City of Detroit

er and Sewerage Department
nalysis of Water Samples Collected at
Southwest Plant
December 12, 2010 ember 12, mber 12,nber 12nber 12ember 12, ember 12, mber 12, 2010

Parameter	Formula	Units	Raw	Tap	MCL	Sec.Std	MDL
Turbidity		NTU	12.76	10.60	0.3/95% (1)		
Total Solids		mg/L	139	127		500	10
Total Dissolved Solids		mg/L	125	110		500	10
Aluminum	Al	mg/L	0.093	<0.050		0.05-0.2	0.005
Iron	Fe	mg/L	<0.050	<0.050		0.3	0.005
Copper	Cu	mg/L	<0.002	<0.002	1.3		0.002
Magnesium	Mg	mg/L	7.35	7.45			0.5
Calcium	Ca	mg/L	26.3	24.0			0.1
Sodium	Na	mg/L	7.93	7.50		20 (2)	0.1
Potassium	K	mg/L	0.89	0.85			0.1
Manganese	Mn	mg/L	0.004	<0.002		0.05	0.002
Zinc	Zn	mg/L	<0.1	<0.1		5	0.1
Silica	SiO2	mg/L	0.68	1.0			0.4
Sulfate	SO4	mg/L	62.2	37.7			
Chloride	Cl-	mg/L	9.0	10.5		250	5
Phosphorus	P	mg/L	<0.05	0.31			0.05
Free Carbon Dioxide	CO2	mg/L	2.1	3.7			
Total Hardness (3), (4), (5)		mg/L	102	95			
Total Alkalinity (3)		mg/L	92	82			
Carbonate Alkalinity (3)		mg/L	0	0			
Bi-Carbonate Alkalinity (3)		mg/L	92	82			
Non-Carbonate Hardness (3)		mg/L	10	13			
Chemical Oxygen Demand		mg/L	4.8	4.8			2
Dissolved Oxygen		mg/L	12.8	10.6			
Ammonia Nitrogen	NH3-N	mg/L	<0.1	<0.1			0.1
Organic Nitrogen		mg/L	0.2	0.2			0.1
Nitrite Nitrogen	NO2-N	mg/L	<0.1	<0.1	1		0.1
Nitrate Nitrogen	NO3-N	mg/L	AE	AE	10	10	0.1
Fluoride	F	mg/L	0.2	1.3	4		0.5
pH			7.93	7.64	6.5-8.5	6.5-8.5	
Specific Conductance @ 25 oC.		micromhos	216	222			
Temperature		°C	5.5	6.5			

Legend
MCL: Maximum Contaminant Level
Sec.Std: Secondary Standard
NTU: Nephelometric Turbidity Unit
mg/l: Milligram Per Liter
MDL: Method Detection Limit
<: Less than
AE: Analytical Error
IV: Invalid Sample

Notes:
(1) Turbidity must not exceed 0.3 NTU in 95% of daily samples in any month
(2) EPA Guidance Level
(3) As Calcium Carbonate
mg/l is equivalent to part per million (ppm)
(4) By Titration
(5) Tap Water Hardnessin in Grains per Gallon **5.51 GPG**
(6) Reported results are below the low calibration standard but above the instrument detection limit.

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