Annex F4

Effluent Quality Monitoring Results

Table F4.1 Effluent Monitoring Results

		1 Apr 22	2 Apr 22	3 Apr 22	4 Apr 22	5 Apr 22	6 Apr 22	7 Apr 22	8 Apr 22	9 Apr 22	10 Apr 22	11 Apr 22
On-site Measurements												
Temperature	°C	28.7	21.2	22.6	27.8	26.7	28.6	29.9	32	26.8	27.4	30.9
pH Value	pH Unit	8.6	8.7	8.7	8.6	8.7	8.6	8.6	8.7	8.6	8.6	8.6
Volume Discharged	m^3	952	1109	865	438	869	374	1285	695	88	299	443
Laboratory Analysis												
Suspended Solids (SS)	mg/L	30.6	56.4	52.6	21.8	37.3	20.4	26.4	23.5	19.1	53.6	32.7
Alkalinity	mg/L	2220	2180	2120	2230	2190	2340	2280	2280	2400	2350	2320
Ammoniacal-nitrogen	mg/L	0.3	0.26	0.3	0.52	0.3	0.47	0.31	0.31	0.39	0.94	0.58
Chloride	mg/L	2210	2070	1850	1930	1910	2010	2350	2380	2210	2560	2480
Nitrite-nitrogen	mg/L	0.17	0.19	0.14	0.45	0.21	0.45	0.21	0.19	0.38	0.26	0.47
Phosphate	mg/L	9.6	8.84	8.41	9.35	7.83	9.53	8.08	9.5	10.2	9.6	9.28
Sulphate	mg/L	151	147	123	123	133	121	150	152	144	152	155
Total Nitrogen	mg/L	103	116	127	119	113	93.9	103	98.4	91.7	108	99.2
Nitrate-nitrogen	mg/L	51	57.3	72.1	64.6	57.9	41.7	48.6	45.1	42.8	47.9	45.4
Total Inorganic Nitrogen	mg/L	51.47	57.75	72.54	65.57	58.41	42.62	49.12	45.6	43.57	49.1	46.45
Biochemical Oxygen Demand (BOD)	mg/L	14	14	33	9	15	9	10	10	6	12	9
Chemical Oxygen Demand (COD)	mg/L	1200	1140	1180	1180	1010	1040	1160	1230	1200	1350	1160
Oil & Grease	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total Organic Carbon (TOC)	mg/L	428	484	362	475	349	350	453	449	466	445	439
Boron	µg/L	5160	5030	5040	5150	5460	5650	5640	5540	5790	5790	5410
Calcium	mg/L	28.2	33.1	27.3	25.2	30.3	26.6	32.1	28.5	27.3	26	25.9
Iron	mg/L	1.71	1.77	1.6	1.63	1.68	1.79	2.11	2.09	2.04	2	2.05
Magnesium	mg/L	30	30.7	25.3	26.4	28	26.5	31.4	31	31.3	28.6	29.6
Potassium	mg/L	898	955	785	846	836	816	932	921	947	885	892
Cadmium	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	µg/L	131	135	137	136	120	129	132	135	132	134	134
Copper	µg/L	<10	<10	44	<10	<10	<10	<10	<10	<10	24	<10
Nickel	µg/L	120	122	121	122	118	126	124	129	127	130	128
Zinc	µg/L	75	88	111	69	88	70	81	80	71	95	82

		12 Apr 22	13 Apr 22	14 Apr 22	15 Apr 22	16 Apr 22	17 Apr 22	18 Apr 22	19 Apr 22	20 Apr 22	21 Apr 22	22 Apr 22	23 Apr 22
On-site Measurements													
Temperature	°C	32.4	30.3	31.5	27.3	27.7	27.3	26.7	26.5	29.2	29	32	29.4
pH Value	pH Unit	8.6	8.5	8.6	8.5	8.5	8.6	8.6	8.6	8.7	8.6	9	8.5
Volume Discharged	m^3	580	227	242	1225	1064	648	368	1001	265	337	815	1137
Laboratory Analysis													
Suspended Solids (SS)	mg/L	39.6	17.6	16.5	18.9	23.7	19.9	30.2	11.7	15.4	12.7	36.1	41
Alkalinity	mg/L	2320	2350	2430	2320	2360	2320	2360	2440	2440	2400	2410	2390
Ammoniacal-nitrogen	mg/L	0.34	0.82	0.46	0.38	0.4	0.31	0.37	0.34	0.35	0.51	0.24	0.2
Chloride	mg/L	2120	2110	2120	2150	2190	2160	2190	2160	2220	2170	2620	2510
Nitrite-nitrogen	mg/L	0.18	0.61	0.55	0.22	0.23	0.23	0.32	0.21	0.21	0.46	0.17	0.17
Phosphate	mg/L	8.93	9.23	9.9	8.98	8.87	8.94	8.92	8.85	8.98	9.02	9.58	9.21
Sulphate	mg/L	161	157	144	164	154	144	144	136	140	130	140	142
Total Nitrogen	mg/L	101	96.4	84.6	95	97.8	110	105	87.4	83.1	79	85.1	89.2
Nitrate-nitrogen	mg/L	45.1	42.8	34.8	42.7	46.8	55	53.7	36.6	32.7	31.1	33.1	34.5
Total Inorganic Nitrogen	mg/L	45.62	44.23	35.81	43.3	47.43	55.54	54.39	37.15	33.26	32.07	33.51	34.87
Biochemical Oxygen Demand (BOD)	mg/L	14	5	6	12	10	10	8	7	6	10	5	5
Chemical Oxygen Demand (COD)	mg/L	1210	1090	1070	1230	1150	1120	1070	1070	1040	1120	1160	1150
Oil & Grease	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total Organic Carbon (TOC)	mg/L	457	420	553	426	431	409	530	441	425	438	439	391
Boron	µg/L	5940	6110	5640	5660	5900	5980	6080	6080	5830	5700	5630	5700
Calcium	mg/L	25	26.1	22.2	24.5	22.8	21.5	20.6	19.9	21.5	21.8	23	23.3
Iron	mg/L	2	2.29	2.05	2.29	2.21	2.04	1.92	2.05	1.95	1.92	2.06	2.19
Magnesium	mg/L	32	32.9	31.1	32.8	33.8	33.3	33.8	32.6	31.6	32.2	31.6	34.6
Potassium	mg/L	911	920	916	908	926	936	954	922	908	914	891	970
Cadmium	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	µg/L	138	134	140	139	139	140	139	141	140	137	136	140
Copper	µg/L	40	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	47
Nickel	µg/L	131	133	136	132	133	136	134	139	128	126	127	132
Zinc	µg/L	97	84	79	93	91	91	80	86	80	80	74	96

		24 Apr 22	25 Apr 22	26 Apr 22	27 Apr 22	28 Apr 22	29 Apr 22	30 Apr 22
On-site Measurements								
Temperature	°C	32.1	33.6	35.3	35.2	33.9	33.6	29.9
pH Value	pH Unit	8.6	8.5	8.5	8.4	8.4	8.4	8.4
Volume Discharged	m^3	627	244	757	216	277	218	806
Laboratory Analysis								
Suspended Solids (SS)	mg/L	52.8	12	30.7	16	16.3	14.6	27.5
Alkalinity	mg/L	2400	2450	2430	2400	2400	2380	2410
Ammoniacal-nitrogen	mg/L	0.29	0.54	0.34	0.36	0.56	0.5	0.22
Chloride	mg/L	2480	2390	2200	2230	2080	2180	2300
Nitrite-nitrogen	mg/L	0.19	0.4	0.18	0.19	0.63	0.49	0.3
Phosphate	mg/L	9.32	9.44	9.07	9.14	8.73	9.06	9.35
Sulphate	mg/L	153	139	145	149	143	146	150
Total Nitrogen	mg/L	96.1	90.5	92.4	92.5	90.9	97.3	96.4
Nitrate-nitrogen	mg/L	39.2	37.3	39.8	40.9	41.4	44.3	44.4
Total Inorganic Nitrogen	mg/L	39.68	38.24	40.32	41.45	42.59	45.29	44.92
Biochemical Oxygen Demand (BOD)	mg/L	10	4	7	8	6	9	10
Chemical Oxygen Demand (COD)	mg/L	1040	1150	1200	1150	1110	1070	1080
Oil & Grease	mg/L	<5	<5	<5	<5	<5	<5	<5
Total Organic Carbon (TOC)	mg/L	466	382	356	382	394	396	374
Boron	µg/L	5520	5680	5980	5650	5620	5860	5850
Calcium	mg/L	21.2	22.5	23.7	24.1	23.4	23.4	22.8
Iron	mg/L	1.95	1.81	1.91	1.81	1.84	1.86	1.8
Magnesium	mg/L	32.5	31.6	35.2	33.6	32.3	33.4	33.2
Potassium	mg/L	914	924	1000	958	924	949	942
Cadmium	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	µg/L	137	130	134	135	134	132	130
Copper	µg/L	53	<10	<10	<10	19	<10	<10
Nickel	µg/L	131	123	131	125	124	124	122
Zinc	µg/L	105	69	76	77	86	76	77

		1 May 22	2 May 22	3 May 22	4 May 22	5 May 22	6 May 22	7 May 22	8 May 22	9 May 22	10 May 22	11 May 22
On-site Measurements												
Temperature	°C	27.1	21.5	27.8	29.4	30.2	27.7	27.7	31.0	30.2	29.3	27.2
pH Value	pH Unit	8.4	8.4	8.4	8.3	8.2	8.3	8.3	8.3	8.3	8.3	8.2
Volume Discharged	m^3	970	948	665	196	130	235	976	1,219	456	390	767
Laboratory Analysis												
Suspended Solids (SS)	mg/L	26.6	52.0	49.8	14.5	11.1	10.9	11.5	26.8	17.0	10.5	14.8
Alkalinity	mg/L	2490	2390	2230	2250	2240	2260	2210	2320	2310	2320	2330
Ammoniacal-nitrogen	mg/L	0.27	0.26	0.33	0.29	0.34	0.28	0.30	0.27	0.23	0.30	0.44
Chloride	mg/L	2440	2380	2150	2070	2020	2140	2200	2140	2420	2300	1980
Nitrite-nitrogen	mg/L	0.19	0.15	0.23	0.21	0.28	0.26	0.28	0.16	0.17	0.28	0.21
Phosphate	mg/L	8.91	8.73	8.28	8.11	7.95	8.30	8.43	8.38	7.73	7.87	7.84
Sulphate	mg/L	143	151	143	143	144	124	142	131	127	131	150
Total Nitrogen	mg/L	80.1	89.1	94.9	95.1	87.2	97.6	88.0	71.2	81.1	80.4	76.0
Nitrate-nitrogen	mg/L	30.0	36.4	43.4	45.8	40.3	40.4	37.8	19.3	28.6	27.0	27.2
Total Inorganic Nitrogen	mg/L	30.46	36.81	43.96	46.30	40.92	40.94	38.38	19.73	29.00	27.58	27.85
Biochemical Oxygen Demand (BOD)	mg/L	9	11	7	11	4	5	8	8	9	10	5
Chemical Oxygen Demand (COD)	mg/L	1130	1100	978	971	863	935	989	836	980	941	1030
Oil & Grease	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total Organic Carbon (TOC)	mg/L	381	384	353	340	385	379	464	404	4340	407	405
Boron	µg/L	5790	5660	5940	5240	5090	5240	5170	5460	5660	5820	5540
Calcium	mg/L	23.3	22.0	24.3	27.9	30.0	28.3	28.1	28.3	27.5	27.1	25.3
Iron	mg/L	1.92	1.86	1.72	1.72	1.66	1.78	1.75	1.94	1.88	1.87	1.77
Magnesium	mg/L	35.0	31.1	30.9	30.1	31.6	34.5	34.5	35.6	38.2	37.3	32.1
Potassium	mg/L	951	874	851	824	860	842	826	838	902	880	882
Cadmium	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	µg/L	133	133	124	123	118	123	121	138	137	137	130
Copper	µg/L	<10	40	40	<10	<10	<10	<10	<10	<10	<10	<10
Nickel	µg/L	127	124	114	111	107	111	108	124	129	126	122
Zinc	µg/L	79	100	129	88	84	83	81	75	72	72	68

		12 May 22	13 May 22	14 May 22	15 May 22	16 May 22	17 May 22	18 May 22	19 May 22	20 May 22	21 May 22	22 May 22	23 May 22
On-site Measurements													
Temperature	°C	30.4	33.0	29.0	22.8	28.1	33.5	33.5	34.9	32.4	32.1	28.4	34.4
pH Value	pH Unit	8.3	8.1	8.0	8.0	8.1	7.9	7.8	8.0	7.8	8.0	7.9	7.9
Volume Discharged	m^3	1,479	1,496	1,495	1,495	1,496	1,492	1,496	1,496	1,495	1,490	1,495	1,496
Laboratory Analysis													
Suspended Solids (SS)	mg/L	22.8	17.3	14.7	47.8	4.2	18.0	20.7	24.1	23.2	22.7	30.2	53.4
Alkalinity	mg/L	1950	1610	1270	1060	937	856	766	767	784	783	816	962
Ammoniacal-nitrogen	mg/L	0.54	0.36	0.39	0.35	0.36	0.61	0.58	0.64	0.47	0.57	0.01	0.40
Chloride	mg/L	1760	1510	1190	1190	1100	863	857	925	924	889	1270	1160
Nitrite-nitrogen	mg/L	0.13	0.13	0.26	0.07	0.09	0.06	0.08	0.05	0.04	<0.10	<0.10	<0.10
Phosphate	mg/L	6.56	4.69	2.90	1.61	0.79	0.47	0.20	0.57	0.92	0.99	1.02	1.95
Sulphate	mg/L	181	230	320	429	455	492	604	634	632	650	627	548
Total Nitrogen	mg/L	70.8	88.0	95.5	136.0	100.0	110.0	108.0	105.0	100.0	96.1	107.0	127.0
Nitrate-nitrogen	mg/L	25.2	39.8	48.4	53.9	61.0	64.4	64.9	62.6	59.7	57.4	68.4	81.8
Total Inorganic Nitrogen	mg/L	25.87	40.29	49.05	54.32	61.45	65.07	65.56	63.29	60.21	58.07	68.51	82.30
Biochemical Oxygen Demand (BOD)	mg/L	7	13	14	12	9	4	8	8	8	8	9	11
Chemical Oxygen Demand (COD)	mg/L	802	762	629	576	516	436	424	410	427	444	495	615
Oil & Grease	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total Organic Carbon (TOC)	mg/L	335	297	272	229	211	182	163	177	151	171	192	220
Boron	µg/L	4540	4140	3550	3180	2880	2570	2580	2600	2840	2680	2740	3190
Calcium	mg/L	44.1	61.6	96.8	133.0	158.0	183.0	182.0	188.0	200.0	176.0	156.0	135.0
Iron	mg/L	1.53	1.20	1.49	0.81	0.61	0.63	0.50	0.49	0.52	0.47	0.58	0.87
Magnesium	mg/L	26.3	26.6	26.0	30.0	32.9	36.8	35.8	37.3	39.4	35.8	35.7	35.1
Potassium	mg/L	679	603	505	465	423	417	365	384	395	359	402	471
Cadmium	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	µg/L	114	96	78	68	59	57	51	53	50	48	56	65
Copper	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	11
Nickel	µg/L	104	88	70	58	50	45	38	37	36	34	47	56
Zinc	µg/L	79	81	71	66	62	63	56	56	56	55	72	93

		24 May 22	25 May 22	26 May 22	27 May 22	28 May 22	29 May 22	30 May 22	31 May 22
On-site Measurements									
Temperature	°C	29.1	28.6	31.5	30.5	32.6	31.5	33.6	32.5
pH Value	pH Unit	8.0	8.1	8.3	8.2	8.2	8.3	8.3	8.4
Volume Discharged	m^3	1,434	1,275	1,186	798	569	1,046	1,035	1,160
Laboratory Analysis									
Suspended Solids (SS)	mg/L	37.5	35.2	44	44	79.8	67.2	40.2	34.6
Alkalinity	mg/L	1130	1270	1360	1430	1490	1490	1660	1750
Ammoniacal-nitrogen	mg/L	0.43	0.38	0.37	0.3	0.75	0.24	0.22	0.59
Chloride	mg/L	1200	1300	1400	1500	1570	1750	1880	1730
Nitrite-nitrogen	mg/L	0.10	0.13	0.07	0.13	0.31	0.12	0.12	0.11
Phosphate	mg/L	2.53	2.56	2.83	3.13	4.93	5.05	5.23	5.75
Sulphate	mg/L	527	508	400	377	338	342	290	275
Total Nitrogen	mg/L	117.0	102.0	90.9	98.9	104.0	96.8	98.1	101.0
Nitrate-nitrogen	mg/L	67.5	46.2	41.5	43.6	52.7	45.6	48.7	51.5
Total Inorganic Nitrogen	mg/L	68.03	46.71	41.94	44.03	53.76	45.96	49.04	52.20
Biochemical Oxygen Demand (BOD)	mg/L	9	10	9	9	17	13	10	10
Chemical Oxygen Demand (COD)	mg/L	632	748	682	825	856	790	883	922
Oil & Grease	mg/L	<5	<5	<5	<5	<5	<5	<5	<5
Total Organic Carbon (TOC)	mg/L	247	278	271	298	298	315	329	336
Boron	µg/L	3320	3770	3670	3810	4160	3800	4460	4600
Calcium	mg/L	118.0	121.0	109	98.6	87.2	81.2	65.4	57.8
Iron	mg/L	0.96	1.20	1.28	1.43	1.41	1.34	1.32	1.28
Magnesium	mg/L	32.3	35.5	34.5	34.4	33.5	29.2	27.8	27
Potassium	mg/L	499	576	591	647	674	644	693	712
Cadmium	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	µg/L	68	76	79	80	86	88	89	94
Copper	µg/L	<10	<10	11	14	23	17	13	11
Nickel	µg/L	61	70	73	77	81	88	96	101
Zinc	µg/L	98	102	105	129	168	116	104	99

		1 Jun 22	2 Jun 22	3 Jun 22	4 Jun 22	5 Jun 22	6 Jun 22	7 Jun 22	8 Jun 22	9 Jun 22	10 Jun 22	11 Jun 22
On-site Measurements												
Temperature	°C	34.8	34.3	34.2	36.6	33.1	31.1	33.8	31.2	29.4	29.4	29.4
pH Value	pH Unit	8.4	8.4	8.4	8.4	8.5	8.5	8.4	8.4	8.3	8.3	8.3
Volume Discharged	m^3	1,048	1,027	990	1,200	1,136	1,133	1,091	1,496	1,495	1,496	1,495
Laboratory Analysis												
Suspended Solids (SS)	mg/L	39.9	30.1	23.3	109.0	14.1	16.2	19.2	28.0	33.7	307.0	23.7
Alkalinity	mg/L	1760	1810	1820	1900	2010	2010	2050	1970	1550	1610	1260
Ammoniacal-nitrogen	mg/L	0.45	0.33	0.41	0.48	0.42	0.35	0.28	0.31	0.25	0.43	0.40
Chloride	mg/L	1830	1970	1910	1940	1950	1900	1830	1700	1650	1710	1360
Nitrite-nitrogen	mg/L	0.13	0.14	0.14	0.13	0.14	0.15	0.16	0.14	0.12	0.13	0.08
Phosphate	mg/L	5.93	5.79	5.92	6.14	6.71	6.85	7.05	5.88	5.49	4.76	2.89
Sulphate	mg/L	228	228	227	198	194	177	174	156	208	214	321
Total Nitrogen	mg/L	111.0	115.0	118.0	110.0	74.7	127.0	126.0	101.0	112.0	136.0	102.0
Nitrate-nitrogen	mg/L	57	65.2	64.7	52.7	59.2	68.6	69.6	57.9	64.6	68.7	55.6
Total Inorganic Nitrogen	mg/L	57.58	65.67	65.25	53.31	59.76	69.10	70.04	58.35	64.97	69.26	56.08
Biochemical Oxygen Demand (BOD)	mg/L	6	7	8	24	10	9	7	9	7	38	8
Chemical Oxygen Demand (COD)	mg/L	910	930	906	1010	966	1080	934	957	836	1020	689
Oil & Grease	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total Organic Carbon (TOC)	mg/L	329	345	355	414	388	390	400	400	314	329	258
Boron	µg/L	3980	4430	4430	5060	5170	4960	5010	5030	3480	3720	3230
Calcium	mg/L	47.5	44.4	43.8	38.7	41.3	39.1	32.8	31.8	43.0	43.8	59.4
Iron	mg/L	1.40	1.40	1.38	1.66	1.49	1.58	1.59	1.61	1.33	1.76	1.03
Magnesium	mg/L	25.6	24.6	25.3	25.0	25.4	25.0	23.5	22.4	22.2	23.2	23.8
Potassium	mg/L	703	712	725	788	828	846	816	790	689	709	587
Cadmium	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	µg/L	102	103	104	119	126	124	126	113	92	113	81
Copper	µg/L	11	11	11	10	<10	10	<10	<10	<10	50	<10
Nickel	µg/L	103	105	105	114	121	118	118	109	87	97	74
Zinc	µg/L	102	102	100	112	98	94	87	108	86	161	79

		12 Jun 22	13 Jun 22	14 Jun 22	15 Jun 22	16 Jun 22	17 Jun 22	18 Jun 22	19 Jun 22	20 Jun 22	21 Jun 22	22 Jun 22	23 Jun 22
On-site Measurements													
Temperature	°C	35.0	31.7	32.4	35.1	33.0	34.6	29.0	31.9	34.1	35.7	35.1	37.7
pH Value	pH Unit	8.2	8.3	8.2	8.1	8.1	8.1	8.5	8.2	8.2	8.2	8.3	8.3
Volume Discharged	m^3	1,495	1,496	1,495	1,495	1,347	1,033	1,108	1,152	1,177	1,107	1,048	1,043
Laboratory Analysis													
Suspended Solids (SS)	mg/L	19.0	11.2	16.7	18.7	20.6	21.6	11.2	24.0	12.8	20.5	18.6	15.3
Alkalinity	mg/L	917	847	706	626	680	676	765	911	545	1210	1430	1510
Ammoniacal-nitrogen	mg/L	0.26	0.42	0.46	0.50	0.77	0.53	0.31	0.49	0.31	0.40	0.39	0.25
Chloride	mg/L	1070	999	930	941	831	863	975	1170	633	1380	1500	1570
Nitrite-nitrogen	mg/L	0.09	0.07	0.11	0.14	0.10	0.08	0.05	0.08	0.12	0.11	0.11	0.11
Phosphate	mg/L	1.80	1.48	1.34	1.21	1.25	1.38	1.40	1.60	1.28	2.49	2.21	2.70
Sulphate	mg/L	394	419	472	478	491	477	517	412	219	336	322	313
Total Nitrogen	mg/L	90.1	87.3	98.7	103.0	109.0	108.0	119.0	132.0	74.8	133.0	114.0	113.0
Nitrate-nitrogen	mg/L	52.7	51.5	65.4	67.9	72.9	76.1	76.8	94.4	51.1	89.6	69.8	67.6
Total Inorganic Nitrogen	mg/L	53.05	51.99	65.97	68.54	73.77	76.71	77.16	94.97	51.53	90.11	70.30	67.96
Biochemical Oxygen Demand (BOD)	mg/L	7	6	7	6	7	7	7	9	6	12	10	7
Chemical Oxygen Demand (COD)	mg/L	509	427	464	431	537	463	524	563	316	774	761	774
Oil & Grease	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total Organic Carbon (TOC)	mg/L	198	201	166	163	192	203	222	256	129	306	328	310
Boron	µg/L	2420	2320	2430	2250	2810	2910	3050	3370	2000	4110	4290	4480
Calcium	mg/L	86.6	91.8	80.7	78.8	69.2	72.5	66.6	57.3	40.5	48.2	45.5	42.1
Iron	mg/L	0.71	0.58	0.55	0.60	0.67	0.73	0.80	1.04	0.66	1.44	1.50	1.53
Magnesium	mg/L	28.7	29.3	27.6	28.0	26.2	28.8	28.3	25.8	15.2	26.0	26.4	23.7
Potassium	mg/L	483	450	418	403	427	436	458	487	311	624	664	677
Cadmium	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	µg/L	59	54	51	51	56	57	58	72	41	87	89	97
Copper	µg/L	19	15	<10	<10	<10	15	<10	19	21	<10	<10	<10
Nickel	µg/L	51	46	43	41	45	48	51	66	40	82	85	92
Zinc	µg/L	85	59	55	55	66	91	77	109	48	89	88	87

		24 Jun 22	25 Jun 22	26 Jun 22	27 Jun 22	28 Jun 22	29 Jun 22	30 Jun 22
On-site Measurements								
Temperature	°C	35.0	34.4	35.1	36.1	31.9	34.6	30.2
pH Value	pH Unit	8.2	8.4	8.3	8.3	8.4	8.3	8.4
Volume Discharged	m^3	1,098	677	34	44	44	49	708
Laboratory Analysis								
Suspended Solids (SS)	mg/L	16.1	50.2	13.4	6.5	15.2	12.2	22.5
Alkalinity	mg/L	1540	1720	1670	1790	1760	1800	1790
Ammoniacal-nitrogen	mg/L	0.36	0.33	0.28	1.04	0.51	0.98	0.75
Chloride	mg/L	1610	1650	1640	1750	1710	1770	1670
Nitrite-nitrogen	mg/L	0.13	0.12	0.12	0.56	1.05	0.97	0.7
Phosphate	mg/L	2.75	3.53	2.92	3.58	3.69	3.52	4.24
Sulphate	mg/L	335	337	284	318	305	291	291
Total Nitrogen	mg/L	111.0	109.0	114.0	96.8	99.4	98.8	99.4
Nitrate-nitrogen	mg/L	67.8	57.7	64.2	48.5	47.6	46	46.8
Total Inorganic Nitrogen	mg/L	68.29	58.15	64.60	50.10	49.16	47.95	48.25
Biochemical Oxygen Demand (BOD)	mg/L	6	14	12	12	6	8	8
Chemical Oxygen Demand (COD)	mg/L	942	1040	983	955	839	876	847
Oil & Grease	mg/L	<5	<5	<5	<5	<5	<5	<5
Total Organic Carbon (TOC)	mg/L	322	327	335	347	558	340	342
Boron	µg/L	4370	4970	4370	4480	4480	4600	4810
Calcium	mg/L	42.2	38.5	40.9	40.6	40.8	40.8	38.8
Iron	mg/L	1.45	1.65	1.62	1.72	1.82	1.95	1.76
Magnesium	mg/L	24.7	24.3	25.4	26.5	26.9	27.3	24.1
Potassium	mg/L	706	734	751	787	786	836	760
Cadmium	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	µg/L	98	110	109	107	107	106	104
Copper	µg/L	<10	17	<10	<10	<10	<10	<10
Nickel	µg/L	91	101	99	99	104	103	96
Zinc	µg/L	89	112	84	82	84	92	93