

**COMPREHENSIVE CHEMICAL ANALYSIS
CITY OF CHICAGO - DEPARTMENT OF WATER - BUREAU OF WATER QUALITY
WATER PURIFICATION LABORATORIES**

SAMPLES COLLECTED: FEBRUARY 2, 1998

PARAMETER	IEPA MCL	DETERMINED AS	NUMBER	South Water Purification Plant						Jardine Water Purification Plant					
				Intake Water		Treated Water		COMPOSITE South Dist.	Intake Water		Treated Water		COMPOSITE South Dist.		
				73rd Outlet	79th Outlet	Cent. Outlet	No. Outlet		Cent. Outlet	Cent. Dist.	North Dist.				
TEMPERATURE		°C	00010	4	4		4	3	3	3	3	3	3		
TURBIDITY	0.5	N.T.U.	82079	1.50	0.10		0.15	5.0	0.10	0.15	0.15	0.15	0.10		
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1M	2Cc		1Cc	2Df	2Cc	2Cc	1Cc	1Cc	1Cc		
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.		---	1M		1E	---	1M	1M	1E	1E	1M		
COLOR	*15	Pt.-Co. Units	00080	0	1		0	0	0	0	0	0	0		
pH	6.5-8.	STD. Units	00040	8.00	7.62		7.60	8.03	7.34	7.46	7.48	7.48	7.52		
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	0.0	0.77		0.75	0.0	0.81	0.74	0.57	0.57	0.59		
SATURATION INDEX, LANGELIER		UNITS +/-		-0.03	-0.36		-0.48	0.00	-0.74	-0.62	-0.60	-0.60	-0.59		
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0		0	0	0	0	0	0	0		
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	99	93		93	101	90	93	92	92	92		
BROMIDE		Br, mg/L	71870	0.032	<0.002		0.011	0.028	0.012	<0.002	0.012	0.012	0.017		
CHLORIDE	*250	Cl, mg/L	00940	13.0	13.0		13.8	12.7	18.0	14.9	14.8	14.8	17.8		
FLUORIDE	4	F, mg/L	00951	0.19	0.97		0.98	0.19	0.92	0.93	0.91	0.91	0.89		
SULFATE	*250	SO ₄ , mg/L	00945	22.9	28.0		28.5	23.5	32.2	30.9	32.2	32.2	38.3		
HARDNESS		CaCO ₃ , mg/L	00900	144	136		142	142	140	142	142	142	140		
CALCIUM		Ca, mg/L	00916	30.0	29.3		29.5	29.5	29.4	29.2	30	30	27.5		
MAGNESIUM		Mg, mg/L	00927	10.9	11.1		10.9	11.4	11.2	11.2	11.0	11.0	11.4		
POTASSIUM		K, mg/L	00937	1.7	1.7		1.7	1.7	1.7	1.8	1.7	1.7	1.8		
SODIUM		Na, mg/L	00006	6.1	6.1		6.2	6.6	7.2	7.2	7.1	7.1	7.2		
SOLIDS, TOTAL DISSOLVED	*500	Diss. Sol., mg/L	00150	156	158		156	158	159	159	164	164	158		
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	163	162		164	164	167	161	168	168	164		
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.53	1.50		1.38	1.65	1.51	1.51	1.59	1.59	1.42		
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5		<5	<5	<5	<5	<5	<5	<5		
NITROGEN, AMMONIA		N, mg/L	00610	<0.01	0.02		<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01		
NITROGEN, NITRATE	10	N, mg/L	00620	0.321	0.307		0.353	0.338	0.358	0.352	0.349	0.349	0.429		
NITROGEN, NITRITE	1	N, mg/L	00615	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
NITROGEN, TOTAL KJELDAHL		N, mg/L	00625	0.190	0.107		0.133	0.176	0.136	0.151	0.180	0.180	<0.100		
PHOSPHATE, ORTHO		PO ₄ , mg/L	00660	0.020	0.241		0.272	0.039	0.268	0.248	0.253	0.253	0.267		
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.030	0.461		0.553	0.042	0.501	0.468	0.480	0.480	0.501		
CYANIDE, TOTAL	0.2	CN, mg/L	00720	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		
FOAMING AGENTS	*0.5	MBAS, mg/L	38260	<0.025	<0.025		<0.025	<0.0256	<0.025	<0.025	<0.025	<0.025	<0.025		
PHENOLICS, TOTAL		Phenol, µg/L	32730	1	<1		<1	<1	<1	<1	<1	<1	1		
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	<1	<1		<1	<1	<1	<1	<1	<1	<1		
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	1.3	1.1		1.1	1.4	1.4	1.6	1.6	1.6	0.9		

* Secondary MCL (if non enforceable)

**COMPREHENSIVE CHEMICAL ANALYSIS
CITY OF CHICAGO - DEPARTMENT OF WATER - BUREAU OF WATER QUALITY
WATER PURIFICATION LABORATORIES**

SAMPLES COLLECTED: FEBRUARY 2, 1998

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT				Jardine Water Purification Plant				
				Intake Water	Treated Water		COMPOSITE South Dist.	Intake Water	Treated Water		COMPOSITE SAMPLES North Dist.	
					73rd Outlet	79th Outlet			Cent. Outlet	North Outlet		
ALUMINUM	*200	Al, µg/L	01105	64	52		55	151	52	49	42	51
ANTIMONY	6	Sb, µg/L	01268	<1	<1		<1	<1	<1	<1	<1	<1
ARSENIC	50	As, µg/L	01002	<5	<5		<5	<5	<5	<5	<5	<5
BARIUM	2000	Ba, µg/L	01007	13	18		14	13	11	12	11	12
BERYLLIUM	4	Be, µg/L	01012	<1	<1		<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	19	15		20	19	20	22	18	17
CADMIUM	5	Cd, µg/L	01027	<1	<1		<1	<1	<1	<1	<1	<1
CHROMIUM	100	Cr, µg/L	01034	<3	<3		<3	<3	<3	<3	<3	<3
COBALT		Co, µg/L	01037	<1	<1		<1	<1	<1	<1	<1	<1
COPPER	*1000	Cu, µg/L	01042	<3	<3		<3	<3	<3	<3	<3	<3
IRON	*300	Fe, µg/L	01045	41	<6		10	88	<6	<6	11	29
LEAD	15**	Pb, µg/L	01051	<3	<3		<3	<3	<3	<3	<3	<3
LITHIUM		Li, µg/L	01132	2	2		2	2	2	2	2	2
MANGANESE	*50	Mn, µg/L	01055	<2	<2		<2	<2	<2	<2	<2	<2
MERCURY	2	Hg, µg/L	71900	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
MOLYBDENUM		Mo, µg/L	01062	<3	<3		<3	<3	<3	<3	<3	<3
NICKEL	100	Ni, µg/L	01067	<3	<3		<3	<3	<3	<3	<3	<3
SELENIUM	50	Se, µg/L	01147	<2	<2		<2	<2	<2	<2	<2	<2
SILICON		Si, µg/L	01142	645	819		822	740	791	793	784	769
SILVER	*100	Ag, µg/L	01077	<1	<1		<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	116	115		115	123	124	124	126	124
THALLIUM	2	Tl, µg/L	01059	<1	<1		<1	<1	<1	<1	<1	<1
TITANIUM		Ti, µg/L	01152	<3	<3		<3	<3	<3	<3	<3	<3
VANADIUM		V, µg/L	00985	<5	<5		<5	<5	<5	<5	<5	<5
ZINC	*5000	Zn, µg/L	01092	5	5		12	7	<5	<5	20	13

* Secondary MCLs (non enforceable) ** Action Level

[Signature]
CHIEF WATER CHEMIST

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DIRECTOR, WATER PURIFICATION LABORATORIES

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DEPUTY COMMISSIONER

**COMPREHENSIVE CHEMICAL ANALYSIS
CITY OF CHICAGO - DEPARTMENT OF WATER - BUREAU OF WATER QUALITY
WATER PURIFICATION LABORATORIES**

SAMPLES COLLECTED May 4, 1998

PARAMETER	IEPA MCL	DETERMINED AS	NUMBER	SOUTH WATER DISTRICT				CENTRAL AND NORTH DISTRICTS				
				RAW CRIB	OUTLETS		COMPOSITE . DISTRIB	RAW SHORE	OUTLETS		COMPOSITE SAMPLES C. DISTRIB; N. DISTRIB.	
					73rd Street	79th Street			Central	North		
TEMPERATURE		°C	00010	12	13		11	13	14	14	12	12
TURBIDITY	0.5	N.T.U.	82079	3.0	0.10		0.20	7.0	0.10	0.10	0.20	0.10
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	4Df	1Cc		1Cc	2Df	2Cc	2Cc	1Cc	2Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.			1M		2M		1E	1M	1E	2M
COLOR	*15	Pt.-Co. Units	00080	0	0		0	0	0	0	0	0
pH	6.5-8.	STD. Units	00040	8.16	7.47		7.46	8.23	7.54	7.52	7.59	7.58
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	0.00	1.03		0.72	0.00	0.92	1.00	0.52	0.62
SATURATION INDEX, LANGELIER		UNITS +/-		0.18	-0.56		-0.57	0.20	-0.49	-0.51	-0.44	-0.45
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0		0	0	0	0	0	0
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	95	87		88	94	87	88	90	89
BROMIDE		Br, mg/L	71870	0.021	<0.003		<0.003	0.021	<0.003	<0.003	<0.003	<0.003
CHLORIDE	*250	Cl, mg/L	00940	13.6	14.7		15.8	14.5	16.3	16.2	16.0	16.0
FLUORIDE	4	F, mg/L	00951	0.17	0.97		0.94	0.18	1.00	1.01	1.02	1.00
SULFATE	*250	SO ₄ , mg/L	00945	23.9	29.2		30.2	24.8	28.8	29.2	28.4	28.8
HARDNESS		CaCO ₃ , mg/L	00900	138	140		130	140	138	144	138	136
CALCIUM		Ca, mg/L	00916	35.0	35.1		34.6	35.9	33.8	34.2	34.7	34.4
MAGNESIUM		Mg, mg/L	00927	11.6	11.4		11.5	12.1	11.4	11.7	11.4	11.1
POTASSIUM		K, mg/L	00937	1.8	1.5		1.4	1.1	1.5	1.3	1.4	1.3
SODIUM		Na, mg/L	00006	7.3	7.4		7.8	7.9	8.0	8.2	8.1	7.7
RESIDUE, FILTERABLE	*500	Diss. Sol., mg/L	00150	150	160		158	162	158	162	166	156
RESIDUE, TOTAL		Tot. Sol., mg/L	00500	158	161		162	177	167	172	169	162
TOTAL ORGANIC CARBON		NPoC, mg/L	00680	1.95	1.80		1.58	2.08	1.76	1.99	1.81	1.85
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5		<5	<5	<5	<5	<5	<5
NITROGEN, AMMONIA		N, mg/L	00610	0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NITROGEN, NITRATE	10	N, mg/L	00620	0.383	0.362		0.384	0.365	0.386	0.383	0.365	0.365
NITROGEN, NITRITE	1	N, mg/L	00615	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NITROGEN, TOTAL KJELDAHL		N, mg/L	00625	0.204	0.141		<0.100	0.210	0.118	0.135	0.64	0.121
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	0.024	0.181		0.222	0.025	0.253	0.235	0.238	0.260
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.029	0.423		0.487	0.045	0.530	0.488	0.485	0.516
CYANIDE, TOTAL	0.2	CN, mg/L	00720	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
FOAMING AGENT	0.5	MBAS, mg/L	38260	<0.025	<0.025		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
PHENOLICS, TOTAL		Phenol, µg/L	32730	<1	<1		<1	<1	<1	<1	<1	<1
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	<1	<1		<1	<1	<1	<1	<1	<1
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	0.9	1.0		1.3	0.4	1.1	1.0	1.3	1.4

* Federal/State Secondary MCL's

**COMPREHENSIVE CHEMICAL ANALYSIS
CITY OF CHICAGO - DEPARTMENT OF WATER - BUREAU OF WATER QUALITY
WATER PURIFICATION LABORATORIES**

SAMPLES COLLECTED May 4, 1998

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER DISTRICT					CENTRAL AND NORTH DISTRICTS				
				RAW CRIB	OUTLETS		COMPOSITE S. DISTRIB.	RAW CRIB	OUTLETS		COMPOSITE SAMPLES C. DISTRIB. N. DISTRIB.		
					73rd Street	79th Street			Central	North			
ALUMINUM		Al, µg/L	01105	134	61		59	261	77	73	64	62	
ANTIMONY	6	Sb, µg/L	01268	<1	<1		<1	<1	<1	<1	<1	<1	
ARSENIC	50	As, µg/L	01002	<5	<5		<5	<5	<5	<5	<5	<5	
BARIUM	2000	Ba, µg/L	01007	18	17		19	19	20	19	19	18	
BERYLLIUM	4	Be, µg/L	01012	<1	<1		<1	<1	<1	<1	<1	<1	
BORON		B, µg/L	01022	20	18		17	20	20	19	18	20	
CADMIUM	5	Cd, µg/L	01027	<1	<1		<1	<1	<1	<1	<1	<1	
CHROMIUM	100	Cr, µg/L	01034	<2	<2		<2	<2	<2	<2	<2	<2	
COBALT		Co, µg/L	01037	<1	<1		<1	<1	<1	<1	<1	<1	
COPPER	1300	Cu, µg/L	01042	4	<3		<3	<3	<3	<3	<3	<3	
IRON	1000	Fe, µg/L	01045	63	<6		<6	145	<6	<6	21	15	
LEAD	15**	Pb, µg/L	01051	<3	<3		3	<3	<3	<3	<3	<3	
LITHIUM		Li, µg/L	01132	3	2		2	3	2	2	2	2	
MANGANESE	150	Mn, µg/L	01055	<2	<2		2	<2	<2	<2	<2	<2	
MERCURY	2	Hg, µg/L	71900	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	
MOLYBDENUM		Mo, µg/L	01062	<3	<3		<3	<3	<3	<3	<3	<3	
NICKEL	100	Ni, µg/L	01067	<2	<2		<2	<2	<2	<2	<2	<2	
SELENIUM	50	Se, µg/L	01147	<2	<2		<2	<2	<2	<2	<2	<2	
SILICON		Si, µg/L	01142	448	748		770	188	552	554	605	593	
SILVER	*100	Ag, µg/L	01077	<1	<1		<1	<1	<1	<1	<1	<1	
STRONTIUM		Sr, µg/L	01082	129	132		131	126	134	133	131	132	
THALLIUM	2	Tl, µg/L	01059	<1	<1		<1	<1	<1	<1	<1	<1	
TITANIUM		Ti, µg/L	01152	<3	<3		<3	<3	<3	<3	<3	<3	
VANADIUM		V, µg/L	00985	<5	<5		<5	<5	<5	<5	<5	<5	
ZINC	5000	Zn, µg/L	01092	<5	<5		8	<5	<5	<5	<5	<5	

** Action Level

CHIEF WATER CHEMIST *[Signature]*

DIRECTOR, WATER PURIFICATION LABORATORIES *[Signature]*

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**COMPREHENSIVE CHEMICAL ANALYSIS
CITY OF CHICAGO - DEPARTMENT OF WATER - BUREAU OF WATER QUALITY
WATER PURIFICATION LABORATORIES**

SAMPLES COLLECTED August 10, 1998

PARAMETER	IEPA MCL	DETERMINED AS	NUMBER	SOUTH WATER DISTRICT						CENTRAL AND NORTH DISTRICTS					
				RAW CRIB	OUTLETS		COMPOSITE . DISTRIB	RAW SHORE	OUTLETS		COMPOSITE SAMPLES				
					73rd Street	79th Street			Central	North		C. DISTRIB.	N. DISTRIB.		
TEMPERATURE		°C	00010	22	22	22	23	22	21	21	21	21	21		
TURBIDITY	0.5	N.T.U.	82079	0.65	0.20	0.10	0.15	1.3	0.15	0.15	0.15	0.20	0.20		
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1M	2Cc	2Cc	1Cc	2E	2Cc	2Cc	2Cc	2Cc	2Cc		
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.			1M	1M	1M		2M	1M	1M	1M			
COLOR	*15	Pt.-Co. Units	00080	0	0	0	0	0	0	0	0	0	0		
pH	6.5-8.	STD. Units	00040	8.15	7.42	7.48	7.62	8.17	7.47	7.46	7.61	7.56	7.56		
FREE CHLORINE RESIDUAL		Cl ₂ , mg/L	50064	0.00	0.76	0.79	0.61	0.00	0.76	0.79	0.63	0.60	0.60		
SATURATION INDEX, LANGELIER		UNITS +/-		0.18	-0.61	-0.49	-0.31	0.30	-0.46	-0.47	-0.32	-0.31	-0.31		
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0	0	0		
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	94	87	88	89	95	86	86	87	87	87		
BROMIDE		Br, mg/L	71870	0.021	0.023	<0.003	<0.003	0.021	<0.003	<0.003	<0.003	<0.003	<0.003		
CHLORIDE	*250	Cl, mg/L	00940	11.2	15.2	14.2	14.7	10.7	14.7	14.3	14.6	15.2	15.2		
FLUORIDE	4	F, mg/L	00951	0.18	0.96	0.91	0.92	0.18	0.97	0.97	0.95	0.97	0.97		
SULFATE	*250	SO ₄ , mg/L	00945	23.5	28.4	28.1	28.3	23.2	27.7	26.8	26.8	27.4	27.4		
HARDNESS		CaCO ₃ , mg/L	00900	136	140	140	140	142	136	142	148	134	134		
CALCIUM		Ca, mg/L	00916	35.2	35.5	36.1	36.2	35.5	35.7	35.4	35.4	35.8	35.8		
MAGNESIUM		Mg, mg/L	00927	11.6	11.5	11.6	11.7	11.6	11.6	11.6	11.5	11.7	11.7		
POTASSIUM		K, mg/L	00937	1.8	1.7	1.7	1.9	1.7	1.9	1.8	1.9	1.8	1.8		
SODIUM		Na, mg/L	00006	5.6	5.9	5.8	6.0	5.8	6.0	5.9	5.9	6.1	6.1		
RESIDUE, FILTERABLE	*500	Dis. Sol., mg/L	00150	149	154	148	152	148	151	151	156	148	148		
RESIDUE, TOTAL		Tot. Sol., mg/L	00500	156	162	154	159	153	169	171	170	159	159		
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	2.02	1.50	1.73	1.49	2.01	2.39	1.85	1.61	1.87	1.87		
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	<5	<5	7.0	<5	<5	<5	<5	<5		
NITROGEN, AMMONIA		N, mg/L	00610	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
NITROGEN, NITRATE	10	N, mg/L	00620	0.242	0.231	0.222	0.278	0.229	0.268	0.219	0.204	0.233	0.233		
NITROGEN, NITRITE	1	N, mg/L	00615	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
NITROGEN, TOTAL KJELDAHL		N, mg/L	00625	0.159	0.142	0.134	<0.100	0.204	<0.100	<0.100	0.114	<0.100	<0.100		
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	<0.01	0.479	0.321	0.391	<0.01	0.430	0.467	0.427	0.440	0.440		
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.013	0.912	0.662	0.816	0.015	0.747	0.820	0.681	0.753	0.753		
CYANIDE, TOTAL	0.2	CN, mg/L	00720	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		
FOAMING AGENT	0.5	MBAS, mg/L	38260	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025		
PHENOLICS, TOTAL		Phenol, µg/L	32730	2	2	2	2	2	1	<1	<1	<1	<1		
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	1.4	1.4	2.0	1.7	1.2	1.2	0.9	0.9	1.0	1.0		

* Federal/State Secondary MCL's

**COMPREHENSIVE CHEMICAL ANALYSIS
CITY OF CHICAGO - DEPARTMENT OF WATER - BUREAU OF WATER QUALITY
WATER PURIFICATION LABORATORIES**

SAMPLES COLLECTED August 10, 1998

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER DISTRICT				CENTRAL AND NORTH DISTRICTS				
				RAW CRIB	OUTLETS		COMPOSITE S. DISTRIB.	RAW CRIB	OUTLETS		COMPOSITE SAMPLES C. DISTRIB., N. DISTRIB.	
					73rd Stree	79th Stree			Central	North		
ALUMINUM		Al, µg/L	01105	14	111	111	102	<10	101	84	98	113
ANTIMONY	6	Sb, µg/L	01268	<3	<3	<3	<3	<3	<3	<3	<3	<3
ARSENIC	50	As, µg/L	01002	<5	<5	<5	<5	<5	<5	<5	<5	<5
BARIUM	2000	Ba, µg/L	01007	21	24	25	25	21	21	20	19	20
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	30	24	31	38	40	35	27	26	32
CADMIUM	5	Cd, µg/L	01027	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHROMIUM	100	Cr, µg/L	01034	<2	<2	<2	<2	<2	<2	<2	<2	<2
COBALT		Co, µg/L	01037	<1	<1	<1	<1	<1	<1	<1	<1	<1
COPPER	1300	Cu, µg/L	01042	4	3	4	<3	<3	<3	<3	<3	<3
IRON	1000	Fe, µg/L	01045	<6	<6	<6	<6	19	<6	<6	<6	29
LEAD	15**	Pb, µg/L	01051	<3	<3	<3	<3	<3	<3	<3	<3	<3
LITHIUM		Li, µg/L	01132	2	<1	<1	<1	<1	<1	2	<1	<1
MANGANESE	150	Mn, µg/L	01055	<2	<2	<2	<2	<2	<2	<2	<2	<2
MERCURY	2	Hg, µg/L	71900	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
MOLYBDENUM		Mo, µg/L	01062	<10	<10	<10	<10	<10	<10	<10	<10	<10
NICKEL	100	Ni, µg/L	01067	<2	<2	<2	<2	<2	<2	<2	<2	<2
SELENIUM	50	Se, µg/L	01147	<3	<3	<3	<3	<3	<3	<3	<3	<3
SILICON		Si, µg/L	01142	304	563	533	564	225	594	559	568	575
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	111	119	120	123	115	118	116	114	128
THALLIUM	2	Tl, µg/L	01059	<1	<1	<1	<1	<1	<1	<1	<1	<1
TITANIUM		Ti, µg/L	01152	<3	<3	<3	<3	<3	<3	<3	<3	<3
VANADIUM		V, µg/L	00985	<10	<10	<10	<10	<10	<10	<10	<10	<10
ZINC	5000	Zn, µg/L	01092	<5	<5	<5	8	<5	<5	5	16	20

** Action Level

Shapel d. Clevner
CHIEF WATER CHEMIST

Ellen P. Flanagan
DEPUTY COMMISSIONER

COMPREHENSIVE CHEMICAL ANALYSIS
CITY OF CHICAGO - DEPARTMENT OF WATER - BUREAU OF WATER QUALITY
WATER PURIFICATION LABORATORIES

SAMPLES COLLECTED NOVEMBER 2 1998

PARAMETER	IEPA MCL	DETERMINED AS	NUMBER	SOUTH WATER DISTRICT					CENTRAL AND NORTH DISTRICTS					
				RAW CRIB	OUTLETS			COMPOSITE S. DISTRIB	RAW CRIB	OUTLETS			COMPOSITE SAMPLES C. DISTRIB.	N. DISTRIB.
					73rd Street	79th Street	S. DISTRICT			Central	North			
TEMPERATURE		*C	00010	17	17	17	15	16	17	17	15	15	15	
TURBIDITY	05	N.T.U.	82079	2.40	0.10	0.10	0.15	3.50	0.10	0.10	0.15	0.15	0.15	
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	2DF	2Cc	2Cc	1Cc	2E	2Cc	2Cc	2Cc	2Cc	2Cc	
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.		2DF	1E	2M	2M	2E	2M	2E	1M	1M	1M	
COLOR	*15	Pt.-Co. Units	00080	0	0	0	0	0	0	0	0	0	0	
PH	*6.5-8.5	STD. Units	00040	8.45	7.31	7.61	7.21	8.50	7.30	7.52	7.39	7.28	7.28	
FREE CHLORINE RESIDUAL		Cl ₂ , mg/L	50064	0.00	0.70	0.74	0.56	0.00	0.78	0.88	0.51	0.56	0.56	
SATURATION INDEX, LANGLEIER		UNITS +/-		0.47	-0.72	-0.42	-0.82	0.52	-0.63	-0.51	-0.64	-0.75	-0.75	
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0	0	0	
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	97	90	92	99	99	91	91	91	91	91	
BROMIDE		Br, mg/L	71870	0.027	<0.003	<0.003	<0.003	0.026	<0.003	<0.003	<0.003	<0.003	<0.003	
CHLORIDE	*250	Cl, mg/L	00940	11.0	12.6	12.5	12.9	11.6	13.0	12.7	13.4	13.3	13.3	
FLUORIDE	4	F, mg/L	00951	0.21	0.97	0.97	0.98	0.22	1.02	1.09	1.07	1.07	1.11	
SULFATE	*250	SO ₄ , mg/L	00945	23.4	26.8	26.6	26.4	23.0	25.7	25.7	25.7	25.4	25.4	
HARDNESS		CaCO ₃ , mg/L	00900	136	134	136	136	134	136	140	134	134	134	
CALCIUM		Ca, mg/L	00916	36.2	36.2	36.2	36.0	36.3	35.4	36.2	36.0	36.1	35.1	
MAGNESIUM		Mg, mg/L	00927	11.8	12.0	11.6	11.4	11.4	11.4	11.4	11.4	10.9	10.9	
POTASSIUM		K, mg/L	00937	1.8	1.8	1.8	1.7	1.9	1.7	1.6	1.7	1.7	1.7	
SODIUM		Na, mg/L	00006	5.9	6.3	6.2	6.3	6.3	6.0	6.1	6.0	5.7	5.7	
RESIDUE, FILTERABLE	*500	Dis. Sol., mg/L	00150	156	164	158	159	160	154	155	156	156	156	
RESIDUE, TOTAL		Tot. Sol., mg/L	00600	168	169	168	171	171	172	173	171	165	165	
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	2.28	1.76	1.67	1.62	1.96	1.62	1.62	1.66	1.52	1.52	
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	5.1	<5	5.1	<5	<5	<5	<5	5.1	<5	<5	
NITROGEN, AMMONIA		N, mg/L	00610	0.03	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	0.01	<0.01	<0.01	
NITROGEN, NITRATE	10	N, mg/L	00620	0.222	0.216	0.215	0.253	0.260	0.253	0.212	0.318	0.211	0.211	
NITROGEN, NITRITE	1	N, mg/L	00615	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
NITROGEN, TOTAL KJELDAHL		N, mg/L	00625	0.222	0.270	0.142	<0.100	0.164	0.127	0.120	0.105	0.105	0.105	
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	0.010	0.363	0.264	0.328	0.020	0.330	0.336	0.322	0.361	0.361	
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.025	0.594	0.514	0.576	0.040	0.578	0.563	0.579	0.612	0.612	
CYANIDE, TOTAL	0.2	CN, mg/L	00720	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
FOAMING AGENT	0.5	MBAS, mg/L	38260	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	
PHENOLICS, TOTAL		Phenol, µg/L	32730	1.68	2.93	1.42	3.18	1.80	6.51	3.18	0.59	2.93	2.93	
RADIOACTIVITY, GROSS ALPHA	15	PCIL	01501	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
RADIOACTIVITY, GROSS BETA	50	PCIL	03501	1.0	1.3	1.1	1.5	1.9	1.3	2.4	1.0	1.6	1.6	

* Federal/State Secondary MCL's

COMPREHENSIVE CHEMICAL ANALYSIS
CITY OF CHICAGO - DEPARTMENT OF WATER - BUREAU OF WATER QUALITY
WATER PURIFICATION LABORATORIES

SAMPLES COLLECTED NOVEMBER 2 1998

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER DISTRICT				CENTRAL AND NORTH DISTRICTS				
				RAW CRIB	OUTLETS		COMPOSITE	RAW CRIB	OUTLETS		COMPOSITE SAMPLES	
					73rd Street	79th Street			S. DISTRIB.	Central		North
ALUMINUM		Al, µg/L	01105	35	103	101	98	41	153	142	101	73
ANTIMONY	6	Sb, µg/L	01268	<3	<3	<3	<3	<3	<3	<3	<3	<3
ARSENIC	50	As, µg/L	01002	<5	<5	<5	<5	<5	<5	<5	<5	<5
BARIUM	2000	Ba, µg/L	01007	17	17	17	17	16	16	16	16	16
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	22	16	19	20	28	21	21	23	21
CADMIUM	5	Cd, µg/L	01027	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHROMIUM	100	Cr, µg/L	01034	<2	<2	<2	<2	<2	<2	<2	<2	<2
COBALT		Co, µg/L	01037	<1	<1	<1	<1	<1	<1	<1	<1	<1
COPPER	1300	Cu, µg/L	01042	3	<3	<3	<3	<3	<3	<3	<3	<3
IRON	1000	Fe, µg/L	01045	37	<6	<6	<6	25	<6	<6	<6	<6
LEAD	15**	Pb, µg/L	01051	<3	<3	<3	<3	<3	<3	<3	<3	<3
LITHIUM		Li, µg/L	01132	3	<1	1	2	<1	<1	<1	<1	2
MANGANESE	150	Mn, µg/L	01055	<2	<2	<2	<2	<2	<2	<2	<2	<2
MERCURY	2	Hg, µg/L	71900	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
MOLYBDENUM		Mo, µg/L	01062	<10	<10	<10	<10	<10	<10	<10	<10	<10
NICKEL	100	Ni, µg/L	01067	<2	<2	<2	<2	<2	<2	<2	<2	<2
SELENIUM	50	Se, µg/L	01147	<3	<3	<3	<3	<3	<3	<3	<3	<3
SILICON		Si, µg/L	01142	539	904	797	824	435	832	672	927	989
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01062	124	124	122	123	124	123	122	118	109
THALLIUM	2	Tl, µg/L	01059	<1	<1	<1	<1	<1	<1	<1	<1	<1
TITANIUM		Ti, µg/L	01152	<3	<3	<3	<3	<3	<3	<3	<3	<3
VANADIUM		V, µg/L	00985	<5	<5	<5	<5	<5	<5	<5	<5	<5
ZINC	5000	Zn, µg/L	01092	<5	<5	<5	10	<5	<5	<5	<5	9

** Action Level

N O'Connor (1st)
CHIEF WATER CHEMIST

Richard M. Wickliffe's
DIRECTOR, WATER PURIFICATION LABORATORIES

Sean P. DeLong
DEPUTY COMMISSIONER