

**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: March 27, 2012 - 1st Quarter

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	11	10	10	11	9	11	11	12	12
TURBIDITY	TT	N.T.U.	82079	6.3	0.10	0.10	0.15	9.1	0.05	0.05	0.15	0.10
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1 E	1 Cc	1 Cc	1 Cc	1 E	1 Cc	1 Cc	1 Cc	1 Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.		--	1 Mm	1 M	1 M	--	1 M	1 M	1 M	1 M
COLOR	*15	Pt.-Co. CU	00080	<1	1	<1	1	7	2	<1	<1	1
pH	*6.5-8.5	STD. Units	00040	8.27	7.71	7.71	7.89	8.27	7.80	7.79	7.87	7.81
FREE CHLORINE RESIDUAL		CL <sub>2</sub> , mg/L	50064	--	1.17	1.20	0.79	--	1.09	1.08	0.76	0.90
SATURATION INDEX, LANGELIER		UNITS +/-		0.16	-0.47	-0.47	-0.25	0.48	-0.04	-0.06	-0.25	-0.32
ALKALINITY, PHENOLPHTHALEIN		0	00415	0	0	0	0	0	0	0	0	0
ALKALINITY, TOTAL		CaCO <sub>3</sub> , mg/L	00410	113	104	105	105	113	105	106	105	106
BROMIDE		Br, mg/L	71870	R	R	R	R	R	R	R	R	R
CHLORIDE	*250	Cl, mg/L	00940	12.3	13.7	13.7	14.2	12.5	13.6	13.7	13.8	13.6
FLUORIDE	4	F, mg/L	00951	0.11	1.02	1.00	1.04	0.11	1.01	1.02	1.05	1.05
SULFATE	*250	SO <sub>4</sub> , mg/L	00945	23.9	29.1	28.9	27.4	23.5	26.9	27.0	27.1	26.8
HARDNESS		CaCO <sub>3</sub> , mg/L	00900	144	137	142	143	135	142	137	138	140
CALCIUM		Ca, mg/L	00916	37.4	37.1	36.5	37.1	39.4	38.1	37.1	36.9	36.0
MAGNESIUM		Mg, mg/L	00927	15.9	14.5	14.1	14.7	15.1	14.2	14.3	13.9	14.1
POTASSIUM		K, mg/L	00937	1.73	1.71	1.28	1.68	1.56	1.40	1.55	1.78	1.40
SODIUM		Na, mg/L	00006	9.73	8.38	8.58	8.98	9.94	8.26	8.59	8.25	8.34
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	131	172	174	161	149	134	162	112	R
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	190	190	180	187	187	184	178	174	183
TOTAL ORGANIC CARBON		TOC, mg/L	00680	1.83	1.69	1.69	1.63	1.75	1.58	1.60	1.62	1.60
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	<5	<5	<5	<5	<5	<5	<5
NITROGEN, AMMONIA		N, mg/L	00610	0.030	0.031	<0.03	<0.03	0.052	0.033	<0.03	<0.03	<0.02
NITROGEN, NITRATE	10	N, mg/L	00620	0.246	0.235	0.234	0.250	0.334	0.316	0.233	0.233	0.231
NITROGEN, NITRITE	1	N, mg/L	00615	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
ORTHOPOSPHATE		PO <sub>4</sub> , mg/L	00660	0.021	0.570	0.570	0.560	0.024	0.472	0.481	0.499	0.486
PHOSPHATE, TOTAL		PO <sub>4</sub> , mg/L	00650	0.023	1.26	1.26	1.05	0.025	0.96	1.00	0.95	0.93
CYANIDE, TOTAL	200	CN, ug/L	00720	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	<1	3.1	<1	<1	1	<1	<1	<1	1
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	6.4	3.7	7.2	5.0	8.1	6.6	6.6	4.4	6.4

\* Federal/State Secondary MCLs

\*\* Action Level

\*\*\*Distribution samples are composited. TT - Treatment Technique ND - not detected

R - Sample results not reported due to unacceptable QC criteria or method performance

**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: March 27, 2012 - 1st Quarter

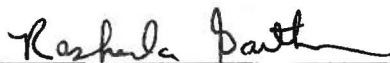
PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				RAW LAKE	OUTLETS		***DISTRIBUTION	RAW LAKE	OUTLETS		***DISTRIBUTION	
					73rd Street	79th Street	South		North	Central	Central	North
ALUMINUM	*50-200	Al, µg/L	01105	224	60.4	55.0	70.2	152	77.7	75.7	60.3	72.2
ANTIMONY	6	Sb, µg/L	01268	<2	<2	,2	<2	<2	<2	,2	<2	<2
ARSENIC	10	As, µg/L	01002	<1	<1	<1	<1	<1	<1	<1	<1	<1
BARIUM	2000	Ba, µg/L	01007	23.6	23.1	23.0	23.0	24.2	22.8	23.0	23.2	23.1
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	295	16.1	15.3	19.3	157	17.8	14.8	15.3	15.6
CADMIUM	5	Cd, µg/L	01027	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHROMIUM	100	Cr, µg/L	01034	<1	<1	<1	<1	<1	<1	<1	<1	<1
COBALT		Co, µg/L	01037	<1	<1	<1	<1	<1	<1	<1	<1	<1
COPPER	**1300	Cu, µg/L	01042	<1	<1	<1	<1	3.6	<1	<1	1.0	2.1
IRON	*300	Fe, µg/L	00031	113	<8	<8	<8	125.00	<8	<8	12.8	<8
LEAD	**15.0	Pb, µg/L	01051	<1	<1	<1	<1	1.00	<1	<1	<1	<1
LITHIUM		Li, µg/L	01132	2.62	2.52	2.64	2.70	2.66	2.61	2.53	2.63	2.59
MANGANESE	*50	Mn, µg/L	01055	4.00	<1	<1	<1	4.60	<1	<1	<1	<1
MERCURY	2	Hg, µg/L	71900	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
MOLYBDENUM		Mo, µg/L	01062	<3	<3	<3	<3	<3	<3	<3	<3	<3
NICKEL		Ni, µg/L	01067	<3	<3	<3	<3	<3	<3	<3	<3	<3
SELENIUM	50	Se, µg/L	01147	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
SILICON		Si, µg/L	01142	1660	1148	1169	1181	1046	1113	1100	1167	1130
SILVER	*100	Ag, µg/L	01077	<3	<3	<3	<3	<3	<3	<3	<3	<3
STRONTIUM		Sr, µg/L	01082	110	109	110	110	111	110	111	110	110
THALLIUM	2	Tl, µg/L	01059	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
TITANIUM		Ti, µg/L	01152	3.69	<1	<1	<1	1.6	<1	<1	<1	<1
VANADIUM		V, µg/L	00985	<2	<2	<2	<2	R	3.14	<2	<2	<2
ZINC	*5000	Zn, µg/L	01092	<5	<5	<5	<5	6.78	<5	<5	37.9	15.7

\* Federal/State Secondary MCLs

\*\* Action Level

\*\*\*Distribution samples are composited. TT - Treatment Technique ND - not detected

O/S - Out of Service



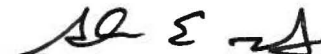
CHIEF WATER CHEMIST



DIRECTOR OF LABORATORIES

—

MANAGER OF WATER QUALITY



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: June 27, 2012 - 2nd Quarter

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	19	20	20	20	21	20	20	20	20
TURBIDITY	TT	N.T.U.	82079	1.7	0.15	0.25	0.20	1.5	0.15	0.15	0.25	0.30
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1 M	1 Cc	1 Cc	0.5 Cc	1 M	1 Cc	1 Cc	0.5 Cc	1 Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.		--	1 M	1 M	1 M	--	1 M	1 Mm	1 Mm	1 M
COLOR	*15	Pt.-Co. CU	00080	0	0	1	0	0	1	1	0	0
pH	*6.5-8.5	STD. Units	00040	8.37	7.69	7.72	7.81	8.38	7.77	7.78	7.86	7.88
FREE CHLORINE RESIDUAL		CL <sub>2</sub> , mg/L	50064	0.02	1.16	1.12	0.80	--	1.04	1.04	0.70	0.87
SATURATION INDEX, LANGELIER		UNITS +/-		0.42	-0.28	-0.22	-0.21	0.48	-0.16	-0.17	-0.14	-0.07
ALKALINITY, PHENOLPHTHALEIN		0	00415	3	0	0	0	3	0	0	0	0
ALKALINITY, TOTAL		CaCO <sub>3</sub> , mg/L	00410	112	103	104	103	112	106	105	105	105
BROMIDE		Br, mg/L	71870	0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
CHLORIDE	*250	Cl, mg/L	00940	12.0	13.4	13.5	13.5	11.8	13.5	13.5	13.7	13.9
FLUORIDE	4	F, mg/L	00951	0.12	1.06	1.06	1.07	0.13	1.06	1.05	1.02	1.04
SULFATE	*250	SO <sub>4</sub> , mg/L	00945	24.1	29.6	29.0	28.9	23.9	27.6	27.6	27.5	27.5
HARDNESS		CaCO <sub>3</sub> , mg/L	00900	140	140	137	142	144	144	139	139	139
CALCIUM		Ca, mg/L	00916	34.0	34.1	36.0	30.2	34.9	35.9	34.8	31.2	34.8
MAGNESIUM		Mg, mg/L	00927	11.7	11.8	11.8	11.6	11.3	11.6	10.9	11.4	11.5
POTASSIUM		K, mg/L	00937	<3	<3	<3	<3	<3	<3	<3	<3	<3
SODIUM		Na, mg/L	00006	8.22	8.49	8.99	7.77	8.16	8.52	8.37	7.81	8.48
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	145	R	132	134	126	R	143	131	140
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	156	163	164	165	152	164	164	159	162
TOTAL ORGANIC CARBON		TOC, mg/L	00680	1.92	1.75	1.76	1.76	1.89	1.79	1.72	1.72	1.82
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	H	H	H	H	H	H	H	H	H
NITROGEN, AMMONIA		N, mg/L	00610	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
NITROGEN, NITRATE	10	N, mg/L	00620	0.352	0.305	0.307	0.313	0.348	0.298	0.297	0.323	0.304
NITROGEN, NITRITE	1	N, mg/L	00615	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
ORTHOPHOSPHATE		PO <sub>4</sub> , mg/L	00660	<0.01	0.477	0.483	0.505	0.021	0.459	0.454	0.511	0.503
PHOSPHATE, TOTAL		PO <sub>4</sub> , mg/L	00650	0.017	0.937	0.900	0.908	0.011	0.921	0.849	0.879	0.891
CYANIDE, TOTAL	200	CN, ug/L	00720	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	<1	<1	<1	<1	<1	<1	<1	1.0	1.0
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	R	R	R	R	R	R	R	R	R

\* Federal/State Secondary MCLs      \*\* Action Level      \*\*\*Distribution samples are composited.    TT - Treatment Technique    ND - not detected

R - Sample results not reported due to unacceptable QC criteria or method performance      H - Holding Time exceeded

**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: June 27, 2012 - 2nd Quarter

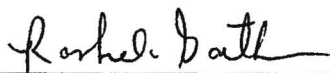
PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				RAW LAKE	OUTLETS		***DISTRIBUTION	RAW LAKE	OUTLETS		***DISTRIBUTION	
					73rd Street	79th Street	South		North	Central	Central	North
ALUMINUM	*50-200	Al, µg/L	01105	94.7	155	133	127	54.4	160	162	116	151
ANTIMONY	6	Sb, µg/L	01268	<1	<1	<1	<1	<1	<1	<1	<1	<1
ARSENIC	10	As, µg/L	01002	<3	<3	<3	<3	<3	<3	<3	<3	<3
BARIUM	2000	Ba, µg/L	01007	22.2	22.3	22.0	23.7	19.7	23.0	22.7	22.5	22.9
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	19.3	17.3	17.4	18.8	16.7	17.9	14.5	18.2	16.9
CADMIUM	5	Cd, µg/L	01027	<5	<5	<5	<5	<5	<5	<5	<5	<5
CHROMIUM	100	Cr, µg/L	01034	2.21	<2	<2	2.86	2.38	<2	<2	<2	<2
COBALT		Co, µg/L	01037	<3	<3	<3	<3	<3	<3	<3	<3	<3
COPPER	**1300	Cu, µg/L	01042	<1	<1	<1	<1	1.99	<1	<1	2.00	1.96
IRON	*300	Fe, µg/L	00031	55.3	<5	<5	<5	19.2	<5	<5	17.3	<5
LEAD	**15.0	Pb, µg/L	01051	<1	<1	<1	2.28	1.06	<1	<1	2.46	1.98
LITHIUM		Li, µg/L	01132	3.77	3.97	4.15	3.48	3.86	3.72	3.81	3.65	3.74
MANGANESE	*50	Mn, µg/L	01055	<1	<1	<1	<1	<1	<1	<1	<1	<1
MERCURY	2	Hg, µg/L	71900	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
MOLYBDENUM		Mo, µg/L	01062	<3	<3	<3	<3	<3	<3	3.44	<3	<3
NICKEL		Ni, µg/L	01067	<1	<1	<1	<1	<1	<1	<1	<1	<1
SELENIUM	50	Se, µg/L	01147	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
SILICON		Si, µg/L	01142	804	921	935	959	838	962	957	958	947
SILVER	*100	Ag, µg/L	01077	<5	<5	<5	<5	<5	<5	<5	<5	<5
STRONTIUM		Sr, µg/L	01082	107	110	114	96.9	108	109	109	101	109
THALLIUM	2	Tl, µg/L	01059	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
TITANIUM		Ti, µg/L	01152	<3	<3	<3	<3	<3	<3	<3	<3	<3
VANADIUM		V, µg/L	00985	<4	<4	<4	<4	<4	<4	<4	<4	<4
ZINC	*5000	Zn, µg/L	01092	<2	<2	<2	5.60	10.7	5.49	<2	13.9	14.5

\* Federal/State Secondary MCLs

\*\* Action Level

\*\*\*Distribution samples are composited. TT - Treatment Technique ND - not detected

O/S - Out of Service



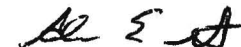
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**CITY OF CHICAGO - DEPARTMENT OF WATER MANAGEMENT - BUREAU OF WATER SUPPLY**  
**WATER QUALITY DIVISION-WATER PURIFICATION LABORATORIES**  
 LABORATORY ACCREDITATION NUMBER: 100228

SAMPLE COLLECTION DATE: September 6, 2012 - 3rd Quarter

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	24	24	24	24	24	24	24	24	23
TURBIDITY	TT	N.T.U.	82079	0.75	0.20	0.10	0.20	1.0	0.15	0.15	0.15	0.10
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1E	1Cc	1 Cc	1 Cc	1Mm	1Cc	1Cc	1Cc	1Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.		--	1E	1Mm	1Mm	--	1M	1M	1M	1M
COLOR	*15	Pt.-Co. CU	00080	1	0	0	3	2	0	0	3	3
pH	*6.5-8.5	STD. Units	00040	8.40	7.72	7.74	7.84	8.41	7.77	7.85	7.87	7.84
FREE CHLORINE RESIDUAL		CL <sub>2</sub> , mg/L	50064	--	1.16	1.27	0.76	--	1.20	1.14	0.99	1.26
SATURATION INDEX, LANGELIER		UNITS +/-		0.52	-0.19	-0.16	-0.15	0.54	-0.12	-0.03	-0.05	-0.13
ALKALINITY, PHENOLPHTHALEIN		0	00415	2	0	0	0	2	0	0	0	0
ALKALINITY, TOTAL		CaCO <sub>3</sub> , mg/L	00410	108	95	97	98	103	100	100	104	98
BROMIDE		Br, mg/L	71870	0.38	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
CHLORIDE	*250	Cl, mg/L	00940	12.4	14.3	14.4	14.3	12.4	14.3	14.4	14.5	15.0
FLUORIDE	4	F, mg/L	00951	0.10	0.94	0.88	1.00	0.10	1.00	1.01	0.97	1.00
SULFATE	*250	SO <sub>4</sub> , mg/L	00945	23.4	28.1	28.1	28.0	23.4	27.1	27.1	27.6	27.9
HARDNESS		CaCO <sub>3</sub> , mg/L	00900	144	139	142	145	139	140	141	139	138
CALCIUM		Ca, mg/L	00916	31.5	33.4	33.5	27.0	34.2	33.5	34.0	30.0	30.3
MAGNESIUM		Mg, mg/L	00927	10.9	11.2	11.6	10.4	11.3	11.3	10.9	10.7	11.2
POTASSIUM		K, mg/L	00937	<3	<3	<3	<3	<3	<3	<3	<3	<3
SODIUM		Na, mg/L	00006	7.80	8.46	7.66	6.84	7.84	7.82	8.50	7.43	8.25
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	182	157	202	190	178	174	164	168	164
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	199	175	206	201	191	202	180	180	175
TOTAL ORGANIC CARBON		TOC, mg/L	00680	2.02	1.93	1.94	1.91	1.99	1.92	1.90	1.97	1.90
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	11.0	<5	7.2	5.3	<5	12.2	<5	<5	<5
NITROGEN, AMMONIA		N, mg/L	00610	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
NITROGEN, NITRATE	10	N, mg/L	00620	0.321	0.268	0.264	0.263	0.263	0.256	0.250	0.249	0.264
NITROGEN, NITRITE	1	N, mg/L	00615	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
ORTHOPHOSPHATE		PO <sub>4</sub> , mg/L	00660	0.005	0.561	0.487	0.535	0.008	0.475	0.470	0.525	0.516
PHOSPHATE, TOTAL		PO <sub>4</sub> , mg/L	00650	0.033	1.14	0.931	1.06	0.032	0.901	0.986	1.00	0.976
CYANIDE, TOTAL	200	CN, ug/L	00720	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	R	R	R	R	R	R	R	R	R
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	R	R	R	R	R	R	R	R	R

\* Federal/State Secondary MCLs

\*\* Action Level

\*\*\*Distribution samples are composited. TT - Treatment Technique

R - Sample results not reported due to unacceptable QC criteria or method performance

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

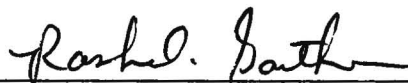
SAMPLE COLLECTION DATE: September 6, 2012 - 3rd Quarter

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	17.0	128	116	90	18.5	137	145	101	110
ANTIMONY	6	Sb, µg/L	01268	<2	<2	<2	<2	<2	<2	<2	<2	<2
ARSENIC	10	As, µg/L	01002	<3	<3	<3	<3	<3	<3	<3	<3	<3
BARIUM	2000	Ba, µg/L	01007	15.8	15.6	15.9	12.2	16.3	16.6	16.0	12.0	15.4
BERYLLIUM	4	Be, µg/L	01012	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
BORON		B, µg/L	01022	26.0	23.4	25.4	34.9	33.2	33.2	33.4	29.0	26.6
CADMIUM	5	Cd, µg/L	01027	<4	<4	<4	<4	<4	<4	<4	<4	<4
CHROMIUM	100	Cr, µg/L	01034	<2	<2	<2	<2	<2	<2	<2	<2	<2
COBALT		Co, µg/L	01037	<3	<3	<3	<3	<3	<3	<3	<3	<3
COPPER	**1300	Cu, µg/L	01042	<1	<1	2.50	<1	2.60	<1	<1	<1	1.90
IRON	*300	Fe, µg/L	00031	<5	<5	<5	<5	<5	<5	<5	<5	<5
LEAD	**15.0	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	<1	<1	<1	<1	<1	<1	<1	<1	<1
MERCURY	2	Hg, µg/L	71900	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
MOLYBDENUM		Mo, µg/L	01062	<3	<3	<3	<3	<3	<3	<3	<3	<3
NICKEL		Ni, µg/L	01067	<3	<3	<3	<3	<3	<3	<3	<3	<3
SELENIUM	50	Se, µg/L	01147	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
SILICON		Si, µg/L	01142	794	981	973	1008	825	1105	1076	1173	1094
SILVER	*100	Ag, µg/L	01077	<5	<5	<5	<5	<5	<5	<5	<5	<5
STRONTIUM		Sr, µg/L	01082	101	118	107	100	122	116	115	104	114
THALLIUM	2	Tl, µg/L	01059	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
TITANIUM		Ti, µg/L	01152	<3	<3	<3	<3	<3	<3	<3	<3	<3
VANADIUM		V, µg/L	00985	<4	<4	<4	<4	<4	<4	<4	<4	<4
ZINC	*5000	Zn, µg/L	01092	<5	<5	<5	<5	<5	<5	<5	18.3	15.2

\* Federal/State Secondary MCLs

\*\* Action Level

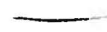
\*\*\*Distribution samples are composited. TT - Treatment Technique O/S - Out of Service



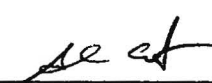
CHIEF WATER CHEMIST



DIRECTOR OF LABORATORIES



MANAGER OF WATER QUALITY



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: October 17, 2012 - 4th Quarter

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	15	15	15	17	16	16	16	17	18
TURBIDITY	TT	N.T.U.	82079	2.0	0.15	0.05	0.10	2.4	0.10	0.10	0.20	0.50
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1 M	1 Cc	1 Cc	1 Cc	1 E	1 Cc	2 Cc	1 Cc	1 Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.		--	1 M	1 M	1 Mm	--	1 M	1 M	1 Mm	1 Mm
COLOR	*15	Pt.-Co. CU	00080	1	1	0	1	1	0	0	1	1
pH	*6.5-8.5	STD. Units	00040	8.39	7.70	7.72	7.80	8.39	7.80	7.79	7.89	7.89
FREE CHLORINE RESIDUAL		CL <sub>2</sub> , mg/L	50064	--	1.08	1.07	0.89	--	1.10	1.02	0.82	0.72
SATURATION INDEX, LANGELIER		UNITS +/-		0.39	-0.23	-0.23	-0.14	0.50	-0.12	-0.25	-0.02	-0.01
ALKALINITY, PHENOLPHTHALEIN		0	00415	2	0	0	0	2	0	0	0	0
ALKALINITY, TOTAL		CaCO <sub>3</sub> , mg/L	00410	111	102	102	102	112	105	104	104	105
BROMIDE		Br, mg/L	71870	0.023	<0.014	<0.014	<0.014	0.022	<0.014	<0.014	<0.014	<0.014
CHLORIDE	*250	Cl, mg/L	00940	12.6	14.2	14.1	14.3	12.5	14.0	13.9	13.8	13.7
FLUORIDE	4	F, mg/L	00951	0.12	1.02	1.00	1.03	0.12	1.12	1.12	1.11	1.11
SULFATE	*250	SO <sub>4</sub> , mg/L	00945	23.6	29.7	29.6	30.0	23.6	26.6	26.5	26.2	25.9
HARDNESS		CaCO <sub>3</sub> , mg/L	00900	133	137	133	135	136	134	136	138	136
CALCIUM		Ca, mg/L	00916	39.7	50.3	48.8	44.6	46.9	47.4	36.3	46.3	46.3
MAGNESIUM		Mg, mg/L	00927	12.3	15.1	13.0	13.1	13.5	12.3	12.4	13.1	12.4
POTASSIUM		K, mg/L	00937	<3	<3	<3	<3	<3	<3	<3	<3	<3
SODIUM		Na, mg/L	00006	7.56	8.92	8.58	9.48	8.54	7.06	7.62	7.86	7.93
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	177	187	192	198	177	175	173	173	162
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	208	204	202	204	202	204	201	194	189
TOTAL ORGANIC CARBON		TOC, mg/L	00680	2.01	1.82	1.82	1.76	2.13	1.89	1.90	1.89	1.87
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	<5	<5	<5	<5	<5	<5	<5	<5	<5
NITROGEN, AMMONIA		N, mg/L	00610	<0.036	<0.02	<0.02	0.02	0.031	0.021	<0.02	0.020	0.025
NITROGEN, NITRATE	10	N, mg/L	00620	0.244	0.215	0.234	0.216	0.239	0.235	0.189	0.244	0.226
NITROGEN, NITRITE	1	N, mg/L	00615	0.003	<0.001	0.005	0.011	0.004	0.009	0.008	<0.001	<0.001
ORTHOPHOSPHATE		PO <sub>4</sub> , mg/L	00660	<0.01	0.530	0.499	0.566	<0.01	0.458	0.453	0.473	0.496
PHOSPHATE, TOTAL		PO <sub>4</sub> , mg/L	00650	0.023	1.17	1.08	1.12	0.026	0.997	1.01	0.967	1.02
CYANIDE, TOTAL	200	CN, ug/L	00720	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	R	R	R	R	R	R	R	R	R
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	<7	7.2	7.9	7.2	9.2	<7	7.9	<7	<7

\* Federal/State Secondary MCLs

\*\* Action Level

\*\*\*Distribution samples are composited. TT - Treatment Technique ND - not detected

R - Sample results not reported due to unacceptable QC criteria or method performance

H - Holding Time exceeded

**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: October 17, 2012 - 4th Quarter

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	58.5	71.3	62.9	70.7	42.3	102	100	88.6	141
ANTIMONY	6	Sb, µg/L	01268	<2	<2	<2	<2	<2	<2	<2	<2	<2
ARSENIC	10	As, µg/L	01002	<3	<3	<3	<3	<3	<3	<3	<3	<3
BARIIUM	2000	Ba, µg/L	01007	<2	<2	<2	4.61	4.59	4.36	9.50	19.2	4.03
BERYLLIUM	4	Be, µg/L	01012	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
BORON		B, µg/L	01022	18.0	15.3	17.6	23.5	14.3	17.3	12.3	19.0	12.2
CADMIUM	5	Cd, µg/L	01027	<5	<5	<5	<5	<5	<5	<5	<5	<5
CHROMIUM	100	Cr, µg/L	01034	<2	<2	<2	<2	<2	<2	<2	<2	<2
COBALT		Co, µg/L	01037	<3	<3	<3	<3	<3	<3	<3	<3	<3
COPPER	**1300	Cu, µg/L	01042	<1	<1	<1	1.04	1.73	<1	<1	<1	<1
IRON	*300	Fe, µg/L	00031	26.4	<5	<5	9.27	39.4	<5	<5	<5	38.7
LEAD	**15.0	Pb, µg/L	01051	<3	<3	<3	<3	<3	<3	<3	<3	<3
LITHIUM		Li, µg/L	01132	<2	<2	<2	2.06	2.14	<2	<2	<2	<2
MANGANESE	*50	Mn, µg/L	01055	2.38	1.18	1.54	1.78	3.15	1.32	2.23	4.69	<1
MERCURY	2	Hg, µg/L	71900	H	H	H	H	H	H	H	H	H
MOLYBDENUM		Mo, µg/L	01062	<3	<3	<3	<3	<3	<3	<3	<3	<3
NICKEL		Ni, µg/L	01067	<3	<3	<3	<3	<3	<3	<3	<3	<3
SELENIUM	50	Se, µg/L	01147	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
SILICON		Si, µg/L	01142	852	663	773	859	901	835	896	982	730
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	110	129	131	119	117	120	117	130	109
THALLIUM	2	Tl, µg/L	01059	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
TITANIUM		Ti, µg/L	01152	<3	<3	<3	<3	<3	<3	<3	<3	<3
VANADIUM		V, µg/L	00985	103	<4	5.52	5.04	7.08	5.49	<4	<4	4.37
ZINC	*5000	Zn, µg/L	01092	<2	<2	<2	28.9	2.02	<2	<2	17.8	10.8

\* Federal/State Secondary MCLs

\*\* Action Level

\*\*\*Distribution samples are composited. TT - Treatment Technique ND - not detected

O/S - Out of Service



CHIEF WATER CHEMIST



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