

City of Detroit
Water and Sewerage Department
Laboratory analysis of Water Samples collected at
Southwest Plant
on January 15, 2002

	Raw	Tap	MCL/[SMCL] ⁽¹⁾	MDL ⁽²⁾
Turbidity ⁽³⁾	23.4	0.161	0.3/95%	
Total Solids	175	139	[500]	10
Total Dissolved Solids	132	127	[500]	10
Aluminum (Al)	(7)	(7)	[0.05-0.2]	0.005
Iron (Fe)	(7)	(7)	[0.3]	0.002
Copper (Cu)	(7)	(7)	1.3	0.001
Magnesium (Mg)	(7)	(7)		0.2
Calcium (Ca)	(7)	(7)		0.06
Sodium (Na)	(7)	(7)	20 ⁽⁴⁾	0.01
Potassium (K)	(7)	(7)		0.01
Manganese (Mn)	(7)	(7)	[0.05]	0.001
Zinc (Zn)	(7)	(7)	[5.0]	0.01
Silica (SiO ₂)	6.56	6.87		0.4
Sulfate (SO ₄)	17.3	25.4		
Chloride (Cl ⁻)	7.0	8.5	[250]	1.0
Phosphorus (P)	<0.01	0.19		0.01
Free Carbon Dioxide	1.9	4.4		
Total Hardness ^{(5) (6)}	108	105		
Total Alkalinity ⁽⁵⁾	82	73		
Carbonate Alkalinity ⁽⁵⁾	0	0		
Bi-Carbonate Alkalinity ⁽⁵⁾	82	73		
Non-Carbonate Hardness ⁽⁵⁾	26	32		
Chemical Oxygen Demand	9.2	<2.0		2.0
Dissolved Oxygen	11.6	10.8		
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	0.64	0.57	10.0	0.01
Fluoride	0.1	0.9	4.0	0.1
pH in pH units	7.94	7.52	6.5-8.5	
Specific Conductance in micromhos at 25° C.	214	215		
Temperature in ° C.	4.4	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. (7) Metals results temporarily unavailable. "<" = Less than. EF = Equipment Failure.

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City of Detroit
Water and Sewerage Department
 Laboratory analysis of Water Samples collected at
Southwest Plant
 on February 12, 2002

	Raw	Tap	MCL/[SMCL] ⁽¹⁾	MDL ⁽²⁾
Turbidity ⁽³⁾	48.8	0.183	0.3/95%	
Total Solids	186	148	[500]	10
Total Dissolved Solids	136	147	[500]	10
Aluminum (Al)	⁽⁷⁾	⁽⁷⁾	[0.05-0.2]	0.005
Iron (Fe)	⁽⁷⁾	⁽⁷⁾	[0.3]	0.002
Copper (Cu)	⁽⁷⁾	⁽⁷⁾	1.3	0.001
Magnesium (Mg)	⁽⁷⁾	⁽⁷⁾		0.2
Calcium (Ca)	⁽⁷⁾	⁽⁷⁾		0.06
Sodium (Na)	⁽⁷⁾	⁽⁷⁾	20 ⁽⁴⁾	0.01
Potassium (K)	⁽⁷⁾	⁽⁷⁾		0.01
Manganese (Mn)	⁽⁷⁾	⁽⁷⁾	[0.05]	0.001
Zinc (Zn)	⁽⁷⁾	⁽⁷⁾	[5.0]	0.01
Silica (SiO ₂)	4.14	6.45		0.4
Sulfate (SO ₄)	18.2	36.3		
Chloride (Cl ⁻)	7.0	11.0	[250]	1.0
Phosphorus (P)	<0.01	0.28		0.01
Free Carbon Dioxide	1.8	7.0		
Total Hardness ⁽⁵⁾ ⁽⁶⁾	105	111		
Total Alkalinity ⁽⁵⁾	89	78		
Carbonate Alkalinity ⁽⁵⁾	0	0		
Bi-Carbonate Alkalinity ⁽⁵⁾	89	78		
Non-Carbonate Hardness ⁽⁵⁾	16	33		
Chemical Oxygen Demand	7.6	3.6		2.0
Dissolved Oxygen	13.5	12.8		
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	0.52	0.67	10.0	0.01
Fluoride	0.1	0.8	4.0	0.1
pH in pH units	7.99	7.35	6.5-8.5	
Specific Conductance in micromhos at 25 ^o C.	219	244		
Temperature in ° C.	2.2	6.9		

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