

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

SAMPLES COLLECTED MARCH 13, 2001

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		
TEMPERATURE		°C	00010	4	5	5	5	4	5	5	5	5	5		
TURBIDITY	0.5	N.T.U.	82079	8.60	0.10	0.15	0.15	13.5	0.20	0.15	0.15	0.15	0.20		
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	2G	2Cc	2Cc	1Cc	2G	2Cc	2Cc	1Cc	2Cc	2Cc		
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.			1M	2M	1M		2M	2M	1M	2M	2M		
COLOR	*15	Pt.-Co. Units	00080	8	0	1	0	6	0	0	0	0	1		
pH	*6.5-8.5	STD. Units	00040	8.28	7.63	7.62	7.72	8.20	7.64	7.68	7.71	7.71	7.72		
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	0.00	0.85	0.81	0.76	0.00	0.86	0.85	0.77	0.77	0.78		
SATURATION INDEX, LANGELIER		UNITS +/-		0.33	-0.32	-0.32	-0.23	0.25	-0.31	-0.27	-0.24	-0.24	-0.23		
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0	0	0		
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	111	102	102	103	112	105	105	102	102	106		
BROMIDE		Br, mg/L	71870	0.024	<0.003	<0.003	<0.003	0.025	<0.003	<0.003	<0.003	<0.003	<0.003		
CHLORIDE	*250	Cl, mg/L	00940	11.1	11.8	11.9	11.6	12.3	13.1	13.2	13.4	13.4	13.8		
FLUORIDE	4	F, mg/L	00951	0.23	1.02	1.02	1.00	0.24	0.94	0.98	0.98	0.98	0.98		
SULFATE	*250	SO ₄ , mg/L	00945	22.0	27	26.9	26.9	22.4	26.9	26.3	26.9	26.9	26.2		
HARDNESS		CaCO ₃ , mg/L	00900	142	144	147	142	132	141	142	145	145	143		
CALCIUM		Ca, mg/L	00916	30.9	31.9	31.4	30.5	31.5	30.9	31.4	32.5	32.5	31.4		
MAGNESIUM		Mg, mg/L	00927	11.8	11.5	11.3	11.5	12.2	11.0	10.7	11.7	11.7	11.8		
POTASSIUM		K, mg/L	00937	1.4	1.3	1.3	1.4	1.5	1.3	1.3	1.3	1.3	1.4		
SODIUM		Na, mg/L	00006	7.9	7.2	7.2	7.0	7.8	7.8	7.7	7.9	7.9	8.0		
RESIDUE, TOTAL DISSOLVED	*500	TDS, mg/L	00150	153	151	153	150	152	149	153	151	151	150		
RESIDUE, TOTAL		Tot. Sol., mg/L	00500	158	155	161	158	158	153	155	154	154	162		
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.60	1.70	1.72	1.63	1.47	1.82	1.73	1.50	1.50	1.58		
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		
NITROGEN, AMMONIA		N, mg/L	00610	0.06	<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	0.349	0.275	0.275	0.281	0.296	0.291	0.292	0.294	0.294	0.301		
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	0.194	0.228	0.183	<0.100	0.233	<0.100	0.142	0.152	0.152	0.185		
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	0.057	0.444	0.481	0.460	0.073	0.443	0.403	0.430	0.430	0.421		
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.124	0.956	1.056	1.024	0.132	0.970	1.003	1.035	1.035	1.025		
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	1.81	1.75	1.46	1.33	1.43	1.59	2.46	1.00	1.00	1.00		
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	1.6	1.3	<1	1.2	1.4	1.4	1.8	1.2	1.2	1.7		

* Federal/State Secondary MCL's

** Action Level

*** Distribution samples are composited.

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

SAMPLES COLLECTED MARCH 13, 2001

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				
ALUMINUM		Al, µg/L	01105	130	54	52	51	117	55	60	54	63		
ANTIMONY	6	Sb, µg/L	01268	<2	<2	<2	<2	<2	<2	<2	<2	<2		
ARSENIC	50	As, µg/L	01002	<3	<3	<3	<3	<3	<3	<3	<3	<3		
BARIIUM	2000	Ba, µg/L	01007	18	17	17	16	19	17	17	17	17		
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1		
BORON		B, µg/L	01022	43	51	34	38	40	39	33	36	44		
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	175	<8	<8	8	188	<8	18	11	47		
LEAD	**15	Pb, µg/L	01051	<3	<3	<3	<3	<3	<3	<3	<3	<3		
LITHIUM		Li, µg/L	01132	2	1	3	1	4	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	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	<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	832	719	703	726	773	732	734	780	754		
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1		
STRONTIUM		Sr, µg/L	01082	119	119	116	116	122	120	120	119	119		
THALLIUM	2	Tl, µg/L	01059	<3	<3	<3	<3	<3	<3	<3	<3	<3		
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	5	<3	12	5	<3	<3	22	17		

* Federal/State Secondary MCL's

** Action Level

*** Distribution samples are composited.

David L. Cannon

Lucretia Wardlaw

Sean P. Flanagan

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

SAMPLES COLLECTED MAY 22, 2001

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	
					73rd Street	78th Street			Central	North		Central
TEMPERATURE		*C	00010	17	16	17	16	16	17	17	16	16
TURBIDITY	0.5	NTU	82079	0.50	0.10	0.10	0.20	1.00	0.10	0.10	0.10	0.20
THRESHOLD ODOR, STRAIGHT	*3	TON	00086	2M	2Cc	2Cc	1Cc	2G	2Cc	2Cc	1Cc	2Cc
THRESHOLD ODOR, DECHLORINATED	*3	TON			1M	1M	1M		2M	1M	2M	1M
COLOR	*15	Pt-Co Units	00080	1	0	0	0	2	0	0	0	0
pH	6.5-8.5	STD. Units	00040	8.22	7.71	7.73	7.79	8.35	7.70	7.71	7.83	7.81
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	0.00	0.93	0.84	0.67	0.00	0.82	0.82	0.71	0.76
SATURATION INDEX, LANGELIER		UNITS +/-		0.12	-0.34	-0.37	-0.26	0.25	-0.35	-0.39	-0.22	-0.24
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0	0
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	106	99	102	97	107	99	98	98	98
BROMIDE		Br, mg/L	71870	0.027	<0.003	<0.003	<0.003	0.023	<0.003	<0.003	<0.003	<0.003
CHLORIDE	*250	Cl, mg/L	00940	10.8	12.2	12.0	12.0	10.9	13.3	12.3	12.3	12.2
FLUORIDE	4	F, mg/L	00951	0.18	0.98	0.98	1.00	0.18	1.04	1.03	1.03	1.03
SULFATE	*250	SO ₄ , mg/L	00945	21.7	25.1	25.0	24.7	21.6	24.8	24.5	24.3	24.8
HARDNESS		CaCO ₃ , mg/L	00900	151	139	139	139	141	137	143	139	143
CALCIUM		Ca, mg/L	00916	33.6	34.4	33.6	34.8	33.1	34.3	33.6	34.3	34.5
MAGNESIUM		Mg, mg/L	00927	11.2	11.0	10.8	11.1	11.0	11.1	11.2	11.2	11.1
POTASSIUM		K, mg/L	00937	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6
SODIUM		Na, mg/L	00006	7.1	7.4	7.5	7.5	6.8	7.4	7.4	7.5	7.4
RESIDUE, TOTAL DISSOLVED	*500	TDS, mg/L	00150	159	170	168	163	164	170	168	168	168
RESIDUE, TOTAL		Tot. Sol., mg/L	00500	169	179	174	163	166	173	174	178	178
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.52	1.41	1.47	1.37	1.74	1.55	1.81	1.36	1.41
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	<5	<5	<5	<5	<5	<5	<5
NITROGEN, AMMONIA		N, mg/L	00610	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01
NITROGEN, NITRATE	10	N, mg/L	00620	0.256	0.247	0.240	0.246	0.210	0.225	0.230	0.222	0.222
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	0.170	0.238	0.173	0.105	0.176	0.114	0.100	0.261	0.119
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	0.023	0.474	0.479	0.451	0.022	0.461	0.452	0.445	0.448
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.098	0.961	0.946	0.993	0.098	0.953	1.009	0.960	0.983
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	0.07	<0.025	<0.025	<0.025	<0.025
PHENOLICS, TOTAL		Phenol, µg/L	32730	<1	<1	<1	<1	<1	<1	1.9	<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	1.2	1.4	<1	1.2	1.4	<1	1.3	1.2	1.5

* Federal/State Secondary MCL's

** Action Level

***Distribution samples are composited.

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

SAMPLES COLLECTED MAY 22, 2001

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT					
				RAW LAKE	OUTLETS		***DISTRIBUTION	RAW LAKE	OUTLETS		***DISTRIBUTION		
					73rd Street	79th Street			Central	North		Central	North
ALUMINUM		Al, µg/L	01105	108	216	217	189	126	193	177	179	243	
ANTIMONY	6	Sb, µg/L	01268	<2	<2	<2	<2	2	<2	<2	<2	<2	
ARSENIC	50	As, µg/L	01002	<3	<3	<3	<3	<3	<3	<3	<3	<3	
BARIUM	2000	Ba, µg/L	01007	13	18	13	13	12	14	14	14	13	
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1	
BORON		B, µg/L	01022	109	107	100	107	91	109	118	107	99	
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	16	<4	4	12	25	<4	<4	35	77	
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	Instrument out of service								<2	<2
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	411	547	558	580	302	506	502	506	500	
SILVER	*100	Ag, µg/L	01077	<2	<2	<2	<2	<2	<2	<2	<2	<2	
STRONTIUM		Sr, µg/L	01082	120	120	122	121	122	122	122	122	123	
THALLIUM	2	Tl, µg/L	01059	<3	<3	<3	<3	<3	<3	<3	<3	<3	
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	10	3	<3	<3	#14	14	

* Federal/State Secondary MCL's

** Action Level

*** Distribution samples are composited.

His name (the)
CHIEF WATER CHEMIST

Supriya Walubhai
DIRECTOR, WATER PURIFICATION LABORATORIES

Sean P. Paragor
DEPUTY COMMISSIONER

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

SAMPLES COLLECTED AUGUST 20, 2001

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
TEMPERATURE		°C	00010	22	23	23	24	22	23	23	24	24
TURBIDITY	0.5	N.T.U.	82079	2.70	0.10	0.10	0.15	3.15	0.10	0.10	0.20	0.15
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1Df	2Cc	2Cc	2Cc	2M	2Cc	2Cc	2Cc	2Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.			1M	1M	1M		2M	1G	1G	1G
COLOR	*15	Pt.-Co. Units	00080	2	0	0	0	2	0	0	0	0
pH	*6.5-8.5	STD. Units	00040	8.07	7.39	7.43	7.51	8.08	7.49	7.53	7.63	7.56
FREE CHLORINE RESIDUAL		Cl ₂ , mg/L	50064	0.00	0.92	0.89	0.66	0.00	0.88	0.90	0.73	0.66
SATURATION INDEX, LANGELEIR		UNITS +/-		0.15	-0.46	-0.47	-0.44	0.08	-0.46	-0.42	-0.32	-0.39
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0	0
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	110	100	97	98	107	100	99	100	100
BROMIDE		Br, mg/L	71870	0.024	<0.003	<0.003	<0.003	0.026	<0.003	<0.003	<0.003	<0.003
CHLORIDE	*250	Cl, mg/L	00940	10.5	12.8	12.9	12.7	10.5	12.9	13.0	13.4	13.0
FLUORIDE	4	F, mg/L	00951	0.18	0.97	0.90	0.89	0.16	1.00	1.00	0.99	1.01
SULFATE	*250	SO ₄ , mg/L	00945	21.8	27.7	27.3	27.3	22.0	25.6	25.7	25.7	25.3
HARDNESS		CaCO ₃ , mg/L	00900	141	140	146	144	140	140	138	143	145
CALCIUM		Ca, mg/L	00916	34.2	34.2	33.7	33.1	32.8	33.0	33.5	33.0	33.2
MAGNESIUM		Mg, mg/L	00927	11.3	11.1	11.0	11.0	11.4	11.4	11.3	11.1	10.9
POTASSIUM		K, mg/L	00937	1.2	1.3	1.3	1.2	1.2	1.2	1.3	1.2	1.2
SODIUM		Na, mg/L	00006	6.4	6.8	6.8	6.8	6.2	6.7	6.8	6.7	6.6
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	160	161	160	171	154	154	168	160	163
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	188	196	196	190	196	191	178	184	188
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.87	1.60	1.52	1.54	1.82	1.58	1.62	1.59	1.58
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	<5	<5	<5	<5	<5	<5	<5
NITROGEN, AMMONIA		N, mg/L	00610	<0.01	<0.01	<0.01	0.01	0.02	<0.01	<0.01	<0.01	<0.01
NITROGEN, NITRATE	10	N, mg/L	00620	0.232	0.207	0.210	0.204	0.190	0.193	0.191	0.210	0.194
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	0.173	<0.10	0.118	<0.10	0.170	<0.10	0.126	0.103	0.137
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	<0.010	0.561	0.531	0.519	<0.010	0.509	0.501	0.524	0.499
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.023	1.181	1.055	1.069	0.028	0.914	0.915	1.100	0.966
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	pc/iL	01501	<1	<1	<1	<1	<1	<1	<1	<1	<1
RADIOACTIVITY, GROSS BETA	50	pc/iL	03501	<1	<1	<1	<1	<1	<1	<1	<1	<1

* Federal/State Secondary MCL's

** Action Level

***Distribution samples are composited.

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

SAMPLES COLLECTED AUGUST 20, 2001

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				RAW LAKE	OUTLETS		***DISTRIBUTION	RAW LAKE	OUTLETS		***DISTRIBUTION	
					73rd Street	79th Street			Central	North		Central
ALUMINUM		Al, µg/L	01105	155	123	153	111	198	143	137	163	116
ANTIMONY	6	Sb, µg/L	01268	<2	<2	<2	<2	<2	<2	<2	<2	<2
ARSENIC	50	As, µg/L	01002	<3	<3	<3	<3	<3	<3	<3	<3	<3
BARIUM	2000	Ba, µg/L	01007	20	21	20	20	19	19	18	19	19
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	25	35	36	30	39	27	33	30	33
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	60	<4	<4	<4	25	<4	<4	<4	10
LEAD	**15	Pb, µg/L	01051	<3	<3	<3	4	<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	<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	467	463	415	430	446	402	419	449	452
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	118	118	119	119	117	117	118	115	116
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	4	<3	4	<3	<3	<3
ZINC	*5000	Zn, µg/L	01092	<4	4	11	<4	6	<4	5	14	14

* Federal/State Secondary MCL's

** Action Level

***Distribution samples are composited.

Angel D. Carver
CHIEF WATER CHEMIST

Karynne W. Anderson
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 NOVEMBER 11, 2001

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT						JARDINE WATER PURIFICATION PLANT					
				RAWE LAKE	OUTLETS		***DISTRIBUTION SOUTH	RAWE LAKE	OUTLETS		***DISTRIBUTION Central	North	Central	North	
					73rd Street	79th Street			Central	North					
TEMPERATURE		°C	00010	11	12	13	14	11	13	13	16	17			
TURBIDITY	0.5	N.T.U.	82079	1.75	0.10	0.10	0.15	1.05	0.10	0.10	0.10	0.20			
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	2Df	2Cc	2Cc	2Cc	1Df	2Cc	2Cc	2Cc	2Cc			
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N			2M	2M	1M		1M	1M	2M	1M			
COLOR	*15	Pl.Co. Units	00080	3	1	1	0	7	0	0	0	0			
pH	*5-8.5	STD. Units	00040	8.29	7.34	7.31	7.36	8.27	7.41	7.39	7.42	7.55			
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	0.00	0.94	0.92	0.63	0.00	0.71	0.70	0.67	0.72			
SATURATION INDEX, LANGELIER		UNITS +/-		0.34	-0.66	-0.69	-0.54	0.32	-0.54	-0.56	-0.58	-0.40			
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0	0			
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	109	97	104	99	112	102	104	105	97			
BROMIDE		Br, mg/L	71870	0.023	<0.003	<0.003	<0.003	0.026	<0.003	<0.003	<0.003	<0.003			
CHLORIDE	*250	Cl, mg/L	00940	10.0	11.2	11.2	11.5	11.6	12.4	12.4	12.0	12.3			
FLUORIDE	4	F, mg/L	00951	0.22	1.03	1.01	1.04	0.23	1.06	1.05	1.05	1.05			
SULFATE	*250	SO ₄ , mg/L	00945	21.5	27.0	26.4	26.6	23.5	26.2	26.2	26.0	25.9			
HARDNESS		CaCO ₃ , mg/L	00900	146	135	137	136	135	139	137	135	138			
CALCIUM		Ca, mg/L	00916	34.5	33.1	32.2	33.5	34.3	36.2	33.3	34.7	34.8			
MAGNESIUM		Mg, mg/L	00927	11.2	11.1	11.0	11.1	11.5	11.5	11.1	11.4	11.4			
POTASSIUM		K, mg/L	00937	1.5	1.4	1.4	1.4	1.6	1.6	1.6	1.5	1.5			
SODIUM		Na, mg/L	00006	7.1	6.9	6.9	7.1	7.4	7.8	7.6	7.5	7.6			
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	140	147	160	158	150	158	152	157	158			
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	200	234	179	219	198	218	187	204	198			
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.72	1.55	1.53	1.43	1.68	1.57	1.53	1.47	1.50			
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	<5	<5	<5	<5	<5	<5	<5			
NITROGEN, AMMONIA		N, mg/L	00610	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			
NITROGEN, NITRATE	10	N, mg/L	00620	0.221	0.216	0.213	0.236	0.300	0.267	0.267	0.253	0.263			
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	0.179	0.146	<0.1	0.130	0.256	0.114	0.146	<0.1	0.120			
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	0.067	0.421	0.446	0.505	0.076	0.452	0.448	0.470	0.500			
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.082	0.997	1.066	1.097	0.117	1.114	1.115	1.047	1.271			
CYANIDE, TOTAL	0.2	CN, mg/L	00720	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001			
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	<1	<1	<1	<1	<1	<1	<1	<1			

* Federal/State Secondary MCL's

** Action Level

*** Distribution samples are composited

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

SAMPLES COLLECTED NOVEMBER 11, 2001

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				RAW LAKE	OUTLETS		***DISTRIBUTION	RAW LAKE	OUTLETS		***DISTRIBUTION	
					73rd Street	79th Street	South		Central	North	Central	North
ALUMINUM		Al, µg/L	01105	62	66	57	40	61	74	65	61	59
ANTIMONY	6	Sb, µg/L	01288	<2	<2	<2	<2	<2	<2	<2	<2	<2
ARSENIC	50	As, µg/L	01002	<3	<3	<3	<3	<3	<3	<3	<3	<3
BARIUM	2000	Ba, µg/L	01007	23	23	21	22	26	24	25	24	24
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	36	30	32	37	38	39	38	33	34
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	<4	<4	<4	12	90	<4	<4	10	41
LEAD	**15	Pb, µg/L	01051	<3	<3	<3	<3	<3	<3	<3	<3	<3
LITHIUM		Li, µg/L	01132	4	3	4	4	4	0	2	2	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	<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	<1	<1	<1	<1	<1	<1	<1	<1	<1
SILICON		Si, µg/L	01142	441	593	572	626	601	688	679	696	700
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	112	113	112	115	115	117	115	115	113
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	*3000	Zn, µg/L	01092	<4	<4	<4	13	4	<4	<4	15	14

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

Ad'Connor (Itel) *Robert M. Hawkins* *Sean P. Heenan*
 CHIEF WATER CHEMIST DIRECTOR, WATER PURIFICATION LABORATORIES DEPUTY COMMISSIONER