



**City of Detroit**  
**Water and Sewerage Department**  
 Laboratory analysis of Water Samples collected at  
**Southwest Plant**  
 on July 17, 2001

	Raw	Tap	MCL/[SMCL] <sup>(1)</sup>	MDL <sup>(2)</sup>
Turbidity <sup>(3)</sup>	4.42	0.243	0.3/95%	
Total Solids	149	160	[500]	10
Total Dissolved Solids	135	139	[500]	10
Aluminum (Al)	0.287	0.096	[0.05-0.2]	0.005
Iron (Fe)	0.119	<0.005	[0.3]	0.002
Copper (Cu)	0.011	0.009	1.3	0.001
Magnesium (Mg)	6.54	8.02		0.2
Calcium (Ca)	12.9	26.7		0.06
Sodium (Na)	3.28	5.45	20 <sup>(4)</sup>	0.01
Potassium (K)	1.03	0.96		0.01
Manganese (Mn)	<0.001	<0.001	[0.05]	0.001
Zinc (Zn)	<0.01	<0.01	[5.0]	0.01
Silica (SiO <sub>2</sub> )	2.83	4.11		0.4
Sulfate (SO <sub>4</sub> )	18.0	25.3		
Chloride (Cl <sup>-</sup> )	10.0	11.9	[250]	1.0
Phosphorus (P)	<0.01	0.35		0.01
Free Carbon Dioxide	1.4	4.5		
Total Hardness <sup>(5) (6)</sup>	105	104		
Total Alkalinity <sup>(5)</sup>	74	73		
Carbonate Alkalinity <sup>(5)</sup>	0	0		
Bi-Carbonate Alkalinity <sup>(5)</sup>	74	73		
Non-Carbonate Hardness <sup>(5)</sup>	31	31		
Chemical Oxygen Demand	3.7	4.1		2.0
Dissolved Oxygen	9.4	9.6		
Ammonia Nitrogen	<0.1	<0.1		0.1
Organic Nitrogen	0.1	<0.1		0.1
Nitrite Nitrogen	<0.01	<0.01	1.0	0.01
Nitrate Nitrogen	0.44	0.47	10.0	0.01
Fluoride	0.1	1.2	4.0	0.1
pH in pH units	8.03	7.51	6.5-8.5	
Specific Conductance in micromhos at 25° C.	212	219		
Temperature in ° C.	25	24.8		

-----  
**FOR INFORMATIONAL PURPOSES ONLY**

Notes: All units are mg/L unless otherwise noted. (1) MCL/[SMCL] = Maximum Contaminant Level/Secondary Maximum Contaminant Level. (2) MDL = Method Detection Limit. (3) NTU = Nephelometric Turbidity Units. Reported results are from a Grab sample. EPA requirements are for 95% of monthly readings to be <0.3 NTU. (4) EPA Guidance level. (5) = As Calcium Carbonate. (6) by EDTA titration. "<" = Less than. EF = Equipment Failure.

Analyst: Brian Brown, Sr. Anl. Chemist

By: Pamela Turner  
 Pamela Turner  
 Manager, Water Quality Division  
 Kathleen Leavy  
 Interim Director, Water & Sewerage Department