

2024 Annual Drinking Water Quality Report
(For period January through December 2023)

HARVEST MONROVIA WATER & SEWER AUTHORITY



P.O. Box 329
9131 Wall Triana Hwy
Harvest, AL 35749
Phone 256-837-1132
www.hmwater.org
PWSID AL0000878



We are pleased to present to you this year's Annual Water Quality Report. This report is delivered to you each year to provide information about the quality of water the Authority provides to our customers. Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and Alabama Department of Environmental Management (ADEM) drinking water health standards. We diligently safeguard your water supplies, and once again we are proud to report that our system has not violated any water quality standard.

Water Sources	8 groundwater wells producing from the Tuscumbia-Fort Payne Aquifer Purchased water from Limestone County Water and Madison Utilities
Water Treatment	<u>10 MGD Burwell Treatment Plant</u> : flocculation, filtration, chlorination, fluoridation, coagulation, corrosion control <u>4.1 MGD Mt Zion Treatment Plant</u> : microfiltration, chlorination, fluoridation, corrosion control
Storage Capacity	7 water storage facilities with a capacity of 11.5 million gallons
Population Served	Approximately 51,912
Interconnections	Madison County Water Department, Huntsville Utilities, Madison Water Works Board, and Limestone County Water Authority
Board Members	Frank Turner, Chairman Tracy Brewer, Vice Chairman Brant Neely, Secretary

Excellence Awards

Our goal at Harvest-Monrovia Water and Sewer Authority is to provide clean, safe drinking water to our customers throughout the year, and our staff strives each day to accomplish this goal. Our water system has won many excellence awards in our population-served division. Our recent awards include:

- 2023 AWPCA Best Operated Plant Award 50,001-100,000 Population
- 2023 AWPCA Best Operated Distribution System 15,001-25,000 Meters
- 2007-2022 EPA and ADEM Optimization Award for Optimized Water Treatment



Water Quality Protection

Harvest-Monrovia Water and Sewer Authority developed a Source Water Assessment Plan (SWAP) that assists in protecting our water sources. All components of the SWAP were completed, and the plan was approved by ADEM. As part of the assessment process, information on potential contaminant sources was defined, and the major sources were ascertained to be existing wells, agricultural run-off and septic tanks. The SWAP is available for review at the water office during regular business hours.

Harvest-Monrovia Water and Sewer Authority routinely completes a water storage facility inspection and utilizes a Bacteriological Monitoring Plan. The required chlorine residual is maintained throughout our distribution system to protect your drinking water from possible outside contaminants. Please help us make these efforts worthwhile by protecting our source water. Carefully follow instructions on pesticides and herbicides you use for your lawn and garden, and properly dispose of household chemicals, paints, and waste oil. We ask that all our customers help us protect our valuable water sources, which are the heart of our community, our way of life, and our children's futures.

Consumer Information

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. Maximum Contaminant Levels (MCLs - defined in the List of Definitions in this report) 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. 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.

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 run-off, 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, storm water run-off, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the levels of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water. 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. People at risk should seek advice about drinking water from their health care providers.

Information about Lead

Elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. However, *lead is rarely found in source water*. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Your water system 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.

Use *only* water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is more likely to cause lead to leach from plumbing materials. 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 www.epa.gov/safewater.

Microbiological Contaminants

Water sources that are surface water or groundwater under the influence of surface water are tested for pathogens such as Cryptosporidium at certain intervals determined by the EPA and ADEM. These pathogens can enter the water from animal or human waste. All test results were well within Federal and State standards.

For people who may be immuno-compromised, a guidance document is available at www.epa.gov/safewater/crypto.html or from the Safe Drinking Water Hotline at 800-426-4791. Testing for the microbiological contaminants was performed on raw water, before any treatment. *Cryptosporidium has not been detected in our finished drinking water.*

Questions?

If you have any questions about this report or concerning your water utility, please contact Mike Oliver at 256-837-1132. 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 meetings. They are held on the second Tuesday of each month at 1:30 p.m. at the water office. More information about drinking water contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).

Monitoring Schedule

We routinely monitor your drinking water for contaminants according to Federal and State laws. The Alabama Department of Environmental Management allows us to monitor for some contaminants less than once per year because the levels of these contaminants do not change frequently. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule. We are pleased to report that our drinking water meets or exceeds federal and state requirements. 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.

Constituents Monitored	Monitored
Inorganic Contaminants	2022
Lead/Copper	2022
Microbiological Contaminants	monthly
Nitrates	2023
Radioactive Contaminants	2020
Synthetic Organic Contaminant	2022
Volatile Organic Contaminants	2023
Disinfection By-products	2023
Cryptosporidium (on raw water)	2017
UCMR4 Contaminants	2018
PFAS Contaminants	2023

Monitoring Results

DETECTED DRINKING WATER CONTAMINANTS							
Primary Contaminants	Harvest Monrovia	Limestone County	Madison Utilities	Unit Msmt	MCLG	MCL	Likely Source
Total coliform bacteria	ND	4 *	ND	present	0	5% of samples	Naturally present in the environment; used as an indicator that other bacteria may be present
Chlorine, finished water	1.2-2.3	1.0-2.2	0.60-2.50	ppm	MRDLG=4	MRDL = 4	Water additive used to control microbes
Total organic carbon	ND-1.0	0.92-2.30	1.93-1.67	ppm	RAA<2.0	TT	Naturally present in the environment
Turbidity, filtered water	0.01-0.12	0.62	0.064	NTU	n/a	0.3	Soil runoff: Indicator of the effectiveness of filtration
Barium	0.002	ND-0.02	0.027	ppm	2	2	Drilling waste and refinery discharge; erosion
Chromium	0.166-0.808	ND	ND	ppb	100	100	Steel and pulp mill discharge; erosion of natural deposits
Copper	0.571 **	0.046 **	0.059 **	ppm	1.3	AL=1.3	Household plumbing corrosion; erosion; preservative leaching
Fluoride	ND - 0.96	ND - 0.96	0.15	ppm	4	4	Erosion; water additive; fertilizer & aluminum factory discharge
Mercury (inorganic)	0.13-0.14	ND	ND	ppb	2	2	Erosion; discharge from industry; runoff
Nitrate (as Nitrogen)	2.74-3.04	0.57-3.50	0.26-1.67	ppm	10	10	Fertilizer runoff; septic tank leaching, sewage; erosion
Bis [2-Ethylhexyl] phthalate	ND-0.04	ND-0.04	ND	ppb	0	6	Discharge from rubber chemical factories
TTHM [Total trihalomethanes]	2.1-36.3	24.1-51.6	22.5-62.9	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	ND-32.3	22.3-43.7	18.5-47.5	ppb	0	60	By-product of drinking water chlorination
Unregulated Contaminants							
Chloroform	1.27	25.0	10.5	ppb	70	n/a	Naturally occurring or from discharge or runoff
Bromodichloromethane	ND	5.4	5.61	ppb	0	n/a	Naturally occurring or from discharge or runoff
Chlorodibromomethane	ND	0.66	0.63	ppb	60	n/a	Naturally occurring or from discharge or runoff
Secondary Contaminants							
Alkalinity, Total (as CA, Co ₃)	110-138	NR	68.1	ppm	n/a	n/a	Caused by carbonates, bicarbonates and hydroxides
Aluminum	ND-0.014	ND-0.08	ND	ppm	n/a	0.2	Erosion of natural deposits or from water treatment
Calcium	6.4-44.6	NR	39.5	ppm	n/a	n/a	Naturally occurring; dissolved minerals
Carbon Dioxide	30-90	NR	ND	ppm	n/a	n/a	Naturally occurring or used to adjust pH
Chloride	8.14-8.57	7.0-11.4	12.6	ppm	n/a	250	Naturally occurring in the environment or from runoff
Hardness	24.1-145	115-139	71.3	ppm	n/a	n/a	Naturally occurring; treatment with water additives
Iron	ND-0.07	ND	ND	ppm	n/a	0.30	Naturally occurring; erosion; leaching from pipes
Magnesium	1.98-8.26	NR	5.8	ppm	n/a	n/a	Naturally occurring; dissolved minerals
Manganese	ND-0.02	ND	ND	ppm	n/a	0.05	Erosion of natural deposits; leaching from pipes
Nickel	0.002-0.005	NR	ND	ppm	n/a	n/a	Erosion of natural deposits; leaching from pipes
pH	6.5-7.2	6.8-8.6	7.45	S.U.	n/a	n/a	Naturally occurring; treatment with water additives
Silver	ND-0.008	NR	ND	ppm	n/a	0.10	Naturally occurring in the environment
Sodium	4.31-5.88	ND-2.43	8.8	ppm	n/a	n/a	Naturally occurring in the environment
Specific Conductance	83.3-295	NR	289	µs/cm	n/a	n/a	Indicates presence of natural ions that conduct electricity.
Sulfate	0.56-2.3	3.91-11.6	8.06	ppm	n/a	250	Naturally present in the environment or from runoff
Total Dissolved Solids	51-185	94-179	102	ppm	n/a	500	Naturally present in the environment or from runoff
Zinc	0.004-0.07	0.01	ND	ppm	n/a	5	Erosion; discharge from industry; runoff from landfills

FOURTH UNREGULATED CONTAMINANT MONITORING RULE (UCMR4) CONTAMINANTS								
Contaminants	Unit Msmt	Level Detected	Contaminants	Unit Msmt	Level Detected	Contaminants	Unit Msm	Level Detected
Germanium	ppb	ND	Oxyfluorfen	ppb	ND	2-methoxyethanol	ppb	ND
Manganese	ppb	ND-8.75	Profenofos	ppb	ND	2-propen-1-ol	ppb	ND
Alpha-hexachlorocyclohexane	ppb	ND	Tebuconazole	ppb	ND	Butylated hydroxyanisole	ppb	ND
Chlorpyrifos	ppb	ND	Total permethrin (cis- & trans-)	ppb	ND	O-toluidine	ppb	ND
Dimethipin	ppb	ND	Tribufos	ppb	ND	Quinoline	ppb	ND-0.05
Ethoprop	ppb	ND	1-butanol	ppb	ND			
Cyanotoxins								
Anatoxin-A	ppb	ND	Microcystin-LR	ppb	ND	Nodularin	ppb	ND
Cylindrospermopsin	ppb	ND	Microcystin-LY	ppb	ND	Total Microcystins	ppb	ND
Microcystin-LA	ppb	ND	Microcystin-RR	ppb	ND			
Microcystin-LF	ppb	ND	Microcystin-YR	ppb	ND			
Distribution Samples								
HAA5	ppb	ND-2.19	HAA9	ppb	ND-2.19	Total organic carbon (TOC)	ppb	ND-1020
HAA6Br	ppb	ND-2.16				Bromide	ppb	ND-25.7

PFAS Contaminants

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that were used in the manufacture of nonstick cookware, stain-resistant carpet and textiles, firefighting foams, food wrappers, and many more industrial and consumer applications. Below is a list of PFAS contaminants for which our water sources were monitored as required and the results of that monitoring. For more information on PFAS contaminants, please refer to the USEPA's website, www.epa.gov/pfas.

PFAS Contaminants (ppb)											
Abbreviation	Contaminant	MCLG	MCL	Detected	Abbreviation	Contaminant	MCLG	MCL	Detected		
11Cl-PF30UDs	11-chloroecosfluoro-3-oxaundecane-1-sulfonic acid	--	--	ND	PFDoA	Perfluorododecanoic acid	--	--	ND		
9CI-PF30NS	9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	--	--	ND	PFH ₈ A	Perfluoroheptanoic acid	--	--	ND		
ADONA	4,8-dioxa-3H-perfluorononanoic acid	--	--	ND	PFHxS	Perfluorooctanesulfonic acid	0.010	0.010	ND-0.0026		
HFPO-DA	Hexafluoropropylene oxide dimer acid A	0.010	0.010	ND	PFNA	Perfluorononanoic acid	0.010	0.010	ND		
NEtFOSAA	N-ethylperfluorooctanesulfonamidoacetic acid	--	--	ND	PFOS	Perfluorooctanesulfonic acid	0	0.004	ND-0.0054		
NMeFOSAA	N-methylperfluorooctanesulfonamidoacetic acid	--	--	ND	PFOA	Perfluorooctanoic acid	0	0.004	ND-0.0045		
PFBS	Perfluorobutanesulfonic acid	--	--	0036-0046	PFTeDA	Perfluorotetradecanoic acid	--	--	ND		
PFDA	Perfluorodecanoic acid	--	--	ND	PFTDA	Perfluorotridecanoic acid	--	--	ND		
PFHxA	Perfluorohexanoic acid	--	--	.0024-033	PFUnA	Perfluoroundecanoic acid	--	--	ND		

Note: In April 2024, the EPA established individual MCLGs and MCLs for five (5) PFAS contaminants in drinking water. PFOA, PFOS, PFHxS, PFNA, & HFPO-DA. Mixtures containing 2 or more of PFHxS, PFNA, HFPO-DA, & PFBS were assigned MCL of 1 "Hazard Index" (unitless).

Madison Utilities – Violation 2023: The Water & Wastewater Board of the City of Madison is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the January 2020—December 2022 monitoring period, we did not monitor for synthetic organic chemicals (SOC), and therefore cannot be sure of the quality of your drinking water during that time. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for examples, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Immediately upon realizing this oversight, SOC samples were collected and tested. All results were within compliance limits. If you have any questions about this non-compliance or monitoring requirements, please contact Reece Lee at 101 Ray Sanderson Drive, Madison, AL or by phone at 256-772-0523 Ext. 120.

DEFINITIONS

Action Level- the concentration of a contaminant that, if exceeded, triggers treatment or other requirements for a water system.

ADEM- Alabama Department of Environmental Management.

Coliform Absent- (ca) indicates that coliform bacteria is not present.

Disinfection byproducts- (DBPs) are formed when disinfectants react with bromide and/or natural organic matter present in the source water.

Disinfection byproducts for which we test are trihalomethanes (TTHM), haloacetic acids (HAA5), bromate, and chlorite.

Distribution System Evaluation- (DSE) a four quarter study to identify locations with high concentrations of disinfection byproducts.

EPA- Environmental Protection Agency.

Maximum Contaminant Level- (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- (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

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.

Micrograms per liter- (ug/L) Equivalent to parts per billion (ppb) since one liter of water is equal in weight to one billion micrograms.

Milligrams per liter- (mg/L) Equivalent to parts per million

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

Nephelometric Turbidity Unit- (NTU) 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 above the detection limits of lab equipment.

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 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 quadrillion- (ppq) or Picograms per liter (picograms/l) one part per quadrillion corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000.

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

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

Running Annual Average- (RAA) running yearly average of results at each specific sampling site.

Standard Units- (S.U.) pH of water measures the water's balances of acids and bases and is affected by temperature and carbon dioxide gas.

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

Variances & Exemptions- (V&E) State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Below is a table of contaminants for which the Environmental Protection Agency and the Alabama Department of Environmental Management require testing. These contaminants were not detected in your drinking water unless they are also listed in the Detected Drinking Water Contaminants table elsewhere in this report.

STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS					
Contaminant	MCL	Unit of Msmt	Contaminant	MCL	Unit of Msmt
Bacteriological Contaminants			trans-1,2-Dichloroethylene	100	ppb
Total Coliform Bacteria	<5%	present/absent	Dichloromethane	5	ppb
Fecal Coliform and E. coli	0	present/absent	1,2-Dichloropropane	5	ppb
Turbidity	TT	NTU	Di (2-ethylhexyl)adipate	400	ppb
Cryptosporidium	TT	Calc.organisms/l	Di (2-ethylhexyl)phthalate	6	ppb
Radiological Contaminants			Dinoseb	7	ppb
Beta/photon emitters	4	mrem/yr	Dioxin [2,3,7,8-TCDD]	30	ppq
Alpha emitters	15	pCi/l	Diquat	20	ppb
Combined radium	5	pCi/l	Endothall	100	ppb
Uranium	30	pCi/l	Endrin	2	ppb
Inorganic Chemicals			Epichlorohydrin	TT	TT
Antimony	6	ppb	Ethylbenzene	700	ppb
Arsenic	10	ppb	Ethylene dibromide	50	ppt
Asbestos	7	MFL	Glyphosate	700	ppb
Barium	2	ppm	Heptachlor	400	ppt
Beryllium	4	ppb	Heptachlor epoxide	200	ppt
Cadmium	5	ppb	Hexachlorobenzene	1	ppb
Chromium	100	ppb	Hexachlorocyclopentadiene	50	ppb
Copper	AL=1.3	ppm	Lindane	200	ppt
Cyanide	200	ppb	Methoxychlor	40	ppb
Fluoride	4	ppm	Oxamyl [Vydate]	200	ppb
Lead	AL=15	ppb	Polychlorinated biphenyls	0.5	ppb
Mercury	2	ppb	Pentachlorophenol	1	ppb
Nitrate	10	ppm	Picloram	500	ppb
Nitrite	1	ppm	Simazine	4	ppb
Selenium	.05	ppm	Styrene	100	ppb
Thallium	.002	ppm	Tetrachloroethylene	5	ppb
Organic Contaminants			Toluene	1	ppm
2,4-D	70	ppb	Toxaphene	3	ppb
Acrylamide	TT	TT	2,4,5-TP(Silvex)	50	ppb
Alachlor	2	ppb	1,2,4-Trichlorobenzene	.07	ppm
Benzene	5	ppb	1,1,1-Trichloroethane	200	ppb
Benzo(a)pyrene [PAHs]	200	ppt	1,1,2-Trichloroethane	5	ppb
Carbofuran	40	ppb	Trichloroethylene	5	ppb
Carbon tetrachloride	5	ppb	Vinyl Chloride	2	ppb
Chlordane	2	ppb	Xylenes	10	ppm
Chlorobenzene	100	ppb	Disinfectants & Disinfection Byproducts		
Dalapon	200	ppb	Chlorine	4	ppm
Dibromochloropropane	200	ppt	Chlorine Dioxide	800	ppb
1,2-Dichlorobenzene	1000	ppb	Chloramines	4	ppm
1,4-Dichlorobenzene (para)	75	ppb	Bromate	10	ppb
o-Dichlorobenzene	600	ppb	Chlorite	1	ppm
1,2-Dichloroethane	5	ppb	HAA5 [Total haloacetic acids]	60	ppb
1,1-Dichloroethylene	7	ppb	TTHM [Total trihalomethanes]	80	ppb
cis-1,2-Dichloroethylene	70	ppb			
LIST OF UNREGULATED CONTAMINANTS					
1,1 - Dichloropropene	Aldicarb		Chloroform	Metolachlor	
1,1,1,2-Tetrachloroethane	Aldicarb Sulfone		Chloromethane	Metribuzin	
1,1,2,2-Tetrachloroethane	Aldicarb Sulfoxide		Dibromochloromethane	N - Butylbenzene	
1,1-Dichloroethane	Aldrin		Dibromomethane	Naphthalene	
1,2,3 - Trichlorobenzene	Bromobenzene		Dicamba	N-Propylbenzene	
1,2,3 - Trichloropropane	Bromochemical		Dichlorodifluoromethane	O-Chlorotoluene	
1,2,4 - Trimethylbenzene	Bromodichloromethane		Dieldrin	P-Chlorotoluene	
1,3 - Dichloropropene	Bromoform		Hexachlorobutadiene	P-Isopropyltoluene	
1,3 - Dichloropropene	Bromomethane		Isopropylbenzene	Propachlor	
1,3,5 - Trimethylbenzene	Butachlor		M-Dichlorobenzene	Sec - Butylbenzene	
2,2 - Dichloropropane	Carbaryl		Methomyl	Tert - Butylbenzene	
3-Hydroxycarbofuran	Chloroethane		MTBE	Trichlorofluoromethane	
LIST OF SECONDARY CONTAMINANTS					
Alkalinity, Total (as CA, Co ₃)	Copper		Magnesium	Silver	
Aluminum	Corrosivity		Manganese	Sodium	
Calcium, as Ca	Foaming agents (MBAS)		Odor	Sulfate	
Chloride	Hardness		Nickel	Total Dissolved Solids	
Color	Iron		pH	Zinc	