

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	Beverly	36	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
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 Barber

CHIEF WATER CHEMIST

Kevin Kelly

DIRECTOR OF LABORATORIES

AC SA

MANAGER OF WATER QUALITY

Dennis Leonard

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
ORTHOPOSPHATE		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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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
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

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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 South	RAW LAKE	OUTLETS		***DISTRIBUTION	
					73rd Street	79th Street			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.

Rishade Bathe
CHIEF WATER CHEMIST

Haseeb Akhbar
DIRECTOR OF LABORATORIES

AC E H
MANAGER OF WATER QUALITY

Dana Lando
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
BARIIUM	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.

Roshunda Parthen

Hester Walsh *SE*

D. Leach

CHIEF WATER CHEMIST

DIRECTOR OF LABORATORIES

MANAGER OF WATER QUALITY

DEPUTY COMMISSIONER