

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

1st Quarter

Sample Date	3/3/2020	3/3/2020	3/3/2020	3/10/2020	3/3/2020	3/3/2020	3/3/2020	3/11/2020	3/11/2020
LAB ID Nos.	20C0892	20C0894	20C0895	20C0977- 20C0979	20C0888	20C0890	20C0891	20C0996- 20C0984	20C099- 20C1002

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	SOUTH WATER PURIFICATION PLANT				JARDINE WATER PURIFICATION PLANT				
				1	2A	2B	3	4	5A	5B	5	7
				RAW LAKE	OUTLETS		***DISTRIBUTION SOUTH	RAW LAKE	OUTLETS		***DISTRIBUTION	
					73rd Street	79th Street			North	Central	Central	North
TEMPERATURE ‡		°C	00010	3	2	3	6	3	3	3	9	10
TURBIDITY	TT	N.T.U.	82079	7.6	0.10	0.10	0.24	6.50	0.15	0.20	0.11	0.11
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 E	1 M	1 Mm	1 M	1 E	1 Mm	1 M	1 M	1 Mm
COLOR (Apparent) ‡	*15	Pt.-Co. CU	00080	53	2	2	1	36	1	0	4	3
pH	*6.5-8.5	STD. Units	00040	8.2	7.8	7.8	7.9	8.2	7.8	7.8	7.9	7.9
FREE CHLORINE RESIDUAL ‡		CL <sub>2</sub> , mg/L	50064	ND	1.52	1.50	1.25	ND	1.34	1.24	1.23	1.23
SATURATION INDEX, LANGELIER ‡		UNITS +/-		-0.10	-0.77	-0.71	-0.41	-0.20	-0.99	-0.97	-0.34	-0.31
ALKALINITY, PHENOLPHTHALEIN		0	00415	0	0	0	0	0	0	0	0	0
ALKALINITY, TOTAL		CaCO <sub>3</sub> , mg/L	00410	108	100	101	101	108	98.6	100	101	101
CONDUCTIVITY		uS/cm		307	308	309	308	299	310	310	310	309
BROMIDE ‡		Br, mg/L	71870	<0.1	<0.1	<0.1	<0.10	<0.1	<0.1	<0.1	<0.10	<0.10
CHLORIDE	*250	Cl, mg/L	00940	15.0	17.5	17.4	16.4	17.4	19.5	19.6	16.8	16.6
FLUORIDE	4	F, mg/L	00951	0.851	0.769	R	0.745	0.712	0.698	0.694	0.699	0.701
SULFATE	*250	SO <sub>4</sub> , mg/L	00945	22.9	27.1	26.8	27.8	22.3	27.6	28.3	28.4	28.2
HARDNESS		CaCO <sub>3</sub> , mg/L	00900	144	142	142	136	144	142	134	137	136
CALCIUM		Ca, mg/L	00916	37.0	36.5	36.3	35.8	37.3	36.5	36.4	35.7	35.2
MAGNESIUM ‡		Mg, mg/L	00927	12.7	12.6	12.5	12.3	12.7	12.6	12.6	12.2	12.0
POTASSIUM ‡		K, mg/L	00937	1.30	1.41	1.39	1.33	1.31	1.40	1.39	1.29	1.27
SODIUM ‡		Na, mg/L	00006	8.99	9.42	9.46	9.40	8.91	9.74	9.68	9.57	9.16
SOLIDS, TOTAL DISSOLVED *	*500	TDS, mg/L	00150	172	161	155	137	159	154	167	147	141
SOLIDS, TOTAL *		Tot. Sol., mg/L	00500	185	164	172	158	161	160	173	158	162
TOTAL ORGANIC CARBON		TOC, mg/L	00680	1.69	1.47	1.46	1.47	2.01	1.52	1.53	1.48	1.41
OXYGEN DEMAND, CHEMICAL ‡		O, mg/L	00335	6.15	4.56	6.29	6.35	4.22	4.51	3.25	6.12	5.90
NITROGEN, AMMONIA ‡		N, mg/L	00610	<0.1	<0.1	<0.1	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1
NITROGEN, NITRATE ‡ *	10	N, mg/L	00620	0.362	0.367	0.365	0.347	0.380	0.384	0.385	0.342	0.338
NITROGEN, NITRITE	1	N, mg/L	00615	<0.1	<0.1	<0.1	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1
ORTHOPHOSPHATE		PO <sub>4</sub> , mg/L	00660	<0.06	0.630	0.624	0.651	<0.06	0.524	0.522	0.548	0.594
PHOSPHATE, TOTAL		PO <sub>4</sub> , mg/L	00650	<0.06	1.24	1.40	1.30	<0.06	1.13	1.15	1.13	1.21
CYANIDE, TOTAL	200	CN, ug/L	00720	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S

\* Federal Primary/Secondary MCLs

\*\* Action Level

TT - Treatment Technique

ND - not detected

Distribution samples results are averages

H - Holding Time Exceeded

R - Data rejected

‡ - Non-NELAP Accredited

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

1st Quarter

PARAMETER	IEPA MCL	DETERMINED AS	STORET NUMBER	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
ALUMINUM	*50-200	Al, µg/L	01105	144	28.8	31.9	30.0	159	38.7	40.9	32.4	36.0
ANTIMONY	6	Sb, µg/L	01268	<1	<1	<1	<1	<1	<1	<1	<1	<1
ARSENIC	10	As, µg/L	01002	1.16	<1	<1	<1	1.02	<1	<1	<1	<1
BARIUM	2000	Ba, µg/L	01007	20.4	18.5	18.7	18.4	20.0	18.6	18.8	18.7	18.8
BERYLLIUM	4	Be, µg/L	01012	<1	<1	<1	<1	<1	<1	<1	<1	<1
BORON ‡		B, µg/L	01022	23.1	22.6	22.3	22.6	22.7	23.2	22.7	22.4	22.5
CADMIUM	5	Cd, µg/L	01027	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHROMIUM	100	Cr, µg/L	01034	<1	1.24	1.20	1.58	<1	<1	1.22	<1	<1
COBALT #		Co, µg/L	01037	<1	<1	<1	<1	<1	<1	<1	<1	<1
COPPER	**1300	Cu, µg/L	01042	2.24	<1	<1	1.11	<1	<1	<1	<1	2.53
IRON	*300	Fe, µg/L	00031	1.31	<1	<1	8.93	194	<1	<1	5.59	13.1
LEAD	**15.0	Pb, µg/L	01051	<1	<1	<1	<1	<1	<1	<1	<1	<1
LITHIUM ‡		Li, µg/L	01132	1.53	2.63	2.74	2.06	<1	2.75	2.27	2.04	2.05
MANGANESE	*50	Mn, µg/L	01055	3.21	<1	<1	<1	3.08	<1	<1	<1	1.28
MERCURY	2	Hg, µg/L	71900	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
MOLYBDENUM		Mo, µg/L	01062	<1	<1	<1	1.12	<1	<1	<1	<1	<1
NICKEL		Ni, µg/L	01067	2.52	1.47	1.50	1.55	2.46	1.44	1.42	1.58	1.57
SELENIUM	50	Se, µg/L	01147	<1	<1	<1	<1	<1	<1	<1	<1	1.00
SILICON		Si, µg/L	01142	1555	1470	1441	1417	1494	1424	1418	1386	1365
SILVER	*100	Ag, µg/L	01077	<1	<1	<1	<1	<1	<1	<1	<1	<1
STRONTIUM ‡		Sr, µg/L	01082	113	119	119	119	111	118	119	118	119
THALLIUM	2	Tl, µg/L	01059	<1	<1	<1	<1	<1	<1	<1	<1	<1
TITANIUM ‡		Ti, µg/L	01152	4.84	1.61	1.74	1.67	4.71	1.44	1.45	1.45	1.50
VANADIUM ‡		V, µg/L	00985	<1	<1	<1	<1	<1	<1	<1	<1	<1
ZINC	*5000	Zn, µg/L	01092	6.33	<1	<1	10.3	13.6	<1	<1	22.0	23.0

\* Federal Primary/Secondary MCLs

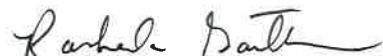
\*\* Action Level


TT - Treatment Technique

ND - not detected

Distribution samples results are averages

‡ - Non-NELAP Accredited

  
 CHIEF WATER CHEMIST

  
 DIRECTOR OF LABORATORIES

  
 DEPUTY COMMISSIONER