

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: February 1, 2017

LAB ID Nos.

1st QUARTER

February 6, 2017 (Site 3 & 6)

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	17C0843	17C0844	17C0845	17C0951	17C0847	17C0848	17C0849	17C0952	17C0851
				SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				1	2A	2B	3	4	5A	5B	6	7
				RAW LAKE	OUTLETS		***DISTRIBUTION	RAW LAKE	OUTLETS		***DISTRIBUTION	
	73rd Street	79th Street	SOUTH		North	Central	Central	North				
TEMPERATURE		°C	00010	4	3	4	9	2	3	3	8	8
TURBIDITY	TT	N.T.U.	82079	1.0	0.05	0.05	0.10	0.50	0.05	0.05	0.10	0.10
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	ND	1 Cc	1 Cc	2 Cc	ND	1 Cc	1 Cc	2 Cc	1 Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.		1 M	1 M	1 M	1 M	1 M	1 M	1 M	1 M	1 M
COLOR	*15	Pt.-Co. CU	00080	8	1	<1	2	3	<1	<1	2	4
pH	*6.5-8.5	STD. Units	00040	8.10	7.74	7.74	7.91	8.09	7.73	7.82	7.80	7.86
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	ND	1.30	1.31	1.00	ND	1.22	1.17	0.91	1.01
SATURATION INDEX, LANGELIER		UNITS +/-		-0.07	-0.68	-0.66	-0.32	-0.28	-0.81	-0.80	-0.44	-0.40
ALKALINITY, PHENOLPHTHALEIN		0	00415	0	0	0	0	0	0	0	0	0
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	108	101	101	101	107	101	101	102	101
CONDUCTIVITY		uS/cm		290	291	294	296	294	292	295	299	296
BROMIDE		Br, mg/L	71870	0.058	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
CHLORIDE	*250	Cl, mg/L	00940	12.9	14.0	14.2	14.3	12.8	14.1	14.4	14.3	14.3
FLUORIDE	4	F, mg/L	00951	0.12	0.68	0.69	0.65	0.12	0.68	0.69	0.69	0.69
SULFATE	*250	SO ₄ , mg/L	00945	23.0	28.3	25.6	25.7	22.1	25.9	25.7	25.6	25.7
HARDNESS		CaCO ₃ , mg/L	00900	135	134	136	134	134	139	135	135	140
CALCIUM		Ca, mg/L	00916	36.4	36.0	36.1	36.2	36.1	36.0	35.9	36.4	35.7
MAGNESIUM		Mg, mg/L	00927	12.0	12.0	12.0	12.1	12.0	12.0	12.0	12.0	11.8
POTASSIUM		K, mg/L	00937	1.29	1.27	1.29	1.30	1.27	1.27	1.27	1.30	1.29
SODIUM		Na, mg/L	00006	7.99	8.19	8.27	8.33	7.91	8.35	8.33	8.50	8.26
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	152	155	154	H	138	152	151	H	H
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	163	R	163	H	202	157	157	H	H
TOTAL ORGANIC CARBON		TOC, mg/L	00680	1.69	1.50	1.51	1.52	1.70	1.47	1.48	1.51	1.51
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	12.4	12.2	8.68	10.5	9.50	7.81	10.3	9.85	9.77
NITROGEN, AMMONIA		N, mg/L	00610	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
NITROGEN, NITRATE	10	N, mg/L	00620	0.269	0.264	0.220	0.326	0.276	0.273	0.276	0.353	H
NITROGEN, NITRITE	1	N, mg/L	00615	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	H
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	<0.06	0.429	0.516	0.521	<0.06	0.520	0.524	0.529	0.536
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	<0.06	1.06	1.38	1.38	<0.06	1.32	1.31	0.877	1.39
CYANIDE, TOTAL	200	CN, ug/L	00720	<12	<12	<12	<12	<12	<12	<12	<12	H
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	<9	<9	<9	<9	<9	<9	<9	<9	<9
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	11	13	13	<7	<7	10	8	12	10

* Federal/State Secondary MCLs

** Action Level

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

Nitrate-N, Nitrite-N were collected on 2/6/17

H - Holding Time Exceeded R - Data rejected

Nitrate-N & Cyanide did not meet LFM QC Criteria

For Solids, constant weight not attained within 0.5 mg (Samples collected on 3/27/17)

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: February 1, 2017 LAB ID Nos. 1st QUARTER

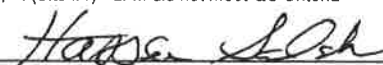
PARAMETER	February 6, 2017 (Site 3 & 6)			17C0843				17C0844				17C0845				17C0951				17C0847				17C0848				17C0849				17C0952				17C0851			
	SOUTH WATER PURIFICATION PLANT													JARDINE WATER PURIFICATION PLANT																									
	IEPA MCL	DETERMINED AS	STORET NUMBER	RAW LAKE	OUTLETS			***DISTRIBUTION	RAW LAKE	OUTLETS			***DISTRIBUTION																										
					73rd Street	79th Street	South	North		Central	Central	North																											
ALUMINUM	*50-200	Al, µg/L	01105	16.6	41.9	43.4	38.4	8.02	43.4	44.5	42.3	40.4																											
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	19.6	18.9	18.9	18.3	19.8	18.9	18.8	18.3	18.1																											
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1																											
BORON		B, µg/L	01022	23.8	23.7	24.0	23.8	23.6	23.6	23.6	23.9	23.3																											
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	1.20	<1	<1	<1	<1	1.39																											
IRON	*300	Fe, µg/L	00031	19.8	<5	<5	11.4	11.3	<5	<5	5.22	9.44																											
LEAD	**15.0	Pb, µg/L	01051	<1	<1	<1	<1	<1	<1	<1	<1	<1																											
LITHIUM		Li, µg/L	01132	2.86	2.78	2.76	2.88	2.80	2.84	2.78	2.80	2.73																											
MANGANESE	*50	Mn, µg/L	01055	<1	<1	<1	<1	<1	<1	<1	<1	<1																											
MERCURY	2	Hg, µg/L	71900	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																											
MOLYBDENUM		Mo, µg/L	01062	1.04	<1	<1	<1	<1	<1	<1	<1	<1																											
NICKEL		Ni, µg/L	01067	1.84	2.09	2.08	2.16	2.09	2.07	2.16	2.14	2.13																											
SELENIUM	50	Se, µg/L	01147	<5	<5	<5	<5	<5	<5	<5	<5	<5																											
SILICON		Si, µg/L	01142	1044	1157	1150	1118	1026	1163	1163	1170	1156																											
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1																											
STRONTIUM		Sr, µg/L	01082	117	115	116	116	117	117	116	117	115																											
THALLIUM	2	Tl, µg/L	01059	<1	<1	<1	<1	<1	<1	<1	<1	<1																											
TITANIUM		Ti, µg/L	01152	<1	1.13	1.28	1.19	<1	1.28	1.29	1.24	1.23																											
VANADIUM		V, µg/L	00985	<1	<1	<1	<1	<1	<1	<1	<1	<1																											
ZINC	*5000	Zn, µg/L	01092	<7	<7	<7	16.6	<7	<7	<7	29.8	26.4																											

* Federal/State Secondary MCLs ** Action Level ***Distribution samples are composited. TT - Treatment Technique

Lithium - LFM did not meet QC Criteria

As, Sr, V, Al (Site #1) - LFM did not meet QC Criteria


 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: April 25, 2017
 April 26 & 27, 2017 (Site #3)

LAB ID Nos. 2nd QUARTER

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	17C2917	17C2918	17C2919	17C2920	17C2921	17C2922	17C2923	17C2924	17C2925
				SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				1	2A	2B	3	4	5A	5B	6	7
				RAW LAKE	OUTLETS		***DISTRIBUTION	RAW LAKE	OUTLETS		***DISTRIBUTION	
	73rd Street	79th Street	SOUTH		North	Central	Central	North				
TEMPERATURE		°C	00010	13	12	13	12	12	12	12	12	13
TURBIDITY	TT	N.T.U.	82079	1.10	0.05	0.05	0.10	1.40	0.05	0.05	0.10	0.10
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	1 M	2 Cc	2 Cc	1 Cc	1 M	2 Cc	2 Cc	1 Cc	1 Cc
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.		1 M	1 M	1 M	1 M	1 M	1 M	1 M	1 M	1 M
COLOR	*15	Pt.-Co. CU	00080	9	0	1	0	11	1	3	1	0
pH	*6.5-8.5	STD. Units	00040	8.2	7.7	7.8	7.9	8.2	7.8	7.8	7.9	7.9
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	ND	1.25	1.23	0.88	ND	1.19	1.15	0.88	0.90
SATURATION INDEX, LANGELIER		UNITS +/-		0.18	-0.50	-0.44	-0.22	0.07	-0.59	-0.60	-0.25	-0.21
ALKALINITY, PHENOLPHTHALEIN		0	00415	0	0	0	0	0	0	0	0	0
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	112	106	105	105	109	102	102	103	103
CONDUCTIVITY		uS/cm		333	326	341	323	309	315	315	322	321
BROMIDE		Br, mg/L	71870	0.634	<0.1	<0.1	0.134	<0.1	<0.1	<0.1	<0.1	<0.1
CHLORIDE	*250	Cl, mg/L	00940	19.6	21.0	21.1	20.4	14.9	16.5	16.6	17.8	17.9
FLUORIDE	4	F, mg/L	00951	0.13	0.69	0.71	0.70	0.13	0.76	0.76	0.77	0.77
SULFATE	*250	SO ₄ , mg/L	00945	22.8	26.0	26.2	26.3	22.1	25.9	26.2	26.2	25.8
HARDNESS		CaCO ₃ , mg/L	00900	138	140	143	136	140	140	138	131	141
CALCIUM		Ca, mg/L	00916	37.1	37.5	37.2	37.2	36.8	36.3	36.4	36.5	36.6
MAGNESIUM		Mg, mg/L	00927	13.1	13.2	13.2	13.0	12.8	12.6	12.6	12.7	12.8
POTASSIUM		K, mg/L	00937	1.18	1.22	1.19	1.20	1.15	1.13	1.14	1.15	1.17
SODIUM		Na, mg/L	00006	11.8	12.6	12.6	12.2	9.23	9.93	10.0	10.8	10.9
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	170	161	151	135	159	166	165	183	167
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	175	183	171	165	162	R	188	187	178
TOTAL ORGANIC CARBON		TOC, mg/L	00680	1.77	1.65	1.60	1.61	1.68	1.51	1.50	1.53	1.57
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	11.6	14.7	13.1	12.5	13.4	11.6	12.5	11.8	13.0
NITROGEN, AMMONIA		N, mg/L	00610	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
NITROGEN, NITRATE	10	N, mg/L	00620	0.496	0.376	0.389	0.332	0.383	0.318	0.318	0.329	0.395
NITROGEN, NITRITE	1	N, mg/L	00615	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	0.019	0.463	0.464	0.460	0.034	0.519	0.529	0.544	0.539
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	1.27	1.25	1.26	0.96	1.42	1.42	1.46	1.49	1.57
CYANIDE, TOTAL	200	CN, ug/L	00720	<12	<12	<12	<12	<12	<12	<12	<12	<12
RADIOACTIVITY, GROSS ALPHA	15	pCi/L	01501	<9	<9	<9	<9	<9	<9	<9	<9	<9
RADIOACTIVITY, GROSS BETA	50	pCi/L	03501	10	12	10	9	8	12	9	10	8

* Federal/State Secondary MCLs ** Action Level ***Distribution samples are composited. TT - Treatment Technique ND - not detected
 pH/Alk not tested within 15 minutes of sample collection H - Holding Time Exceeded R - Data rejected
 Site #3 was not preserved for COD For Solids, did not meet precision criteria of 0.5 mg

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

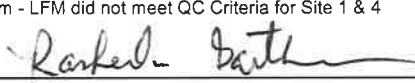
SAMPLE COLLECTION DATE: April 25, 2017

LAB ID Nos. 2nd QUARTER

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	17C2917	17C2918	17C2919	17C2920	17C2921	17C2922	17C2923	17C2924	17C2925
				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	40.0	67.6	60.3	28.3	104	57.5	58.8	36.0	29.4
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	20.9	19.7	19.7	19.9	20.8	19.2	19.1	19.3	19.3
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	23.9	23	22.8	22.8	23.7	21.8	21.7	21.8	22.0
CADMIUM	5	Cd, µg/L	01027	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHROMIUM	100	Cr, µg/L	01034	<1	<1	2.7	<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	1.09	1.46	<1	3.08	<1	1.29
IRON	*300	Fe, µg/L	00031	26.4	<2	<2	9.10	103	<2	<2	5.48	6.13
LEAD	**15.0	Pb, µg/L	01051	<1	<1	<1	<1	<1	<1	<1	<1	<1
LITHIUM		Li, µg/L	01132	2.98	2.95	2.94	3.02	3.06	2.85	2.85	2.85	2.87
MANGANESE	*50	Mn, µg/L	01055	<1	<1	<1	<1	1.38	<1	<1	<1	<1
MERCURY	2	Hg, µg/L	71900	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MOLYBDENUM		Mo, µg/L	01062	1.10	1.12	1.08	1.50	1.05	<1	<1	1.02	1.02
NICKEL		Ni, µg/L	01067	1.91	1.77	1.72	1.95	1.86	1.60	1.63	1.71	1.79
SELENIUM	50	Se, µg/L	01147	<1	<1	<1	<1	<1	<1	<1	<1	<1
SILICON		Si, µg/L	01142	1043	1162	1150	1145	1176	1141	1136	1121	1125
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	130	126	124	121	124	120	116	121	120
THALLIUM	2	Tl, µg/L	01059	<1	<1	<1	<1	<1	<1	<1	<1	<1
TITANIUM		Ti, µg/L	01152	<1	<1	<1	<1	2.81	1.07	1.08	1.08	1.06
VANADIUM		V, µg/L	00985	<1	<1	<1	<1	<1	<1	<1	<1	<1
ZINC	*5000	Zn, µg/L	01092	2.70	1.55	1.25	12.0	3.43	<1	<1	16.9	14.4

* Federal/State Secondary MCLs ** Action Level ***Distribution samples are composited. TT - Treatment Technique

Lithium - LFM did not meet QC Criteria for Site 1 & 4


 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: August 29, 2017

LAB ID Nos.

3rd QUARTER

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	17C5667	17C5668	17C5669	17C5670	17C5671	17C5672	17C5673	17C5674	17C2925
				SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				1	2A	2B	3	4	5A	5B	6	7
				RAW LAKE	OUTLETS		***DISTRIBUTION	RAW LAKE	OUTLETS		***DISTRIBUTION	
	73rd Street	79th Street	SOUTH		North	Central	Central	North				
TEMPERATURE		°C	00010	22	23	23	23	20	22	22	23	25
TURBIDITY	TT	N.T.U.	82079	0.50	0.05	0.10	0.15	0.40	0.05	0.05	0.10	0.10
THRESHOLD ODOR, STRAIGHT	*3	T.O.N	00086	2 M	2 M	2 M	2 M	3 M	2 M	2 M	2 M	2 M
THRESHOLD ODOR, DECHLORINATED	*3	T.O.N.		2 M	2 M	2 M	2 M	3 M	2 M	2 M	2 M	2 M
COLOR	*15	Pt.-Co. CU	00080	2	0	0	0	1	0	0	0	0
pH	*6.5-8.5	STD. Units	00040	8.4	7.9	7.9	7.9	8.3	7.9	7.9	8.0	8.0
FREE CHLORINE RESIDUAL		CL ₂ , mg/L	50064	--	1.41	1.42	0.80	--	1.18	1.14	0.94	0.94
SATURATION INDEX, LANGELIER		UNITS +/-		0.43	-0.27	-0.28	-0.03	0.33	-0.29	-0.28	0.10	0.11
ALKALINITY, PHENOLPHTHALEIN		0	00415	1.65	0	0	0	1.40	0	0	0	0
ALKALINITY, TOTAL		CaCO ₃ , mg/L	00410	107	101	101	101	107	102	102	102	102
CONDUCTIVITY		uS/cm		303	306	305	297	298	306	306	303	306
BROMIDE		Br, mg/L	71870	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
CHLORIDE	*250	Cl, mg/L	00940	13.3	14.7	14.7	14.9	11.9	14.5	14.5	14.7	14.6
FLUORIDE	4	F, mg/L	00951	0.16	0.59	0.61	0.61	0.15	0.59	0.62	0.64	0.66
SULFATE	*250	SO ₄ , mg/L	00945	21.6	24.3	24.2	24.3	19.9	23.8	23.8	23.5	23.8
HARDNESS		CaCO ₃ , mg/L	00900	139	145	138	139	138	133	139	141	134
CALCIUM		Ca, mg/L	00916	34.0	34.0	34.0	33.9	34.1	34.3	34.3	33.9	34.0
MAGNESIUM		Mg, mg/L	00927	11.8	11.9	11.9	11.8	11.7	11.7	11.8	11.7	11.7
POTASSIUM		K, mg/L	00937	1.35	1.39	1.38	1.33	1.28	1.33	1.32	1.30	1.30
SODIUM		Na, mg/L	00006	8.19	8.57	8.48	8.52	7.80	8.27	8.31	8.28	8.24
SOLIDS, TOTAL DISSOLVED	*500	TDS, mg/L	00150	R	R	R	R	R	R	R	R	R
SOLIDS, TOTAL		Tot. Sol., mg/L	00500	147	137	141	135	136	144	110	140	144
TOTAL ORGANIC CARBON		TOC, mg/L	00680	1.83	1.82	1.78	1.81	1.83	1.79	1.82	1.82	1.23
OXYGEN DEMAND, CHEMICAL		O, mg/L	00335	4.2	2.8	3.3	3.8	3.1	3.8	5.1	8.3	4.3
NITROGEN, AMMONIA		N, mg/L	00610	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
NITROGEN, NITRATE	10	N, mg/L	00620	0.316	0.283	0.272	H	0.292	0.281	0.280	H	H
NITROGEN, NITRITE	1	N, mg/L	00615	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
ORTHOPHOSPHATE		PO ₄ , mg/L	00660	<0.03	0.408	0.405	0.551	<0.03	0.536	0.536	0.557	0.568
PHOSPHATE, TOTAL		PO ₄ , mg/L	00650	0.044	0.828	0.784	0.998	0.072	1.09	1.04	1.11	1.09
CYANIDE, TOTAL	200	CN, ug/L	00720	<12	<12	<12	<12	<12	<12	<12	<12	<12

* Federal/State Secondary MCLs

** Action Level

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

Nitrate samples collected on 8/8/17

H - Holding Time Exceeded

R - Data rejected

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: August 29, 2017 LAB ID Nos. 3rd QUARTER

February 6, 2017 (Site 3 & 6) 17C0843 17C0844 17C0845 17C0951 17C0847 17C0848 17C0849 17C0952 17C0851

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	*50-200	Al, µg/L	01105	14.1	200	193	181	13.6	182	188	190	182
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	19.4	19.0	18.9	19.0	19.4	18.8	19.3	18.7	19.0
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON		B, µg/L	01022	25.4	24.9	25.1	25.0	24.3	24.1	24.7	24.4	24.6
CADMIUM	5	Cd, µg/L	01027	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHROMIUM	100	Cr, µg/L	01034	<1	<1	2.7	<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	1.99	<1	<1	1.29	<1	<1	<1	<1	1.14
IRON	*300	Fe, µg/L	00031	7.21	<1	<1	1.95	7.21	<1	<1	<1	2.93
LEAD	**15.0	Pb, µg/L	01051	<1	<1	<1	<1	<1	<1	1.80	<1	<1
LITHIUM		Li, µg/L	01132	1.60	1.58	1.60	1.60	1.46	1.49	1.50	1.46	1.46
MANGANESE	*50	Mn, µg/L	01055	<1	<1	<1	<1	<1	<1	<1	<1	<1
MERCURY	2	Hg, µg/L	71900	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MOLYBDENUM		Mo, µg/L	01062	<1	1	<1	<1	<1	<1	<1	<1	<1
NICKEL		Ni, µg/L	01067	1.11	1.15	1.12	1.21	1.24	1.18	1.19	1.34	1.22
SELENIUM	50	Se, µg/L	01147	<1	<1	<1	<1	<1	<1	<1	<1	<1
SILICON		Si, µg/L	01142	711	769	779	776	828	857	861	830	823
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM		Sr, µg/L	01082	112	112	109	111	111	109	113	108	109
THALLIUM	2	Tl, µg/L	01059	<1	<1	<1	<1	<1	<1	<1	<1	<1
TITANIUM		Ti, µg/L	01152	<1	1.32	<1	1.14	<1	1.32	1.27	1.18	1.22
VANADIUM		V, µg/L	00985	<1	<1	<1	<1	<1	<1	<1	<1	<1
ZINC	*5000	Zn, µg/L	01092	<1	<1	<1	11.7	<1	<1	<1	14.8	7.44

* Federal/State Secondary MCLs

** Action Level

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

Rand. Bath

CHIEF WATER CHEMIST

Haseen S. Sh

DIRECTOR OF LABORATORIES

Indrakishore

MANAGER OF WATER QUALITY

DeS

DEPUTY COMMISSIONER