

WATER QUALITY OF RIVER BRAHMANI - 2007

Panposh U/S

Month	Year	pH	DO (mg/l)	BOD (mg/l)	Cond. μS/cm	NH4-N (mg/l)	Nitrate-N (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	SI	DI	Class	COD (mg/l)
January	2007	7.3	8.4	1.3	166	1.68	0.315	330	230	6.7	0.52	B	14
February		8	8.6	1	174	1.02	ND	210	110				12
March		8	7.7	2	162	1.02	ND	470	330				6
April		8	7.7	1.4	171	1.12	0.337	1400	790	5.6	0.41	C	12
May		7.8	7.4	1.6	169	0.56	0.533	940	700				8
June		8.1	7.2	1.4	127	0.56	0.54	1300	790				14
July		8.3	6.5	0.6	128	0.784	0.072	1700	1100				5.66
August		8.1	7.6	0.7	110		0.109	1500	1200				8.8
September		7.8	9	0.6	150.7	0.51	0.1	1200	940				2
October		7.3	7.8	1.2	70.3	0.78	0.29	2200	1300				15.7
November		8.5	8.9	0.7	111.8	1.0	0.1	1700	1100				4.9
December		8.1	8.7	1.4	145.5	0.7	0.1	1400	940				10.0
Minimum		7.3	6.5	0.6	70	0.510	0.072	210	110	5.60	0.41	0	2.00
Maximum		8.5	8.9	2.0	174	1.680	0.540	2200	1300	6.70	0.52	0	15.70
Average		7.9	7.9	1.2	140	0.886	0.253	1196	794	6.15	0.47	#DIV/0!	9.42

Panposh D/S

Month	Year	pH	DO (mg/l)	BOD (mg/l)	Cond. μ S/cm	NH4-N (mg/l)	Nitrate-N (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	SI	DI	Class	COD (mg/l)
January	2007	7.4	7.3	4.8	259	1.4	1.563	54000	22000	4.75	0.29	C	38
February		7.8	7.2	3.2	282	1.12	0.252	7900	4900				26
March		7.8	7	3.6	297	1.12	2.932	9400	4600				20
April		7.8	7.2	4	295	0.84	6	22000	11000	5.6	0.36	C	20
May		8.2	5.5	3.6	324	0.56	2.182	35000	17000				24
June		7.1	6.7	3.2	310	1.4	2.3	22000	7900				28
July		7.8	6.4	4.2	164	0.56	1.006	35000	22000				32.07
August		7.9	7.5	1.4	165		0.748	22000	13000				21.8
September		7.9	8	1.8	176.2	0.816	0.8	28000	14000				16
October		7.5	4.6	2.2	145.8	2.30	1.37	22000	11000				19.7
November		7.9	7.3	4.1	210.4	1.1	6.5	28000	14000				23.2
December		7.8	7.8	2.5	252	2.3	8.2	17000	11000				15.0
Minimum		7.1	4.6	1.4	146	0.560	0.252	7900	4600	4.75	0.29	0.00	15.00
Maximum		8.2	8.0	4.8	324	2.300	8.200	54000	22000	5.60	0.36	0.00	38.00
Average		7.7	6.9	3.2	240	1.231	2.824	25192	12700	5.2	0.3		23.6

Rourkela D/S

Month	Year	pH	DO (mg/l)	BOD (mg/l)	Cond. μ S/cm	NH4-N (mg/l)	Nitrate-N (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	SI	DI	Class	COD (mg/l)
January	2007	7.5	7.4	3	224	1.4	1.485	35000	11000				36
February		7.6	7.7	2.6	235	1.1	0.1	13000	7900				22
March		7.4	7.6	2.4	269	1.1	1.212	12000	6300				16
April		7.9	7.4	3.4	250	0.56	2.834	7900	4900				18
May		8.2	7.7	3	217	0.84	1.111	17000	13000				22
June		7.9	6.6	2.2	260	1.12	1.8	11000	7000				22
July		7.6	6.7	3.2	136	0.56	0.558	22000	13000				30.28
August		8	7.3	0.8	91		0.734	17000	9400				19.47
September		7.5	8	1.5	171.5	0.612	0.7	14000	7900				10
October		7.1	7.7	1.8	144.7	2.13	1.43	17000	9400				15.7
November		8.3	8.3	1.8	96.8	0.7	0.7	3300	2200				14.9
December		7.4	8.0	1.8	142	1.4	1.8	14000	7900				12.0
Minimum		7.1	6.6	0.8	91	0.560	0.100	3300	2200	--	--	--	10
Maximum		8.3	8.3	3.4	269	2.128	2.834	35000	13000	--	--	--	36
Average		7.7	7.6	2.3	186	1.045	1.202	15267	8325	--	--	--	20

Boneigarh

Month	Year	pH	DO (mg/l)	BOD (mg/l)	Cond. μ S/cm	NH4-N (mg/l)	Nitrate-N (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	SI	DI	Class	COD (mg/l)
January	2007	7.8	8	0.9	165	1.96	0.06	390	270				6
April		8	7.7	1.8	245	0.56	0.0731	1100	790				10
July		8	7	0.7	158	0.672	0.416	2200	1100				7.55
October		7.4	7.5	1.6	87.3	1.23	0.22	1500	940				15.7
Minimum		7.4	7.0	0.7	87	0.560	0.060	390	270	0	0	0	6
Maximum		8.0	8.0	1.8	245	1.960	0.416	2200	1100	0	0	0	16
Average		7.8	7.6	1.3	164	1.106	0.192	1298	775	#DIV/0!	#DIV/0!	#DIV/0!	10

Rengali

Month	Year	pH	DO (mg/l)	BOD (mg/l)	Cond. μ S/cm	NH4-N (mg/l)	Nitrate-N (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	SI	DI	Class	COD (mg/l)
January	2007	7.2	8	1.3	125	1.68	0.158	1700	330				10
April		8	8.9	0.6	129	0.56	0.057	1700	1200				6
July		7.9	7.4	0.5	180	0.448	0.332	1400	790				5.1
October		7.2	7.6	1.3	89.7	1.12	0.28	1700	1300				7.9
Minimum		7.2	7.4	0.5	90	0.448	0.057	1400	330	0	0	0	5
Maximum		8.0	8.9	1.3	180	1.680	0.332	1700	1300	0	0	0	10
Average		7.6	8.0	0.9	131	0.952	0.207	1625	905	#DIV/0!	#DIV/0!	#DIV/0!	7

Samal

Month	Year	pH	DO (mg/l)	BOD (mg/l)	Cond. μ S/cm	NH4-N (mg/l)	Nitrate-N (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	SI	DI	Class	COD (mg/l)
January	2007	7.3	8.2	1.8	132	1.4	0.209	1100	700				16
April		8	8.9	1.4	136	0.56	0.329	1200	630				10.1
July		7.6	7.9	0.6	150	0.672	0.405	1200	940				9.4
October		6.9	7.9	1.8	95.4	1.57	0.27	1400	790				15.7
Minimum		6.9	7.9	0.6	95	0.560	0.209	1100	630	0	0	0	9
Maximum		8.0	8.9	1.8	150	1.568	0.405	1400	940	0	0	0	16
Average		7.5	8.2	1.4	128	1.050	0.303	1225	765	#DIV/0!	#DIV/0!	#DIV/0!	13

Talcher U/S

Month	Year	pH	DO (mg/l)	BOD (mg/l)	Cond. μ S/cm	NH4-N (mg/l)	Nitrate-N (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	SI	DI	Class	COD (mg/l)
January	2007	7.9	7.8	1.8	114	0.84	0.041	2400	490				22
April		8	8.3	1.2	136	0.56	0.124	1700	1300				12.1
July		7.9	7.5	1.1	136	0.672	0.441	2100	1400				20.4
October		7.5	7.5	1.1	79.2	0.90	0.17	1700	1300				10.9
Minimum		7.5	7.5	1.1	79	0.560	0.041	1700	490	0	0	0	11
Maximum		8.0	8.3	1.8	136	0.896	0.441	2400	1400	0	0	0	22
Average		7.8	7.8	1.3	116	0.742	0.194	1975	1123	#DIV/0!	#DIV/0!	#DIV/0!	16

Kamalanga D/S

Month	Year	pH	DO (mg/l)	BOD (mg/l)	Cond. μ S/cm	NH4-N (mg/l)	Nitrate-N (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	SI	DI	Class	COD (mg/l)
January	2007	7.8	7.2	2	223	1.68	0.018	9200	2400	5.5	0.4	C	26
April		8	7.1	2.4	144	0.56	0.183	2800	1700	5	0.37	C	16
July		8.2	6.8	1.4	134	0.336	0.258	2100	1400				18.7
October		7	7.1	2	96.6	1.23	0.10	3500	2400				12.9
Minimum		7.0	6.8	1.4	97	0.336	0.018	2100	1400	5.00	0.37		12.9
Maximum		8.2	7.2	2.4	223	1.680	0.258	9200	2400	5.50	0.40		26.0
Average		7.8	7.1	2.0	149	0.952	0.140	4400	1975	5.25	0.39		18.4

Bhuban

Month	Year	pH	DO (mg/l)	BOD (mg/l)	Cond. mS/cm	NH4-N (mg/l)	Nitrate-N (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	SI	DI	Class	COD (mg/l)
January	2007	7.8	7.3	0.6	114	1.12	0.027	1700	1100				6
April		8.1	8.1	0.4	252	0.84	0.215	1700	790				6
July		8	6.4	1.3	136	0.616	0.302	2100	1500				11.4
October		7.4	7.3	0.9	70.4	0.95	2.72	1700	1100				9.7
Minimum		7.4	6.4	0.4	70	0.616	0.027	1700	790	0	0	0	6
Maximum		8.1	8.1	1.3	252	1.120	2.722	2100	1500	0	0	0	11
Average		7.8	7.3	0.8	143	0.882	0.817	1800	1123	#DIV/0!	#DIV/0!	#DIV/0!	8

Dharmasala

Month	Year	pH	DO (mg/l)	BOD (mg/l)	Cond. μ S/cm	NH4-N (mg/l)	Nitrate-N (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	SI	DI	Class	COD (mg/l)
January	2007	7.6	8.4	1.2	223	1.4	0.007	3500	1300				12
April		7.8	9.3	1	145	0.84	0.402	3500	1400				10
July		8	6.8	1.6	168	0.672	0.35	3500	1300				11.6
October		7.4	7.8	2.9	116.6	1.34	0.18	2200	1700				13.1
Minimum		7.4	6.8	1.0	117	0.672	0.007	2200	1300	0	0	0	10
Maximum		8.0	9.3	2.9	223	1.400	0.402	3500	1700	0	0	0	13
Average		7.7	8.1	1.7	163	1.064	0.234	3175	1425	#DIV/0!	#DIV/0!	#DIV/0!	12

Pottamundai

Month	Year	pH	DO (mg/l)	BOD (mg/l)	Cond. μ S/cm	NH4-N (mg/l)	Nitrate-N (mg/l)	TC (MPN/100 ml)	FC (MPN/100 ml)	SI	DI	Class	COD (mg/l)
January	2007	8.3	8.3	2.1	307	1.12	0.029	2400	790				16
February		7.8	9.2	2.4	195	0.84	0.0137	1400	790				18
March		7.5	9.1	1.3	145	0.68	ND	1200	940				12
April		8.1	8.1	1	184	0.84	0.435	1700	1300				10
May		8.5	7.2	1.2	176	0.56	0.263	1500	940				8
June		7.8	8.3	1	574	0.84	0.6	1100	790				8
July		7.2	6.4	1	156	1.008	0.09	2100	1700				16.8
August		8	6.95	1.3	275		0.13	2400	1300				12.4
September		7.3	6	0.6	104.2	0.714	0.1	1700	1100				10
October		7.4	9.2	0.3	112.6	0.84	0.10	2400	1300				5.9
November		7.7	8.6	2.1	180.1	0.8	1.4	2100	1700				11.5
December		7.6	9.7	1.2	202	0.3	0.6	2800	1700				8.0
Minimum		7.2	5.9	0.3	104	0.300	0.014	1100	790	0	0	0	6
Maximum		8.5	9.7	2.4	574	1.120	1.400	2800	1700	0	0	0	18
Average		7.8	8.1	1.3	218	0.775	0.342	1900	1196	#DIV/0!	#DIV/0!	#DIV/0!	11

TSS (mg/l)	Turbidity, NTU	T. Alk., mg/l	Chloride, mg/l	Total Kjeldahl N, mg/l	Hardness CaCO3, mg/l	Ca as CaCO3, mg/l	Mg as CaCO3, mg/l	Sulphate, mg/l	Sodium, mg/l	TDS, mg/l	PO43--P, mg/l	Boron, mg/l	Potassium, mg/l	Flouride, mg/l
12	6.1		14	3.6	80	48	22	1.94	8	90	0.016	ND	5	0.8
8	6	68	13	4.2	50	32	18	2.68	8	108	0.023	0.014	1	0.305
112	291	38	2	1.68	32	16	16	21.3		65	0.05	0.065		0.254
96	108.0	44	2.0	3.4	32	24	8	14.5	6.9	46	0.013	0.041	1.3	0.418
8.0	0	38.00	1.99	2	32.00	16.00	0	1.94	6.90	46	0.01	0.01	1	0.25
112.0	0	68.00	14.00	4	80.00	48.00	0	21.30	8.00	108	0.05	0.07	5	0.80
57.0	#DIV/0!	50.00	7.75	3	48.50	30.00	#DIV/0!	10.11	7.63	77	0.03	0.04	2	0.44

TSS (mg/l)	Turbidity, NTU	T. Alk., mg/l	Chloride, mg/l	Total Kjeldahl N, mg/l	Hardness CaCO3, mg/l	Ca as CaCO3, mg/l	Mg as CaCO3, mg/l	Sulphate, mg/l	Sodium, mg/l	TDS, mg/l	PO43--P, mg/l	Boron, mg/l	Potassium, mg/l	Fluoride, mg/l
90	41.7		28	16.2	100	64	36	31.15	16	168	0.084	ND	12	1.2
18	12.2	44	16	9.24	102	58	44	43.81	9	188	0.018	0.01	4	0.912
360	510	44	18	14	56	48	8	36.4		107	0.108	0.024		0.621
132	115.0	56	8.0	5.0	68	48	20	22.1	8.5	96	0.052	0.013	3	0.621
18.0	0.0	44.0	8.0	5.0	56.0	48.0	0.0	22.1	8.5	96.0	0.0	0.0	3.0	0.6
360.0	0.0	56.0	28.0	16.2	102.0	64.0	0.0	43.8	16.0	188.0	0.0	0.0	12.0	1.2
150.0	#DIV/0!	48.0	17.5	11.1	81.5	54.5	#DIV/0!	33.4	11.2	139.8	#DIV/0!	0.0	6.3	0.8

TSS (mg/l)	Turbidity, NTU	T. Alk., mg/l	Chloride, mg/l	Total Kjeldahl N, mg/l	Hardness CaCO3, mg/l	Ca as CaCO3, mg/l	Mg as CaCO3, mg/l	Sulphate, mg/l	Sodium, mg/l	TDS, mg/l	PO43--P, mg/l	Boron, mg/l	Potassium, mg/l	Flouride, mg/l
30	12.2		26	10.6	92	60	32	20.27	13	164	0.046	ND	10	1.09
10	7.8	56	16	2.8	74	52	22	32.9	9	148	0.02	0.011	1	0.745
270	385	48	26	3.92	44	32	12	27.1		94	0.060	0.01		0.317
134	109.0	52	8.0	3.4	64	56	8	22.8	8.4	94	0.033	0.02	3	0.467
10	0	48	8	3	44	32	0	20	8	94	0	0	1	0.317
270	0	56	26	11	92	60	0	33	13	164	0	0	10	1.09
111	#DIV/0!	52	19	5	69	50	#DIV/0!	26	10	125	#DIV/0!	0	5	0.65

TSS (mg/l)	Turbidity, NTU	T. Alk., mg/l	Chloride, mg/l	Total Kjeldahl N, mg/l	Hardness CaCO ₃ , mg/l	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Sulphate, mg/l	Sodium, mg/l	TDS, mg/l	PO ₄ --P, mg/l	Boron, mg/l	Potassium, mg/l	Fluoride, mg/l
32	8.2		6	3.4	72	44	28	2.98	4	98	0.016	0.061	3	0.862
10	3.9	74	13	3.08	76	50	26	21.31	8	174	0.011	0.028	1	0.485
246	320	42	6	6.76	32	20	12	13.9		78	0.444	0.006		0.278
86	156.0	52	4.0	2.4	44	32	12	7.6	6	58	0.03	0.003	1	0.198
10	0	42	4	2	32	20	12	3	4	58	0	0	1	0.198
246	0	74	13	7	76	50	12	21	8	174	0	0	3	0.862
94	#DIV/0!	56	7	4	56	37	12	11	6	102	0	0	2	0.456

TSS (mg/l)	Turbidity, NTU	T. Alk., mg/l	Chloride, mg/l	Total Kjeldahl N, mg/l	Hardness CaCO ₃ , mg/l	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Sulphate, mg/l	Sodium, mg/l	TDS, mg/l	PO ₄ --P, mg/l	Boron, mg/l	Potassium, mg/l	Fluoride, mg/l
42	8.3		8	6.1	40	36	4	1.49	3	78	0.018	0.007	2	0.79
58	25	60	7	3.08	48	26	22	3.27	4	74	0.008	0.01	2	0.302
250	185	40	4	6.72	36	20	16	28.5		75	0.506	0.072		0.271
158	138	52	2.0	2.8	40	32	8	6.6	6.7	58	0.04	0.027	1.6	0.374
42	138	40	2	3	36	20	8	1	3	58	0	0	2	0.271
250	138	60	8	7	48	36	8	29	7	78	0	0	2	0.790
127	138	51	5	5	41	29	8	10	5	71	0	0	2	0.434

TSS (mg/l)	Turbidity, NTU	T. Alk., mg/l	Chloride, mg/l	Total Kjeldahl N, mg/l	Hardness CaCO ₃ , mg/l	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Sulphate, mg/l	Sodium, mg/l	TDS, mg/l	PO ₄ -P, mg/l	Boron, mg/l	Potassium, mg/l	Fluoride, mg/l
66	22.9		6	8.9	44	36	8	0.745	3	88	0.019	0.048	2	0.916
62	34.9	58	8	4.6	44	30	14	5.36	5	86	0.023	0.018	1	0.301
330	192	40	4	6.32	28	16	12	29.5		72	0.494	0.03		0.269
112	95.1	44	6.0	2.5	40	24	16	11.8	7.4	62	0.03	0.037	2	0.088
62	95	40	4	3	28	16	16	1	3	62	0	0	1	0.088
330	95	58	8	9	44	36	16	30	7	88	0	0	2	0.916
143	95	47	6	6	39	27	16	12	5	77	0	0	2	0.394

TSS (mg/l)	Turbidity, NTU	T. Alk., mg/l	Chloride, mg/l	Total Kjeldahl N, mg/l	Hardness CaCO ₃ , mg/l	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Sulphate, mg/l	Sodium, mg/l	TDS, mg/l	PO ₄ -P, mg/l	Boron, mg/l	Potassium, mg/l	Fluoride, mg/l
12	8		8	2.16	68	44	24	7.005	3	76	0.016	ND	1	0.526
4	5	58	7	2.8	48	30	18	5.22	4	89	0.006	0.014	1	0.363
138	284	40	4	2.24	36	24	12	33.9		64	0.044	0.027		0.301
78	114	48	4.0	2.5	40	36	4	12.2	4.3	52	0.03	0.068	1	0.198
4	114	40	4	2	36	24	4	5	3	52	0	0	1	0.198
138	114	58	8	3	68	44	24	34	4	89	0	0	1	0.526
58	114	49	6	2	48	34	15	15	4	70	0	0	1	0.347

TSS (mg/l)	Turbidity, NTU	T. Alk., mg/l	Chloride, mg/l	Total Kjeldahl N, mg/l	Hardness CaCO ₃ , mg/l	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Sulphate, mg/l	Sodium, mg/l	TDS, mg/l	PO ₄ --P, mg/l	Boron, mg/l	Potassium, mg/l	Fluoride, mg/l
16	4.1		16	2.84	76	40	36	4.02	6	120	0.011	0.027	2	1.061
6	2.5	56	8	2.24	52	34	18	8.49	4	94	0.014	0.007	2	0.313
182	210	44	4	6.16	36	28	8	27.1		75	0.029	0.048		0.31
134	118	60	2.0	4.8	52	44	8	13.4	6.5	64	0.02	0.02	1.4	0.181
6.0	2.5	44.0	2.0	2.2	36.0	28.0	8.0	4.0	4.0	64.0	0.0	0.0	1.4	0.181
182.0	210.0	60.0	16.0	6.2	76.0	44.0	36.0	27.1	6.5	120.0	0.0	0.0	2.0	1.061
84.5	83.7	53.3	7.5	4.0	54.0	36.5	17.5	13.3	5.5	88.3	0.0	0.0	1.8	0.466

TSS (mg/l)	Turbidity, NTU	T. Alk., mg/l	Chloride, mg/l	Total Kjeldahl N, mg/l	Hardness CaCO ₃ , mg/l	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Sulphate, mg/l	Sodium, mg/l	TDS, mg/l	PO ₄ --P, mg/l	Boron, mg/l	Potassium, mg/l	Fluoride, mg/l
4	1.2		11	6.7	64	52	12	2.832	6	84	0.199	0.013	2	0.451
100	42	56	9	2.52	46	30	16	2.98	5	147	0.004	0.013	1	0.402
720	1286	42	2	5.6	36	20	16	4.62		65	0.076	0.044		0.234
92	21.2	52	4.0	6.2	40	32	8	11.8	4.2	46	0.08	0.068	1.1	0.313
4	1	42	2	3	36	20	8	3	4	46	0	0	1	0.234
720	1286	56	11	7	64	52	16	12	6	147	0	0	2	0.451
229	338	50	6	5	47	34	13	6	5	86	0	0	1	0.350

TSS (mg/l)	Turbidity, NTU	T. Alk., mg/l	Chloride, mg/l	Total Kjeldahl N, mg/l	Hardness CaCO ₃ , mg/l	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Sulphate, mg/l	Sodium, mg/l	TDS, mg/l	PO ₄ -P, mg/l	Boron, mg/l	Potassium, mg/l	Fluoride, mg/l
28	14.9		10	4.5	80	52	28	246.84	7	114	0.082	ND	3	0.512
32	26	56	11	3.64	50	30	20	5.2	5	80	0.023	ND	1	0.377
492	525	42	4	6.72	44	20	24	3		91.6	0.071	ND		0.279
88	55.5	68	6.0	5.0	76	56	20	5.2	5.5	76	0.05	0.03	1.3	0.478
28	15	42	4	4	44	20	20	3	5	76	0	0	1	0.279
492	525	68	11	7	80	56	28	247	7	114	0	0	3	0.512
160	155	55	8	5	63	40	23	65	6	90	0	0	2	0.412

TSS (mg/l)	Turbidity, NTU	T. Alk., mg/l	Chloride, mg/l	Total Kjeldahl N, mg/l	Hardness CaCO ₃ , mg/l	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Sulphate, mg/l	Sodium, mg/l	TDS, mg/l	PO ₄ -P, mg/l	Boron, mg/l	Potassium, mg/l	Fluoride, mg/l
28	19.6		20	2.8	104	60	44	3.726	16	198	0.027	ND	10	0.496
90	33.9	78	7	5.32	64	38	26	4.47	4	110	0.052	0.056	2	0.35
270	198	60	6	5.6	44	36	8	13.7		102	0.013	0.058		0.505
30	19.1	64	6.0	5.6	60	40	20	5.1	6.9	74	0.02	0.061	1.5	0.401
28	19	60	6	3	44	36	8	4	4	74	0	0	2	0.350
270	198	78	20	6	104	60	44	14	16	198	0	0	10	0.505
105	68	67	10	5	68	44	25	7	9	121	0	0	5	0.438

Cyanide, mg/l	Cadmium, mg/l	Copper, mg/l	Lead, mg/l	Chromium Total, mg/l	Nickel, mg/l	Zinc, mg/l	Mercury, mg/l	Iron Total, mg/l	Nitrite-N, mg/l	P. Alk., mg/l	TFS, mg/l	M. Alk., mg/l
0.007												
0.026	0.0012	0.0078	0.004	BDL	0.0011	0.022	0.0001	2.73		ND	92	
									ND			
									0.001			
								7.86	0.009	ND		38
				0.18				4.536	0.01			
0.01	0	0.01	0.00	0	0.00	0.02	0	0.00	0.00	0	92.00	38.00
0.03	0	0.01	0.00	0	0.00	0.02	0	0.00	0.01	0	92.00	38.00
0.02	0	0.01	0.00	0	0.00	0.02	0	#DIV/0!	0.01		92.00	38.00

Cyanide, mg/l	Cadmium, mg/l	Copper, mg/l	Lead, mg/l	Chromium Total, mg/l	Nickel, mg/l	Zinc, mg/l	Mercury, mg/l	Iron Total, mg/l	Nitrite-N, mg/l	P. Alk., mg/l	TFS, mg/l	M. Alk., mg/l
0.014												
0.021	0.0013	0.0085	0.004	BDL	0.0016	0.047	0.0001	3.32		ND	130	
									ND			
									0.003			
								24.216	0.049	ND		48
0.0086				0.26				6.524	0.019			
0	0	0	0	0	0	0	0	0	0	0	130	48
0	0	0	0	0	0	0	0	0	0	0	130	48
0	0	0	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	130	48

Cyanide, mg/l	Cadmium, mg/l	Copper, mg/l	Lead, mg/l	Chromium Total, mg/l	Nickel, mg/l	Zinc, mg/l	Mercury, mg/l	Iron Total, mg/l	Nitrite-N, mg/l	P. Alk., mg/l	TFS, mg/l	M. Alk., mg/l
0.004												
0.014	0.0004	0.0014	0.007	BDL	0.0052	0.014	0.0002	1.513		2	88	
									0.0003			
									0.002			
								18.24	0.004	ND		60
				0.11				0.44	0.004			
0	0	0	0	0	0	0	0	0	0	2	88	60
0	0	0	0	0	0	0	0	18	0	2	88	60
0	0	0	0	0	0	0	0	7	0	2	88	60