

COMPREHENSIVE CHEMICAL ANALYSIS
CITY OF CHICAGO - DEPARTMENT OF WATER MANAGEMENT - BUREAU OF WATER SUPPLY
WATER QUALITY DIVISION-WATER PURIFICATION LABORATORIES
 LABORATORY ACCREDITATION NUMBER : 100228

SAMPLES COLLECTED: March 03, 2005

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	2	2	4	1	5	5	3	5			
TURBIDITY	0.5	N.T.U.	82079	12.10	0.20	0.15	0.25	6.25	0.20	0.20	0.20	0.30			
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	2M	2Cc	2Cc	1Cc	2M	2Cc	2Cc	1Cc	1Cc			
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N			1M	1M	1M		1M	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	8.10	7.60	7.50	7.65	8.10	7.60	7.64	7.68	7.87			
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	0.00	0.90	0.90	0.71	0.00	0.90	0.90	0.67	0.67			
SATURATION INDEX, LANGELIER		UNITS +/-		0.27	-0.30	-0.42	-0.25	0.22	-0.33	-0.29	-0.20	-0.01			
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0	0			
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	113	102	103	103	110	101	101	103	103			
BROMIDE		Br, mg/L	71870	0.030	<0.006	<0.006	<0.006	0.027	<0.006	<0.006	<0.006	<0.006			
CHLORIDE	*250	Cl, mg/L	00940	13.7	14.3	14.3	14.2	11.6	13.0	13.0	15.0	14.9			
FLUORIDE	4	F, mg/L	00951	0.15	0.88	0.88	0.87	0.14	0.91	0.93	0.92	0.93			
SULFATE	*250	SO ₄ , mg/L	00945	23.3	29.9	29.9	29.6	22.0	27.5	27.4	28.6	28.4			
HARDNESS		CaCO ₃ , mg/L	00900	146	138	140	140	138	138	142	144	143			
CALCIUM		Ca, mg/L	00916	37.8	37.6	36.3	37.7	37.2	35.8	36.4	36.7	36.6			
MAGNESIUM		Mg, mg/L	00927	11.7	11.7	11.8	11.7	11.8	11.1	11.4	11.6	11.6			
POTASSIUM		K, mg/L	00937	1.3	1.5	1.3	1.5	1.1	1.6	1.8	1.3	1.7			
SODIUM		Na, mg/L	00006	7.4	7.5	7.4	7.2	6.3	6.7	6.5	7.7	7.6			
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	165	156	150	169	154	157	156	161	160			
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	179	187	189	174	181	184	188	189	190			
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.72	1.56	1.54	2.39	1.75	1.55	1.54	1.62	1.83			
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	<5	<5	<5	<5	<5	<5	<5			
NITROGEN, AMMONIA		N, mg/L	00610	0.06	0.05	0.04	0.04	0.04	0.02	0.04	0.02	0.04			
NITROGEN, NITRATE	10	N, mg/L	00620	0.389	0.360	0.362	0.367	0.326	0.329	0.330	0.379	0.379			
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	0.155	0.156	0.114	0.141	0.178	<0.1	0.164	0.153	0.138			
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	<0.05	0.427	0.413	0.429	<0.05	0.440	0.453	0.473	0.425			
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	<0.05	0.900	0.932	0.795	<0.05	1.040	0.839	0.991	0.908			
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			
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 MANAGEMENT - BUREAU OF WATER SUPPLY
WATER QUALITY DIVISION-WATER PURIFICATION LABORATORIES
 LABORATORY ACCREDITATION NUMBER : 100228

SAMPLES COLLECTED: March 03, 2005

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	79th Street			Central	North		Central
ALUMINUM		Al, µg/L	01105	131	47	47	39	131	38	45	30	38
ANTIMONY	6	Sb, µg/L	01268	<1	<1	<1	<1	<1	<1	<1	1.3	<1
ARSENIC	50	As, µg/L	01002	<1	<1	<1	<1	1	<1	<1	<1	<1
BARIUM	2000	Ba, µg/L	01007	21	20	20	20	22	20	21	20	21
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	25	26	26	27	22	26	24	24	24
CADMIUM	5	Cd, µg/L	01027	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHROMIUM	100	Cr, µg/L	01034	3	4	4	3	4	2	3	2	<1
COBALT		Co, µg/L	01037	<1	<1	<1	<1	<1	<1	<1	<1	<1
COPPER	**1300	Cu, µg/L	01042	<3	<3	<3	<3	5	<3	<3	<3	<3
IRON	*300	Fe, µg/L	01045	11	<9	<9	<9	<9	<9	<9	<9	<9
LEAD	**15	Pb, µg/L	01051	<3	<3	<3	<3	<3	<3	<3	<3	<3
LITHIUM		Li, µg/L	01132	<2	<2	<2	<2	<2	<2	<2	<2	<2
MANGANESE	*50	Mn, µg/L	01055	<5	<5	<5	<5	<5	<5	<5	<5	<5
MERCURY	2	Hg, µg/L	71900	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
MOLYBDENUM		Mo, µg/L	01062	1	1	1	1	<1	1	1	1	1
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	1189	1134	1158	1174	1164	1190	1196	1170	1214
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	133	135	133	132	121	128	128	137	131
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	1	1	1	1	2	<1	1	<1	<1
ZINC	*5000	Zn, µg/L	01092	12	<4	<4	9	<4	8	10	6	13

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

CHIEF WATER CHEMIST

DIRECTOR, WATER PURIFICATION LABORATORIES

DEPUTY COMMISSIONER

COMPREHENSIVE CHEMICAL ANALYSIS
CITY OF CHICAGO - DEPARTMENT OF WATER MANAGEMENT - BUREAU OF WATER SUPPLY
WATER QUALITY DIVISION-WATER PURIFICATION LABORATORIES
 LABORATORY ACCREDITATION NUMBER: 100228

SAMPLE COLLECTED: May 10, 2005, REVISED DATE: August 9, 2005

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	11	12	12	11	11	11	11	12
TURBIDITY	0.5	N.T.U.	82079	1.30	0.25	0.30	0.20	1.40	0.20	0.20	0.19
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1Mm	2Cc	1.5Cc	1Cc	1Mm	2Cc	1.5Cc	2Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N		-	1Mm	1G	1Ep	-	1G	1M	1G
COLOR	*15	Pt.-Co. Units	00080	0	0	0	0	0	0	0	0
pH	*6.5-8.5	STD. Units	00040	8.25	7.23	7.31	7.41	8.33	7.42	7.70	7.43
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	0.00	0.90	0.91	0.62	0.00	0.93	0.93	0.65
SATURATION INDEX, LANGELIER		UNITS +/-		0.25	-0.79	-0.72	-0.65	0.24	-0.64	-0.38	-0.67
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	111	106	97	97	107	99	98	98
BROMIDE		Br, mg/L	71870	0.028	<0.006	<0.006	<0.006	0.027	<0.006	<0.006	<0.006
CHLORIDE	*250	Cl, mg/L	00940	12.8	14.6	14.7	14.8	12.6	14.0	13.9	14.1
FLUORIDE	4	F, mg/L	00951	0.17	1.05	1.02	1.00	0.16	1.12	1.15	1.14
SULFATE	*250	SO ₄ , mg/L	00945	22.5	28.6	28.3	28.4	22.1	26.8	26.6	26.7
HARDNESS		CaCO ₃ , mg/L	00900	135	137	139	135	134	136	136	137
CALCIUM		Ca, mg/L	00916	33.0	33	32.7	33.1	30.7	32.3	32.7	32.4
MAGNESIUM		Mg, mg/L	00927	11.3	10.9	11.0	11.0	10.7	11.1	11.2	11.0
POTASSIUM		K, mg/L	00937	1.0	1.0	1.4	1.2	1.0	1.1	1.2	1.6
SODIUM		Na, mg/L	00006	6.8	7.5	7.5	7.6	6.7	7.0	7.0	7.2
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	164	161	160	170	170	163	161	169
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	174	176	177	177	176	175	176	175
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.65	1.48	1.45	1.46	1.50	1.49	1.50	1.49
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	9.0	<5	5.50	5.80	5.80	<5.0
NITROGEN, AMMONIA		N, mg/L	00610	0.02	0.03	0.03	0.04	0.03	0.03	0.03	0.03
NITROGEN, NITRATE	10	N, mg/L	00620	0.318	0.318	0.320	0.325	0.300	0.302	0.296	0.306
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	o/s	o/s	o/s	o/s	o/s	o/s	o/s	o/s
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	<0.05	0.430	0.498	0.538	<0.05	0.565	0.517	0.572
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.154	1.141	1.323	0.944	0.146	1.393	1.038	1.338
CYANIDE, TOTAL	0.2	CN, mg/L	00720	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	<1	<1	<1	<1	<1	<1	<1	<1
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	<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 MANAGEMENT - BUREAU OF WATER SUPPLY
WATER QUALITY DIVISION-WATER PURIFICATION LABORATORIES
 LABORATORY ACCREDITATION NUMBER: 100228

SAMPLE COLLECTED: May 10, 2005

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	26	40	42	40	48	41	48	36	41	
ANTIMONY	6	Sb, µg/L	01268	<1	<1	<1	<1	<1	<1	<1	<1	<1	
ARSENIC	50	As, µg/L	01002	<3	<3	<3	<3	<3	<3	<3	<3	<3	
BARIUM	2000	Ba, µg/L	01007	21	20	20	20	21	20	20	20	20	
BERYLLIUM	4	Be, µg/L	01012	<3	<3	<3	<3	<3	<3	<3	<3	<3	
BORON		B, µg/L	01022	26	27	29	28	27	25	23	<10	14	
CADMIUM	5	Cd, µg/L	01027	<3	<3	<3	<3	<3	<3	<3	<3	<3	
CHROMIUM	100	Cr, µg/L	01034	6	7	7	4	10	<3	3	<3	<3	
COBALT		Co, µg/L	01037	<3	<3	<3	<3	<3	<3	<3	<3	<3	
COPPER	**1300	Cu, µg/L	01042	<3	<3	<3	<3	<3	<3	<3	<3	<3	
IRON	*300	Fe, µg/L	01045	11	<9	<9	<9	19	<9	<9	<9	<9	
LEAD	**15	Pb, µg/L	01051	<3	<3	<3	<3	<3	<3	<3	<3	<3	
LITHIUM		Li, µg/L	01132	3	3	3	2	2	2	2	2	2	
MANGANESE	*50	Mn, µg/L	01055	<3	<3	<3	<3	<3	<3	<3	<3	<3	
MERCURY	2	Hg, µg/L	71900	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
MOLYBDENUM		Mo, µg/L	01062	<3	<3	<3	<3	<3	<3	<3	<3	<3	
NICKEL	100	Ni, µg/L	01067	<3	<3	<3	<3	<3	7	11	<3	<3	
SELENIUM	50	Se, µg/L	01147	<1	2	2	2	<1	1	1	2	1	
SILICON		Si, µg/L	01142	734	872	876	616	699	859	871	859	851	
SILVER	*100	Ag, µg/L	01077	<3	<3	<3	<3	<3	<3	<3	<3	<3	
STRONTIUM		Sr, µg/L	01082	123	122	121	124	122	119	123	123	126	
THALLIUM	2	Tl, µg/L	01059	<1	<1	<1	<1	<1	<1	<1	<1	<1	
TITANIUM		Ti, µg/L	01152	26	35	36	28	26	27	31	31	26	
VANADIUM		V, µg/L	00985	2	3	3	1	1	<1	1	1	<1	
ZINC	*5000	Zn, µg/L	01092	12	<4	<4	<4	<4	<4	<4	<4	<4	

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

Henry J. Davis
 WATER CHEMIST

AR S
 DIRECTOR, WATER PURIFICATION LABORATORIES

AR S
 WATER QUALITY MANAGER

COMPREHENSIVE CHEMICAL ANALYSIS
CITY OF CHICAGO - DEPARTMENT OF WATER MANAGEMENT - BUREAU OF WATER SUPPLY
WATER QUALITY DIVISION-WATER PURIFICATION LABORATORIES
 LABORATORY ACCREDITATION NUMBER: 100228

SAMPLES COLLECTED: September 20, 2005

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	20	22	22	21	19	18	19	21	22
TURBIDITY	0.5	N.T.U.	82079	0.75	****0.10	****0.10	0.25	1.10	****0.10	****0.10	0.25	0.20
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1M	1Cc	1Cc	1Cc	1M	1Cc	1Cc	1Cc	1Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.		1M	1M	1M	1M	1M	1M	1M	1M	1M
COLOR	*15	Pl.-Co. Units	00080	0	0	0	0	0	0	0	0	0
pH	*6.5-8.5	STD. Units	00040	8.14	7.37	7.32	7.43	8.04	7.37	7.33	7.48	7.50
FREE CHLORINE RESIDUAL		Cl ₂ mg/L	50064	0.00	0.96	0.93	0.61	0.00	0.93	0.93	0.44	3.56
SATURATION INDEX, LANGELIER		UNITS +/-		0.27	-0.51	-0.56	-0.45	0.19	-0.50	-0.55	-0.37	-0.36
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ mg/L	00415	0	0	0	0	0	0	0	0	0
ALKALINITY, TOTAL		CaCO ₃ mg/L	00410	110	102	102	102	110	104	103	104	102
BROMIDE		Br. mg/L	71870	0.031	<0.006	<0.006	<0.006	0.029	<0.006	<0.006	<0.006	<0.006
CHLORIDE	*250	Cl. mg/L	00940	12.5	13.8	13.8	13.6	11.8	13.5	13.3	13.4	13.3
FLUORIDE	4	F. mg/L	00951	0.22	0.94	0.97	0.94	0.21	0.92	0.92	0.93	0.93
SULFATE	*250	SO ₄ mg/L	00945	23.7	28.7	28.5	27.7	22.9	28.1	28.0	27.9	27.5
HARDNESS		CaCO ₃ mg/L	00900	140	142	138	140	142	136	136	137	135
CALCIUM		Ca. mg/L	00916	35.7	35.8	36.0	36.1	35.8	35.6	35.5	37.9	35.5
MAGNESIUM		Mg. mg/L	00927	11.3	10.9	10.8	11.0	11.0	10.6	10.9	10.7	11.0
POTASSIUM		K. mg/L	00937	1.1	1.1	1.2	1.2	1.2	1.1	1.1	1.1	1.0
SODIUM		Na. mg/L	00006	6.4	6.6	6.6	6.5	5.7	6.2	6.1	6.0	6.0
SOLIDS, TOTAL DISSOLVED	*500	TDS. mg/L	00150	172	185	165	166	158	163	162	161	178
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	181	176	177	178	169	175	173	174	181
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.94	2.20	2.01	1.99	2.40	2.01	2.06	1.88	2.00
OXYGEN DEMAND, CHEMICAL		O. mg/L	00335	<5	5.1	12	<5	5.1	<5	5.6	6.6	8.4
NITROGEN, AMMONIA		N. mg/L	00610	0.02	0.01	0.01	0.01	0.01	<0.01	<0.01	0.01	<0.01
NITROGEN, NITRATE	10	N. mg/L	00620	0.261	0.233	0.236	0.214	0.222	0.215	0.210	0.209	0.214
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	o/s	o/s	o/s	o/s	o/s	o/s	o/s	o/s	o/s
ORTHOPHOSPHATE		PO ₄ mg/L	00660	<0.05	0.454	0.434	0.483	<0.05	0.438	0.436	0.443	0.449
PHOSPHATE, TOTAL		PO ₄ mg/L	00650	<0.05	0.879	0.850	0.955	<0.05	0.850	0.857	0.872	0.901
CYANIDE, TOTAL	0.2	CN, mg/L	00720	<0.001	<0.001	<0.001	<0.001	0.002	0.002	0.002	0.001	0.001
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.

**** Average Control Lab values of JWFP and SWPP

COMPREHENSIVE CHEMICAL ANALYSIS
CITY OF CHICAGO - DEPARTMENT OF WATER MANAGEMENT - BUREAU OF WATER SUPPLY
WATER QUALITY DIVISION-WATER PURIFICATION LABORATORIES
 LABORATORY ACCREDITATION NUMBER: 100228

SAMPLES COLLECTED: September 20, 2005

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	14	150	142	114	32	115	121	99	137	
ANTIMONY	6	Sb, µg/L	01268	<1	<1	<1	<1	<1	<1	<1	<1	<1	
ARSENIC	50	As, µg/L	01002	<1	<1	<1	<1	<1	<1	<1	<1	<1	
BARIUM	2000	Ba, µg/L	01007	22.2	22.1	21.8	21.5	21.9	21.6	21.5	21.9	20.6	
BERYLLIUM	4	Be, µg/L	01012	<2	<2	<2	<2	<2	<2	<2	<2	<2	
BORON		B, µg/L	01022	38	35	37	40	35	34	38	34	33	
CADMIUM	5	Cd, µg/L	01027	<1	<1	<1	<1	<1	<1	<1	<1	<1	
CHROMIUM	100	Cr, µg/L	01034	5	6	6	5	5	6	5	6	4	
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	<9	<9	<9	<9	27	<9	<9	<9	31	
LEAD	**15	Pb, µg/L	01051	<3	<3	<3	<3	<3	<3	<3	<3	<3	
LITHIUM		Li, µg/L	01132	<2	4	5	<2	<2	5	<2	<2	<2	
MANGANESE	*50	Mn, µg/L	01055	<8	<8	<8	<8	<8	<8	<8	<8	<8	
MERCURY	2	Hg, µg/L	71900	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
MOLYBDENUM		Mo, µg/L	01062	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.2	1.1	
NICKEL	100	Ni, µg/L	01067	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SELENIUM	50	Se, µg/L	01147	<1	1.3	1.4	1.6	<1	1.4	1.5	1.4	1.5	
SILICON		Si, µg/L	01142	577	750	733	780	629	778	763	784	780	
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1	
STRONTIUM		Sr, µg/L	01082	120	121	120	121	119	120	121	120	119	
THALLIUM	2	Tl, µg/L	01059	<1	<1	<1	<1	<1	<1	<1	<1	<1	
TITANIUM		Ti, µg/L	01152	33	33	30	28	31	30	29	29	28	
VANADIUM		V, µg/L	00985	2	3	3	2	2	2	2	2	2	
ZINC	*5000	Zn, µg/L	01092	<4	<4	8	9	<4	<4	<4	16	12	

* Federal/State Secondary MCL's

** Action Level

*** Distribution samples are composited.

[Signature]
 WATER CHEMIST IV

[Signature]
 DIRECTOR, WATER PURIFICATION LABORATORIES

[Signature]
 DEPUTY COMMISSIONER

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

LABORATORY ACCREDITATION NUMBER: 100228

SAMPLES COLLECTED: December 14, 2005

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	
TEMPERATURE		°C	00010	1	3	3	2	1	2	2	
TURBIDITY	0.5	N.T.U.	82079	4.6	0.10	0.10	0.10	8.2	0.10	0.10	
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1M	1CC	1CC	1CC	1M	1CC	1CC	
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.			1M	1M	1M		1M	1M	
COLOR	*15	Pt-Co. Units	00080	0	0	0	0	0	0	0	
pH	*6.5-8.5	STD. Units	00040	8.15	7.45	7.49	7.59	8.14	7.50	7.50	
FREE CHLORINE RESIDUAL		Cl ₂ , mg/L	50064	0.00	0.94	0.94	0.55	0.00	0.96	0.96	
SATURATION INDEX, LANGELIER		UNITS +/-		0.10	-0.61	-0.55	-0.53	0.08	-0.57	-0.55	
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	111	100	100	101	109	101	100	
BROMIDE		Br, mg/L	71870	0.027	<0.01	<0.01	<0.01	0.027	<0.01	<0.01	
CHLORIDE	*250	Cl, mg/L	00940	11.2	12.4	12.3	12.5	11.1	12.4	12.4	
FLUORIDE	4	F, mg/L	00951	0.16	0.90	0.92	0.92	0.17	0.91	0.94	
SULFATE	*250	SO ₄ , mg/L	00945	22.9	29.3	29.4	29.3	22.8	29.2	29.1	
HARDNESS		CaCO ₃ , mg/L	00900	136	140	136	135	135	138	140	
CALCIUM		Ca, mg/L	00916	33.3	35.5	36.1	35.1	32.6	35.4	35.0	
MAGNESIUM		Mg, mg/L	00927	12.1	12.5	12.6	12.2	11.9	12.8	12.7	
POTASSIUM		K, mg/L	00937	1.4	1.5	1.5	1.5	1.4	1.5	1.4	
SODIUM		Na, mg/L	00006	6.3	7.0	7.2	7.2	6.2	7.4	7.1	
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	162	167	161	159	149	90	147	
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	173	179	173	168	159	100	156	
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.76	2.15	1.95	1.64	1.88	1.55	1.62	
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	5.7	<5	<5	<5	11	<5	<5	
NITROGEN, AMMONIA		N, mg/L	00610	O/S	O/S	O/S	O/S	O/S	O/S	O/S	
NITROGEN, NITRATE	10	N, mg/L	00620	0.238	0.234	0.233	0.236	0.238	0.239	0.240	
NITROGEN, NITRITE	1	N, mg/L	00615	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
NITROGEN, TOTAL KJELDAHL		N, mg/L	00625	O/S	O/S	O/S	O/S	O/S	O/S	O/S	
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	<0.05	0.419	0.388	0.408	0.063	0.342	0.347	
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	<0.05	0.845	0.811	0.928	0.067	0.760	0.836	
CYANIDE, TOTAL	0.2	CN, mg/L	00720	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	<1	<1	<1	<1	<1	<1	<1	
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	<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 MANAGEMENT - BUREAU OF WATER SUPPLY
WATER QUALITY DIVISION-WATER PURIFICATION LABORATORIES
LABORATORY ACCREDITATION NUMBER: 100228**

SAMPLES COLLECTED: December 14, 2005

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				LAKE	OUTLETS		***DISTRIBUTION	LAKE	OUTLETS		***DISTRIBUTION	
					73rd Street	79th Street			Central	North		Central
ALUMINUM		Al, µg/L	01105	124	31	30	27	174	37	36	33	34
ANTIMONY	6	Sb, µg/L	01268	<1	<1	<1	<1	<1	<1	<1	<1	<1
ARSENIC	50	As, µg/L	01002	1	<1	<1	<1	1	<1	<1	<1	<1
BARIUM	2000	Ba, µg/L	01007	21	19	19	19	22	20	20	20	21
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	24	25	24	23	21	21	21	22	22
CADMIUM	5	Cd, µg/L	01027	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHROMIUM	100	Cr, µg/L	01034	5	6	6	5	5	6	5	6	4
COBALT		Co, µg/L	01037	<1	<1	<1	<1	<1	<1	<1	<1	<1
COPPER	**1300	Cu, µg/L	01042	<3	<3	<3	<3	4	<3	<3	<3	<3
IRON	*300	Fe, µg/L	01045	190	95	92	102	238	92	90	114	166
LEAD	**15	Pb, µg/L	01051	<3	<3	<3	<3	<3	<3	<3	<3	<3
LITHIUM		Li, µg/L	01132	2	2	2	2	2	<2	<2	<2	2
MANGANESE	*50	Mn, µg/L	01055	<8	<8	<8	<8	<8	<8	<8	<8	<8
MERCURY	2	Hg, µg/L	71900	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
MOLYBDENUM		Mo, µg/L	01062	1	1	1	1	1	1	1	1	1
NICKEL	100	Ni, µg/L	01067	<1	<1	<1	<1	5	6	4	1	1
SELENIUM	50	Se, µg/L	01147	<1	1	1	1	<1	1	1	1	1
SILICON		Si, µg/L	01142	977	1091	1132	1026	1280	1001	1039	1013	984
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	120	121	120	121	119	120	121	120	119
THALLIUM	2	Tl, µg/L	01059	<1	<1	<1	<1	<1	<1	<1	<1	<1
TITANIUM		Ti, µg/L	01152	32	30	27	27	39	39	34	26	31
VANADIUM		V, µg/L	00003	3	3	3	2	3	2	3	2	2
ZINC	*5000	Zn, µg/L	01092	<4	<4	<4	11	7	<4	<4	18	10

* Federal/State Secondary MCL's

** Action Level

*** Distribution samples are composited.

QC CHECKS WCIV

WATER CHEMIST

MANAGER, WATER QUALITY

DEPUTY COMMISSIONER