

TABLE 6 – Additional Physical, Mineral, and Metal Characteristics

2006 BY WATER TREATMENT PLANT										
ANALYTE	Miramar Treatment Plant			Alvarado Treatment Plant			Otay Treatment Plant			Units
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	
Color	nd	1	2	nd	1	6	nd	1	4	COLOR
pH	7.8	8.1	8.4	8.1	8.4	8.9	8.1	8.4	8.6	pH
Specific Conductance	710	823	951	706	815	966	712	816	972	µS/cm
Total Dissolved Solids (TDS)	397	465	552	354	442	518	361	443	485	mg/L
Alkalinity – Total as CaCO ₃	82	94	103	86	107	124	81	107	136	mg/L
Bicarbonate (HCO ₃)	86	111	125	102	127	151	98	130	165	mg/L
Calcium	42.8	48.2	55.2	41.6	46.0	48.8	39.8	45.6	49.6	mg/L
Carbonate (CO ₃)	0	1	17	0	2	20	0	0	0	mg/L
Hardness – Total	182	204	245	178	198	228	169	198	226	mg/L
Hardness – Total in Grains/Gal	10.6	11.9	14.3	10.4	11.6	13.3	9.9	11.6	13.2	mg/L
Magnesium	17.0	19.8	26.4	15.1	20.0	25.4	16.6	20.1	24.9	mg/L
Potassium	3.2	3.6	4.0	3.2	3.8	4.4	3.1	3.8	4.5	mg/L
Sodium	66.9	72.8	83.3	63.1	72.8	88.8	64.5	75.3	82.8	mg/L
Langlier Index	-0.09	0.28	0.70	0.27	0.69	1.11	0.34	0.60	0.88	
Aggressive Index	11.7	12.1	12.5	12.1	12.5	12.9	12.1	12.4	12.7	
Silica	6.6	8.6	10.6	8.6	10.3	11.8	8.2	10.2	13.2	mg/L
Bromide	< 0.1	< 0.1	0.3	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	mg/L
Chloride	66.2	80.2	101	68.2	81.8	95.7	70.9	88.0	105	mg/L
Cyanide	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	mg/L
Fluoride	0.18	0.22	0.27	0.18	0.21	0.26	0.18	0.24	0.29	mg/L
Nitrate	< 2	< 2	2.41	< 2	< 2	3.77	< 2	< 2	2.24	mg/L
Nitrate as Nitrogen	< 0.45	< 0.45	0.54	< 0.45	< 0.45	0.85	< 0.45	< 0.45	0.51	mg/L
Ortho phosphates	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	mg/L
Perchlorate	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	µg/L
Sulfate	116	148	177	107	129	151	96	122	141	mg/L
Aluminum	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	11.3	µg/L
Antimony	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	µg/L
Arsenic	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	µg/L
Barium	67.8	93.1	122	65.8	82.4	93.5	67.0	75.6	80.8	µg/L
Beryllium	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	µg/L
Cadmium	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	µg/L
Chromium	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	µg/L
Copper	nd	nd	5.8	nd	8.5	19.7	nd	5.1	8.0	µg/L
Iron	< 50	< 50	62	< 50	< 50	63	< 50	< 50	54	µg/L
Lead	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	µg/L
Manganese	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	µg/L
Mercury	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	µg/L
Nickel	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	µg/L
Silver	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	µg/L
Vanadium	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	µg/L
Zinc	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	µg/L

Abbreviations:

mg/L: Milligrams per liter or Parts per million (ppm)

µg/L: Micrograms per liter or Parts per billion (ppb)

µS/cm: Micro siemens per centimeter

COLOR: natural color units