

MIAMI-DADE WATER & SEWER DEPARTMENT
ALEXANDER ORR JR. WATER TREATMENT PLANT LABORATORY - CERT. #E56720
 6800 Southwest 87th Avenue, Miami, Florida 33173
 Raymond D. Diaz, Chief, Laboratory Services Division - Tel. (786) 552-4181
2014 TYPICAL AVERAGE ANALYSIS
ALEXANDER ORR WATER TREATMENT PLANT

PARAMETERS	EXPRESSED IN	MCL*	RAW WATER	FINISHED WATER
METALS				
Aluminum (as Al)	mg/L	b2	0.0	0.0
Antimony (as Sb)	mg/L	b	0.001	0.000
Arsenic (as As)	mg/L	c	0.00	0.00
Barium (as Ba)	mg/L	b	0	0
Beryllium (as Be)	mg/L	b	0.000	0.000
Cadmium (as Cd)	mg/L	b	0.000	0.000
Calcium (as Ca)	mg/L	d	78	23
Chromium (as Cr)	mg/L	b	0.0	0.0
Copper (as Cu)	mg/L	c	0.0	0.0
Iron (as Fe)	mg/L	b2	0.0	0.0
Lead (as Pb)	mg/L	b	0.000	0.000
Magnesium (as Mg)	mg/L	d	5.0	3.7
Manganese (as Mn)	mg/L	b2	0.00	0.00
Mercury (as Hg)	mg/L	b	0.000	0.000
Nickel (as Ni)	mg/L	b	0.0	0.0
Potassium (as K)	mg/L	d	3.5	3.0
Selenium (as Se)	mg/L	b	0.00	0.00
Silver (as Ag)	mg/L	b2	0.0	0.0
Sodium (as Na)	mg/L	b	26	27
Thallium (as Tl)	mg/L	b	0.000	0.000
Zinc (as Zn)	mg/L	b2	0	0
Bromide (as Br ⁻)	mg/L	d	0.10	0.05
Chlorides (as Cl ⁻)	mg/L	b2	40	45
Cyanides (as CN ⁻)	mg/L	c	0.00	0.00
Fluoride (as F ⁻)	mg/L	c	0.2	0.4
Nitrates (N)	mg/L	b	0.2	0.2
Nitrites (as N)	mg/L	b	0.1	0.0
Sulfates (as SO ₄ ²⁻)	mg/L	b2	10	11
Alkalinity (as CaCO ₃)				
Phenolphthalein	mg/L	d	0	9
Total	mg/L	d	197	55
Ammonia (as NH ₃)	mg/L	d	0.0	0.7
Carbon Dioxide (as free CO ₂)	mg/L	d	18	0
Chlorine Residual at Plant (as Cl ₂)	mg/L	c	0.0/0.0	0.2/3.3
Color	PCU	b2	7	2

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Conductivity	umhos/cm	d		485	265
Hardness (as CaCO ₃)					
Total	mg/L	d		211	72 =
Non-carbonate	mg/L	d		14	16
Oxygen, dissolved (as O ₂)	mg/L	d		2.5	3.6
pH	pH	c	≥ 6.5	7.4	9.3
Ortho Phosphate (as PO ₄ ³⁻)	mg/L	d		0.00	0.16
Total Phosphate (as PO ₄ ³⁻)	mg/L	d		0.00	0.33
Silica (as SiO ₂)	mg/L	d		5.5	6.9
Surfactants (MBAS)	mg/L	b2	0.5	0.1	0.0
Temperature	°C	d		24.9	25.2 ∞
Threshold Odor Number	TON	b, g	3	NOD	NOD
Total Dissolved Solids	mg/L	b2	500	294	148
Total Organic Carbon	mg/L	d		3.6	2.9
Turbidity	NTU	b	1.0	0.32	0.45
Cryptosporidium/Giardia	#/100L	d, h		ND	-
Total Coliform	Present-Absent -	P, b A	e	A	A
Endrin	mg/L	b	0.002	0.000	0.000
Lindane	mg/L	b	0.0002	0.0000	0.0000
Methoxychlor	mg/L	b	0.04	0.00	0.00
Toxaphene	mg/L	b	0.003	0.000	0.000
2, 4, -D	mg/L	b	0.07	0.00	0.00
2, 4, 5 - TP (Silvex)	mg/L	b	0.05	0.00	0.00
Phenols	mg/L	c	0.001	0.000	0.000
Total Trihalomethanes	mg/L	b	0.080	0.000	0.039
Vinyl Chloride	mg/L	b	0.001	0.000	0.000
Benzene	mg/L	b	0.001	0.000	0.000
Carbon Tetrachloride	mg/L	b	0.003	0.000	0.000
1, 2- Dichloroethane	mg/L	b	0.003	0.000	0.000
Trichloroethylene	mg/L	b	0.003	0.000	0.000
para-Dichlorobenzene	mg/L	b	0.075	0.000	0.000
1, 1- Dichloroethylene	mg/L	b	0.007	0.000	0.000
1, 1, 1-Trichloroethane	mg/L	b	0.2	0.0	0.0
cis-1, 2 - Dichloroethylene	mg/L	b	0.07	0.00	0.00
1, 2- Dichloropropane	mg/L	b	0.005	0.000	0.000
Ethylbenzene	mg/L	b	0.7	0.0	0.0
Monochlorobenzene	mg/L	b	0.1	0.0	0.0
o- Dichlorobenzene	mg/L	b	0.6	0.0	0.0

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Styrene	mg/L	b	0.1	0.0	0.0
Tetrachloroethylene	mg/L	b	0.003	0.000	0.000
Toluene	mg/L	b	1	0	0
Trans-1, 2-Dichloroethylene	mg/L	b	0.1	0.0	0.0
Xylenes (total)	mg/L	b	10	0	0
Dichloromethane	mg/L	b	0.005	0.000	0.000
1, 2, 4 - Trichlorobenzene	mg/L	b	0.07	0.00	0.00
1, 1, 2 - Trichloroethane	mg/L	b	0.005	0.000	0.000
Ethylene Dibromide	mg/L	b	0.00002	0.00000	0.00000
Radionuclides					
Gross Alpha	pCi/L	b	15	<2.0	<0.9
Radon	pCi/L	d	--	<55	<55
Radium 226	pCi/L	b	5	-	0.4
Radium 228	pCi/L	b	5	-	<0.9

NOTES

- a) MCL - Maximum Contaminant Level. Values are for the Agency with the most stringent levels.
- b) MCL - Set by Florida Administrative Code, Chapter 62-550 *
Primary Drinking Water Standards
- b2) MCL - Set by Florida Administrative Code, Chapter 62-550
Secondary Drinking Water Standards
- c) MCL - Set by Dade County Code 24-43 for Drinking Water
- d) No Limits Set
- e) No more than 5.0 percent of the samples collected during a month show the presence of total coliform bacteria.
- f) For free chlorine residual: minimum is 0.2 mg/L, maximum is 4.0 mg/L. For total chlorine residual: minimum is 0.6 mg/L, maximum is 4.0 mg/L. Results expressed as free/total.
- g) N.O.D. - No Odor Detected
- h) ND - Not Detected
- ❖ < - Less than
- ❖ ≥ - Greater than or equal to
- ❖ = - 4.3 grains/Gal
- ❖ ∞ - 77.4°F