

Western Treatment Plant Recycled Water Quality

May 2015

9/06/2015

Parameter Summary for Previous 12 Months To May 2015

Location: **ERW6** Effluent Reuse - Pump station No 6

Parameter	Units	LTV	STV	May 2015	Rolling 12 Months Results				
					No.Samples	Average	Min	Max	Median
Aluminium	mg/L	5	20	0.0100	9	0.033	0.010	0.070	0.020
Antimony	mg/L			0.0010	9	0.001	0.001	0.002	0.001
Arsenic	mg/L	0.1	2	0.0020	9	0.002	0.001	0.002	0.002
Barium	mg/L			0.0060	9	0.005	0.004	0.006	0.005
Beryllium	mg/L			< 0.0010	9	< 0.001	< 0.001	< 0.001	< 0.001
Boron	mg/L	0.5		0.1400	9	0.160	0.140	0.180	0.160
Cadmium	mg/L	0.01	0.05	< 0.0002	9	< 0.000	< 0.000	< 0.000	< 0.000
Chromium	mg/L	0.1	1	0.0010	9	0.001	0.001	0.002	0.001
Cobalt	mg/L	0.05	0.1	0.0010	9	0.001	0.001	0.001	0.001
Copper	mg/L	0.2	5	0.2500	9	0.033	0.004	0.250	0.006
Iron	mg/L	0.2	10	0.0200	9	0.048	0.020	0.110	0.040
Lead	mg/L	2	5	< 0.0010	9	< 0.001	< 0.001	< 0.001	< 0.001
Lithium	mg/L	2.5	2.5	< 0.0200	9	< 0.020	< 0.020	< 0.020	< 0.020
Manganese	mg/L	0.2	10	0.0180	9	0.036	0.011	0.072	0.027
Mercury	mg/L	0.002	0.002	< 0.0001	9	< 0.000	< 0.000	< 0.000	< 0.000
Molybdenum	mg/L	0.01	0.05	0.0030	9	0.003	0.002	0.003	0.003
Nickel	mg/L	0.2	2	0.0080	9	0.009	0.008	0.010	0.009
Selenium	mg/L	0.02	0.05	< 0.0010	9	< 0.001	< 0.001	< 0.001	< 0.001
Silver	mg/L			< 0.0010	9	< 0.001	< 0.001	< 0.001	< 0.001
Thorium	mg/L			< 0.0020	9	< 0.002	< 0.002	< 0.002	< 0.002
Tin	mg/L			< 0.0010	9	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	mg/L	0.1	0.5	0.0010	9	0.001	0.001	0.002	0.001
Zinc	mg/L	2	5	0.2100	9	0.040	0.014	0.210	0.018

9/06/2015

Physical Chemistry Summary for Previous 12 Months To May 2015

Location: **ERW6** Effluent Reuse - Pump station No 6

Parameter	Units	LTV*	STV*	May 2015	Rolling 12 Months Results				
					No.Samples	Average	Min	Max	Median
Biological Oxygen Demand	mg/L			< 2.00	17	< 2.12	< 2.00	< 4.0	< 2.000
E.Coli	orgs/100mL			3.00	42	0.50	0.00	7.0	0.000
Nitrite	mg N / L			< 0.02	9	< 0.03	< 0.01	< 0.1	< 0.020
Nitrate	mg N / L			27.00	9	15.30	6.40	27.0	13.000
pH	Units			7.20	9	7.48	7.20	7.8	7.500
Somatic Coliphage	pfu/100mL			< 2.00	40	< 1.03	< 1.00	< 2.0	< 1.000
Total Phosphate	mg P / L	0.05	0.8-12	8.40	9	8.34	7.40	9.5	8.400
Total Nitrogen	mg/L	5	25-125	28.00	9	17.92	9.60	28.0	19.000
Suspended Solids	mg/L			4.00	40	3.55	2.00	10.0	3.000

Salinity Summary for Previous 12 Months To May 2015

Location: **ERW6** Effluent Reuse - Pump station No 6

Rolling 12 Months Results

<u>Parameter</u>	<u>Units</u>	<u>LTV</u>	<u>STV</u>	<u>May 2015</u>	<u>No.Samples</u>	<u>Average</u>	<u>Min</u>	<u>Max</u>	<u>Median</u>
Calcium	mg/L			30	8	27	18	30	29
Chloride	mg/L			440	9	408	340	460	410
Electrical Conductivity	uS/cm			1,800	9	1,756	1,600	1,900	1,800
Magnesium	mg/L			26	9	23	15	27	25
Potassium	mg/L			33	9	29	20	33	30
SAR				9	9	9	8	10	9
Sodium	mg/L			280	9	253	180	290	270
Total Dissolved Solids	mg/L			1,000	22	1,020	940	1,200	1,000
TDS Inorganic	mg/L			870	22	882	820	980	875