15	ND	0-Dichlorobenzene (ppb)	600	ND
Mercury (ppb)	2	ND	Para-dichlorobenzene (ppb)	75	ND
Nickel (ppb)	100	ND	1,2-Dichloroethane (ppb)	5	ND
Nitrate (as N)(ppm)	10	0.38	1,1-Dichloroethylene (ppb)	7	ND
Nitrite (as N)(ppm)	1	ND	Cis-1,2-Dichloroethylene (ppb)	70	ND
Total Nitrate/Nitrite (ppm)	10	0.38	Trans-1,2-Dichloroethylene (ppb)	100	ND
Selenium (ppb)	50	ND	Dichloromethane (ppb)	5	ND
Sulfate (ppm)	500	25.9	1,2-Dichloropropane (ppb)	5	ND
Thallium (ppb)	2	ND	Ethylbenzene (ppb)	700	ND
Organic Chemicals			Ethylene Dibromide (EDB)(ppt)	50	ND
2,4-D (ppb)	70	ND	Styrene (ppb)	100	ND
2,4,5-TP (Silvex) (ppb)	50	ND	Tetrachloroethylene (ppb)	5	ND
Acrylamide (ppm)	TT	ND	1,2,4-Trichlorobenzene (ppb)	70	ND
Alachlor (ppb)	2	ND	1,1,1-Trichloroethane (ppb)	200	ND
Atrazine (ppb)	3	ND	1,1,2-Trichloroethane (ppb)	5	ND
Benzo(a)pyrene[PHAs] (ppt)	200	ND	Trichloroethylene (TCE)(ppb)	5	ND
Carbofuran (ppb)	40	ND	Total trihalomethanes (TTHM)(ppb)	80	33.5
Chlordane (ppb)	2	ND	Toluene (ppm)	1	ND
Dalapon (ppb)	200	ND	Vinyl Chloride (ppb)	2	ND
Di-(2-ethylhexyl)adipate (ppb)	400	ND	Chlorine (ppm)	4	1.1
Di(2-ethylhexyl)phthalates (ppb)	6	ND	Chlorine dioxide (ppb)	800	ND
Dinoseb (ppb)	7	ND	Bromate (ppb)	10	ND
Diquat (ppb)	20	ND	Total Organic Carbon (TOC)	TT	0.93-1.59
Dioxin[2,3,7,8-TCDD] (ppq)	30	ND	Xylenes (Total)(ppm)	10	ND
			Haloacetic Acids (HAA5)(ppb)	60	15.3

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Table of Secondary Contaminants							
Contaminants	Range	Average	MCL	Contaminants	Range	Average	MCL
Aluminum	ND		PPM 0.2	Manganese	0.04		PPM 0.05
Chloride	3.48		PPM 250	Silver	ND		PPM 0.1
Iron	ND		PPM 0.3	Total Dissolved Solids	64.0		PPM 500
Color	ND		PPM 15.0	Zinc	ND		PPM 5
Foaming Agents	ND		PPB 500	Copper	0.018		PPM 1
Odor	ND		T.O.N. 3	Lead	ND		PPB .015

Table of Special Contaminants							
Contaminants	Range	Average	MCL	Contaminants	Range	Average	MCL
Calcium	ND		PPM N/A	Sodium	12.1		PPM N/A
Carbon Dioxide	ND		PPM N/A	Sulfate	22.9		PPM 250
Magnesium	ND		PPM N/A	Specific Conductance	ND		PPM N/A
pH	8.20		PPM N/A	Total Hardness (as CaCO3)	10.5		PPM N/A
Total Alkalinity	ND		PPM N/A	Temperature	ND		°C N/A

Table of Unregulated Drinking Water Contaminants					
CONTAMINANT	AVERAGE	CONTAMINANT	AVERAGE	CONTAMINANT	AVERAGE
1,1 - Dichloropropene	ND	Chloroform	8.60	1,2,4-Trichlorobenzene	ND
Chloromethane	ND	1,1,2,2-Tetrachloroethane	ND	Chlorodibromomethane	1.32
1,1-Dichloroethane	ND	Dibromomethane	ND	1,2,3 - Trichlorobenzene	ND
Dicamba	ND	1,2,3 - Trichloropropane	ND	Dichlorodifluoromethane	ND
1,2,4 - Trimethylbenzene	ND	Dieldrin	ND	1,3 - Dichloropropane	ND
Hexachlorobutadiene	ND	1,3 - Dichloropropene	ND	Isopropylbenzene	ND
1,3,5 - Trimethylbenzene	ND	M-Dichlorobenzene	ND	2,2 - Dichloropropane	ND
Methomyl	ND	3-Hydroxycarbofuran	ND	MTBE	ND
Aldicarb	ND	Aldicarb Sulfone	ND	Aldicarb Sulfoxide	ND
Aldrin	ND	Bromobenzene	ND	Bromochloromethane	ND
Bromodichloromethane	3.96	Bromoform	ND	Bromomethane	ND
Butachlor	ND	Carbaryl	ND	Chloroethane	ND
Metolachlor	ND	Metribuzin	ND	N-Propylbenzene	ND
N - Butylbenzene	ND	Naphthalene	ND	O-Chlorotoluene	ND
P-Chlorotoluene	ND	P-Isopropyltoluene	ND	Propachlor	ND
Sec - Butylbenzene	ND	Tert - Butylbenzene	ND	Fluorotrichloromethane	ND

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk. The EPA or ADEM requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. The table below lists all of the drinking water contaminants that we detected.

Table of Detected Drinking Water Contaminants							
CONTAMINANT	MCLG	MCL	Range			Amount Detected	Likely Source of Contamination
Bacteriological (Sampling Date 2014)							
Turbidity	0	TT				0.29 NTU	Soil runoff
Inorganic Contaminants (Sampling Date 2014)							
Copper	1.3	AL=1.3	No. of Sites above action level 0			0.018 ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	4	4	ND	-	0.34	0.34 ppm	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead	0	AL=15	No. of Sites above action level 0			ND ppb	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as N)	10	10	ND	-	0.38	0.38 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Total Nitrate & Nitrite	10	10	ND	-	0.38	0.38	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sulfate	N/A	500	ND	-	22.9	22.9	ppm	Naturally occurring in the environment
Organic Contaminants (Sampling Date 2014)								
Total trihalomethanes (TTHM)	0	80	18.4	-	62.6	33.5	ppb	By-product of drinking water chlorination
Chlorine	MRDLG 4	MRDL 4	1.0	-	1.4	1.1	ppm	Water additive used to control microbes
Total Organic Carbon (TOC)	N/A	TT	0.93	-	1.59	1.59	ppm	Naturally present in the environment
Haloacetic Acids (HAA5)	0	60	9.67	-	25.1	15.3	ppb	By-product of drinking water chlorination
Secondary Contaminants (Sampling Date 2014)								
Chloride	N/A	250	ND	-	3.48	3.48	ppm	Naturally occurring in the environment or as a result of agricultural runoff
Copper	1.3	AL=1.3	ND	-	0.018	0.018	ppm	Erosion of natural deposits; leaching from pipes
Sulfate	N/A	250	ND	-	22.9	22.9	ppm	Naturally occurring in the environment
Total Dissolved Solids	N/A	500	ND	-	64.0	64.0	ppm	Erosion of natural deposits
Special Contaminants (Sampling Date 2014)								
pH	N/A	N/A	ND	-	8.20	8.20	SU	Naturally occurring in the environment or as a result of treatment with water additives
Sulfate	N/A	N/A	ND	-	22.9	22.9	ppm	Naturally occurring in the environment
Total Hardness (as CaCO3)	N/A	N/A	ND	-	10.5	10.5	ppm	Naturally occurring in the environment or as a result of treatment with water additives

General Information

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. **Walnut Hill Water Authority** 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>.

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 radioactive material, and it can pick up substances resulting from the presence of animals or from human activities.

As you can see by the tables, our system had no monitoring violations of allowable limits of contaminants in drinking water. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive or other immune system disorders, some elderly, and infants can be particularly at risk from infections. People at risk should seek advice about drinking water from their health care providers. EPA (Environmental Protection Agency)/CDC (Center of Disease Control) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline. All Drinking water, including bottled

drinking water, may reasonably be expected to contain at least small amounts of some contaminants. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

We at the Walnut Hill Water Authority work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

For more information contact:

**Mr. Robin East, Manager
Walnut Hill Water Authority
7791 Hwy 50
Dadeville, Alabama 36853
Telephone: 256-825-9841**



Website: www.cewsa.com

Email: cewsa@cewsa.com

716 US Highway 231

Wetumpka, AL 36093

Phone: (334) 567-6814

Fax: (334) 567-5556



2014

Annual

WATER QUALITY REPORT



Proudly

Presented by:



H. Wade Johnson – Chairman

Ron Johnson – Vice-Chairman

Kenny Holt – Director

Robert L. Prince Jr. – General Manager

Tina Stanley – Secretary

Table of Detected Contaminants (2014)

CONTAMINANT	MCLG	MCL	Units	Etmore		Likely Source of Contamination
				Highest Detected Level	Range of Detected Levels	
Bacteriological	Jan 1, 2014 - Dec 31, 2014			Highest Detected Level	Range of Detected Levels	
Total Coliform Bacteria	NA	< 5%	Present or Absent	Coliform Absent	Coliform Absent	Naturally present in the environment
Turbidity	NA	TT	NTU	0.1	0.1	Soil runoff
Radiological	Jan 1, 2014 - Dec 31, 2014			Highest Detected Level	Range of Detected Levels	
Radium 228	NA	15	PC/L	ND	ND	Erosion of natural products
Inorganic Chemicals	Jan 1, 2014 - Dec 31, 2014			Highest Detected Level	Range of Detected Levels	
Copper	1.3	AL=1.3	ppm	0.055 (90th Percentile)	Zero sites above action level	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	0	AL=0.15	ppm	0.008 (90th Percentile)	Zero sites above action level	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	4	4	ppm	0.93	0.93	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	10	10	ppm	0.103	0.103	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Barium	2	2	ppm	0.012	0.012	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrite	1	1	ppm	ND	ND	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Organic Chemicals	Jan 1, 2014 - Dec 31, 2014			Highest Detected Level/Avg	Range of Detected Levels	
TTM	NA	0.08	ppm	0.040	0.020-0.040	By-product of drinking water chlorination
Haloacetic Acid	NA	0.06	ppm	0.038	0.025-0.038	By-product of drinking water chlorination
Total Organic Carbon (TOC)	NA	NA	ppm	1.10	0.5-1.10	Naturally present in the environment
Chlorine Dioxide	0	60	ppm	NA	NA	Water additive used to control microbes
Chlorite	0	60	ppm	NA	NA	By-product of drinking water disinfection
Xylenes	10	10	ppm	ND	ND	Discharge from petroleum factories; Discharge from chemical factories

Proudly

Presented by:



Detected Unregulated Contaminant Table (2014)

CONTAMINANT	Etmore		Etmore	
	Average Detected Level	Range of Detected Levels	Average Detected Level	Range of Detected Levels
Bromodichloromethane (ppm)	0.0004	.002-.006	Calcium (ppm)	2.52
Bromofom (ppm)	ND	ND	Carbon Dioxide (ppm)	11
Trichloroacetic acid (ppm)	0.015	.001-.024	Chloride (ppm)	9
Dichloroacetic acid (ppm)	0.016	.003-.024	Color (units)	6
Chloroform (ppm)	0.025	.007-.050	Copper (ppm)	0.055
Dibromochloromethane (ppm)	0.0005	ND-.0009	Hardness (ppm)	18.1
Dibromoacetic acid (ppm)	0.0002	ND-.0007	Magnesium (ppm)	0.96
Monochloroacetic acid (ppm)	0.003	.0007-.004	pH (su)	8.2
Monobromoacetic acid (ppm)	0.0003	ND-.002	Sodium (ppm)	14.7
Strontium	0.023	.020-.027	Specific Conductance (umhos)	108
Chromium 6	0.00003	ND-.00006	Sulfate (ppm)	7
Chlorate	0.109	.088-.160	Total Alkalinity (ppm)	12.4
			Total Dissolved Solids (ppm)	53
			Zinc (ppm)	ND
			Aluminum (ppm)	0.033
			Manganese (ppm)	0.008

At CEW&SA, we make it a priority to keep you and your family safe. We test your water for approximately 150 possible contaminants. Of the many contaminants tested, only these few were at levels of detection. They were no where near alert levels.

**Central Elmore Water
And Sewer Authority
2014 Annual Water Quality Report**

PWS # 000547

Safety and security have always been our top priorities. Central Elmore Water and Sewer Authority strives to deliver safe drinking water to our customers and to keep the utility secure and protected. The Source Water Assessment was updated in 2012 and no problems were found. It can be viewed at the main office. We are proud to deliver this annual report covering the year 2014.

Central Elmore Water & Sewer Authority maintains and operates a 10-million gallon per day surface water treatment plant at our primary water source on Lake Martin. Here at Central Elmore Water & Sewer Authority we serve approximately 11,747 customers of our own along with four fulltime neighboring utilities, Rockford (1,208 customers), Friendship (1,285 customers), Electric (1,507 customers), and Wetumpka (3,275 customers). Each customer refers to a meter served, which translates into approximately 66,577 persons served by Central Elmore Water & Sewer Authority.



A Message from Our General Manager

I am privileged to present to you our Annual Water Quality Report. The purpose of this report is to recap the results of the water testing conducted during the calendar year of 2014. The report has been prepared to meet the requirements of the 1996 Safe Drinking Water Act (SDWA) adopted by Congress and to provide our customers with information about their water system. The water provided by Central Elmore Water & Sewer Authority (CEW&SA) as always meets or surpasses all state and federal water quality regulations. Again I'm pleased to inform you that CEW&SA has never had a violation of contamination levels in the water we supply to you, our valuable customers. With a track record of sound management practices, CEW&SA remains diligent in its efforts to maintain the highest standards possible.

The consistent goal of CEW&SA is to deliver customers with a safe, dependable supply of drinking water that can be used with confidence. As you well know we are in the middle of tough economic times, with the rising cost of everything associated with our lives, we are dedicated to you, our customers, to be as prudent as possible in delivering you water at the lowest possible cost while upholding the highest quality.

Please take some time to read this report. If you have any questions concerning this report or CEW&SA, please contact me, Robert L. Prince, Jr., General Manager, at 334-567-6814 or Patrick Morgan, Filter Plant Manager, at 334-512-0480, Monday - Friday, 7:30 a.m. to 4:30 p.m. and we will be glad to address any concerns you may have. If you would like to learn more about CEW&SA, feel free to attend any of our regularly scheduled board meetings which are held at 12:00 p.m. on the third Tuesday of each month at the main office located at 716 US Hwy 231, in Wetumpka. CEW&SA Board members are as follows: Chairman – H. Wade Johnson, Vice-Chairman – Ron Johnson and Director – Kemy Holt.

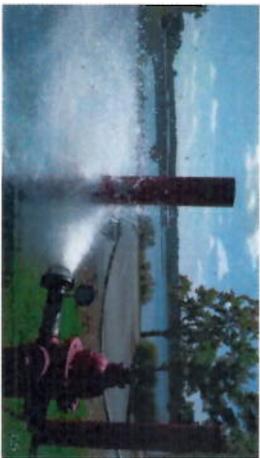
Again, please feel free to contact me with any questions or concerns you may have involving Central Elmore Water and Sewer Authority.

Robert L. Prince, Jr.
Robert L. Prince, Jr.

Happening at the Plant...

Our main goal at the Filter Plant is to provide continuous, safe, and clean drinking water to our customers, which this report describes in detail. Due to Taste & Odor issues that have been challenging we started adding copper sulfate along with activated carbon for treatment. CEW&SA would like to assure our customers that we are working very hard on this issue and its resolution. Please take the time to read the report and if you have any questions I can be contacted at 334-512-0480.

Sincerely,
Patrick Morgan
Plant Manager



Geosmin and MIB

Geosmin, chemically known as 1,2,7-tetrahydro-2-norbornol, is an organic compound that is responsible for the earthy smell often associated with fresh-turned dirt. The name, Geosmin, directly translates to "earthy smell" from its origin over 100 years ago. MIB, or 2-methylisobornol, has also been associated with musty taste and odor concerns in drinking waters. Both Geosmin and MIB are low molecular weight volatile tertiary alcohols. In water sources, these compounds are produced by some species of cyanobacteria (blue green algae) and actinobacteria (a group of gram positive bacteria). The presence of these bacteria are required for the formation of the compounds, however, production of the compounds are not always evident when these bacteria are present. MIB is produced during the life cycle of these bacteria and Geosmin is commonly trapped in the cell bodies and released in high concentrations when these bacteria die. As a result, taste and odor can be directly related to summer algae blooms in some water systems. There are other known sources of these taste and odor compounds that can be attributed to the decay of timber, leaves, and other naturally-occurring organic matter commonly found in surface waters. Both Geosmin and MIB have extremely low odor thresholds to humans. It is not uncommon for the average person to detect the presence of these compounds in the 10 to 30 part per trillion (ng/L) concentration range. Often during the summer months, water systems that depend upon surface water sources will experience complaints from consumers regarding taste and odor which can directly be attributed to Geosmin and MIB. Both are unpleasant, but pose no harmful effects to humans. Rest assured CEW&SA has and will continue to monitor and control the issue.

1. The 716 Highway Drive Station, Wetumpka, Ala.
2. Lake Martin, helping the volunteer fire department by testing a fire hydrant for flow.
3. The Tallapoosa River - CEW&SA water source.

Definitions:

Maximum Contaminant Level (MCL). The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs 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. MCLGs allow for a margin of safety.
90th Percentile. 90% of samples are equal to or less than the number in the chart.
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.
Maximum Residual Disinfectant Level or (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.
NA. Not applicable.
ND. Not detectable at testing limits.
PB. or parts per billion, micrograms per liter (µg/l).
PPM or parts per million, milligrams per liter (mg/l).
Action Level or AL. The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
Treatment Technique or TT. A required process intended to reduce the level of a contaminant in drinking water.
NTU or Nephelometric Turbidity Units. A measure of clarity.
Special Health 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. 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: (1-800-426-7291).

All 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.

General Information about Drinking Water Contaminants:

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, 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 byproducts 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.

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. CEW&SA 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 the 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>.

Based on a study conducted by the Department with the approval of the EPA, a statewide water for the monitoring of asbestos and disinix was issued. Thus, monitoring for any of these contaminants was not required.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- Not Applicable - (N/A)**
- ND⁺** means not detected and indicates that the substance was not found by laboratory analysis.
- Parts per million (ppm) or Milligrams per Liter (mg/L)** - one part by weight of analyte to 1 million parts by weight of the water sample.
- Parts per billion (ppb) or Micrograms per Liter** - one part by weight of analyte to 1 billion parts by weight of the water sample.
- Residues per liter (rpl/L) - Residues per liter is a measure of the radioactivity in water.**
- Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Contaminant Level** - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal** - The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Maximum residual disinfectant level or 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 or 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.

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. All 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 Environmental Protection Agency's Safe Drinking Water Hotline at 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. Okaloosa County Water and Sewer 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 how to 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>.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. Those 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If you have any questions about this report or concerning your water utility, please contact Phillip Arnett at (850) 651-7133.



Gannett's Main Water System - This water system services the Ocean City-Wright-Shalimar-Okaloosa Island area and all the unincorporated areas around Fort Walton Beach. It is served by 12 wells, 10 elevated tanks, and two ground storage tanks. In addition this system also receives drinking water from the Mid-County system via pipeline.

Bluewater Bay/Raintree System - Located in Bluewater Bay east of Rocky Bayou Bridge along Highway 20 to the Walton County line. This system is served by 3 wells and 2 elevated tanks.

Mid-County (Crestview) System - This water system serves the unincorporated areas around Crestview and consists of 5 wells, 3 elevated tanks, and 1 ground storage tank.

Please call our office if you have any questions. We at the Okaloosa County Water and Sewer System work around the clock to provide top quality water to every tap. We ask that all our customers help us to protect our water sources, which are at the heart of our community, our way of life and our children's future.

We want our valued customers to be informed about their water utility. If you want to learn more please attend any of our regularly scheduled Board of County Commissioners' meetings, usually held on the 1st and 3rd Tuesdays of every month. Please contact: Kathy Newby at (850) 651-7515.

WATER NOTES

2014 Annual Drinking Water Quality Report of the Okaloosa County Water and Sewer System

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is ground water drawn from the Floridan Aquifer. Due to the excellent quality of our water the only treatment process required is disinfection using chlorine at each well.

The Okaloosa County Water and Sewer System routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2014. The state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In 2014 the Department of Environmental Protection performed a Source Water Assessment (SWA) on our systems. These assessments were conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are 9 potential sources of contamination identified for the Main system (PWS 1460506) with low to moderate susceptibility levels. In the Bluewater/Raintree system (PWS 1460775) there was no potential sources of contamination. The SWA for the Mid County system (PWS 1464044) revealed no potential sources of contamination. The assessment results are available on the FDEP Source Water Assessment and Protection web site: www.dep.state.fl.us/swapp or they can be obtained from OCWS at 651-7133.

The sources of drinking water (both tap 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:

- (A) **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) **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.
- (C) **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- (D) **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.
- (E) **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

TEST RESULTS TABLE FOR THE BLUEWATER/MAIN TREE SYSTEM (3 WELLS) - PWS ID# 146075											
MICROBIOLOGICAL CONTAMINANTS											
Contaminant and Unit of Measurement	Dates of Sampling (mo/Yr)	MCL Violation Y/N	Highest Monthly Percentage of Positive Samples	MCLG	MCL	Likely Source of Contamination					
Total Coliform Bacteria	01/14/12/14	N	1	0	0	For systems collecting at least 80 samples per month; presence of coliform bacteria in 1 sample collected during a month.					
INORGANIC CONTAMINANTS											
Contaminant and Unit of Measurement	Dates of Sampling (mo/Yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination				
Barium (ppm)	07/14	N	0.0055	0.005-0.0055	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.				
Fluoride (ppm)	07/14	N	0.19	0.16-0.19	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong leech when at the optimum level of 0.7 ppm.				
Lead (point of entry) (ppb)	07/14	N	1.0	0.5-1.0	15	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.				
Nitrate (as Nitrogen) (ppm)	07/13	N	0.011	ND-0.011	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage, and paint; lead pipe, casing, and solder.				
Sodium (ppm)	07/14	N	7.7	7.7-7.7	N/A	160	Salt water intrusion; leaching from soil.				
LEAD AND COPPER (TAP WATER)											
Dates of Sampling (mo/Yr)	AL Exceeded Y/N	90th Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG (Action Level)	Likely Source of Contamination						
09/14	N	0.12	0 of 30	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.						
09/14	N	0.12	0 of 30	1.3	Corrosion of household plumbing systems; erosion of natural deposits.						
09/14	N	0.12	0 of 30	1.3	Corrosion of household plumbing systems; erosion of natural deposits.						
Stage 1 Disinfection By-Products											
Contaminant and Unit of Measurement	Dates of Sampling (mo/Yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination				
Lead (tap water) (ppb)	09/14	N	2.6	0 of 30	0	15	Corrosion of household plumbing systems; erosion of natural deposits.				
Chlorine (ppm)	01/14/12/14	N	0.78	0.64-1.01	MRDLG=4	MRDL=4.0	Water additive used to control microbes.				
Stage 2 Disinfection By-Products											
HAAS (Halo Acetic Acids) (ppb)	11/13-8/14	N	0.27	ND-0.97	N/A	MCL=60	By-product of drinking water disinfection.				
THM (Total Trihalomethanes) (ppb)	11/13-8/14	N	3.1	1.3-4.3	N/A	MCL=80	By-product of drinking water disinfection.				
TEST RESULTS TABLE FOR THE MID-COUNTY SYSTEM (5 WELLS) - PWS ID# 1464044											
INORGANIC CONTAMINANTS											
Contaminant and Unit of Measurement	Dates of Sampling (mo/Yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination				
Arsenic (ppb)	09/14	N	3.1	0.7-3.1	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.				
Barium (ppm)	09/14	N	0.013	0.00M1-0.013	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.				
Fluoride (ppm)	09/14	N	0.34	0.1-0.34	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong leech when at the optimum level of 0.7 ppm.				
Lead (point of entry) (ppb)	09/14	N	0.5	0.1-0.5	15	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.				
Nickel (ppb)	09/14	N	0.6	0.4-0.6	100	100	Pollution from mining and refining operations.				
Sodium (ppm)	09/14	N	35	1.35	N/A	160	Salt water intrusion; leaching from soil.				
LEAD AND COPPER (TAP WATER)											
Dates of Sampling (mo/Yr)	AL Exceeded Y/N	90th Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG (Action Level)	Likely Source of Contamination						
07/14-08/14	N	0.1	0 of 20	1.3	Corrosion of household plumbing systems; erosion of natural deposits.						
07/14-08/14	N	1.0	0 of 20	1.3	Corrosion of household plumbing systems; erosion of natural deposits.						
07/14-08/14	N	1.0	0 of 20	1.3	Corrosion of household plumbing systems; erosion of natural deposits.						
Stage 1 Disinfection By-Products											
Contaminant and Unit of Measurement	Dates of Sampling (mo/Yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination				
Lead (tap water) (ppb)	07/14-08/14	N	1.0	0 of 20	0	15	Corrosion of household plumbing systems; erosion of natural deposits.				
Chlorine (ppm)	01/14/12/14	N	0.76	0.56-0.83	MRDLG=4	MRDL=4.0	Water additive used to control microbes.				
Stage 2 Disinfection By-Products											
HAAS (Halo Acetic Acids) (ppb)	08/14	N	1.1	0.43-1.1	N/A	MCL=60	By-product of drinking water disinfection.				
THM (Total Trihalomethanes) (ppb)	08/14	N	5.3	4.1-5.3	N/A	MCL=80	By-product of drinking water disinfection.				
TEST RESULTS TABLE FOR THE MAIN SYSTEM (12 WELLS) - PWS ID# 1460506											
RADIOACTIVE CONTAMINANTS											
Contaminant and Unit of Measurement	Dates of Sampling (mo/Yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination				
Alpha (pCi/l)	12/09-10/14	N	3.5	0.5-3.5	0	15	Erosion of natural deposits.				
Radium 226 or combined radium (pCi/l)	12/09-10/14	N	1.1	0.2-1.1	0	5	Erosion of natural deposits.				
INORGANIC CONTAMINANTS											
Contaminant and Unit of Measurement	Dates of Sampling (mo/Yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination				
Barium (ppm)	07/14-10/14	N	0.29	0.006-0.29	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.				
Fluoride (ppm)	07/14-10/14	N	1.3	0.28-1.3	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong leech when at the optimum level of 0.7 ppm.				
Lead (point of entry) (ppb)	07/14-10/14	N	2.9	ND-2.9	14	14	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.				
Mercury (inorganic) (ppb)	07/14-10/14	N	0.2	ND-0.2	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from copland.				
Nickel (ppb)	07/14-10/14	N	3.4	ND-3.4	N/A	100	Pollution from mining and refining operations.				
Nitrate (as Nitrogen) (ppm)	07/14-10/14	N	0.022	ND-0.022	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage, and paint; lead pipe, casing, and solder.				
Selenium (ppb)	07/14-10/14	N	1.1	ND-1.1	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits.				
Sodium (ppm)	07/14-10/14	N/A	170	15-170	N/A	160	Salt water intrusion; leaching from soil.				
Thallium (ppb)	07/14-10/14	N	0.2	ND-0.2	2	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories.				
LEAD AND COPPER (TAP WATER)											
Dates of Sampling (mo/Yr)	AL Exceeded Y/N	90th Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG (Action Level)	Likely Source of Contamination						
08/14	N	0.2	0 of 30	1.3	Corrosion of household plumbing systems; erosion of natural deposits.						
08/14	N	0.2	0 of 30	1.3	Corrosion of household plumbing systems; erosion of natural deposits.						
08/14	N	0.2	0 of 30	1.3	Corrosion of household plumbing systems; erosion of natural deposits.						
Stage 1 Disinfection By-Products											
Contaminant and Unit of Measurement	Dates of Sampling (mo/Yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination				
Lead (tap water) (ppb)	08/14	N	2.7	1 of 30	0	15	Corrosion of household plumbing systems; erosion of natural deposits.				
Chlorine (ppm)	01/14-12/14	N	0.73	0.62-0.78	MRDLG=4	MRDL=4.0	Water additive used to control microbes.				
Stage 2 Disinfection By-Products											
HAAS (Halo Acetic Acids) (ppb)	08/14 & 12/14	N/A	N/A	3.6-8.2	N/A	MCL=60	By-product of drinking water disinfection.				
THM (Total Trihalomethanes) (ppb)	08/14 & 12/14	N/A	N/A	15.1-36.9	N/A	MCL=80	By-product of drinking water disinfection.				
*Not applicable until 4 quarters are sampled.											