Recycled Water Quality Information for the San Jose/Santa Clara Water Pollution Control Plant

2018

Water Quality Parameter	Yearly Average	Standard Deviation	Minimum Level	Maximum Level	Jan-Feb Average	Mar-Apr Average	May-Jun Average	Jul-Aug Average	Sep-Oct Average	Nov-Dec Average	Sample Frequency
General Parameters											
Alkalinity (Total as CaCO3), mg/L	125	5.8	106	177	116	125	126	133	121	130	Weekly
Ammonia (as Nitrogen), mg/L	1.9	0.3	1.4	2.7	2.3	2.1	1.5	2.0	1.8	1.7	Monthly
Bicarbonate (HCO3), mg/L	125	5.8	106	177	116	125	126	133	121	130	Weekly
Biological Oxygen Demand, mg/L	1.2	0.2	0	2.2	1.0	1.1	1.4	1.2	1.4	1.1	Weekly
Conductivity, umhos/cm	918	117	710	1,270	787	821	960	1,110	876	949	Weekly
Hardness (as CaCO3), mg/L	173	13	145	255	168	161	175	195	160	178	Weekly
Nitrate (as Nitrogen), mg/L	9.9	1.3	8.0	12.3	8.6	9.0	10.1	9.7	9.9	12.3	Monthly
Nitrite (as Nitrogen), mg/L	<0.08	NA	<0.02	0.24	0.22	0.06	0.07	0.05	<0.04	<0.02	Monthly
Permeability SAR [calculated]	3.8	0.4	3.2	4.5	3.3	3.3	3.9	4.4	3.8	3.9	Monthly
pH (units)	7.6	0.1	6.9	8.4	7.8	7.7	7.5	7.5	7.5	7.6	Daily
Temperature, degrees Fahrenheit	71.7	3.7	64.2	77.5	67.4	68.7	73.1	76.5	74.8	69.5	Daily
Total Coliform Count, CFU/100ml	<1	NA	<1	40	<1	<1	<2	<1	<1	<1	Daily
Total Dissolved Solids, mg/L	524	75	390	740	436	463	530	649	509	552	Weekly
Total Residual Chlorine, mg/L	5.7	0.5	2.5	8.0	5.1	5.4	5.7	6.4	6.0	5.8	Daily
Total Suspended Solids, mg/L	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	Weekly
Turbidity, NTU	0.4	0.1	0.2	0.8	0.4	0.4	0.5	0.5	0.4	0.4	Daily
Chemical Parameters											
Arsenic (As), ug/L	0.6	0.2	0.4	0.9	0.4	0.5	0.7	0.7	0.6	0.9	Monthly
Boron (B), ug/L	364	18.1	319	411	345	364	351	397	362	368	Monthly
Cadmium (Cd), ug/L	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	Monthly
Calcium (Ca), ug/L	32,800	2,390	28,300	40,200	31,400	30,300	31,800	36,900	32,200	34,300	Monthly
Chloride (Cl), ug/L	152,000	30,600	110,000	203,000	117,000	123,000	160,000	202,000	154,000	160,000	Monthly
Total Chromium (Cr), ug/L	0.3	0.04	0.2	0.4	0.3	0.3	0.3	0.4	0.3	0.3	Monthly
Copper (Cu), ug/L	1.6	0.3	1.0	2.2	1.8	1.7	1.7	1.6	1.1	1.4	Monthly
Iron (Fe), ug/L	<100	NA	<100	<100	<100	<100	<100	<100	<100	<100	Monthly
Lead (Pb), ug/L	<0.1	NA	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	Monthly
Magnesium (Mg), ug/L	22,300	2,070	18,700	27,400	20,800	20,500	22,000	26,100	21,400	23,100	Monthly
Mercury (Hg), ug/L	0.0007	0.0001	0.0006	0.0010	0.0006	0.0006	0.0006	0.0008	0.0009	0.0008	Monthly
Nickel (Ni), ug/L	3.1	0.5	2.4	4.4	2.4	2.6	3.1	3.3	3.6	3.4	Monthly
Phosphate (PO4), ug/L	1,140	1,200	315	4,140	459	1,100	767	435	553	3,540	Monthly
Potassium (K), ug/L	11,800	1,760	9,000	14,900	10,100	9,550	11,500	13,800	12,200	13,600	Monthly
Silicon (Si), ug/L	6,460	747	5,180	8,270	6,040	5,510	6,120	7,530	6,470	7,130	Monthly
Silver (Ag), ug/L	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	Monthly
Sodium (Na), ug/L	115,000	17,700	91,800	145,000	96,100	96,400	117,000	144,000	114,000	120,000	Monthly
Sulfate (SO4), ug/L	62,400	7,630	49,600	80,400	51,800	58,800	62,600	73,500	59,600	68,300	Monthly
Zinc (Zn), ug/L	12.2	2.3	9.4	18.3	9.9	9.6	12.9	12.9	12	16	Monthly
Other											
Dissolved Oxygen, mg/L	7.7	0.2	6.7	8.4	8.1	7.9	7.7	7.4	7.6	7.8	Daily
Ortho Phosphate, mg/L	0.6	0.3	0.2	2.9	0.8	0.8	0.3	0.4	0.4	1.0	Weekly

NA = Not Available
MPN = Most Probable Number
SAR = [Na+] /sqrt(([Ca++]+[Mg++])/2)

NTU = Nephelometric Turbidity Units (measure of the suspended material in water)
mg/L = Milligrams per Liter (parts per million)
ug/L = Micrograms per Liter (parts per billion)