

TABLE 6 – ADDITIONAL PHYSICAL, MINERAL, AND METAL CHARACTERISTICS

2005 BY WATER TREATMENT PLANT

ANALYTE	Miramar Treatment Plant			Alvarado Treatment Plant			Otay Treatment Plant			Units
	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	
Hardness – Total	181	232	267	156	218	244	173	216	244	mg/L
Hardness – Total in Grains/Gal	10.6	13.6	15.6	9.1	12.7	14.3	10.1	12.6	14.3	gr/Gal
Calcium	40.8	52.5	60.8	35.4	48.1	52.8	37.6	46.9	53.2	mg/L
Magnesium	18.9	24.2	27.6	16.1	23.5	27.8	18.9	23.6	26.6	mg/L
Sodium	71.6	81.2	88.9	63.4	75.7	84.4	72	80.8	87.7	mg/L
Potassium	3.35	4.35	6.76	3.4	4.5	6.82	3.37	4.39	6.83	mg/L
Alkalinity – Total as CaCO3	96.1	109	119	94.6	121	135	101	112	126	mg/L
Carbonate (CO3)	0	0	0	0	1.7	9.3	0	1.4	8.4	mg/L
Bicarbonate (HCO3)	117	132	145	115	143	156	123	134	153	mg/L
Sulfate	111	166	213	81.9	134	175	88.9	139	179	mg/L
Chloride	86.7	91.5	97.6	77.2	86.1	95.3	88.7	97.1	108	mg/L
Nitrate	< 2	< 2	2.3	< 2	< 2	4.39	< 2	< 2	3.25	mg/L
Fluoride	0.21	0.27	0.52	0.2	0.25	0.52	0.21	0.28	0.52	mg/L
pH	7.62	8.1	8.56	7.81	8.25	8.6	8.03	8.32	8.61	pH
Specific Conductance	754	964	1100	684	909	1200	758	938	1090	µS/cm
Total Dissolved Solids (TDS)	430	510	595	379	470	533	397	499	532	mg/L
Color	ND	1.5	3	ND	2.4	4	ND	2.4	8	COLOR
Aluminum	< 10	< 10	17.5	< 10	< 10	19	< 10	< 10	< 10	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	68	99.3	120	60.5	76.8	93.1	56.1	79.1	94.8	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	6.29	14.7	30	< 5	8.4	20.8	< 5	< 5	18.5	µg/L
Iron	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	µg/L
Lead	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	µg/L
Manganese	< 2	< 2	17.4	< 2	< 2	8.8	< 2	< 2	6.7	µg/L
Mercury	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	µg/L
Nickel	< 10	< 10	< 10	< 10	< 10	10.3	< 10	< 10	< 10	µg/L
Silver	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	µg/L
Vanadium	< 3	4.8	14.3	< 3	< 3	< 3	< 3	< 3	< 3	µg/L
Zinc	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	µg/L
Langlier Index	-0.12	0.35	0.92	0	0.62	1.37	0	0.58	0.97	
Aggressive Index	11.7	12.2	12.7	11.9	12.5	13.2	12	12.5	12.8	
Silica	7.4	8.3	9.5	7.6	10.7	12.4	7.4	9.6	10.7	mg/L
Ortho Phosphate	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	mg/L
Nitrate as Nitrogen	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	mg/L
Cyanide	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	mg/L
Bromide	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.15	< 0.1	< 0.1	< 0.1	mg/L
Perchlorate	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	µg/L

Abbreviations:

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

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

ND: Not detected

µS/cm: Micro siemens per centimeter

COLOR: Natural color units