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**City of Detroit**  
Water and Sewerage Department  
Laboratory Analysis of Water Samples Collected at  
Southwest Plant  
March 8, 2004

Parameter	Formula	Units	Raw	Tap	MCL	Sec.Std	MDL
Turbidity		NTU	3.00	0.08	0.3/95%*		
Total Solids		mg/l	112	114		500	10
Total Dissolved Solids		mg/l	109	112		500	10
Aluminum	Al	mg/l	0.190	0.078		0.05-0.2	0.005
Iron	Fe	mg/l	0.157	0.034		0.3	0.002
Copper	Cu	mg/l	0.009	0.007	1.3		0.001
Magnesium	Mg	mg/l	6.78	7.18			0.2
Calcium	Ca	mg/l	15.9	15.8			0.06
Sodium	Na	mg/l	3.53	3.81		20**	0.01
Potassium	K	mg/l	1.03	0.96			0.01
Manganese	Mn	mg/l	0.005	<0.001		0.05	0.001
Zinc	Zn	mg/l	<0.01	<0.01		5	0.01
Silica	SiO <sub>2</sub>	mg/l	12.86	21.41			0.4
Sulfate	SO <sub>4</sub>	mg/l	17.8	23.7			
Chloride	Cl <sup>-</sup>	mg/l	8.3	10.3		250	1
Phosphorus	P	mg/l	<0.01	0.32			0.01
Free Carbon Dioxide	CO <sub>2</sub>	mg/l	0.0	3.6			
Total Hardness ***/****/*****		mg/l	100	102			
Total Alkalinity ***		mg/l	80	70			
Carbonate Alkalinity ***		mg/l	0	0			
Bi-Carbonate Alkalinity ***		mg/l	80	70			
Non-Carbonate Hardness ***		mg/l	20	32			
Chemical Oxygen Demand		mg/l	2.8	<2.0			2
Dissolved Oxygen		mg/l	9.1	11.6			
Ammonia Nitrogen	NH <sub>3</sub> -N	mg/l	<0.10	<0.10			0.1
Organic Nitrogen		mg/l	0.2	0.2			0.1
Nitrite Nitrogen	NO <sub>2</sub> -N	mg/l	<0.01	<0.01	1		0.01
Nitrate Nitrogen	NO <sub>3</sub> -N	mg/l	0.24	0.28	10	10	0.01
Fluoride	F	mg/l	0.1	1.0	4		0.1
pH			7.94	7.59	6.5-8.5	6.5-8.5	
Specific Conductance @ 25 °C.		micromhos	197	203			
Temperature in °C.			8.6	4.5			

<b>Legend</b> MCL: Maximum Contaminant Level Sec. Std: Secondary Standard NTU: Nephelometric Turbidity Unit mg/l: Milligram Per Liter MDL: Method Detection Limit <: Less than EF: Equipment Failure IV: Invalid Sample	<b>Notes:</b> * Turbidity must not exceed 0.3 NTU in 95% of daily samples in any month ** EPA Guidance Level *** As Calcium Carbonate mg/l is equivalent to part per million (ppm) **** By Titration ***** Tap Water Hardness in Grains per Gallon <b>5.92 GPG</b>
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April 8, 2004  
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April 12, 2004  
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