

City of Detroit
Water and Sewerage Department
 Laboratory analysis of Water Samples collected at
Southwest Plant
 on December 10, 2002

	Raw	Tap	MCL/ [SMCL] ⁽¹⁾	MDL ⁽²⁾
Turbidity ⁽³⁾	18.50	0.17	0.3/95%	
Total Solids	160	137	[500]	10
Total Dissolved Solids	125	110	[500]	10
Aluminum (Al)	0.623	0.049	[0.05-0.2]	0.005
Iron (Fe)	0.585	0.009	[0.3]	0.002
Copper (Cu)	0.005	0.002	1.3	0.001
Magnesium (Mg)	8.02	7.65		0.2
Calcium (Ca)	27.1	30.6		0.06
Sodium (Na)	4.16	4.54	20 ⁽⁴⁾	0.01
Potassium (K)	1.18	0.95		0.01
Manganese (Mn)	0.011	<0.001	[0.05]	0.001
Zinc (Zn)	<0.01	<0.01	[5.0]	0.01
Silica (SiO ₂)	14.75	18.66		0.4
Sulfate (SO ₄)	20.1	26.2		
Chloride (Cl ⁻)	7.0	8.0	[250]	1.0
Phosphorus (P)	<0.01	0.22		0.01
Free Carbon Dioxide	0.6	3.1		
Total Hardness ⁽⁵⁾ ⁽⁶⁾	105	109		
Total Alkalinity ⁽⁵⁾	89	78		
Carbonate Alkalinity ⁽⁵⁾	0	0		
Bi-Carbonate Alkalinity ⁽⁵⁾	89	78		
Non-Carbonate Hardness ⁽⁵⁾	16	31		
Chemical Oxygen Demand	3.2	4.6		2.0
Dissolved Oxygen	13.3	11.9		
Ammonia Nitrogen	0.2	<0.1		0.1
Organic Nitrogen	0.2	<0.1		0.1
Nitrite Nitrogen	<0.01	<0.01	1.0	0.01
Nitrate Nitrogen	0.41	0.38	10.0	0.01
Fluoride	0.1	1.0	4.0	0.1
pH in pH units	8.08	7.70	6.5-8.5	
Specific Conductance in micromhos at 25° C.	221	228		
Temperature in ° C.	2.2	4.4		

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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.

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