

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

Corrected Copy

SAMPLES COLLECTED February 7, 2000

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT						JARDINE WATER PURIFICATION PLANT					
				RAW LAKE	OUTLETS		***DISTRIBUTION SOUTH	RAW LAKE	OUTLETS		***DISTRIBUTION Central	***DISTRIBUTION North			
					73rd Street	79th Street			Central	North			Central	North	
TEMPERATURE		°C	00010	2	2	2	5	4	4	4	3	4			
TURBIDITY	0.5	N.T.U.	82079	2.45	0.10	0.15	0.30	5.15	0.10	0.10	0.15	0.15			
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	2Df	2Cc	2Cc	1Cc	1Df	2Cc	2Cc	1Cc	1Cc			
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.			2M	1M	1M		2M	1G	1G	1G			
COLOR	*15	Pt.-Co. Units	00080	0	0	0	0	1	0	0	0	0			
pH	*6.5-8.5	STD. Units	00040	8.34	7.17	7.19	7.24	8.41	7.24	7.25	7.20	7.31			
FREE CHLORINE RESIDUAL		Cl ₂ , mg/L	50064	0.00	0.88	0.91	0.84	0.00	0.76	0.75	0.96	1.08			
SATURATION INDEX, LANGEIER		UNITS +/-		0.42	-0.81	-0.79	-0.74	0.43	-0.74	-0.73	-0.78	-0.67			
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0	0			
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	122	112	112	110	122	112	111	107	109			
BROMIDE		Br, mg/L	71870	0.570	<0.003	<0.003	<0.003	0.340	<0.003	<0.003	<0.003	<0.003			
CHLORIDE	*250	Cl, mg/L	00940	11.7	13.3	13.3	13.2	12.3	13.8	13.8	15.0	13.4			
FLUORIDE	4	F, mg/L	00951	0.20	0.95	0.91	0.92	0.21	0.91	0.94	0.99	1.01			
SULFATE	*250	SO ₄ , mg/L	00945	22.9	29.3	29.1	28.9	23.4	28.5	28.6	28.6	28.5			
HARDNESS		CaCO ₃ , mg/L	00900	144	140	141	142	146	147	141	144	146			
CALCIUM		Ca, mg/L	00916	34.4	35.6	36.0	35.8	36.3	35.9	36.0	35.6	35.3			
MAGNESIUM		Mg, mg/L	00927	12.3	12.2	12.6	12.5	12.8	12.3	12.2	12.2	12.0			
POTASSIUM		K, mg/L	00937	2.0	1.8	1.8	2.0	1.3	1.4	1.3	1.4	1.6			
SODIUM		Na, mg/L	00006	6.3	6.6	6.5	6.7	6.6	6.7	6.7	6.7	6.4			
RESIDUE, TOTAL DISSOLVED	*500	TDS, mg/L	00150	147	153	153	158	164	159	155	156	160			
RESIDUE, TOTAL		Tot. Sol., mg/L	00500	159	176	171	175	164	174	173	174	172			
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.99	1.65	1.51	1.94	2.13	1.55	1.65	1.41	1.82			
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	5.5	<5	<5	5.4	<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			
NITROGEN, NITRATE	10	N, mg/L	00620	0.297	0.299	0.294	0.301	0.298	0.301	0.296	0.296	0.320			
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	0.304	0.188	<0.100	0.104	0.104	0.104	<0.100	<0.100	<0.100			
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	<0.01	0.381	0.386	0.369	0.013	0.388	0.434	0.413	0.462			
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.029	0.852	0.779	0.745	0.032	0.659	0.837	0.684	0.745			
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 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			
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	1.7	1.3	1.2	<1	1.0	1.5	1.7	1.3	1.2			

* Federal/State Secondary MCL's

***Distribution samples are composited.

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

SAMPLES COLLECTED February 7, 2000

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				RAW LAKE	OUTLETS		***DISTRIBUTION South	RAW LAKE	OUTLETS		***DISTRIBUTION	
					73rd Street	79th Street			Central	North		Central
ALUMINUM		Al, µg/L	01105	73	56	91	80	84	104	57	93	144
ANTIMONY	6	Sb, µg/L	01268	<2	<2	<2	<2	<2	<2	<2	<2	<2
ARSENIC	50	As, µg/L	01002	<4	<4	<4	<4	<4	<4	<4	<4	<4
BARIUM	2000	Ba, µg/L	01007	21	19	19	21	19	19	19	19	19
BERYLLIUM	4	Be, µg/L	01012	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
BORON		B, µg/L	01022	<10	<10	<10	<10	<10	<10	<10	<10	<10
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	4	<3	<3	<3
IRON	*300	Fe, µg/L	01045	66	15	15	31	132	<12	<12	33	168
LEAD	**15	Pb, µg/L	01051	<3	<3	<3	<3	<3	<3	<3	<3	<3
LITHIUM		Li, µg/L	01132	<1	<1	<1	<1	<1	<1	<1	<1	<1
MANGANESE	*50	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	<3	<3	<3	<3	<3	<3	<3	<3	<3
SELENIUM	50	Se, µg/L	01147	<3	<3	<3	<3	<3	<3	<3	<3	<3
SILICON		Si, µg/L	01142	751	824	808	840	782	847	847	853	901
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	116	115	113	113	117	121	107	109	119
THALLIUM	2	Tl, µg/L	01059	<2	<2	<2	<2	<2	<2	<2	<2	<2
TITANIUM		Ti, µg/L	01152	<3	<3	<3	<3	<3	<3	<3	3	<3
VANADIUM		V, µg/L	00985	8	5	<3	8	16	10	15	11	7
ZINC	*5000	Zn, µg/L	01092	16	<3	31	20	8	8	17	17	<3

** Action Level

*** Distribution samples are composited.

William (St. Carle)
CHIEF WATER CHEMIST

Kristina Halverson
DIRECTOR, WATER PURIFICATION LABORATORIES

Sean P. Flanagan
DEPUTY COMMISSIONER

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

SAMPLES COLLECTED June 20, 2000

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				RAW LAKE	OUTLETS		***DISTRIBUTION SOUTH	RAW LAKE	OUTLETS		***DISTRIBUTION Central North Central North	
					73rd Street	79th Street			Central	North		Central
TEMPERATURE		°C	00010	17	18	19	19	17	18	18	18	17
TURBIDITY	0.5	N.T.U.	82079	0.70	0.10	0.10	0.20	1.7	0.15	0.10	0.15	0.35
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1G	2Cc	2Cc	1Cc	2G	1Cc	2Cc	1Cc	2Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.			1M	1M	2M		2M	1M	1M	1M
COLOR	*15	Pt.-Co. Units	00080	0	0	0	0	0	0	0	0	0
pH	*6.5-8.5	STD. Units	00040	8.28	7.64	7.67	7.75	8.34	7.58	7.69	7.75	7.76
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	0.00	0.70	0.82	0.54	0.00	0.72	0.75	0.68	0.69
SATURATION INDEX, LANGELIER		UNITS +/-		0.25	-0.39	-0.36	-0.28	0.31	-0.45	-0.34	-0.28	-0.27
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0	0
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	108	98	98	99	105	97	98	97	98
BROMIDE		Br, mg/L	71870	0.037	<0.003	<0.003	0.006	0.037	<0.003	<0.003	<0.003	0.004
CHLORIDE	*250	Cl, mg/L	00940	10.7	12.0	12.1	12.0	10.8	12.0	12.1	12.1	12.2
FLUORIDE	4	F, mg/L	00951	0.19	0.96	0.96	0.95	0.18	1.04	1.06	1.07	1.08
SULFATE	*250	SO ₄ , mg/L	00945	21.6	24.7	24.7	24.4	21.6	25.1	24.9	24.9	24.7
HARDNESS		CaCO ₃ , mg/L	00900	139	137	138	130	133	138	139	131	131
CALCIUM		Ca, mg/L	00916	33.2	32.9	33.1	33.1	32.8	32.8	33.1	33.0	33.0
MAGNESIUM		Mg, mg/L	00927	10.2	10.1	10.1	10.0	10.2	10.2	10.3	10.2	10.2
POTASSIUM		K, mg/L	00937	1.0	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.3
SODIUM		Na, mg/L	00006	5.8	6.0	6.1	6.0	5.6	5.9	5.8	6.1	5.7
RESIDUE, TOTAL DISSOLVED	*500	TDS, mg/L	00150	166	164	160	158	159	160	161	161	159
RESIDUE, TOTAL		Tot. Sol., mg/L	00500	172	177	176	171	173	180	178	179	171
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.74	1.85	2.02	1.55	2.03	1.37	1.51	1.69	1.88
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	5.0	<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	<0.01
NITROGEN, NITRATE	10	N, mg/L	00620	0.262	0.250	0.254	0.286	0.253	0.242	0.237	0.239	0.243
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	<0.100	<0.100	0.133	<0.100	0.125	0.118	0.106	0.165	<0.100
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	0.018	0.439	0.490	0.488	0.018	0.361	0.362	0.370	0.368
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.035	0.483	0.562	0.565	0.030	0.423	0.400	0.420	0.417
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 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
PHENOLICS, TOTAL		Phenol, µg/L	32730	2	<1	<1	1	<1	2	2	<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	<1	<1	<1	<1	<1	<1	<1	<1

* Federal/State Secondary MCL's
***Distribution samples are composited.

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

SAMPLES COLLECTED June 20, 2000

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				RAW LAKE	OUTLETS		***DISTRIBUTION South	RAW LAKE	OUTLETS		**DISTRIBUTION Central	**DISTRIBUTION North
					73rd Street	79th Street			Central	North		
ALUMINUM		Al, µg/L	01105	34	96	184	77	38	145	81	78	87
ANTIMONY	6	Sb, µg/L	01268	<3	<3	<3	<3	<3	<3	<3	<3	<3
ARSENIC	50	As, µg/L	01002	<4	<4	<4	<4	<4	<4	<4	<4	<4
BARIUM	2000	Ba, µg/L	01007	16	16	16	16	17	17	17	16	17
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	32	24	19	40	31	40	43	48	28
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	*300	Fe, µg/L	01045	29	<8	<8	23	39	<8	<8	<8	41
LEAD	**15	Pb, µg/L	01051	<3	<3	<3	<3	<3	<3	<3	<3	<3
LITHIUM		Li, µg/L	01132	<1	<1	5	6	<1	4	<1	<1	3
MANGANESE	*50	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	<5	<5	<5	<5	<5	<5	<5	<5	<5
NICKEL	100	Ni, µg/L	01067	<3	<3	<3	<3	<3	<3	4	<3	<3
SELENIUM	50	Se, µg/L	01147	<3	<3	<3	<3	<3	<3	<3	<3	<3
SILICON		Si, µg/L	01142	457	603	601	592	348	582	580	709	469
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	106	101	101	102	102	102	101	105	106
THALLIUM	2	Tl, µg/L	01059	<2	<2	<2	<2	<2	<2	<2	<2	<2
TITANIUM		Ti, µg/L	01152	<5	<5	<5	<5	<5	<5	<5	<5	<5
VANADIUM		V, µg/L	00985	<3	<3	<3	<3	<3	<3	<3	<3	<3
ZINC	*5000	Zn, µg/L	01092	<3	<3	<3	6	3	<3	<3	5	14

** Action Level
*** Distribution samples are composited.

Sheldon P. Pomeroy
CHIEF WATER CHEMIST

Richard A. Heavens
DIRECTOR, WATER PURIFICATION LABORATORIES

Sean P. Hanagan
DEPUTY COMMISSIONER

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

SAMPLE COLLECTED August 22, 2000

CORRECTED COPY

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				RAW LAKE	OUTLETS		***DISTRIBUTION SOUTH	RAW LAKE	OUTLETS		***DISTRIBUTION Central	North
					73rd Street	79th Street			Central	North		
TEMPERATURE		°C	00010	22	24	23	24	23	24	24	24	24
TURBIDITY	0.5	N.T.U.	82079	0.70	0.20	0.15	0.20	1.90	0.15	0.10	0.35	0.15
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	2Df	2Cc	2Cc	1Cc	2G	2Cc	1Cc	1Cc	2Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.			1M	1M	1M		1M	2M	2M	1M
COLOR	*15	Pt.-Co. Units	00080	1	0	1	0	3	0	0	2	0
pH	*6.5-8.5	STD. Units	00040	8.38	7.55	7.63	7.55	8.24	7.55	7.46	7.58	7.61
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	0.00	0.96	1.06	0.71	0	0.91	0.91	0.89	0.89
SATURATION INDEX, LANGELIER		UNITS +/-		0.51	-0.37	-0.29	-0.43	0.31	-0.43	-0.52	-0.40	-0.37
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0	0
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	100	99	92	92	100	93	92	92	92
BROMIDE		Br, mg/L	71870	0.029	<0.003	<0.003	<0.003	0.024	<0.003	<0.003	<0.003	<0.003
CHLORIDE	*250	Cl, mg/L	00940	10.7	12.6	12.7	12.4	10.2	12.1	12.2	12.4	12.3
FLUORIDE	4	F, mg/L	00951	0.17	0.92	0.93	0.94	0.18	1.08	1.12	1.07	1.10
SULFATE	*250	SO ₄ , mg/L	00945	22.0	26.3	26.3	26.0	21.5	25.5	25.6	25.7	25.3
HARDNESS		CaCO ₃ , mg/L	00900	136	136	143	142	133	136	138	137	139
CALCIUM		Ca, mg/L	00916	33.4	33.0	33.0	33.1	32.9	33.1	32.8	32.7	32.9
MAGNESIUM		Mg, mg/L	00927	11.8	11.5	11.4	11.4	11.5	11.3	11.7	11.8	11.5
POTASSIUM		K, mg/L	00937	1.5	1.3	1.3	1.4	1.1	1.4	1.0	1.3	1.2
SODIUM		Na, mg/L	00006	6.7	6.8	6.9	6.7	6.2	6.3	6.3	6.4	6.3
RESIDUE, TOTAL DISSOLVED	*500	TDS, mg/L	00150	149	157	149	156	150	156	154	155	150
RESIDUE, TOTAL		Tot. Sol., mg/L	00500	157	169	174	160	167	183	176	177	175
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	2.18	2.72	1.82	1.68	2.48	1.71	2.43	1.76	2.14
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	<5	<5	<5	<5	<5	<5	<5
NITROGEN, AMMONIA		N, mg/L	00610	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NITROGEN, NITRATE	10	N, mg/L	00620	0.265	0.221	0.215	0.221	0.216	0.203	0.213	0.217	0.205
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	0.282	0.175	0.089	0.220	0.263	0.158	0.144	0.185	0.212
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	0.016	0.430	0.438	0.454	0.018	0.360	0.345	0.378	0.359
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.029	0.719	0.697	0.736	0.031	0.500	0.511	0.570	0.511
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 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
PHENOLICS, TOTAL		Phenol, µg/L	32730	<1	<1	<1	2	<1	<1	2	<1	<1
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	<1	<1	<1	<1	<1	<1	<1	<1	<1
RADIOACTIVITY, GROSS BETA	50	pCi/L	03801	<1	1.0	<1	1.4	1.3	1.2	1.0	1.4	1.2

* Federal/State Secondary MCL's

** Analytical Error

*** Not Test

UNIT OF CHICAGO - DEPARTMENT OF WATER - BUREAU OF WATER QUALITY
 WATER PURIFICATION LABORATORIES

SAMPLE COLLECTED August 22, 2000

CORRECTED COPY

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				RAW LAKE	OUTLETS		***DISTRIBUTION South	RAW LAKE	OUTLETS		***DISTRIBUTION Central	North
					73rd Street	79th Street			Central	North		
ALUMINUM		Al, µg/L	01105	75	186	178	141	91	150	153	116	118
ANTIMONY	6	Sb, µg/L	01268	<3	<3	<3	<3	<3	<3	<3	<3	<3
ARSENIC	50	As, µg/L	01002	<4	<4	<4	<4	<4	<4	<4	<4	<4
BARUM	2000	Ba, µg/L	01007	12	13	14	14	13	12	12	13	13
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	34	32	28	32	29	26	26	26	26
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	5	<3	5	4	5	<3	<3	<3
IRON	*300	Fe, µg/L	01045	17	<8	<8	23	25	<8	<8	21	31
LEAD	**15	Pb, µg/L	01051	<3	<3	<3	<3	<3	3.8	<3	3.1	<3
LITHIUM		Li, µg/L	01132	<1	3	<1	1	5	<1	3	<1	1
MANGANESE	*50	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	224	453	436	496	409	558	556	633	555
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	107	112	114	113	112	110	111	111	110
THALLIUM	2	Tl, µg/L	01059	<2	<2	<2	<2	<2	<2	<2	<2	<2
TITANIUM		Ti, µg/L	01152	<5	<5	<5	<5	<5	<5	<5	<5	<5
VANADIUM		V, µg/L	00985	<3	<3	<3	<3	<3	<3	<3	<3	<3
ZINC	*5000	Zn, µg/L	01092	<3	<3	<3	4	11	3	<3	16	17

* Federal/State Secondary MCL's

** Action Level

*** Distribution samples are composited.

Shirley D. D'Amico
 CHIEF WATER CHEMIST

Hugh H. MacLennan
 DIRECTOR, WATER PURIFICATION LABORATORIES

Sean P. Morgan
 DEPUTY COMMISSIONER

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

SAMPLES COLLECTED November 15, 2000

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT						JARDINE WATER PURIFICATION PLANT					
				RAW LAKE	OUTLETS		***DISTRIBUTION SOUTH	RAW LAKE	OUTLETS		***DISTRIBUTION Central	***DISTRIBUTION North			
					73rd Street	79th Street			Central	North			Central	North	
TEMPERATURE		°C	00010	8	13	12	14	9	12	12	14	14	18		
TURBIDITY	0.5	N.T.U.	82079	1.70	0.15	0.15	0.15	2.35	0.10	0.10	0.15	0.15	0.20		
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	3G	2Cc	2Cc	2Cc	2G	2Cc	2Cc	1Cc	2Cc	2Cc		
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.			2M	2Mm	2M		1M	2M	1M	2M	2M		
COLOR	*15	Pt.-Co. Units	00080	2	0	0	0	7	1	0	0	1	0		
pH	*6.5-8.5	STD. Units	00040	8.20	7.70	7.69	7.74	8.18	7.73	7.72	7.76	7.76	7.77		
FREE CHLORINE RESIDUAL		Cl ₂ , mg/L	50064	0	0.85	0.88	0.76	0	1.03	1.00	0.67	0.52			
SATURATION INDEX, LANGELIER		UNITS +/-		0.25	-0.25	-0.26	-0.21	0.23	-0.22	-0.23	-0.19	-0.18			
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0	0			
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	109	100	99	101	108	101	101	101	101			
BROMIDE		Br, mg/L	71870	0.029	<0.003	<0.003	<0.003	0.029	<0.003	<0.003	<0.003	<0.003			
CHLORIDE	*250	Cl, mg/L	00940	11.7	13.1	13.1	13.0	12.3	13.1	13.1	12.5	12.7			
FLUORIDE	4	F, mg/L	00951	0.26	1.00	1.00	0.98	0.26	1.01	1.02	1.06	1.04			
SULFATE	*250	SO ₄ , mg/L	00945	23.6	28.7	28.7	28.3	24.4	27.8	27.9	27.2	27.1			
HARDNESS		CaCO ₃ , mg/L	00900	142	134	138	148	146	145	147	144	139			
CALCIUM		Ca, mg/L	00916	34.9	35.4	34.7	34.8	34.8	34.9	34.5	35.1	35.6			
MAGNESIUM		Mg, mg/L	00927	11.1	11.3	11.0	11.1	11.4	11.2	11.0	11.1	11.1			
POTASSIUM		K, mg/L	00937	1.6	1.6	1.6	1.5	1.5	1.2	1.5	1.4	1.3			
SODIUM		Na, mg/L	00006	6.9	7.7	7.6	7.5	7.4	7.6	7.5	7.2	7.2			
RESIDUE, TOTAL DISSOLVED	*500	TDS, mg/L	00150	164	158	160	159	164	160	172	178	158			
RESIDUE, TOTAL		Tot. Sol., mg/L	00500	183	177	183	179	193	214	190	199	172			
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.87	1.76	1.78	1.72	1.92	1.77	1.96	1.72	1.44			
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	<5	<5	<5	<5	<5	<5	<5			
NITROGEN, AMMONIA		N, mg/L	00610	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			
NITROGEN, NITRATE	10	N, mg/L	00620	0.298	0.286	0.285	0.284	0.333	0.363	0.294	0.264	0.269			
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	0.159	0.175	<0.100	0.106	0.164	<0.100	<0.100	0.159	0.111			
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	<0.010	0.506	0.504	0.520	0.012	0.510	0.505	0.551	0.560			
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.076	1.163	1.109	1.069	0.098	1.172	1.099	1.110	1.062			
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 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			
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	2.0	1.5	1.5	1.4	1.1	1.1	1.5			

* Federal/State Secondary MCL's

** Action Level

*** Distribution samples are composited.

CITY OF CHICAGO - DEPARTMENT OF WATER - BUREAU OF WATER QUALITY
 WATER PURIFICATION LABORATORIES

SAMPLES COLLECTED November 15, 2000

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT					JARDINE WATER PURIFICATION PLANT				
				RAW LAKE	OUTLETS		***DISTRIBUTION South	RAW LAKE	OUTLETS		***DISTRIBUTION		
					73rd Street	79th Street			Central	North		Central	North
ALUMINUM		Al, µg/L	01105	101	76	68	77	179	74	65	61	74	
ANTIMONY	6	Sb, µg/L	01268	<3	<3	<3	<3	<3	<3	<3	<3	<3	
ARSENIC	50	As, µg/L	01002	<4	<4	<4	<4	<4	<4	<4	<4	<4	
BARIUM	2000	Ba, µg/L	01007	16	15	14	14	16	15	15	14	14	
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1	
BORON		B, µg/L	01022	21	22	32	13	24	26	21	19	27	
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	*300	Fe, µg/L	01045	40	<8	<8	16	25	<8	<8	12	38	
LEAD	**15	Pb, µg/L	01051	<3	<3	<3	<3	<3	<3	<3	<3	<3	
LITHIUM		Li, µg/L	01132	2	2	3	3	4	2	2	2	4	
MANGANESE	*50	Mn, µg/L	01055	<2	<2	<2	<2	<2	<2	<2	<2	<2	
MERCURY	2	Hg, µg/L	71900	Instrument out of service									
MOLYBDENUM		Mo, µg/L	01062	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NICKEL	100	Ni, µg/L	01067	<2	<2	<2	<2	5	<2	<2	<2	<2	
SELENIUM	50	Se, µg/L	01147	<3	<3	<3	<3	<3	<3	<3	<3	<3	
SILICON		Si, µg/L	01142	345	492	469	507	416	580	551	603	586	
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1	
STRONTIUM		Sr, µg/L	01082	111	110	111	109	112	111	110	108	108	
THALLIUM	2	Tl, µg/L	01059	<2	<2	<2	<2	<2	<2	<2	<2	<2	
TITANIUM		Ti, µg/L	01152	<5	<5	<5	<5	<5	<5	<5	<5	<5	
VANADIUM		V, µg/L	00985	3	<3	<3	<3	<3	<3	<3	<3	<3	
ZINC	*5000	Zn, µg/L	01092	7	7	4	13	12	<3	4	18	32	

* Federal/State Secondary MCL's ** Action Level *** Distribution samples are composted. *

Ad' Connor (H. Eckel)
 CHIEF WATER CHEMIST

Stephanie Washburn's
 DIRECTOR, WATER PURIFICATION LABORATORIES

Steve P. Danagan
 DEPUTY COMMISSIONER