

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 COLLECTION DATE: JANUARY 16, 2008, (1st Qtr)

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		North	Central	Central	North
TEMPERATURE		°C	00010	1	3	3	5	1	5	5	7	7
TURBIDITY	0.5	N.T.U.	82079	2.20	0.10	0.10	0.10	2.20	0.10	0.10	0.10	0.15
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086		1Cc	1Cc	1Cc		1Cc	1Cc	1Cc	1Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.		1M	1M	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	7.52	7.49	7.57	8.09	7.58	7.58	7.66	7.69
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	0.00	0.96	0.97	0.84	0.00	0.97	0.97	0.81	0.80
SATURATION INDEX, LANGELIER		UNITS +/-		-0.08	-0.66	-0.71	-0.52	-0.08	-0.70	-0.71	-0.53	-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	109	95	96	97	107	99	99	100	98
BROMIDE		Br, mg/L	71870	0.028	<0.01	<0.01	<0.01	0.027	<0.01	<0.01	<0.01	<0.01
CHLORIDE	*250	Cl, mg/L	00940	12.5	14.3	12.6	13.2	13.2	13.2	13.0	13.1	13.0
FLUORIDE	4	F, mg/L	00951	0.10	0.95	0.95	1.01	0.09	0.93	1.01	1.00	1.00
SULFATE	*250	SO ₄ , mg/L	00945	23.3	29.1	28.9	29.3	23.2	28.0	28.0	27.7	27.5
HARDNESS		CaCO ₃ , mg/L	00900	130	136	129	137	130	134	136	138	136
CALCIUM		Ca, mg/L	00916	35.7	36	36.6	35.0	35.4	34.8	35.1	35.5	34.9
MAGNESIUM		Mg, mg/L	00927	13.3	12.7	12.8	12.6	12.5	12.4	12.6	12.4	12.5
POTASSIUM		K, mg/L	00937	1.6	1.5	1.7	1.5	1.5	1.5	1.6	1.5	1.5
SODIUM		Na, mg/L	00006	7.9	7.7	7.7	8.0	7.9	8.2	8.0	8.0	8.0
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	173	155	148	155	145	157	163	169	164
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	181	189	180	188	175	189	186	184	129
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.86	1.55	1.50	1.55	1.78	1.60	1.58	1.57	1.52
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	<5	<5	<5	<5	<5	<5	<5
NITROGEN, AMMONIA		N, mg/L	00610	0.04	0.02	0.01	0.02	0.02	0.01	0.01	0.01	0.01
NITROGEN, NITRATE	10	N, mg/L	00620	0.319	0.278	0.282	0.295	0.303	0.286	0.283	0.284	0.283
NITROGEN, NITRITE	1	N, mg/L	00615	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
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	0.465	0.459	0.463	<0.05	0.443	0.411	0.415	0.420
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	<0.05	0.853	1.299	1.424	<0.05	0.720	1.335	0.966	1.087
CYANIDE, TOTAL	200	CN, ug/L	00720	<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	2.0	2.2	1.7	2.0	1.0	2.2	2.2	2.2	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 COLLECTION DATE: JANUARY 16, 2008, (1st Qtr)

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		North	Central	Central	North
ALUMINUM	*50-200	Al, µg/L	01105	78.9	50.0	31.3	29.5	38.4	39.2	39.5	32.5	54.7
ANTIMONY	6	Sb, µg/L	01268	<1	<1	<1	<1	<1	<1	<1	<1	<1
ARSENIC	10	As, µg/L	01002	<1	<1	<1	<1	<1	<1	<1	<1	<1
BARIUM	2000	Ba, µg/L	01007	19.9	18	17.5	17.5	19.2	18.6	18.6	18.1	19.5
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	19.9	19.2	18.8	19.2	19.1	19.4	18.2	17.9	19.1
CADMIUM	5	Cd, µg/L	01027	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHROMIUM	100	Cr, µg/L	01034	<1	<1	<1	2.2	<1	<1	<1	<1	<1
COBALT		Co, µg/L	01037	<1	<1	<1	<1	<1	<1	<1	<1	<1
COPPER	**1300/90%	Cu, µg/L	01042	2.6	1.1	1.1	2.1	4.1	<1	1.3	1.6	1.2
IRON	*300	Fe, µg/L	00031	70.7	<6	<6	<6	29.4	<6	<6	6.7	11.7
LEAD	**15/90%	Pb, µg/L	01051	<1	<1	<1	<1	<1	<1	<1	<1	1.5
LITHIUM		Li, µg/L	01132	<2	<2	<2	<2	<2	<2	<2	<2	<2
MANGANESE	*50	Mn, µg/L	01055	1.5	<1	<1	<1	1.2	<1	<1	<1	<1
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	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0
NICKEL	100	Ni, µg/L	01067	<1	<1	<1	<1	1.3	<1	<1	<1	<1
SELENIUM	50	Se, µg/L	01147	<1	<1	<1	<1	<1	<1	<1	<1	<1
SILICON		Si, µg/L	01142	1,033	1,130	1,114	1,132	962.8	1,106	1,097	1,098	1,102
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	121	119	120	119	123	123	124	121	126
THALLIUM	2	Tl, µg/L	01059	<1	<1	<1	<1	<1	<1	<1	<1	<1
TITANIUM		Ti, µg/L	01152	11.3	<5	<5	<5	5.6	<5	<5	<5	<5
VANADIUM		V, µg/L	00985	<1	<1	<1	<1	<1	<1	<1	<1	<1
ZINC	*5000	Zn, µg/L	01092	<4	<4	<4	<4	<4	<4	<4	15.6	6.2

* Federal/State Secondary MCL's

** Action Level

***Distribution samples are composited.

Rasheda Baitha
 CHIEF WATER CHEMIST

Hosna Siddiqui
 DIRECTOR OF LABORATORIES

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 MANAGER OF WATER QUALITY

Dennis Leonardo
 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 COLLECTION DATE: 4/09/2008, 2nd Qtr

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		North	Central	Central	North
TEMPERATURE		°C	00010	5	7	7	6	5	8	8	6	8
TURBIDITY	0.5	N.T.U.	82079	1.20	0.05	0.10	0.15	0.85	0.10	0.10	0.10	0.10
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1M	1Cc	1Cc	1Cc	1M	1Cc	1Cc	1Cc	1Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.		1/2M	1M	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	8.21	7.51	7.49	7.56	8.23	7.63	7.59	7.65	7.69
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	0	1.00	0.98	0.71	0	0.99	0.97	0.77	0.65
SATURATION INDEX, LANGELIER		UNITS +/-		-0.05	-0.68	-0.75	-0.71	-0.05	-0.61	-0.67	-0.64	-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	112	101	103	104	110	102	101	102	101
BROMIDE		Br, mg/L	71870	0.027	<0.01	<0.01	<0.01	0.027	<0.01	<0.01	<0.01	<0.01
CHLORIDE	*250	Cl, mg/L	00940	14.4	17.5	17.6	17.8	12.8	14.6	14.5	14.6	14.6
FLUORIDE	4	F, mg/L	00951	0.15	0.81	0.80	0.78	0.14	0.84	0.84	0.84	0.82
SULFATE	*250	SO ₄ , mg/L	00945	23.2	31.5	31.0	30.9	22.8	27.9	28.1	28.6	28.2
HARDNESS		CaCO ₃ , mg/L	00900	148	158	158	162	144	146	146	146	144
CALCIUM		Ca, mg/L	00916	37.5	38.2	37.6	37.8	36.9	36.6	36.0	36.7	33.7
MAGNESIUM		Mg, mg/L	00927	12.8	13.0	12.9	13.2	12.9	13.2	12.5	12.9	13.3
POTASSIUM		K, mg/L	00937	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.2	1.2
SODIUM		Na, mg/L	00006	8.2	9.6	9.5	9.5	7.4	8.0	8.0	8.8	7.8
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	178	195	181	186	153	167	167	175	169
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	182	201	207	209	183	194	195	193	190
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.86	1.57	1.55	1.54	1.79	1.52	1.49	1.50	1.50
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	8.2	<5	<5	<5	<5	<5	<5	<5	7.8
NITROGEN, AMMONIA		N, mg/L	00610	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NITROGEN, NITRATE	10	N, mg/L	00620	0.326	0.347	0.349	0.351	0.280	0.290	0.290	0.289	0.292
NITROGEN, NITRITE	1	N, mg/L	00615	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
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	0.48	0.50	0.47	<0.05	0.44	0.45	0.45	0.46
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	<0.05	1.17	1.07	0.90	<0.05	1.06	1.00	0.96	0.88
CYANIDE, TOTAL	200	CN, ug/L	00720	<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	2.7	2.1	1.8	2.5	2.0	2.6	2.0	1.9	2.9

* Federal/State Secondary MCL's

** Action Level

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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 COLLECTION DATE: 4/09/2008, 2nd Qtr

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	North		Central
ALUMINUM		Al, µg/L	01105	24	35	34	42	17	37	36	29	32
ANTIMONY	6	Sb, µg/L	01268	<1	<1	<1	<1	<1	<1	<1	<1	<1
ARSENIC	10	As, µg/L	01002	<1	<1	<1	<1	<1	<1	<1	<1	<1
BARIIUM	2000	Ba, µg/L	01007	19	20	19	19	19	19	19	18	19
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	18	18	18	17	15	16	13	15	15
CADMIUM	5	Cd, µg/L	01027	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHROMIUM	100	Cr, µg/L	01034	3	5	5	5	6	6	4	4	2
COBALT		Co, µg/L	01037	<1	<1	<1	<1	<1	<1	<1	<1	<1
COPPER	**1300	Cu, µg/L	01042	1	<1	<1	2	3	2	<1	1	<1
IRON	*300	Fe, µg/L	00031	13	<6	<6	9	7	<6	<6	<6	<6
LEAD	**15	Pb, µg/L	01051	<1	<1	<1	<1	<1	<1	<1	<1	<1
LITHIUM		Li, µg/L	01132	<2	<2	<2	<2	<2	<2	<2	<2	<2
MANGANESE	*50	Mn, µg/L	01055	<2	<2	<2	<2	<2	<2	<2	<2	<2
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	2	1	1	1	1	2	1	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	1	1	<1	1	1	1	<1
SILICON		Si, µg/L	01142	1011	1168	1135	1150	832	1048	1044	1056	1068
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	120	122	121	119	113	120	122	120	122
THALLIUM	2	Tl, µg/L	01059	<1	<1	<1	<1	<1	<1	<1	<1	<1
TITANIUM		Ti, µg/L	01152	<5	<5	<5	<5	<5	<5	<5	<5	<5
VANADIUM		V, µg/L	00985	<1	<1	<1	<1	<1	<1	<1	<1	<1
ZINC	*5000	Zn, µg/L	01092	<4	<4	<4	<4	<4	<4	<4	14	<4

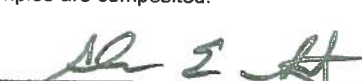
* Federal/State Secondary MCL's

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 CHIEF WATER CHEMIST


 DIRECTOR OF LABORATORIES


 MANAGER OF WATER QUALITY


 DEPUTY COMMISSIONER

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WATER QUALITY DIVISION-WATER PURIFICATION LABORATORIES
 LABORATORY ACCREDITATION NUMBER: 100228

SAMPLE COLLECTION DATE: 07/16/2008 3rd Qtr

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		North	Central	Central	North
TEMPERATURE		°C	00010	20	20	20	20	20	20	17	19	19
TURBIDITY	0.5	N.T.U.	82079	0.40	0.20	0.15	0.15	0.70	0.10	0.10	0.10	0.10
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1 E	1 Cc	1 Cc	1 Cc	1 E	2 Cc	2 Cc	1 Cc	1 Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.		1 E	1 E	1 E	1 E	1 E	1 E	1 E	1 M	1 M
COLOR	*15	Pt.-Co. Units	00080	0	0	0	0	0	0	0	0	0
pH	*6.5-8.5	STD. Units	00040	8.43	7.70	7.70	7.70	8.35	7.70	7.60	7.70	7.70
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	0	0.96	0.99	0.63	0	0.97	0.96	0.64	0.69
SATURATION INDEX, LANGELIER		UNITS +/-		0.46	-0.33	-0.33	-0.31	0.36	-0.31	-0.48	-0.35	-0.35
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0	0
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	110	99	99	99	108	100	102	99	99
BROMIDE		Br, mg/L	71870	0.029	<0.01	<0.01	<0.01	0.028	<0.01	<0.01	<0.01	<0.01
CHLORIDE	*250	Cl, mg/L	00940	12.5	13.8	13.8	13.8	12.2	13.9	13.9	13.9	13.9
FLUORIDE	4	F, mg/L	00951	0.14	0.89	0.88	0.87	0.13	0.93	0.94	0.93	0.96
SULFATE	*250	SO ₄ , mg/L	00945	22.7	28.4	28.3	28.3	22.5	28.5	28.7	28.6	28.2
HARDNESS		CaCO ₃ , mg/L	00900	128	130	136	125	127	127	132	116	134
CALCIUM		Ca, mg/L	00916	31.9	31.3	30.8	31.8	31.3	31.6	31.8	31.0	31.1
MAGNESIUM		Mg, mg/L	00927	11.4	11.7	11.4	11.4	11.7	11.6	11.3	11.5	11.2
POTASSIUM		K, mg/L	00937	1.9	1.8	1.8	1.8	1.7	1.7	1.9	1.9	1.9
SODIUM		Na, mg/L	00006	7.9	8.2	8.1	8.2	7.7	7.9	7.9	8.1	8.1
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	167	173	167	171	170	173	177	179	176
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	167	173	167	171	170	173	177	179	176
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.65	1.56	1.55	1.52	1.72	1.49	1.47	1.52	1.51
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	<5	8.1	8.9	<5	<5	7.8	6.2
NITROGEN, AMMONIA		N, mg/L	00610	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NITROGEN, NITRATE	10	N, mg/L	00620	0.246	0.211	0.210	0.217	0.233	0.215	0.215	0.214	0.220
NITROGEN, NITRITE	1	N, mg/L	00615	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
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	0.467	0.474	0.471	<0.05	0.425	0.444	0.454	0.452
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	<0.05	1.244	1.271	1.100	<0.05	0.879	0.962	1.087	1.170
CYANIDE, TOTAL	200	CN, ug/L	00720	<1	<1	<1	<1	<1	<1	<1	<1	<1
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	<1	<1	1.8	<1	2.6	1.1	1.9	<1	1.6
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	4.7	4.7	5.7	4.3	4.9	3.8	5.3	5.1	4.8

* 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 COLLECTION DATE: 07/16/2008 3rd Qtr

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		North	Central	Central	North
ALUMINUM		Al, µg/L	01105	64	128	120	118	68	95	97	88	93
ANTIMONY	6	Sb, µg/L	01268	1	<1	<1	<1	<1	<1	<1	<1	<1
ARSENIC	10	As, µg/L	01002	<1	<1	<1	<1	<1	<1	<1	<1	<1
BARIUM	2000	Ba, µg/L	01007	21	21	21	24	21	21	22	22	23
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	19	18	21	18	19	21	19	18	19
CADMIUM	5	Cd, µg/L	01027	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHROMIUM	100	Cr, µg/L	01034	2	7	6	5	3	3	3	4	4
COBALT		Co, µg/L	01037	<1	<1	<1	<1	<1	<1	<1	<1	<1
COPPER	**1300	Cu, µg/L	01042	2	<1	<1	1	4	<1	<1	<1	<1
IRON	*300	Fe, µg/L	00031	7	<6	<6	<6	20	<6	<6	12	7
LEAD		Pb, µg/L	01051	<1	<1	<1	2	<1	<1	<1	<1	1
LITHIUM		Li, µg/L	01132	2	2	2	2	2	2	2	2	2
MANGANESE	*50	Mn, µg/L	01055	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	2	1	1	1	1	1
NICKEL	100	Ni, µg/L	01067	1	1	1	2	1	1	1	2	2
SELENIUM	50	Se, µg/L	01147	<1	<1	<1	<1	<1	<1	<1	<1	<1
SILICON		Si, µg/L	01142	409	472	464	491	388	507	542	524	524
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	106	105	101	117	104	103	106	109	111
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	2	3	3
VANADIUM		V, µg/L	00985	<2	<2	<2	<2	<2	<2	<2	<2	<2
ZINC	*5000	Zn, µg/L	01092	<2	<2	<2	3	<2	<2	<2	17	6

* Federal/State Secondary MCL's

** Action Level

***Distribution samples are composited.

Rushade Batha
 CHIEF WATER CHEMIST

Harveen K. Lal
 DIRECTOR OF LABORATORIES

SE S. J.
 MANAGER OF WATER QUALITY

David Leavelle
 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 COLLECTION DATE: 10/29/08 4th Qtr

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		North	Central	Central	North
TEMPERATURE		°C	00010	14	13	13	15	9	12	12	16	16
TURBIDITY	0.5	N.T.U.	82079	6.40	0.10	0.10	0.10	4.3	0.10	0.10	0.10	0.10
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	2E	2Cc	2Cc	1 Cc	1 E	2 Cc	2 Cc	2Cc	2Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.			1M	1Mm	1M		1M	1M	1E	1 M
COLOR	*15	Pt.-Co. Units	00080	0	0	0	0	0	0	0	0	0
pH	*6.5-8.5	STD. Units	00040	8.25	7.73	7.67	7.82	8.21	7.73	7.76	7.91	7.94
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	0	1.00	0.95	0.75	0	1.07	1.01	0.69	0.70
SATURATION INDEX, LANGELIER		UNITS +/-		0.19	-0.41	-0.47	-0.27	0.01	-0.43	-0.40	-0.15	-0.11
ALKALINITY, PHENOLPHTHALEIN		CaCO ₃ , mg/L	00415	0	0	0	0	0	0	0	0	0
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	111	102	103	101	111	101	104	101	102
BROMIDE		Br, mg/L	71870	0.031	<0.01	<0.01	<0.01	0.027	<0.01	<0.01	<0.01	<0.01
CHLORIDE	*250	Cl, mg/L	00940	15.0	15.6	15.7	14.0	12.0	13.7	13.7	14.5	13.8
FLUORIDE	4	F, mg/L	00951	0.11	0.90	0.91	0.92	0.08	0.91	0.90	0.93	0.92
SULFATE	*250	SO ₄ , mg/L	00945	25.6	30.8	31.0	28.8	22.9	28.2	28.3	29	28.3
HARDNESS		CaCO ₃ , mg/L	00900	141	141	141	139	135	143	148	145	137
CALCIUM		Ca, mg/L	00916	35.7	34.6	35.0	35.3	35	35.3	34.2	35.0	35.5
MAGNESIUM		Mg, mg/L	00927	12.1	11.7	11.4	11.6	11.5	11.7	11.6	11.8	11.7
POTASSIUM		K, mg/L	00937	1.9	1.7	1.8	1.6	1.6	1.5	1.4	1.6	1.7
SODIUM		Na, mg/L	00006	9.3	9.1	9.1	7.8	7.3	7.8	7.8	8.2	7.8
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	51	49.2	46.2	27.8	41.6	35.6	38.8	32.2	40.4
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	179	187	185	178	172	181	176	172	178
TOTAL ORGANIC CARBON		NPOC, mg/L	00680	1.87	1.63	1.65	1.54	1.71	1.49	1.45	1.49	1.47
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	8.0	<5	<5	5.1	8.0	9.4	8.7	<5	6.6
NITROGEN, AMMONIA		N, mg/L	00610	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NITROGEN, NITRATE	10	N, mg/L	00620	0.311	0.276	0.279	0.246	0.290	0.280	0.280	0.276	0.280
NITROGEN, NITRITE	1	N, mg/L	00615	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
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	0.539	0.552	0.536	<0.05	0.393	0.397	0.426	0.415
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	<0.05	1.287	1.186	1.058	<0.05	0.841	0.918	0.854	0.873
CYANIDE, TOTAL	200	CN, ug/L	00720	<1	<1	<1	<1	<1	<1	<1	<1	<1
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	<1	<1	<1	<1	<1	<1	<1	1.4	<1
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	6.4	6.3	6.3	6.1	5.7	6.2	5.8	6.1	6.4

* Federal/State Secondary MCL's

** Action Level

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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 COLLECTION DATE: 10/29/08 4th Qtr

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		North	Central	Central	North
ALUMINUM		Al, µg/L	01105	97	55	52	45	47	42	43	41	41
ANTIMONY	6	Sb, µg/L	01268	<1	<1	<1	<1	<1	<1	<1	<1	<1
ARSENIC	10	As, µg/L	01002	1	<1	<1	<1	<1	<1	<1	<1	<1
BARIUM	2000	Ba, µg/L	01007	23	21	21	18	16	20	17	20	21
BERYLLIUM	4	Be, µg/L	01012	4.2	4.2	4.1	4.1	4.0	4.0	4.0	4.0	4.0
BORON		B, µg/L	01022	12	10	8	7	7	7	4	7	7
CADMIUM	5	Cd, µg/L	01027	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHROMIUM	100	Cr, µg/L	01034	<1	1.1	2.5	<1	1.1	2.4	1.9	<1	1.3
COBALT		Co, µg/L	01037	<1	<1	<1	<1	<1	<1	<1	<1	<1
COPPER	**1300	Cu, µg/L	01042	2.8	<1	<1	1.2	3.8	<1	<1	2.7	1.2
IRON	*300	Fe, µg/L	00031	232	63.4	60.8	67.9	137	60.8	63.2	77.1	85.5
LEAD		Pb, µg/L	01051	<1	<1	<1	<1	<1	<1	<1	<1	1.2
LITHIUM		Li, µg/L	01132	3	2	2	2	2	2	2	2	2.2
MANGANESE	*50	Mn, µg/L	01055	6	<1	<1	<1	5.2	<1	<1	1.1	<1
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	1.6	1.4	1.5	1.1	<1	1.1	1	1.3	1.2
NICKEL	100	Ni, µg/L	01067	1.4	1.1	1.1	1.1	1	1.1	1	1.3	1.3
SELENIUM	50	Se, µg/L	01147	<1	1	1.1	<1	<1	<1	<1	<1	<1
SILICON		Si, µg/L	01142	790	822	840	857	889	980	979	1005	991
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	122	122	120	115	95.7	120	108	119	120
THALLIUM	2	Tl, µg/L	01059	<1	<1	<1	<1	<1	<1	<1	<1	<1
TITANIUM		Ti, µg/L	01152	<5	<5	<5	<5	<5	<5	<5	<5	<5
VANADIUM		V, µg/L	00985	2.3	<2	<2	<2	<2	2.1	<2	<2	<2
ZINC	*5000	Zn, µg/L	01092	<1	<1	3.2	6.3	<1	<1	<1	59.7	17.4

* Federal/State Secondary MCL's

** Action Level

***Distribution samples are composited.

Rashed Parthen
 CHIEF WATER CHEMIST

Hassan Salih *AL E H*
 DIRECTOR OF LABORATORIES MANAGER OF WATER QUALITY

D. Leach
 DEPUTY COMMISSIONER