



ANNEX F4

EFFLUENT QUALITY MONITORING
RESULTS

TABLE F4.1 EFFLUENT MONITORING RESULTS

Date		Limit Level	4 Jan 23	2 Feb 23	2 Mar 23	4 Apr 23	4 May 23	1 Jun 23	6 Jul 23	2 Aug 23	7 Sep 23	5 Oct 23	2 Nov 23	6 Dec 23
On-site Measurements														
Temperature	°C	43	25	22	25.7	30.8	35.6	36.6	33.2	35.8	33	35.4	33.1	23
pH Value	pH Unit	6 - 10	8	8.3	8.4	8.7	8.4	8.5	8.4	8.4	8.3	8.3	8.4	8.2
Volume Discharged	m ³	2,000	1,339	1,000	1,021	1,268	1,182	799	1,013	724	775	1080	1164	698
Laboratory Analysis														
Suspended Solids (SS)	mg/L	800	14.3	27.2	68	40	38.7	158	40.6	39.8	28.3	31.1	19.4	55.1
Alkalinity	mg/L	N/A	2170	2080	2390	2270	2170	2280	1790	2300	1260	1580	1420	1460
Ammoniacal-nitrogen	mg/L	100	0.08	0.08	0.02	0.24	0.11	0.38	0.26	0.02	0.44	0.22	0.2	0.94
Chloride	mg/L	N/A	1950	2200	1780	1660	1680	1980	1820	2380	1510	1910	1770	1520
Nitrite-nitrogen	mg/L	100	0.25	0.37	0.1	0.11	0.11	0.14	0.15	0.22	<0.10	<0.10	0.02	0.55
Phosphate	mg/L	25	2.96	8.68	7.65	9.5	8.94	5.76	3.54	8.28	2.28	2.82	0.11	1.94
Sulphate	mg/L	800	201	147	164	104	122	142	324	244	451	252	165	279
Total Nitrogen	mg/L	N/A	111	144	87.6	73	79.7	85.9	114	119	104	132	95	100
Nitrate-nitrogen	mg/L	100	42.9	54.3	34.4	20.7	26.7	35.7	52.1	59.5	53.7	79	54.4	23.4
Total Inorganic Nitrogen	mg/L	100	43.23	54.75	34.52	21.05	26.92	36.22	52.51	59.74	54.14	79.22	54.62	24.89
Biochemical Oxygen Demand (BOD)	mg/L	800	24	17	19	12	9	21	9	9	11	20	18	22
Chemical Oxygen Demand (COD)	mg/L	2,000	806	938	1010	1120	941	809	796	1130	675	885	701	1070
Oil & Grease	mg/L	20	<5	<5	<5	<5	<5	<5	<5	<6	<5	<5	<5	<5
Total Organic Carbon (TOC)	mg/L	N/A	257	667	447	406	389	314	288	354	254	270	260	403

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Boron	µg/L	7,000	5130	5390	5640	5930	5570	5710	5220	6000	3850	4610	3880	5080
Calcium	mg/L	N/A	17.7	20.9	19.5	18	19.9	18.7	40.3	21.7	37.2	34.6	50.8	45.7
Iron	mg/L	5	1.76	2.35	1.9	2	2.23	1.63	1.66	1.84	1.13	1.6	1.38	1.78
Magnesium	mg/L	N/A	24.9	25.2	27.7	29	29.9	27.8	28.8	31.2	36	34.2	53.4	54.8
Potassium	mg/L	N/A	787	910	1030	908	908	820	738	869	555	712	550	593
Cadmium	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.0	<1.0	<1.0	<1.0
Chromium	µg/L	300	133	218	146	167	178	123	111	129	85	105	93	197
Copper	µg/L	1,000	<10	12	<10	<10	10	<10	<10	<11	11	12	<10	<10
Nickel	µg/L	700	122	146	119	134	139	125	101	126	82	97	78	65
Zinc	µg/L	700	43	126	54	102	109	72	99	82	114	98	73	69