## INFORMATIONAL WATER CHEMISTRY REPORT



Laboratory #: 123456789 Water Source: Kitchen Tap

Requested By: Jones, V. Dr. Received Date: 05/01/2010

Account #: 100 Completed Date: 05/06/2010

## **EPA PRIMARY DRINKING WATER REGULATIONS**

Contaminant	Test Result (mg/L)	MCL (mg/L)	Status
Fluoride (F)	2.3	4.0	ACCEPTABLE

Contaminant	Test Result (mg/L)	MCL (mg/L)	Status
Antimony (Sb)	0.009	0.006	UNACCEPTABLE
Arsenic (As)	0.004	0.010	ACCEPTABLE
Barium (Ba)	1	2	ACCEPTABLE
Beryllium (Be)	0.003	0.004	ACCEPTABLE
Cadmium (Cd)	0.001	0.005	ACCEPTABLE
Chromium (Cr- Total)	0.006	0.1	ACCEPTABLE
Copper (Cu)	< 0.1	1.3	ACCEPTABLE
Lead (Pb)	0.028	0.015	UNACCEPTABLE
Mercury (inorganic)	< 0.010	0.002	ACCEPTABLE
Selenium (Se)	0.01	0.05	ACCEPTABLE
Thallium (TI)	0.002	0.002	ACCEPTABLE
Uranium (U238)	0.02	0.03	ACCEPTABLE

## **EPA SECONDARY DRINKING WATER REGULATIONS**

Parameter	Test Result (pH unit)	SMCL Range	Status
рН	6.3	6.5 – 8.5	ACIDIC
Contaminant	Test Result (mg/L)	SMCL (mg/L)	Status
Aluminum (Al)	0.1	0.2	ACCEPTABLE
Iron (Fe)	0.5	0.3	ELEVATED
Manganese (Mn)	0.02	0.05	ACCEPTABLE
Zinc (Zn)	3	5	ACCEPTABLE

ADDITIONAL CONTAMINANT METALS	
Contaminant	Test Result (mg/L)
Calcium (Ca)	46
Magnesium (Mg)	3
Nickel (Ni)	0.01
Potassium (K)	2
Sodium (Na)	28

## **Legend and Definitions:**

"MCL": Maximum Contaminant Level in mg/L allowed by EPA in a public water system. MCLs are EPA enforceable standards for contaminants that present a potential health risk.

"SMCL": Secondary Maximum Contaminant Level recommended by EPA in a public water system. SMCLs are non-enforceable guidelines for contaminants.

"<": Below Minimum Detection Limit, Value given is Minimum Detection Limit.

"mg/L": Is expressed as milligrams per liter which is equivalent to parts per million (ppm).

TESTING: All testing for EPA Primary and Secondary Regulatory Contaminants were conducted by methods approved by the U.S. Environmental Protection Agency (EPA). All testing for the Additional Contaminant Metals were conducted using variations of EPA methods.

INFORMATION: For more information on EPA guidelines, regulations and discussion of the drinking water contaminants that may have been found elevated on this test, please visit the following website: <a href="https://www.epa.gov/ogwdw/contaminants/index.html">www.epa.gov/ogwdw/contaminants/index.html</a>

USAGE: This report is intended to be used for informational and research purposes only and should not be used for regulatory and/or legal purposes.

PRIMARY CONTAMINANTS (Health Risk)			
Contaminant	MCL (mg/L)2	Potential Health Effects From Long-Term Exposure Above the MCL (unless Specified as short-term)*	Sources of Contaminant In Drinking Water
Fluoride (F)	4.0	Bone disease (pain and tenderness of the bones); Children may get mottled teeth	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Antimony (Sb)	0.006	Increase in blood cholesterol; decrease in blood sugar	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (As)	0.010	Skin damage or problems with circulatory Systems, and may have increased risk of getting cancer	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (Ba)	2	Increase in blood pressure	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Berryllium (Be)	0.004	Intestinal lesions	Discharge from metal refineries and coal- Burning factories; discharge from electrical, Aerospace, and defense industries
Cadmium (Cd)	0.005	Kidney damage	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (Cr)	0.1	Allergic dermatitis	Discharge from steel and pulp mills; erosion of natural deposits
Copper (Cu)	1.3	Short term exposure: Gastrointestinal distress Long Term exposure: Liver or kidney damage	Corrosion of household plumbing systems; erosion of natural deposits
Lead (Pb)	0.015	Infants and children: Delays in physical or mental development; children could show slight deficits in attention span and learning abilities	Corrosion of household plumbing systems; erosion of natural deposits
Mercury (Hg)	0.002	Kidney damage	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and crop lands
Selenium (Se)	0.05	Hair or fingernail loss; numbness in fingers or toes; circulatory problems	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines
Thallium (Tl)	0.002	Hair loss; changes in blood; kidney, intestine, or liver problems	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Uranium (U)	30 ug/L	Increased risk of cancer, kidney toxicity	Erosion of natural deposits

Information obtained from Publication: EPA 816-F-09-0004, May 2009

SECONDARY CONTAMINANTS (Aesthetic or Nuisance Contaminants)			
Contaminant	SMCL	Noticeable Effects above the Secondary MCL (SMCL)	
Aluminum (Al)	2	Colored water	
Iron (Fe)	0.3	Rusty color; sediment; metallic taste; reddish or orange staining	
Manganese (Mn)	0.05	Black to brown color; black staining; bitter metallic taste	
Zinc (Zn)		Metallic taste	
рН	6.5 – 8.5	low pH: bitter metallic taste and potential corrosion of plumbing system high pH: slippery feel; soda taste; deposits	

Information obtained from Publication: EPA 810/K-92-001 July 1992 Secondary Drinking Water Regulations: Guidance for Nuisance Chemicals