



## 2008 Recycled Water Quality Summary

CONSTITUENT	UNITS	Recycled Water				Groundwater Sources							
		MWRP		LAWRP		Well 72		Well 78		Well ET1 (PAP)		Well ET2	
		Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range
Electrical Conductivity	mohs/cm	1092	893 - 1378	-	-	1404	1330 - 1480	956	923 - 1000	1367	1140 - 1660	-	-
pH	SU	6.8	6.0 - 8.7	7.8	7.0 - 8.0	7.2	6.9 - 7.5	7.4	7.2 - 7.5	8.0	7.0 - 8.3	7.3	7.2 - 7.4
Temperature	°C	27.3	22.5 - 32.4	21.3	11.5 - 29.2	24.8	20.7 - 26.8	29.3	27.0 - 30.8	25.0	21.5 - 36.6	27.1	25.5 - 28.8
Total Chlorine Residual	mg/L	9.2	5.2 - 13.8	8.0	3.6 - 34	<0.05	ND - 0.32	0.10	ND - 0.20	0.06	ND - 0.26	<0.05	ND
Turbidity	NTU	1.1	0.2 - 2.0	1.0	0.33 - 2.0	1.2	0.11 - 12	0.82	0.20 - 4.7	0.69	ND - 10	-	-
Micro													
Total Coliforms	MPN/100ml	<1.8	ND - 350	<1.8	ND - 13	<1.8	ND	<1.8	ND - 2.0	<1.8	ND	<1.8	ND
Fecal Coliforms	MPN/100ml	<1.8	ND - 2.0	<1.8	ND - 4.5	<1.8	ND	<1.8	ND	<1.8	ND	<1.8	ND
Conventional													
Biochemical Oxygen Demand	mg/L	<3	ND - 6.6	<3.0	ND	-	-	-	-	-	-	-	-
Chemical Oxygen Demand	mg/L	23	ND - 88	35	20 - 59	-	-	-	-	-	-	-	-
Total Dissolved Solids	mg/L	675	576 - 760	736	724 - 752	1010	1010	-	-	939	910 - 978	667	652 - 682
Total Organic Carbon	mg/L	7.7	5.3 - 13	11	8.1 - 14	<1.0	ND	<1.0	ND	-	-	-	-
Total Suspended Solids	mg/L	1.5	ND - 7.6	2.2	ND - 14	-	-	2.1	ND - 10	2.0	<1.0 - 4.3	1.1	ND - 5.5
Volatile Suspended Solids	%	-	-	90	31 - 100	-	-	-	-	-	-	-	-
Nutrients													
Ammonia as Nitrogen	mg/L	0.19	ND - 11	-	-	-	-	<0.08	ND - 0.090	<0.10	ND - 0.41	<0.10	ND
Nitrate as Nitrogen	mg/L	7.7	2.6 - 12	0.20	ND - 0.59	-	-	-	-	8.3	1.5 - 15	-	-
Nitrite as Nitrogen	mg/L	0.01	ND - 0.13	0.20	0.02 - 0.67	13	11 - 19	-	-	<0.010	ND	-	-
Nitrite/Nitrate as Nitrogen	mg/L	7.7	2.6 - 12	0.39	ND - 1.3	-	-	0.44	ND - 0.85	8.3	1.5 - 15	2.4	1.5 - 9.7
Ortho-Phosphate as Phosphorus	mg/L	2.8	0.69 - 4.0	-	-	-	-	0.055	ND - 0.12	0.25	ND - 1.6	-	-
Total Inorganic Nitrogen	mg/L	7.9	3.6 - 17	-	-	-	-	-	-	-	-	2.4	1.5 - 9.7
Total Kjeldahl Nitrogen	mg/L	1.3	0.54 - 4.3	-	-	<0.30	ND - 0.58	<0.30	ND	-	-	0.22	ND - 0.66
Total Nitrogen	mg/L	9.8	7.9 - 13	-	-	13	11 - 19	0.58	ND - 0.92	-	-	2.6	1.5 - 9.7
Total Phosphorus	mg/L	3.0	0.72 - 4.0	-	-	<0.20	ND - 0.21	<0.20	ND	-	-	<0.20	ND - 0.22
Minerals													
Adjusted Sodium Adsorption Ratio	mgeq/L	5	4 - 5	5	5 - 5	-	-	-	-	-	-	-	-
Alkalinity as Ca CO <sub>3</sub>	mg/L	147	109 - 164	259	227 - 286	230	230	216	216	195	190 - 203	-	-
Bicarbonate	mg/L	180	133 - 200	314	276 - 346	-	-	-	-	194	189 - 202	-	-
Boron	mg/L	0.43	0.23 - 0.60	0.52	0.35 - 0.64	-	-	-	-	-	-	-	-
Calcium	mg/L	46.0	37.3 - 53.9	58.5	53.3 - 65.8	-	-	-	-	125	105 - 144	74.4	61.1 - 80.2
Carbonate	mg/L	<0.6	ND	-	-	-	-	-	-	-	-	-	-
Chloride	mg/L	146	114 - 180	156	144 - 173	181	181	136	136	170	152 - 189	-	-
Fluoride	mg/L	0.59	0.33 - 0.82	0.46	0.28 - 0.70	-	-	-	-	-	-	-	-
Magnesium	mg/L	23.5	15.9 - 28.9	24.0	22.9 - 26.1	-	-	-	-	25.4	16.4 - 32.0	20.4	12.7 - 23.1
Potassium	mg/L	18.2	13.9 - 35.6	17.6	16.4 - 19.9	-	-	-	-	3.4	3.1 - 3.7	-	-
Sodium	mg/L	146	129 - 169	151	135 - 161	-	-	-	-	139	134 - 146	-	-
Sodium Adsorption Ratio	mgeq/L	4	4 - 5	4	4 - 5	-	-	-	-	-	-	-	-
Sulfate	mg/L	142	90.8 - 192	215	203 - 233	254	254	194	194	208	188 - 226	-	-
Silica	mg/L	-	-	-	-	-	-	-	-	58	54 - 62	-	-
Total Hardness as CaCO <sub>3</sub>	mg/L	212	160 - 249	250	227 - 271	-	-	-	-	-	-	276	231 - 267
Metals													
Aluminum	ug/L	-	-	91.9	91.9	-	-	-	-	-	-	-	-
Antimony	ug/L	0.431	ND - 0.777	0.602	0.602	-	-	-	-	-	-	-	-
Arsenic	ug/L	1.82	1.00 - 2.23	2.05	2.05	2.45	1.86 - 2.95	7.95	5.68 - 11.8	-	-	6.52	5.62 - 7.36
Barium	ug/L	33.8	17.4 - 54.7	42.2	33.3 - 48.3	-	-	-	-	-	-	-	-
Beryllium	ug/L	<0.25	ND	ND	ND	-	-	-	-	-	-	-	-
Cadmium	ug/L	0.210	ND - 0.498	ND	ND	<0.25	ND	0.292	ND - 0.625	-	-	0.481	0.469 - 0.507
Chromium	ug/L	0.458	ND - 0.654	ND	ND	-	-	-	-	-	-	-	-
Cobalt	ug/L	<0.5	ND - 0.58	-	-	-	-	-	-	-	-	-	-
Copper	ug/L	8.65	5.76 - 13.2	3.25	3.25	4.67	3.75 - 5.65	21.0	12.0 - 34.7	-	-	4.38	3.11 - 5.30
Iron	ug/L	54.0	29.5 - 67.7	20.2	8.2 - 42.7	-	-	-	-	-	-	-	-
Lead	ug/L	0.302	ND - 0.538	0.274	0.274	0.435	0.297 - 0.657	0.574	0.451 - 0.737	-	-	0.544	0.314 - 0.724
Manganese	ug/L	13.5	1.07 - 26.7	13.6	8.61 - 17.1	-	-	-	-	-	-	21.5	21.4 - 21.6
Mercury	ug/L	0.041	ND - 0.21	ND	ND	-	-	-	-	-	-	-	-
Molybdenum	ug/L	59.5	19.1 - 170	4.80	4.80	-	-	-	-	-	-	-	-
Nickel	ug/L	2.40	1.36 - 3.18	3.71	3.71	3.42	2.44 - 4.30	1.43	0.918 - 2.29	-	-	1.44	0.877 - 1.78
Selenium	ug/L	2.19	ND - 3.53	ND	ND	9.18	8.69 - 9.99	4.26	2.13 - 7.19	-	-	5.76	5.13 - 6.54
Silver	ug/L	<0.250	ND - 0.258	ND	ND	-	-	-	-	-	-	-	-
Thallium	ug/L	<0.25	ND - 0.364	ND	ND	-	-	-	-	-	-	-	-
Zinc	ug/L	47.0	27.2 - 55.2	23.3	23.3	11.2	8.52 - 13.5	27.6	23.2 - 32.6	-	-	12.3	4.96 - 20.1
Other													
Cyanide	ug/L	<0.005	ND	-	-	-	-	-	-	-	-	-	-
Surfactants	mg/L	-	-	0.16	0.11 - 0.23	-	-	-	-	-	-	<0.10	ND