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ภาคผนวก

ตารางที่ 1 แสดงข้อมูลคัดนิคุณภาพน้ำดิบจากอาคารสูงที่ไม่ผ่านระบบบำบัดน้ำเสียระหว่างวันที่ 22 กุมภาพันธ์ - 7 มีนาคม 2527

วัน เดือน ปี	จำนวนคน	อัตราการไหลของน้ำดิบ (ลบ.ม.)	อุณหภูมิ (°ซ)	pH	ความเป็นด่าง (มก/ลas $CaCO_3$)	ความขุ่น (NTU)	ของแข็งแขวนลอยทั้งหมด (มก/ล)	ของแข็งที่ละลายน้ำทั้งหมด (มก/ล)	ออกซิเจนละลาย (มก/ล)	บีโอดี (มก/ล)	ซีโอดี (มก/ลุ)	แอมโมเนียไนโตรเจน (มก/ล)	ฟอสเฟตทั้งหมด (มก/ล)	ซัลเฟต (มก/ล)	โคลิฟอร์มแบคทีเรียบ (MPN/100 มล)	Faecal Coliform (MPN/200มล.)
22.2.84	379	858.65	29.0	7.48	42.0	32	26	392	0.35	117.0	81.83	76.72	1.40	35.0	>24,000	<20
23.2.84	237	884.29	29.5	7.65	41.5	30	36	446	0.40	120.6	90.67	70.56	1.90	45.0	>24,000	<20
24.2.84	-	829.49	29.0	7.75	44.0	31	46	462	0.30	99.0	65.17	78.68	1.25	53.0	>24,000	<20
25.2.84	456	884.28	29.0	7.82	37.25	34	34	768	0.10	148.5	87.67	83.02	3.00	66.5	>24,000	<20
26.2.84	772	856.89	28.0	7.80	39.50	37	32	386	0	185.4	127.17	88.38	1.75	72.5	>24,000	<20
27.2.84	945	897.63	29.0	8.10	40.25	30	62	514	0	152.3	88.67	91.14	2.50	83.0	>24,000	<20
28.2.84	951	848.11	28.5	4.95	31.25	22	28	388	0	135.9	85.33	83.72	1.65	74.5	>24,000	<20
29.2.84	1119	880.52	27.5	8.10	32.50	28	38	376	0	121.93	83.50	83.17	2.80	72.5	>24,000	<20
1.3.84	858	860.40	28.0	8.15	36.75	22	50	690	0	153.0	95.83	83.58	2.10	79.5	>24,000	<20
2.3.84	949	846.40	26.0	7.85	50.25	47	48	480	0	219.6	129.00	99.82	1.45	70.0	>24,000	<20
3.3.84	844	940.39	28.0	7.50	44.20	43	52	490	0	202.0	122.33	107.52	2.30	50.5	>24,000	<20
4.3.84	627	862.26	27.0	7.20	54.25	43	44	532	0.20	243.0	186.25	107.42	1.45	50.5	>24,000	<20
5.3.84	417	820.59	27.0	7.65	48.50	32	50	450	0.20	216.0	138.67	94.08	2.075	57.0	>24,000	<20
6.3.84	391	864.00	27.0	7.65	39.50	30	62	462	0.30	195.0	136.25	89.60	2.60	55.0	>24,000	<20
7.3.84	-	-	27.0	7.80	-	32	38	570	0.1	169.0	101.50	97.44	2.45	61.5	>24,000	<20

ตารางที่ 2 แสดงข้อมูลดัชนีคุณภาพน้ำทิ้งจากอาคารที่ไม่ผ่านระบบบำบัดน้ำเสีย ระหว่างวันที่ 24 มีนาคม - 7 เมษายน 2527

วัน เดือน ปี	จำนวนคน	อัตราการไหลของน้ำทิ้ง (ลบ.ม.)	อุณหภูมิ (°ซ)	pH	ความเป็นด่าง (มก/ล as $CaCO_3$)	ความขุ่น (NTU)	ของแข็งแขวนลอยทั้งหมด (มก/ล)	ของแข็งที่ละลายน้ำทั้งหมด (มก/ล)	ออกซิเจนละลาย (มก/ล)	บีโอดี (มก/ล)	บีโอดี (มก/ล)	แอมโมเนียไนโตรเจน (มก/ล)	ฟอสเฟตทั้งหมด (มก/ล)	ซัลเฟต (มก/ล)	โคลิฟอร์มแบคทีเรีย (MPN/100 มล)	Faecal Coliform (MPN/100 มล)
24.3.84	452	964.47	29.5	8.15	82.75	26	46	498	0.1	150.4	92.33	75.32	6.10	78.75	>24,000	<20
25.3.84	224	796.06	27.5	8.25	34.50	32	52	534	0.2	103.4	67.50	62.44	3.85	90.75	>24,000	<20
26.3.84	276	860.40	28.5	7.95	34.75	25	48	420	0.2	139.12	84.0	69.16	4.90	59.25	>24,000	<20
27.3.84	434	962.25	27.5	8.00	40.50	29	54	370	0.3	160.74	115.33	78.26	2.15	58.0	>24,000	<20
28.3.84	514	864.00	28.0	7.85	40.00	26.5	32	494	0	169.20	102.67	81.76	3.25	58.0	>24,000	<20
29.3.84	-	858.62	27.8	7.90	38.75	27	74	434	0	146.64	124.75	88.76	5.35	53.5	>24,000	<20
30.3.84	930	884.19	67.5	7.90	43.00	34	54	500	0.4	161.92	148.25	77.26	2.30	72.5	>24,000	<20
31.3.84	836	829.45	28.0	7.90	37.75	35	48	502	0.4	183.08	104.67	85.82	1.45	65.75	>24,000	<20
1.4.84	658	902.99	28.5	7.65	36.50	48	54	380	0.4	188.60	109.17	94.22	0.50	58.0	>24,000	<20
2.4.84	520	864.00	29.0	8.05	43.00	27	34	556	0.5	185.84	117.83	87.08	2.4	57.0	>24,000	<20
3.4.84	540	882.32	29.8	7.65	32.75	44.5	42	708	0.2	212.52	132.17	88.06	4.25	37.75	>24,000	<20
4.4.84	242	880.49	28.5	7.90	35.50	32	50	416	0.4	179.34	106.5	84.42	2.25	53.5	>24,000	<20
5.4.84	240	851.62	29.0	7.90	35.25	22	62	416	0.4	148.96	104.67	71.96	1.80	64.5	>24,000	<20
6.4.84	240	917.03	28.0	7.90	36.25	24.5	42	424	0.4	164.9	112.0	78.42	2.85	72.5	>24,000	<20
7.4.84	320	856.83	28.5	7.65	38.00	27	32	522	0.4	172.66	114.67	55.16	3.05	67.5	>24,000	<20

ตารางที่ 3 แสดงข้อมูลคุณภาพน้ำทิ้งจากอาคารสูงที่ผ่านระบบบำบัดน้ำเสียระหว่างวันที่ 22 กุมภาพันธ์ - 7 มีนาคม 2527

วัน เดือน ปี	จำนวนคน	อัตราการไหลของน้ำทิ้ง (ลบ.ม.)	อุณหภูมิ (°ซ)	pH	ความเป็นด่าง (มก/ล as $CaCO_3$)	ความขุ่น (NTU)	ของแข็งแขวนลอยทั้งหมด (มก/ล)	ของแข็งที่ละลายน้ำทั้งหมด (มก/ล)	ออกซิเจนละลาย (มก/ล)	บีโอดี (มก/ล)	ซีโอดี (มก/ล)	แอมโมเนียไนโตรเจน (มก/ล)	ฟอสเฟตทั้งหมด (มก/ล)	ซัลเฟต (มก/ล)	โคลิฟอร์มแบคทีเรีย (MPN/100 มล)	Faecal Coliform (MPN/100 มล
22.2.84	379	258.64	29.0	6.00	2.75	18.0	20	532	1.8	86.4	41.25	9.24	1.25	35.0	>24,000	<20
23.2.84	237	884.40	29.0	6.25	3.00	5.1	26	516	2.11	57.6	34.67	9.38	1.90	34.5	>24,000	<20
24.2.84	-	829.46	29.0	6.85	8.00	5.0	10	584	1.4	63.0	38.25	4.28	1.90	37.56	>24,000	<20
25.2.84	456	880.25	29.0	6.80	4.75	6.2	28	948	1.0	86.4	38.00	16.24	1.65	38.0	>24,000	<20
26.2.84	772	856.86	27.5	6.65	3.50	14.5	58	484	0.8	111.6	68.50	15.96	1.75	50.5	>24,000	<20
27.2.84	945	807.66	28.0	6.70	3.50	10.0	26	578	0.8	52.2	49.75	18.62	1.65	55.0	>24,000	<20
28.2.84	951	848.11	28.5	7.45	4.25	10.5	24	472	0.8	70.2	67.00	24.78	1.50	61.5	>24,000	<20
29.2.84	1113	880.50	27.0	7.65	12.50	14.0	24	402	0.55	29.0	71.75	34.86	1.45	68.0	>24,000	<20
1.3.84	858	860.40	26.0	7.65	13.00	12.0	46	592	0.8	124.2	66.75	39.9	2.25	70.0	>24,000	<20
2.3.84	949	846.35	26.0	7.20	11.25	14.0	82	388	1.2	104.4	72.75	51.52	1.95	55.0	>24,000	<20
3.3.84	844	940.43	27.5	7.40	13.50	13.5	48	394	1.0	114.0	70.0	45.92	2.10	40.5	>24,000	<20
4.3.84	627	862.23	26.0	7.85	12.50	16.5	78	348	1.1	99.0	55.5	37.12	1.50	48.5	>24,000	<20
5.3.84	417	814.14	26.5	7.00	12.00	17.0	26	360	1.4	108.0	55.75	39.76	2.35	40.5	>24,000	<20
6.3.84	391	857.83	27.0	6.80	3.50	11.5	30	532	1.4	87.0	59.25	27.79	3.0	37.0	>24,000	<20
7.3.84	-	-	29.0	6.05	-	12.0	46	502	1.6	88.0	62.75	20.72	2.25	48.5	>24,000	<20

ตารางที่ 4 แสดงข้อมูลคัยนิคุณภาพน้ำดิบจากอาคารสูงที่ผ่านระบบบำบัดน้ำเสียระหว่าง 24 มีนาคม - 7 เมษายน 2527

วัน เดือน ปี	จำนวนคน	อัตราการไหลของน้ำดิบ (ลบ.ม.)	อุณหภูมิ (°ซ)	pH	ความเป็นด่าง (มก/ล as $CaCO_3$)	ความขุ่น (NTU)	ของแข็งแขวนลอยทั้งหมด (มก/ล)	ของแข็งที่ละลายน้ำทั้งหมด (มก/ล)	ออกซิเจนละลาย (มก/ล)	บีโอดี (มก/ล)	บีโอดี (มก/ล)	แอมโมเนียไนโตรเจน (มก/ล)	ฟอสเฟตทั้งหมด (มก/ล)	ซัลเฟต (มก/ล)	โคลิฟอร์มแบคทีเรีย (MPN/100 มล)	Faecal Coliform (MPN/100
24.3.84	452	964.47	30.0	6.70	6.0	15.5	54	522	0.4	121.26	56	30.69	5.60	74.5	>24,000	<20
25.3.84	224	796.03	28.0	6.82	5.5	14.5	64	600	0.6	75.20	62	24.36	3.85	72.5	>24,000	< 20
26.3.84	276	860.44	27.9	6.53	4.75	9.5	8	786	0.5	92.87	51	21.70	3.25	73.0	> 24,000	< 20
27.3.84	434	962.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28.3.84	514	864.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29.3.84	-	858.62	31.5	6,28	3.25	14.0	18	764	0.8	78.96	112	20.44	5.05	65.75	> 24,000	<20
30.3.84	938	880.47	30.0	6.25	3.00	16.0	12	626	1.2	84.64	114	22.40	3.35	76.75	> 24,000	< 20
31.3.84	836	829.43	31.5	6.80	2.50	20.0	22	760	0.7	120.52	112	19.74	1.90	67.54	> 24,000	< 20
1.4.84	658	901.54	28.2	6.20	3.25	18.0	24	618	0.6	112.24	59	19.74	1.65	64.50	>24,000	< 20
2.4.84	520	864.00	28.5	6.10	1.50	15.5	22	682	1.2	102.12	73	19.04	2.75	62.50	>24,000	< 20
3.4.84	540	882.34	29.0	6.05	2.00	15.0	26	784	1.5	87.4	73	20.16	3.85	50.50	>24,000	<20
4.4.84	242	880.49	28.5	6.00	1.25	14.0	10	380	1.0	99.96	74	19.46	1.80	65.75	>24,000	<20
5.4.84	240	851.62	29.0	5.85	1.50	7.0	22	524	1.8	65.66	65	19.88	1.35	61.50	>24,000	<20
6.4.84	240	921.60	28.5	5.80	2.00	7.0	20	766	2.1	54.32	45.5	19.14	2.45	62.50	>24,000	<20
7.4.84	320	156.90	28.5	5.80	1.75	11.0	22	586	1.0	84.39	61	15.12	2.75	22.50	>24,000	<20

ตารางที่ 5 ผลวิเคราะห์อุณหภูมิเฉลี่ยของแม่น้ำเจ้าพระยาตอนล่างขณะน้ำขึ้นสูงสุด น้ำลงต่ำสุด และอัตราการไหลเฉลี่ยของน้ำในแม่น้ำเจ้าพระยา ประจำปี 2525

เดือน	อุณหภูมิ (°ซ)		อัตราไหลของน้ำ ($ม^3$/วินาที)
	น้ำขึ้นสูงสุด	น้ำลงต่ำสุด	
มกราคม	25.9	26.2	158
กุมภาพันธ์	28.1	27.8	102
มีนาคม	28.7	30.3	103
เมษายน	30.5	30.6	120
พฤษภาคม	31.5	31.5	96
มิถุนายน	-	-	103
กรกฎาคม	30.1	29.9	104
สิงหาคม	29.5	29.9	108
กันยายน	29.03	29.14	447
ตุลาคม	29.3	29.5	705
พฤศจิกายน			233
ธันวาคม	23.6	24.3	250

ที่มา - กองมาตรฐานคุณภาพสิ่งแวดล้อม สำนักงานคณะกรรมการสิ่งแวดล้อมแห่งชาติ, 2526

ตารางที่ 6 ผลการวิเคราะห์ค่าออกซิเจนละลายของแม่น้ำเจ้าพระยาช่วงกิโลเมตรที่ 0-58 ขณะน้ำขึ้นสูงสุด ประจำปี 2525

Perameter, Date, flow rate / station (Km)	ออกซิเจนละลายที่จุดกึ่งกลางแม่น้ำ (มก/ล)									
	12 มค.	10 กพ.	30 มีค.	12 เมย.	17 พค.	1 กค.	9 สค.	6 กย.	21 ตค.	20 ธค.
	$163m^3/s$	$114m^3/s$	$99m^3/s$	$103m^3/s$	$158m^3/s$	$73m^3/s$	$84m^3/s$	$215m^3/s$	$600m^3/s$	$280m^3/s$
10	2.42	3.92	1.95	0.90	3.01	1.22	0.76	0.40	2.05	2.21
14	1.69	3.38	0.85	0.99	0.43	0.73	0.35	0.44	2.15	3.59
20	0.58	2.15	0.75	0.54	0.33	0.43	0.35	0.24	2.43	2.65
24	0.53	1.22	0.55	0.45	0.94	0.54	0.30	0.32	3.15	2.80
28	0.68	0.73	0.45	1.17	0.53	0.34	0.30	0.24	3.00	3.10
30	0.82	0.39	0.55	1.17	0.38	0.34	0.38	0.32	3.24	3.39
36	1.07	0.19	0.20	0.72	0.48	0.24	6.38	0.40	3.72	3.64
42	2.08	0	0.40	0.45	0.53	0.34	0.61	0.24	4.15	3.78
44	2.08	0	0.40	0.72	1.72	0.29	0.46	0.48	4.39	3.88
48	2.32	0.14	0.55	0.81	0.53	0.54	0.61	0.88	4.00	4.13
52	2.95	0.64	0.50	0.72	0.52	2.14	0.38	1.99	4.48	4.28
58	3.24	1.76	1.55	4.68	0.81	2.05	1.37	2.39	4.58	4.52

ที่มา - กองมาตรฐานคุณภาพสิ่งแวดล้อม สำนักงานคณะกรรมการสิ่งแวดล้อมแห่งชาติ, 2526

ตารางที่ 7 ผลการวิเคราะห์ค่าออกซิเจนละลายของแม่น้ำเจ้าพระยาช่วงกิโลเมตรที่ 0-58 ขณะน้ำขึ้นสูงสุด ประจำปี 2525

Parameter, Date, flow rate / Station (km)	ออกซิเจนละลายที่จุดกึ่งกลางแม่น้ำ (มก/ล)									
	12 มค	10 กพ	30 มีค	12 เมษ	17 พค	1 กค	3 สค	6 กย	21 ตค	20 ธค
	$163 m^3/s$	$114 m^3/s$	$99 m^3/s$	$103 m^3/s$	$158 m^3/s$	$73 m^3/s$	$84 m^3/s$	$215 m^3/s$	$600 m^3/s$	$280 m^3/s$
10	2.47	3.38	1.35	0.72	0.96	1.12	0.46	0.24	2.10	3.69
14	1.65	2.94	0.40	0.54	0.33	0.34	0.15	0	2.48	2.16
20	0.82	1.66	0.35	0.45	0.29	0.34	0	0.24	2.77	2.36
24	0.39	0.98	0	0.36	0.19	0.15	0.15	0.24	3.00	2.60
28	0.77	0.78	0	0.36	0.24	0.15	0.15	0.24	3.48	2.76
30	0.48	0.39	0.30	0.36	0.29	0.15	0.08	0.40	3.62	2.95
36	0.73	0.44	0.50	0.54	0.19	0.19	0.61	0.24	3.77	3.44
42	0.77	0	0.25	0.72	0.240	0.44	0.23	1.30	3.62	3.73
44	1.02	0	0.25	1.55	0.29	0.49	0.23	1.43	3.81	3.73
48	1.83	0.44	1.00	2.70	0.38	0.49	0.53	1.67	4.34	3.88
52	2.08	0.34	2.25	4.59	0.57	0.88	2.36	2.39	4.96	4.03
58	2.86	2.20	3.65	5.13	1.53	1112	2.13	3.19	4.62	4.23

ที่มา - กองมาตราฐานคุณภาพสิ่งแวดล้อม สำนักงานคณะกรรมการสิ่งแวดล้อมแห่งชาติ, 2526

ตารางที่ 8 ผลการวิเคราะห์ค่าบีโอดีของแม่น้ำเจ้าพระยาช่วงกิโลเมตรที่ 0-58 ขณะน้ำขึ้นสูงสุด ประจำปี 2525

parameter, Date, flow rate / Station (km)	บีโอดี (มก/ล)									
	12 มค	10 กพ	30 มีค	12 เมย	17 พค	1 กค	3 สค	6 กย	21 ตค	20 ธค
	$163 m^3/s$	$114 m^3/s$	$99 m^3/s$	$103 m^3/s$	$158 m^3/s$	$73 m^3/s$	$84 m^3/s$	$215 m^3/s$	$600 m^3/s$	$280 m^3/s$
10	1.06	1.59	1.97	2.14	0.40	1.13	1.87	2.39	1.59	2.37
14	1.70	1.88	-	2.24	1.54	0.79	1.53	2.87	-	1.06
20	1.26	2.12	2.81	2.54	1.69	0.69	2.74	1.06	1.22	1.11
24	1.80	2.37	1.38	2.42	1.33	0.73	1.75	2.82	1.11	0.58
28	1.68	3.64	4.41	1.69	1.04	9.03	-	2.33	1.25	0.76
30	2.18	3.24	2.62	1.77	3.64	0.50	2.00	1.70	0.49	1.00
36	1.64	4.89	2.77	2.03	2.00	0.74	1.00	1.07	2.02	1.54
42	1.58	4.00	4.21	2.26	1.68	0.79	2.38	1.85	1.26	1.29
44	1.33	3.86	2.83	2.77	2.02	0.64	0.88	2.53	0.98	0.87
48	1.80	3.72	2.62	2.41	4.28	0.64	0.93	1.61	1.06	0.87
52	1.61	3.31	2.37	2.10	1.18	0.89	0.93	1.55	1.15	0.78
58	1.52	1.87	2.19	1.59	0.87	1.13	0.49	1.15	0.87	0.73

ที่มา - กองมาตรฐานคุณภาพสิ่งแวดล้อม สำนักงานคณะกรรมการสิ่งแวดล้อมแห่งชาติ, 2526

ตารางที่ 9 ผลการวิเคราะห์ค่าบีโอดีของแม่น้ำเจ้าพระยาช่วงกิโลเมตรที่ 0-58 ขณะน้ำลงต่ำสุด ประจำปี 2525

parameter, Date, flow rate / station (km)	บีโอดี (มก/ล)									
	12 มค	10 กพ	30 มีค	12 เมย	17 พค	1 กค	9 สค	6 กย	21 ตค	20 ธค
	$163 m^3/s$	$114 m^3/s$	$99 m^3/s$	$103 m^3/s$	$158 m^3/s$	$73 m^3/s$	$24 m^3/s$	$215 m^3/s$	$600 m^3/s$	$280 m^3/s$
10	2.74	1.48	3,71	2.16	2,78	1,04	2,52	2,44	1,83	2.59
14	1.85	1,29	1,98	5,13	1.95	1,52	3.09	2,04	2,25	1.26
20	1,99	1,34	4,36	2.72	0.29	0,55	0,02	3,70	1.70	1.06
24	2.21	1,24	6,02	2.04	1,91	0,88	2.05	2.43	1,54	2,48
28	1.72	1.68	7.61	5.06	1,24	1.57	6.74	0.72	1.68	0.86
30	2.05	1,33	6.17	3.15	2.04	0,98	1,92	3,22	1,07	0.91
36	2,16	1.86	7.10	2.58	1.60	2,30	1.60	2,19	1,93	0.58
42	1.26	2.69	6,85	2,33	1,20	1.66	1.99	2.29	1,35	0,47
44	1,21	2.60	5.12	2,15	1.45	2,74	2,41	1.90	1,97	0,72
48	1.12	2.07	4.77	2.64	1.89	1,77	1,42	1.11	1,26	1,32
52	0,97	1,10	2,73	1,39	2,25	1,53	1,53	1,16	1,44	0,18
58	1.11	1,20	1.88	0,96	1,01	0,88	0,70	0,91	1,48	0.86

ที่มา - กองมาตรฐานคุณภาพสิ่งแวดล้อม สำนักงานคณะกรรมการสิ่งแวดล้อมแห่งชาติ, 2526

ตารางที่ 10 มาตรฐานคุณภาพน้ำในแหล่งน้ำผิวดินของประเทศไทย (กองมาตรฐานคุณภาพสิ่งแวดล้อม สำนักงานคณะกรรมการสิ่งแวดล้อมแห่งชาติ, 2525)

ดัชนีคุณภาพน้ำ	หน่วย	การแบ่งระดับคุณภาพน้ำตามการใช้ประโยชน์				
		ระดับ				
		1	2	3	4	5
อุณหภูมิ (temperature)	องศาเซลเซียส	ธ	ธ	ธ	ธ	-
พีเอช (pH)	มิลลิกรัม/ลิตร	6-8	6-8	6-8	6-8	6-8
ออกซิเจนละลาย(DO)	มิลลิกรัม/ลิตร	ธ	6	4	2	-
บีโอดี (BOD)		-	1.5	2.0	4.0	-
โคลิฟอร์มแบคทีเรีย	MPN/100 ml					
-Total Coliform	มิลลิกรัม					
-Total Coliform		-	5,000	20,000	-	-
-Faecal Coliform		-	1,000	4,000	-	-
ไนเตรทไนโตรเจน (NO_3)	มิลลิกรัม/ลิตร	5.0			-	-
แอมโมเนียไนโตรเจน (NH_3)	มิลลิกรัม/ลิตร	0.5			-	-
ฟีนอล (Phenols)	มิลลิกรัม/ลิตร	0.005			-	-
ทองแดง (Cu)	มิลลิกรัม/ลิตร	0.1			-	-
นิคเกิล (Ni)	มิลลิกรัม/ลิตร	0.1			-	-
แมงกานีส (Mn)	มิลลิกรัม/ลิตร	1.0			-	-
สังกะสี (Zn)	มิลลิกรัม/ลิตร	1.0			-	-
สารกัมมันตภาพรังสี สารเป็นพิษ	ดูรี	ไม่มี			-	-

ตารางที่ 10 (ต่อ)

ดัชนีคุณภาพน้ำ	หน่วย	การแบ่งระดับคุณภาพน้ำตามการใช้ประโยชน์				
		ระดับ				
		1	2	3	4	5
ปรอททั้งหมด (Total Hg)	มิลลิกรัม/ลิตร	0.002			-	-
แคดเมียม (Cd)	มิลลิกรัม/ลิตร	0.005*			-	-
	มิลลิกรัม/ลิตร	0.05**			-	-
โครเมี่ยม (Cr)	มิลลิกรัม/ลิตร	0.05			-	-
ตะกั่ว (Pb)	มิลลิกรัม/ลิตร	0.05			-	-
สารหนู (As)	มิลลิกรัม/ลิตร	0.01			-	-
ไซยาไนด์ (CN)	มิลลิกรัม/ลิตร	0.005			-	-
ยากำจัดศัตรูพืช	มิลลิกรัม/ลิตร	0.05			-	-

s = เป็นไปตามธรรมชาติ

s' = เป็นไปตามธรรมชาติแต่เปลี่ยนแปลงได้ไม่เกิน 3 องศาเซลเซียส

* = ในน้ำที่มีความกระด้างต่ำกว่า 100 มิลลิกรัม/ลิตร ในรูป $CaCO_3$

** = ในน้ำที่มีความกระด้างสูงกว่า 100 มิลลิกรัม/ลิตร ในรูป $CaCO_3$

หมายเหตุ

ระดับ 1 แหล่งน้ำสะอาดดีมาก ใช้ประโยชน์เพื่อ

- อุปโภคและบริโภค โดยอาจไม่จำเป็นต้องผ่านขบวนการบำบัดน้ำ นอกจากฆ่าเชื้อโรคอย่างปกติ (Chlorination)
- การอนุรักษ์ระบบนิเวศน์วิทยาของแหล่งน้ำ โดยให้สิ่งมีชีวิตระดับพื้นฐาน

ระดับ 2 แหล่งน้ำสะอาดดี ใช้ประโยชน์เพื่อ

- การอุปโภคและบริโภค โดยผ่านขบวนการบำบัดโดยทั่วไปก่อนใช้
- การอนุรักษ์สัตว์น้ำทั่วไปให้มีชีวิตอยู่รอดและเชื้ออำนวยต่อการประมง
- การประมง
- การพักผ่อนหย่อนใจ

ระดับที่ 3 แหล่งน้ำสะอาดปานกลาง ใช้ประโยชน์เพื่อ

- การอุปโภคและบริโภค โดยต้องผ่านขบวนการบำบัดน้ำโดยทั่วไป
- การเกษตรกรรม

ระดับที่ 4 แหล่งน้ำสะอาดพอใช้ ใช้ประโยชน์สำหรับ

- การอุปโภคและบริโภค โดยต้องผ่านขบวนการบำบัดน้ำเป็นพิเศษ
- การอุตสาหกรรม
- กิจกรรมอื่น ๆ

ระดับ 5 แหล่งน้ำที่ไม่อยู่ในระดับ 1-4 ใช้ประโยชน์เพื่อ

- การคมนาคม

ตารางที่ 11 มาตรฐานคุณภาพน้ำทิ้งของกระทรวงอุตสาหกรรม

BOD (5 day 20°c) maximum	20	ppm
Suspended solids - maximum	30	ppm
Dissolved solids - maximum	2,000	ppm
pH value	5-9	
Permanganate value - maximum	60	ppm
Sulphide (as H_2S) - maximum	1	ppm
Cyanide (as HCN) - Maximum	0.2	ppm
Oil and greese	none	
Tar	none	
Formaldehyde - maximum	1	ppm
Phenol and cresols-maximum	1	ppm
Free chlorine-maximum	1	ppm
Zinc	individually or in total maximum 1 ppm	
Chromium		
Ansanic		
Selenium		
Silver		
Lead		
Nickel		
Insecticides	none	
Radioactive materials	none	
Temperature	maximum 49°c	
Taste and odour	not disagreeable	

Graphical Solution

graphical solution เป็นวิธีที่ใช้แสดงผลของความน่าจะเป็น (probability) ของปริมาณดัชนีคุณภาพ (parameter) ในรูปเปอร์เซ็นต์ บนกระดาษกราฟที่เรียกว่า Arithmetic probability paper โดยแกน x จะแสดงถึงเปอร์เซ็นต์ความน่าจะเป็น แกน y แสดงดัชนีคุณภาพ เป็นวิธีที่ปรับปรุงมาจากกราฟรูปโค้งปกติ (normal curve) มีวิธีการหา 2 วิธี คือสำหรับตัวอย่างที่มีจำนวนน้อยกว่า 30 ตัวอย่าง และมากกว่า 30 ตัวอย่าง กรณีที่มีตัวอย่างน้อยกว่า 30 ตัวอย่าง มีวิธีการหาดังนี้

1. เรียงลำดับข้อมูลจากน้อยไปมาก
2. กำหนดให้ค่าจำนวน (value number) ของข้อมูล =m (m=1,2,3,...,29,30)
3. คำนวณเปอร์เซ็นต์ความน่าจะเป็นของข้อมูล ดังนี้

$$\% \text{ probability} = I + \text{previous probability}$$

เมื่อ I = increment = $100\ \%/n$

n = total number of samples

m = cummulative total of assigned numbers

$\%$ probability ของข้อมูลที่ 1 = $I/2$

จากผลการวิเคราะห์ดัชนีคุณภาพน้ำทิ้งจากอาคารสูง นำมาหาค่าเปอร์เซ็นต์ความน่าจะเป็นได้ดังตารางที่ 12

$$n = 13, \quad I = \frac{100}{13}$$

$$= 7.7$$

$$n = 14, \quad I = \frac{100}{14}$$

$$= 7.1$$

ตารางที่ 12 แสดงเปอร์เซ็นต์ความน่าจะเป็นของข้อมูลที่มีจำนวน 13, 14 และ 15

m/n	ความเป็นไปได้ (%)		
	13	14	15
1	3.85	3.55	3.35
2	11.55	10.65	10.05
3	19.25	17.75	16.75
4	26.95	24.85	23.45
5	34.65	31.95	30.15
6	42.35	39.05	36.85
7	50.05	46.15	43.55
8	57.75	53.25	50.25
9	65.45	60.35	56.95
10	73.15	67.45	63.65
11	80.85	74.55	70.35
12	88.55	81.65	77.05
13	96.25	88.75	83.75
14		95.85	90.45
15			97.15

$$n = 15, \quad I = \frac{100}{15}$$

$$= 6.8$$

ตารางที่ 13 แสดงค่าดัชนีคุณภาพที่สำคัญของน้ำทิ้งที่เปอร์เซ็นต์ความเป็นไปได้ต่าง

A, A' เป็นน้ำทิ้งที่ออกจากถังอิมฮอฟฟ์

B, B' เป็นน้ำทิ้งที่ผ่านระบบบำบัดน้ำเสีย

ความเป็นไปได้ (%) / ดัชนีคุณภาพ		10	20	30	40	50	60	70	80	90
อุณหภูมิ (°ซ)	A	26.75	27.25	27.70	28.0	28.25	28.50	28.75	29.25	29.60
	B	26.0	28.50	27.0	27.4	27.75	28.0	28.50	28.90	29.25
	A'	27.5	27.75	28.0	28.25	28.50	28.5	28.75	29.00	29.25
	B'	28.0	28.40	28.60	29.00	29.20	29.5	29.6	30.0	30.5
ออกซิเจนละลาย (มก/ล)	A	0	0	0	0	0.037	0.075	0.130	0.20	0.275
	B	0.55	0.74	0.875	1.0	1.1	1.2	1.335	1.470	1.650
	A'	0	0.07	0.125	0.18	0.25	0.275	0.35	0.41	0.50
	B'	0.275	0.50	0.65	0.73	0.90	1.025	1.15	1.30	1.525
บีโอดี (มก/ล)	A	67.5	82.5	92.5	102.0	111.0	120.0	128.5	140.0	155.0
	B	40.0	45.5	50.0	53.5	57.0	60.0	63.5	68.0	75.75
	A'	83.75	92.5	98.80	104.0	109.0	114.0	119.0	125.0	134.0
	B'	45.0	55.0	62.5	68.0	73.75	80.0	85.5	92.5	102.5
ซีโอดี (มก/ล)	A	117.0	135.0	148.5	160.0	70.0	181.0	193.0	206.0	224.0
	B	70.0	77.0	82.0	86.0	90.0	93.0	98.0	102.0	109.0
	A'	103.0	144.0	152.0	159.0	164.0	171.5	179.0	187.0	197.0
	B'	65.0	73.0	80.0	86.0	90.0	95.0	100.5	107.0	116.0
อัตราการไหลของน้ำทิ้ง (ลบ.ม./วัน)	A	829	842	891	859	867	873	882	892	904
	A'	822	842	855	867	878	890	902	917	935

```
**********************************************************
RIVER CHARACTERISTICS                          **
                                               **
        FLOW, CU.M/SEC.    =   120             **
        DO,   MG/L         =  1.53             **
        BOD,  MG/L         =  1.89             **   K1     =    .05
                                               **   K2     =    .15
WASTE CHARACTERISTICS                          **   BOD(M) = 1.8990
        FLOW, CU.M/SEC     =   .01             **   DO(M)  = 1.5299
        DO,   MG/L         =   .13             **
        BOD,  MG/L         =  110.             **   DEF(I) = .00012
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.02147818	1.5085218
.3	.06132762	1.4686724
.5	.09757756	1.4324224
.7	.13048966	1.3995103
.9	.16030759	1.3696924
1.1	.18725830	1.3427417
1.3	.21155314	1.3184469
1.5	.23338889	1.2966111
1.7	.25294873	1.2770513
1.9	.27040320	1.2595968
2.1	.28591105	1.2440890
2.3	.29961998	1.2303800
2.5	.31166746	1.2183325
2.7	.32218137	1.2078186
2.9	.33128067	1.1987193
3.1	.33907601	1.1909240
3.3	.34567028	1.1843297
3.5	.35115915	1.1788409
3.7	.35563153	1.1743685
3.9	.35917007	1.1708299
4.1	.36185158	1.1681484
4.3	.36374737	1.1662526
4.5	.36492370	1.1650763
4.7	.36544208	1.1645579
4.9	.36535963	1.1646404
5.1	.36472935	1.1652707
5.3	.36360038	1.1663996
5.5	.36201832	1.1679817
5.7	.36002545	1.1699746
5.9	.35766093	1.1723391

TC = 4.7706 DAYS
DEF = .36544 MG/L
DOC = 1.1646 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                          **
                                               **
        FLOW, CU.M/SEC.    =   120             **
        DO,   MG/L         =  1.53             **
        BOD,  MG/L         =  1.89             **   K1     =     .1
                                               **   K2     =     .2
WASTE CHARACTERISTICS                          **   BOD(M) = 1.8990
        FLOW, CU.M/SEC     =   .01             **   DO(M)  = 1.5299
        DO,   MG/L         =   .13             **
        BOD,  MG/L         =  110.             **   DEF(I) = .00012
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04235323	1.4876468
.3	.11838959	1.4116104
.5	.18414566	1.3458543
.7	.24068755	1.2893125
.9	.28898031	1.2410197
1.1	.32989714	1.2001029
1.3	.36422776	1.1657722
1.5	.39268608	1.1373139
1.7	.41591714	1.1140829
1.9	.43450345	1.0954966
2.1	.44897074	1.0810293
2.3	.45979322	1.0702068
2.5	.46739836	1.0626016
2.7	.47217118	1.0578288
2.9	.47445825	1.0555417
3.1	.47457130	1.0554287
3.3	.47279036	1.0572096
3.5	.46936690	1.0606331
3.7	.46452641	1.0654736
3.9	.45847093	1.0715291
4.1	.45138120	1.0786188
4.3	.44341877	1.0865812
4.5	.43472777	1.0952722
4.7	.42543663	1.1045634
4.9	.41565958	1.1143404
5.1	.40549805	1.1245019
5.3	.39504189	1.1349581
5.5	.38437052	1.1456295
5.7	.37355398	1.1564460
5.9	.36265383	1.1673462

TC = 3.0101 DAYS
DEF = .47457 MG/L
DOC = 1.0554 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
      FLOW, CU.M/SEC.    =   120         **
      DO,   MG/L         =  1.53         **
      BOD,  MG/L         =  1.89         **    K1    =    .15
                                         **    K2    =    .25
WASTE CHARACTERISTICS                    **    BOD(M)= 1.8990
      FLOW, CU.M/SEC     =   .01         **    DO(M) = 1.5299
      DO,   MG/L         =   .13         **
      BOD,  MG/L         =   110.        **    DEF(I)= .00012
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.06274756	1.4672524
.3	.1715064B	1.3584935
.5	.26072332	1.2692767
.7	.33303819	1.196961B
.9	.39076971	1.1392303
1.1	.43595229	1.0940477
1.3	.47036914	1.0596309
1.5	.49558164	1.0344184
1.7	.51295529	1.0170447
1.9	.52368276	1.0063172
2.1	.52880432	1.0011957
2.3	.52922590	1.0007741
2.5	.52573518	1.0042648
2.7	.51901563	1.0109844
2.9	.50965924	1.020340B
3.1	.49817758	1.0318224
3.3	.48501151	1.0449885
3.5	.47053998	1.0594600
3.7	.45508765	1.0749123
3.9	.43893170	1.0910683
4.1	.42230774	1.1076923
4.3	.40541522	1.124584B
4.5	.38842191	1.1415781
4.7	.37146814	1.1585319
4.9	.35467028	1.1753297
5.1	.33812404	1.1918760
5.3	.32190720	1.2080928
5.5	.30608204	1.2239180
5.7	.29069754	1.2393025
5.9	.27579123	1.2542088

TC = 2.2184 DAYS
DEF = .52923 MG/L
DOC = 1.0008 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
      FLOW, CU.M/SEC.    =   120         **
      DO,   MG/L         =  1.53         **
      BOD,  MG/L         =  1.89         **    K1    =     .2
                                         **    K2    =     .3
WASTE CHARACTERISTICS                    **    BOD(M)= 1.8990
      FLOW, CU.M/SEC     =   .01         **    DO(M) = 1.5299
      DO,   MG/L         =   .13         **
      BOD,  MG/L         =   110.        **    DEF(I)= .00012
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.08266943	1.4473306
.3	.22088037	1.3091196
.5	.32815739	1.2018426
.7	.40964472	1.1203553
.9	.46972138	1.0602786
1.1	.51210884	1.0178912
1.3	.53996401	.99003599
1.5	.55595952	.97404048
1.7	.56235294	.96764706
1.9	.56104658	.96895342
2.1	.55363892	.97636108
2.3	.54146886	.98853114
2.5	.52565408	1.0043459
2.7	.50712380	1.0228762
2.9	.48664690	1.0433531
3.1	.46485618	1.0651438
3.3	.44226935	1.0877307
3.5	.41930655	1.1106935
3.7	.39630585	1.1336942
3.9	.37353614	1.1564639
4.1	.35120846	1.1787915
4.3	.32948540	1.2005146
4.5	.30848925	1.2215107
4.7	.28830889	1.2416911
4.9	.26900566	1.2609943
5.1	.25061831	1.2793817
5.3	.23316726	1.2968327
5.5	.21665806	1.3133419
5.7	.20108443	1.3289156
5.9	.18643079	1.3435692

TC = 1.7609 DAYS
DEF = .56235 MG/L
DOC = .96765 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
      FLOW, CU.M/SEC.    =   120         **
      DO,   MG/L         =  1.53         **
      BOD,  MG/L         =  1.89         **   K1    =    .05
                                         **   K2    =    .15
WASTE CHARACTERISTICS                    **   BOD(M)= 1.9002
      FLOW, CU.M/SEC     =   .01         **   DO(M) = 1.5299
      DO,   MG/L         =   .24         **
      BOD,  MG/L         =  124.         **   DEF(I)= .00011
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.02148272	1.5085173
.3	.06135774	1.4686423
.5	.09763097	1.4323690
.7	.13056422	1.3994358
.9	.16040133	1.3695987
1.1	.18736940	1.3426306
1.3	.21167990	1.3183201
1.5	.23352973	1.2964703
1.7	.25310220	1.2768978
1.9	.27056797	1.2594320
2.1	.28608585	1.2439141
2.3	.29980368	1.2301963
2.5	.31185899	1.2181410
2.7	.32237975	1.2076202
2.9	.33148500	1.1985150
3.1	.33928546	1.1907145
3.3	.34588408	1.1841159
3.5	.35137658	1.1786234
3.7	.35585195	1.1741480
3.9	.35939289	1.1706071
4.1	.36207624	1.1679238
4.3	.36397336	1.1660266
4.5	.36515057	1.1648494
4.7	.36566940	1.1643306
4.9	.36558703	1.1644130
5.1	.36495646	1.1650435
5.3	.36382689	1.1661731
5.5	.36224394	1.1677561
5.7	.36024991	1.1697501
5.9	.35788400	1.1721160

TC = 4.7707 DAYS
DEF = .36567 MG/L
DOC = 1.1643 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
      FLOW, CU.M/SEC.    =   120         **
      DO,   MG/L         =  1.53         **
      BOD,  MG/L         =  1.89         **   K1    =     .1
                                         **   K2    =     .2
WASTE CHARACTERISTICS                    **   BOD(M)= 1.9002
      FLOW, CU.M/SEC     =   .01         **   DO(M) = 1.5299
      DO,   MG/L         =   .24         **
      BOD,  MG/L         =  124.         **   DEF(I)= .00011
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04237096	1.4876290
.3	.11845578	1.4115442
.5	.18425378	1.3457462
.7	.24083177	1.2891682
.9	.28915541	1.2408446
1.1	.33009843	1.1999016
1.3	.36445107	1.1655489
1.5	.39292768	1.1370723
1.7	.41617371	1.1138263
1.9	.43477205	1.0952280
2.1	.44924875	1.0807513
2.3	.46007833	1.0699217
2.5	.46768851	1.0623115
2.7	.47246458	1.0575354
2.9	.47475333	1.0552467
3.1	.47486666	1.0551333
3.3	.47308480	1.0569152
3.5	.46965937	1.0603406
3.7	.46481601	1.0651840
3.9	.45875688	1.0712431
4.1	.45166284	1.0783372
4.3	.44369554	1.0863045
4.5	.43499920	1.0950008
4.7	.42570233	1.1042977
4.9	.41591925	1.1140807
5.1	.40575143	1.1242486
5.3	.39528879	1.1347112
5.5	.38461081	1.1453892
5.7	.37378755	1.1562125
5.9	.36288062	1.1671194

TC = 3.0101 DAYS
DEF = .47487 MG/L
DOC = 1.0551 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =    120      **
        DO,   MG/L         =   1.53      **
        BOD,  MG/L         =   1.89      **    K1    =     .15
                                         **    K2    =     .25
WASTE CHARACTERISTICS                    **    BOD(M)= 1.9002
        FLOW, CU.M/SEC     =    .01      **    DO(M) = 1.5299
        DO,   MG/L         =    .24      **
        BOD,  MG/L         =    124.     **    DEF(I)= .00011
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.06277818	1.4672218
.3	.17160625	1.3583938
.5	.26087988	1.2691201
.7	.33324085	1.1967592
.9	.39100924	1.1389908
1.1	.43622074	1.0937793
1.3	.47065971	1.0593403
1.5	.49588850	1.0341115
1.7	.51327347	1.0167265
1.9	.52400804	1.0059920
2.1	.52913314	1.0008669
2.3	.52955529	1.0004447
2.5	.52606265	1.0039374
2.7	.51933912	1.0106609
2.9	.50997708	1.0200229
3.1	.49848041	1.0315116
3.3	.48531425	1.0446858
3.5	.47083379	1.0591662
3.7	.45537191	1.0746281
3.9	.43920595	1.0907940
4.1	.42257167	1.1074283
4.3	.40566865	1.1243313
4.5	.38866477	1.1413352
4.7	.37170045	1.1582995
4.9	.35489213	1.1751079
5.1	.33833557	1.1916644
5.3	.32210861	1.2078914
5.5	.30627358	1.2237264
5.7	.29087947	1.2391205
5.9	.27596385	1.2540361

TC = 2.2184 DAYS
DEF = .52956 MG/L
DOC = 1.0004 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =    120      **
        DO,   MG/L         =   1.53      **
        BOD,  MG/L         =   1.89      **    K1    =      .2
                                         **    K2    =      .3
WASTE CHARACTERISTICS                    **    BOD(M)= 1.9002
        FLOW, CU.M/SEC     =    .01      **    DO(M) = 1.5299
        DO,   MG/L         =    .24      **
        BOD,  MG/L         =    124      **    DEF(I)= .00011
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.08271341	1.4472866
.3	.22101340	1.3089866
.5	.32835964	1.2016404
.7	.40989966	1.1201003
.9	.47001528	1.0599847
1.1	.51243035	1.0175696
1.3	.54030381	.98969619
1.5	.55630997	.97369003
1.7	.56270789	.96729211
1.9	.56140106	.96859894
2.1	.55398901	.97601099
2.3	.54181149	.98818851
2.5	.52598689	1.0040131
2.7	.50744503	1.0225550
2.9	.48695528	1.0430447
3.1	.46515086	1.0648491
3.3	.44254980	1.0874502
3.5	.41957251	1.1104275
3.7	.39655728	1.1334427
3.9	.37377318	1.1562268
4.1	.35143138	1.1785686
4.3	.32969457	1.2003054
4.5	.30868512	1.2213149
4.7	.28849197	1.2415080
4.9	.26917650	1.2608235
5.1	.25077750	1.2792225
5.3	.23331537	1.2966846
5.5	.21679570	1.3132043
5.7	.20121220	1.3287878
5.9	.18654926	1.3434507

TC = 1.7609 DAYS
DEF = .56271 MG/L
DOC = .96729 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =   120       **
        DO,   MG/L         =  1.53       **
        BOD,  MG/L         =  1.89       **   K1    =    .05
                                         **   K2    =    .15
WASTE CHARACTERISTICS                    **   BOD(M)= 1.9019
        FLOW, CU.M/SEC     =   .01       **   DO(M) = 1.5299
        DO,   MG/L         =    .4       **
        BOD,  MG/L         =  145.       **   DEF(I)= .00009
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.02148925	1.5085107
.3	.06140136	1.4685986
.5	.09770834	1.4322917
.7	.13067225	1.3993277
.9	.16053717	1.3694628
1.1	.18753038	1.3424696
1.3	.21186357	1.3181364
1.5	.23373381	1.2962662
1.7	.25332460	1.2766754
1.9	.27080672	1.2591933
2.1	.28633917	1.2436608
2.3	.30006989	1.2299301
2.5	.31213655	1.2178634
2.7	.32266725	1.2073328
2.9	.33178112	1.1982189
3.1	.33958899	1.1904110
3.3	.34619391	1.1838061
3.5	.35169169	1.1783083
3.7	.35617139	1.1738286
3.9	.35971579	1.1702842
4.1	.36240181	1.1675982
4.3	.36430087	1.1656991
4.5	.36547935	1.1645206
4.7	.36599885	1.1640012
4.9	.36591658	1.1640834
5.1	.36528560	1.1647144
5.3	.36415516	1.1658448
5.5	.36257091	1.1674291
5.7	.36057521	1.1694248
5.9	.35820727	1.1717927

TC = 4.7707 DAYS
DEF = .36600 MG/L
DOC = 1.1640 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =   120       **
        DO,   MG/L         =  1.53       **
        BOD,  MG/L         =  1.89       **   K1    =     .1
                                         **   K2    =     .2
WASTE CHARACTERISTICS                    **   BOD(M)= 1.9019
        FLOW, CU.M/SEC     =   .01       **   DO(M) = 1.5299
        DO,   MG/L         =    .4       **
        BOD,  MG/L         =  145.       **   DEF(I)= .00009
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04239662	1.4876034
.3	.11855166	1.4114483
.5	.18441045	1.3455895
.7	.24104076	1.2889592
.9	.28940914	1.2405909
1.1	.33039013	1.1996099
1.3	.36477468	1.1652253
1.5	.39327780	1.1367222
1.7	.41654554	1.1134545
1.9	.43516130	1.0948387
2.1	.44965164	1.0803484
2.3	.46049151	1.0695085
2.5	.46810901	1.0618910
2.7	.47288979	1.0571102
2.9	.47518096	1.0548190
3.1	.47529471	1.0547053
3.3	.47351151	1.0564885
3.5	.47008323	1.0599168
3.7	.46523570	1.0647643
3.9	.45917128	1.0708287
4.1	.45207100	1.0779290
4.3	.44409664	1.0859034
4.5	.43539256	1.0946074
4.7	.42608741	1.1039126
4.9	.41629558	1.1137044
5.1	.40611865	1.1238814
5.3	.39564662	1.1343534
5.5	.38495904	1.1450410
5.7	.37412604	1.1558740
5.9	.36320930	1.1667907

TC = 3.0102 DAYS
DEF = .47529 MG/L
DOC = 1.0547 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                          **
                                               **
        FLOW, CU.M/SEC.    =    120            **
        DO,   MG/L         =   1.53            **
        BOD,  MG/L         =   1.89            **     K1     =     .15
                                               **     K2     =     .25
WASTE CHARACTERISTICS                          **     BOD(M)= 1.9019
        FLOW, CU.M/SEC     =    .01            **     DO(M)  = 1.5299
        DO,   MG/L         =     .4            **
        BOD,  MG/L         =   145.            **     DEF(I)= .00009
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.06282252	1.4671775
.3	.17175080	1.3582492
.5	.26110674	1.2688933
.7	.33353452	1.1964655
.9	.39135635	1.1386437
1.1	.43660978	1.0933902
1.3	.47108080	1.0589192
1.5	.49633319	1.0336668
1.7	.51373457	1.0162654
1.9	.52447944	1.0055206
2.1	.52960968	1.0003903
2.3	.53003265	.99996735
2.5	.52653722	1.0034628
2.7	.51980794	1.0101921
2.9	.51043770	1.0195623
3.1	.49893887	1.0310611
3.3	.48575299	1.0442470
3.5	.47125961	1.0587404
3.7	.45578388	1.0742161
3.9	.43960341	1.0903966
4.1	.42295417	1.1070458
4.3	.40603594	1.1239641
4.5	.38901675	1.1409833
4.7	.37203713	1.1579629
4.9	.35521363	1.1747864
5.1	.33864213	1.1913579
5.3	.32240051	1.2075995
5.5	.30655116	1.2234488
5.7	.29114314	1.2388569
5.9	.27621403	1.2537860

TC = 2.2184 DAYS
DEF = .53003 MG/L
DOC = .99997 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                          **
                                               **
        FLOW, CU.M/SEC.    =    120            **
        DO,   MG/L         =   1.53            **
        BOD,  MG/L         =   1.89            **     K1     =      .2
                                               **     K2     =      .3
WASTE CHARACTERISTICS                          **     BOD(M)= 1.9019
        FLOW, CU.M/SEC     =    .01            **     DO(M)  = 1.5299
        DO,   MG/L         =     .4            **
        BOD,  MG/L         =   145.            **     DEF(I)= .00009
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.08277523	1.4472248
.3	.22120117	1.3087988
.5	.32864532	1.2013547
.7	.41025987	1.1197401
.9	.47043060	1.0595694
1.1	.51288473	1.0171153
1.3	.54078405	.98921595
1.5	.55680531	.97319469
1.7	.56320960	.96679040
1.9	.56190213	.96809787
2.1	.55448388	.97551612
2.3	.54229581	.98770419
2.5	.52645734	1.0035427
2.7	.50789913	1.0221009
2.9	.48739123	1.0426088
3.1	.46556744	1.0644326
3.3	.44294626	1.0870537
3.5	.41994849	1.1100515
3.7	.39691273	1.1330873
3.9	.37410628	1.1558917
4.1	.35174651	1.1782535
4.3	.32999026	1.2000097
4.5	.30896202	1.2210380
4.7	.28875079	1.2412492
4.9	.26941802	1.2605820
5.1	.25100254	1.2789975
5.3	.23352477	1.2964752
5.5	.21699029	1.3130097
5.7	.20139282	1.3286072
5.9	.18671673	1.3432833

TC = 1.7609 DAYS
DEF = .56321 MG/L
DOC = .96679 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                          **
                                               **
      FLOW, CU.M/SEC.    =   120               **
      DO,   MG/L         =  1.22               **
      BOD,  MG/L         =  1.67               **   K1    =    .05
                                               **   K2    =    .15
WASTE CHARACTERISTICS                          **   BOD(M)= 1.6790
      FLOW, CU.M/SEC     =   .01               **   DO(M) = 1.2199
      DO,   MG/L         =   .13               **
      BOD,  MG/L         =  110.               **   DEF(I)= .00009
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.01897818	1.2010218
.3	.05421215	1.1657879
.5	.08626354	1.1337365
.7	.11536369	1.1046363
.9	.14172808	1.0782719
1.1	.16555735	1.0544427
1.3	.18703837	1.0329616
1.5	.20634512	1.0136549
1.7	.22363959	.99636041
1.9	.23907254	.98092746
2.1	.25278434	.96721566
2.3	.26490559	.9550941
2.5	.27555783	.94444217
2.7	.28485412	.93514588
2.9	.29289966	.92710034
3.1	.29979227	.92020773
3.3	.30562292	.91437708
3.5	.31047620	.90952380
3.7	.31443074	.90556926
3.9	.31755960	.90244040
4.1	.31993068	.90006932
4.3	.32160706	.89839294
4.5	.32264730	.89735270
4.7	.32310581	.89689419
4.9	.32303308	.89696692
5.1	.32247595	.89752405
5.3	.32147791	.89852209
5.5	.32007925	.89992075
5.7	.31831736	.90168264
5.9	.31622688	.90377312

TC = 4.7707 DAYS
DEF = .32311 MG/L
DOC = .89689 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                          **
                                               **
      FLOW, CU.M/SEC.    =   120               **
      DO,   MG/L         =  1.22               **
      BOD,  MG/L         =  1.67               **   K1    =     .1
                                               **   K2    =     .2
WASTE CHARACTERISTICS                          **   BOD(M)= 1.6790
      FLOW, CU.M/SEC     =   .01               **   DO(M) = 1.2199
      DO,   MG/L         =   .13               **
      BOD,  MG/L         =  110.               **   DEF(I)= .00009
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.03743515	1.1825649
.3	.10466428	1.1153357
.5	.16280392	1.0571961
.7	.21279670	1.0072033
.9	.25549588	.96450412
1.1	.29167350	.92832650
1.3	.32202782	.89797218
1.5	.34719004	.87280996
1.7	.36773049	.85226951
1.9	.38416421	.83583579
2.1	.39695602	.82304398
2.3	.40652521	.81347479
2.5	.41324972	.80675028
2.7	.41746998	.80253002
2.9	.41949243	.80050757
3.1	.41959267	.80040733
3.3	.41801830	.80198170
3.5	.41499166	.80500834
3.7	.41071212	.80928788
3.9	.40535832	.81464168
4.1	.39909007	.82090993
4.3	.39205019	.82794981
4.5	.38436612	.83563388
4.7	.37615143	.84384857
4.9	.36750711	.85249289
5.1	.35852284	.86147716
5.3	.34927805	.87072195
5.5	.33984298	.88015702
5.7	.33027954	.88972046
5.9	.32064217	.89935783

TC = 3.0101 DAYS
DEF = .41959 MG/L
DOC = .80041 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
      FLOW, CU.M/SEC.    =   120         **
      DO,   MG/L         =  1.22         **
      BOD,  MG/L         =  1.67         **   K1     =    .15
                                         **   K2     =    .25
WASTE CHARACTERISTICS                    **   BOD(M) = 1.6790
      FLOW, CU.M/SEC     =   .01         **   DO(M)  = 1.2199
      DO,   MG/L         =   .13         **
      BOD,  MG/L         =  110.         **   DEF(I) = .00009
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05546707	1.1645329
.3	.15162832	1.0683717
.5	.23051116	.98948884
.7	.29444988	.92555012
.9	.34549451	.87450549
1.1	.38544380	.83455620
1.3	.41587442	.80412558
1.5	.43816687	.78183313
1.7	.45352848	.76647152
1.9	.46301375	.75698625
2.1	.46754246	.75245754
2.3	.46791560	.75208440
2.5	.46482961	.75517039
2.7	.45888879	.76111121
2.9	.45061656	.76938344
3.1	.44046521	.77953479
3.3	.42882456	.79117544
3.5	.41602966	.80397034
3.7	.40236755	.81763245
3.9	.38808331	.83191669
4.1	.37338525	.84661475
4.3	.35844974	.86155026
4.5	.34342510	.87657490
4.7	.32843540	.89156460
4.9	.31358354	.90641646
5.1	.29895415	.92104585
5.3	.28461598	.93538402
5.5	.27062411	.94937589
5.7	.25702185	.96297815
5.9	.24384238	.97615762

TC = 2.2184 DAYS
DEF = .46792 MG/L
DOC = .75208 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
      FLOW, CU.M/SEC.    =   120         **
      DO,   MG/L         =  1.22         **
      BOD,  MG/L         =  1.67         **   K1     =     .2
                                         **   K2     =     .3
WASTE CHARACTERISTICS                    **   BOD(M) = 1.6790
      FLOW, CU.M/SEC     =   .01         **   DO(M)  = 1.2199
      DO,   MG/L         =   .13         **
      BOD,  MG/L         =  110.         **   DEF(I) = .00009
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.07308128	1.1469187
.3	.19528295	1.0247170
.5	.29013399	.92986601
.7	.36218272	.85781728
.9	.41530091	.80469909
1.1	.45277895	.76722105
1.3	.47740804	.74259196
1.5	.49155123	.72844877
1.7	.49720459	.72279541
1.9	.49605004	.72394996
2.1	.48950093	.73049907
2.3	.47874106	.74125894
2.5	.46475864	.75524136
2.7	.44837524	.77162476
2.9	.43027069	.78972931
3.1	.41100448	.80899552
3.3	.39103436	.82896564
3.5	.37073179	.84926821
3.7	.35039570	.86960430
3.9	.33026383	.88973617
4.1	.31052276	.90947724
4.3	.29131625	.92868375
4.5	.27275244	.94724756
4.7	.25490990	.96509010
4.9	.23784286	.98215714
5.1	.22158562	.9784438
5.3	.20615619	1.0138438
5.5	.19155950	1.0284405
5.7	.17779001	1.0422100
5.9	.16483392	1.0551661

TC = 1.7609 DAYS
DEF = .49720 MG/L
DOC = .72280 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
      FLOW, CU.M/SEC.    =   120         **
      DO,   MG/L         =  1.22         **
      BOD,  MG/L         =  1.67         **   K1    =    .05
                                         **   K2    =    .15
WASTE CHARACTERISTICS                    **   BOD(M)= 1.6802
      FLOW, CU.M/SEC     =   .01         **   DO(M) = 1.2199
      DO,   MG/L         =   .24         **
      BOD,  MG/L         =  124.         **   DEF(I)= .00008
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.01898269	1.2010173
.3	.05424217	1.1657578
.5	.08631678	1.1336832
.7	.11543803	1.1045620
.9	.14182154	1.0781785
1.1	.16566812	1.0543319
1.3	.18716475	1.0328352
1.5	.20648555	1.0135144
1.7	.22379262	.99620738
1.9	.23923683	.98076317
2.1	.25295865	.96704135
2.3	.26508877	.95491123
2.5	.27574881	.94425119
2.7	.28505194	.93494806
2.9	.29310341	.92689659
3.1	.30000112	.91999888
3.3	.30583611	.91416389
3.5	.31069302	.90930698
3.7	.31465054	.90534946
3.9	.31778178	.90221822
4.1	.32015470	.89984530
4.3	.32183241	.89816759
4.5	.32287353	.89712647
4.7	.32333249	.89666751
4.9	.32325983	.89674017
5.1	.32270243	.89729757
5.3	.32170378	.89829622
5.5	.32030424	.89969576
5.7	.31854119	.90145881
5.9	.31644931	.90355069

TC = 4.7707 DAYS
DEF = .32333 MG/L
DOC = .89667 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
      FLOW, CU.M/SEC.    =   120         **
      DO,   MG/L         =  1.22         **
      BOD,  MG/L         =  1.67         **   K1    =     .1
                                         **   K2    =     .2
WASTE CHARACTERISTICS                    **   BOD(M)= 1.6802
      FLOW, CU.M/SEC     =   .01         **   DO(M) = 1.2199
      DO,   MG/L         =   .24         **
      BOD,  MG/L         =  124.         **   DEF(I)= .00008
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.03745281	1.1825472
.3	.10473026	1.1152697
.5	.16291172	1.0570883
.7	.21294050	1.0070595
.9	.25567047	.96432953
1.1	.29187421	.92812579
1.3	.32225049	.89774951
1.5	.34743095	.87256905
1.7	.36798634	.85201366
1.9	.38443204	.83556796
2.1	.39723324	.82276676
2.3	.40680951	.81319049
2.5	.41353905	.80646095
2.7	.41776256	.80223744
2.9	.41978667	.80021333
3.1	.41988720	.80011280
3.3	.41831191	.80168809
3.5	.41528330	.80471670
3.7	.41100090	.80899910
3.9	.40564346	.81435654
4.1	.39937091	.82062909
4.3	.39232618	.82767382
4.5	.38463679	.83536321
4.7	.37641639	.84358361
4.9	.36776605	.85223395
5.1	.35877551	.86122449
5.3	.34952426	.87047574
5.5	.34008259	.87991741
5.7	.33051245	.88948755
5.9	.32086833	.89913167

TC = 3.0102 DAYS
DEF = .41989 MG/L
DOC = .80011 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                          **
                                               **
      FLOW, CU.M/SEC.    =   120               **
      DO,   MG/L         =  1.22               **
      BOD,  MG/L         =  1.67               **   K1    =    .15
                                               **   K2    =    .25
WASTE CHARACTERISTICS                          **   BOD(M)= 1.6802
      FLOW, CU.M/SEC     =   .01               **   DO(M) = 1.2199
      DO,   MG/L         =   .24               **
      BOD,  MG/L         =  124.               **   DEF(I)= .00008
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05549759	1.1645024
.3	.15172779	1.0682722
.5	.23066726	.98933274
.7	.29465195	.92534805
.9	.34573335	.87426665
1.1	.38571150	.83428850
1.3	.41616417	.80383583
1.5	.43847286	.78152714
1.7	.45384575	.76615425
1.9	.46333811	.75666189
2.1	.46787035	.75212965
2.3	.46824406	.75175594
2.5	.46515616	.75484384
2.7	.45921137	.76078863
2.9	.45093350	.76906650
3.1	.44077517	.77922483
3.3	.42912645	.79087355
3.5	.41632265	.80367735
3.7	.40265101	.81734899
3.9	.38835679	.83164321
4.1	.37364844	.84635156
4.3	.35870246	.86129754
4.5	.34366728	.87633272
4.7	.32866706	.89133294
4.9	.31380476	.90619524
5.1	.29916508	.92083492
5.3	.28481682	.93518318
5.5	.27081511	.94918489
5.7	.25720327	.96279673
5.9	.24401452	.97598548

TC = 2.2184 DAYS
DEF = .46824 MG/L
DOC = .75176 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                          **
                                               **
      FLOW, CU.M/SEC.    =   120               **
      DO,   MG/L         =  1.22               **
      BOD,  MG/L         =  1.67               **   K1    =     .2
                                               **   K2    =     .3
WASTE CHARACTERISTICS                          **   BOD(M)= 1.6802
      FLOW, CU.M/SEC     =   .01               **   DO(M) = 1.2199
      DO,   MG/L         =   .24               **
      BOD,  MG/L         =  124.               **   DEF(I)= .00008
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.07312435	1.1468757
.3	.19541356	1.0245864
.5	.29033265	.92966735
.7	.36243317	.85756683
.9	.41558966	.80441034
1.1	.45309484	.76690516
1.3	.47774191	.74225809
1.5	.49189559	.72810441
1.7	.49755336	.72244664
1.9	.49639837	.72360163
2.1	.48984495	.73015505
2.3	.47907775	.74092225
2.5	.46508568	.75491432
2.7	.44869091	.77130909
2.9	.43057373	.78942627
3.1	.41129407	.80870593
3.3	.39130996	.82869004
3.5	.37099316	.84900684
3.7	.35064279	.86935721
3.9	.33049677	.88950323
4.1	.31074182	.90925818
4.3	.29152180	.92847820
4.5	.27294492	.94705508
4.7	.25508981	.96491019
4.9	.23801076	.98198924
5.1	.22174205	.99825795
5.3	.20630175	1.0136983
5.5	.19169477	1.0283052
5.7	.17791556	1.0420844
5.9	.16495033	1.0550497

TC = 1.7609 DAYS
DEF = .49755 MG/L
DOC = .72245 MG/L

RIVER CHARACTERISTICS

FLOW, CU.M/SEC. = 120
DO, MG/L = 1.22
BOD, MG/L = 1.67

K1 = .05
K2 = .15
BOD(M) = 1.6819
DO(M) = 1.2199

WASTE CHARACTERISTICS

FLOW, CU.M/SEC = .01
DO, MG/L = .4
BOD, MG/L = 145.

DEF(I) = .00007

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.01898926	1.2010107
.3	.05428589	1.1657141
.5	.08639432	1.1336057
.7	.11554629	1.1044537
.9	.14195766	1.0780423
1.1	.16582943	1.0541706
1.3	.18734880	1.0326512
1.5	.20669005	1.0133099
1.7	.22401546	.99598454
1.9	.23947606	.98052394
2.1	.25321246	.96678754
2.3	.26535550	.95464450
2.5	.27602692	.94397308
2.7	.28534000	.93466000
2.9	.29340011	.92659989
3.1	.30030525	.91969475
3.3	.30614655	.91385345
3.5	.31100874	.90899126
3.7	.31497060	.90502940
3.9	.31810531	.90189469
4.1	.32048091	.89951909
4.3	.32216056	.89783944
4.5	.32320296	.89679704
4.7	.32366258	.89633742
4.9	.32359002	.89640998
5.1	.32303221	.89696779
5.3	.32203269	.89796731
5.5	.32063185	.89936815
5.7	.31886712	.90113288
5.9	.31677321	.90322679

TC = 4.7708 DAYS
DEF = .32366 MG/L
DOC = .89634 MG/L

RIVER CHARACTERISTICS

FLOW, CU.M/SEC. = 120
DO, MG/L = 1.22
BOD, MG/L = 1.67

K1 = .1
K2 = .2
BOD(M) = 1.6819
DO(M) = 1.2199

WASTE CHARACTERISTICS

FLOW, CU.M/SEC = .01
DO, MG/L = .4
BOD, MG/L = 145.

DEF(I) = .00007

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.03747854	1.1825215
.3	.10482635	1.1151736
.5	.16306872	1.0569313
.7	.21314992	1.0068501
.9	.25592471	.96407529
1.1	.29216649	.92783351
1.3	.32257474	.89742526
1.5	.34778176	.87221824
1.7	.36835889	.85164111
1.9	.38482206	.83517794
2.1	.39763692	.82236308
2.3	.40722349	.81277651
2.5	.41396037	.80603963
2.7	.41818860	.80181140
2.9	.42021514	.79978486
3.1	.42031607	.79968393
3.3	.41873945	.80126055
3.5	.41570798	.80429202
3.7	.41142141	.80857859
3.9	.40605867	.81394133
4.1	.39977986	.82022014
4.3	.39272806	.82727194
4.5	.38503092	.83496908
4.7	.37680221	.84319779
4.9	.36814311	.85185689
5.1	.35914343	.86085657
5.3	.34988278	.87011722
5.5	.34043149	.87956851
5.7	.33085160	.88914840
5.9	.32119764	.89880236

TC = 3.0102 DAYS
DEF = .42032 MG/L
DOC = .79968 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
      FLOW, CU.M/SEC.    =    120        **
      DO,   MG/L         =   1.22        **
      BOD,  MG/L         =   1.67        **   K1     =     .15
                                         **   K2     =     .25
WASTE CHARACTERISTICS                    **   BOD(M)= 1.6819
      FLOW, CU.M/SEC     =    .01        **   DO(M)  = 1.2199
      DO,   MG/L         =     .4        **
      BOD,  MG/L         =   145.        **   DEF(I)= .00007
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05554203	1.1644580
.3	.15187264	1.0681274
.5	.23089457	.98910543
.7	.29494620	.92505380
.9	.34608114	.87391886
1.1	.38610130	.83389870
1.3	.41658608	.80341392
1.5	.43891842	.78108158
1.7	.45430775	.76569225
1.9	.46381042	.75618958
2.1	.46834782	.75165218
2.3	.46872235	.75127765
2.5	.46563165	.75436835
2.7	.45968110	.76031890
2.9	.45139502	.76860498
3.1	.44122651	.77877349
3.3	.42956605	.79043395
3.5	.41674928	.80325072
3.7	.40306378	.81693622
3.9	.38875502	.83124498
4.1	.37403169	.84596831
4.3	.35907046	.86092954
4.5	.34401993	.87598007
4.7	.32900439	.89099561
4.9	.31412689	.90587311
5.1	.29947223	.92052777
5.3	.28510929	.93489071
5.5	.27109323	.94890677
5.7	.25746745	.96253255
5.9	.24426518	.97573482

TC = 2.2184 DAYS
DEF = .46872 MG/L
DOC = .75128 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
      FLOW, CU.M/SEC.    =    120        **
      DO,   MG/L         =   1.22        **
      BOD,  MG/L         =   1.67        **   K1     =      .2
                                         **   K2     =      .3
WASTE CHARACTERISTICS                    **   BOD(M)= 1.6819
      FLOW, CU.M/SEC     =    .01        **   DO(M)  = 1.2199
      DO,   MG/L         =     .4        **
      BOD,  MG/L         =   145.        **   DEF(I)= .00007
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.07318708	1.1468129
.3	.19560375	1.0243963
.5	.29062192	.92937808
.7	.36279787	.85720213
.9	.41601013	.80398987
1.1	.45355483	.76644517
1.3	.47822808	.74177192
1.5	.49239702	.72760298
1.7	.49806124	.72193876
1.9	.49690559	.72309441
2.1	.49034589	.72965411
2.3	.47956802	.74043198
2.5	.46556190	.75443810
2.7	.44915057	.77084943
2.9	.43101502	.78898498
3.1	.41171574	.80828426
3.3	.39171127	.82828873
3.5	.37137374	.84862626
3.7	.35100259	.86899741
3.9	.33083597	.88916403
4.1	.31106081	.90893919
4.3	.29182111	.92817889
4.5	.27322520	.94677480
4.7	.25535180	.96464820
4.9	.23825523	.98174477
5.1	.22196985	.99803015
5.3	.20651370	1.0134863
5.5	.19189173	1.0281083
5.7	.17809839	1.0419016
5.9	.16511985	1.0548801

TC = 1.7609 DAYS
DEF = .49806 MG/L
DOC = .72194 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                          **
                                               **
      FLOW, CU.M/SEC.    =    120              **
      DO,   MG/L         =   1.53              **
      BOD,  MG/L         =   1.89              **   K1    =    .05
                                               **   K2    =    .15
WASTE CHARACTERISTICS                          **   BOD(M)= 1.8953
      FLOW, CU.M/SEC     =    .01              **   DO(M) = 1.5300
      DO,   MG/L         =      1              **
      BOD,  MG/L         =   65.4              **   DEF(I)= .00004
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.02136678	1.5086332
.3	.06114373	1.4688563
.5	.09732785	1.4326722
.7	.13018028	1.3998197
.9	.15994427	1.3700557
1.1	.18684635	1.3431537
1.3	.21109745	1.3189025
1.5	.23289400	1.2971060
1.7	.25241885	1.2775812
1.9	.26984222	1.2601578
2.1	.28532254	1.2446775
2.3	.29900727	1.2309927
2.5	.31103360	1.2189664
2.7	.32152919	1.2084708
2.9	.33061277	1.1993872
3.1	.33839480	1.1916052
3.3	.34497796	1.1850220
3.5	.35045774	1.1795423
3.7	.35492290	1.1750771
3.9	.35845594	1.1715441
4.1	.36113351	1.1688665
4.3	.36302679	1.1669732
4.5	.36420194	1.1657981
4.7	.36472034	1.1652797
4.9	.36463900	1.1653610
5.1	.36401082	1.1659892
5.3	.36288487	1.1671151
5.5	.36130665	1.1686934
5.7	.35931835	1.1706816
5.9	.35695909	1.1730409

TC = 4.7710 DAYS
DEF = .36472 MG/L
DOC = 1.1653 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                          **
                                               **
      FLOW, CU.M/SEC.    =    120              **
      DO,   MG/L         =   1.53              **
      BOD,  MG/L         =   1.89              **   K1    =     .1
                                               **   K2    =     .2
WASTE CHARACTERISTICS                          **   BOD(M)= 1.8953
      FLOW, CU.M/SEC     =    .01              **   DO(M) = 1.5300
      DO,   MG/L         =      1              **
      BOD,  MG/L         =   65.4              **   DEF(I)= .00004
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04220222	1.4877978
.3	.11809745	1.4119025
.5	.18373175	1.3462683
.7	.24016923	1.2898308
.9	.28837310	1.2416269
1.1	.32921492	1.2007851
1.3	.36348291	1.1665171
1.5	.39188963	1.1381104
1.7	.41507890	1.1149211
1.9	.43363213	1.0963679
2.1	.44807406	1.0819259
2.3	.45887801	1.0711220
2.5	.46647063	1.0635294
2.7	.47123622	1.0587638
2.9	.47352070	1.0564793
3.1	.47363521	1.0563648
3.3	.47185924	1.0581408
3.5	.46844380	1.0615562
3.7	.46361394	1.0663861
3.9	.45757134	1.0724287
4.1	.45049640	1.0795036
4.3	.44255034	1.0874497
4.5	.43387704	1.0961230
4.7	.42460469	1.1053953
4.9	.41484731	1.1151527
5.1	.40470611	1.1252939
5.3	.39427080	1.1357292
5.5	.38362065	1.1463794
5.7	.37282555	1.1571744
5.9	.36194697	1.1680530

TC = 3.0102 DAYS
DEF = .47364 MG/L
DOC = 1.0564 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =   120       **
        DO,   MG/L         =  1.53       **
        BOD,  MG/L         =  1.89       **    K1    =    .15
                                         **    K2    =    .25
WASTE CHARACTERISTICS                    **    BOD(M)= 1.8953
        FLOW, CU.M/SEC     =   .01       **    DO(M) = 1.5300
        DO,   MG/L         =     1       **
        BOD,  MG/L         =  65.4       **    DEF(I)= .00004
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.06255785	1.4674421
.3	.17111364	1.3588864
.5	.26016438	1.2698356
.7	.33234514	1.1976549
.9	.38997014	1.1400299
1.1	.43506993	1.0949301
1.3	.46942432	1.0605757
1.5	.49459173	1.0354083
1.7	.51193506	1.0180649
1.9	.52264472	1.0073553
2.1	.52775899	1.0022410
2.3	.52818210	1.0018179
2.5	.52470023	1.0052998
2.7	.51799555	1.0120044
2.9	.50865894	1.0213411
3.1	.49720098	1.0327990
3.3	.48406172	1.0459383
3.5	.46961938	1.0603806
3.7	.45419802	1.0758020
3.9	.43807428	1.0919257
4.1	.42148333	1.1085167
4.3	.40462426	1.1253757
4.5	.38766451	1.1423355
4.7	.37074416	1.1592558
4.9	.35397934	1.1760207
5.1	.33746561	1.1925344
5.3	.32128057	1.2087194
5.5	.30548642	1.2245136
5.7	.29013204	1.2398680
5.9	.27525488	1.2547451

TC = 2.2185 DAYS
DEF = .52818 MG/L
DOC = 1.0018 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =   120       **
        DO,   MG/L         =  1.53       **
        BOD,  MG/L         =  1.89       **    K1    =     .2
                                         **    K2    =     .3
WASTE CHARACTERISTICS                    **    BOD(M)= 1.8953
        FLOW, CU.M/SEC     =   .01       **    DO(M) = 1.5300
        DO,   MG/L         =     1       **
        BOD,  MG/L         =  65.4       **    DEF(I)= .00004
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.08244194	1.4475581
.3	.22039401	1.3096060
.5	.32747092	1.2025291
.7	.40880709	1.1211929
.9	.46877320	1.0612268
1.1	.51108361	1.0189164
1.3	.53888921	.99111079
1.5	.55485755	.97514245
1.7	.56124191	.96875809
1.9	.55994095	.97005905
2.1	.55255014	.97744986
2.3	.54040583	.98959417
2.5	.52462357	1.0053764
2.7	.50613083	1.0238692
2.9	.48569501	1.0443050
3.1	.46394774	1.0660523
3.3	.44140573	1.0885943
3.5	.41848834	1.1115117
3.7	.39553300	1.1344670
3.9	.37280810	1.1571919
4.1	.35052427	1.1794757
4.3	.32884382	1.2011562
4.5	.30788880	1.2221112
4.7	.28774792	1.2422521
4.9	.26848242	1.2615176
5.1	.25013099	1.2798690
5.3	.23271399	1.2972860
5.5	.21623699	1.3137630
5.7	.20069373	1.3293063
5.9	.18606864	1.3439314

TC = 1.7609 DAYS
DEF = .56124 MG/L
DOC = .96876 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                  **
                                       **
        FLOW, CU.M/SEC.    =   120     **
        DO,   MG/L         =  1.53     **
        BOD,  MG/L         =  1.89     **   K1    =    .05
                                       **   K2    =    .15
WASTE CHARACTERISTICS                  **   BOD(M)= 1.8961
        FLOW, CU.M/SEC     =   .01     **   DO(M) = 1.5300
        DO,   MG/L         =  1.24     **
        BOD,  MG/L         =  74.5     **   DEF(I)= .00002
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.02135601	1.5086440
.3	.06115020	1.4688498
.5	.09735003	1.4326500
.7	.13021676	1.3997832
.9	.15999374	1.3700063
1.1	.18690758	1.3430924
1.3	.21116932	1.3188307
1.5	.23297546	1.2970245
1.7	.25250893	1.2774911
1.9	.26994003	1.2600600
2.1	.28542725	1.2445727
2.3	.29911811	1.2308819
2.5	.31114987	1.2188501
2.7	.32165023	1.2083498
2.9	.33073799	1.1992620
3.1	.33852362	1.1914764
3.3	.34510988	1.1848901
3.5	.35059228	1.1794077
3.7	.35505963	1.1749404
3.9	.35859446	1.1714055
4.1	.36127345	1.1687266
4.3	.36316782	1.1668322
4.5	.36434374	1.1656563
4.7	.36486263	1.1651374
4.9	.36478152	1.1652185
5.1	.36415334	1.1658467
5.3	.36302716	1.1669728
5.5	.36144852	1.1685515
5.7	.35945963	1.1705404
5.9	.35709961	1.1729004

TC = 4.7711 DAYS
DEF = .36486 MG/L
DOC = 1.1651 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                  **
                                       **
        FLOW, CU.M/SEC.    =   120     **
        DO,   MG/L         =  1.53     **
        BOD,  MG/L         =  1.89     **   K1    =     .1
                                       **   K2    =     .2
WASTE CHARACTERISTICS                  **   BOD(M)= 1.8961
        FLOW, CU.M/SEC     =   .01     **   DO(M) = 1.5300
        DO,   MG/L         =  1.24     **
        BOD,  MG/L         =  74.5     **   DEF(I)= .00002
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04220002	1.4878000
.3	.11812737	1.4118726
.5	.18378952	1.3462105
.7	.24025102	1.2897490
.9	.28847550	1.2415245
1.1	.32933486	1.2006651
1.3	.36361765	1.1663823
1.5	.39203673	1.1379633
1.7	.41523618	1.1147638
1.9	.43379765	1.0962023
2.1	.44824611	1.0817539
2.3	.45905507	1.0709449
2.5	.46665134	1.0633487
2.7	.47141940	1.0585806
2.9	.47370530	1.0562947
3.1	.47382031	1.0561797
3.3	.47204406	1.0579559
3.5	.46862763	1.0613724
3.7	.46379619	1.0662038
3.9	.45775149	1.0722485
4.1	.45067400	1.0793260
4.3	.44272503	1.0872750
4.5	.43404849	1.0959515
4.7	.42477264	1.1052274
4.9	.41501155	1.1149885
5.1	.40486647	1.1251335
5.3	.39442715	1.1355729
5.5	.38377288	1.1462271
5.7	.37297359	1.1570264
5.9	.36209077	1.1679092

TC = 3.0103 DAYS
DEF = .47382 MG/L
DOC = 1.0562 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                          **
                                               **
      FLOW, CU.M/SEC.    =   120               **
      DO,   MG/L         =  1.53               **
      BOD,  MG/L         =  1.89               **   K1     =    .15
                                               **   K2     =    .25
WASTE CHARACTERISTICS                          **   BOD(M)= 1.8961
      FLOW, CU.M/SEC     =   .01               **   DO(M)  = 1.5300
      DO,   MG/L         =  1.24               **
      BOD,  MG/L         =  74.5               **   DEF(I)= .00002
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.06256404	1.4674360
.3	.17116541	1.3588346
.5	.26025368	1.2697463
.7	.33246502	1.1975350
.9	.39011458	1.1398854
1.1	.43523375	1.0947663
1.3	.46960307	1.0603969
1.5	.49478160	1.0352184
1.7	.51213280	1.0178672
1.9	.52284757	1.0071524
2.1	.52796463	1.0020354
2.3	.52838855	1.0016114
2.5	.52490587	1.0050941
2.7	.51819902	1.0118010
2.9	.50885912	1.0211409
3.1	.49739698	1.0326030
3.3	.48425282	1.0457472
3.5	.46980501	1.0601950
3.7	.45437776	1.0756222
3.9	.43824781	1.0917522
4.1	.42165044	1.1083496
4.3	.40478481	1.1252152
4.5	.38781845	1.1421815
4.7	.37089148	1.1591085
4.9	.35412008	1.1758799
5.1	.33759985	1.1924001
5.3	.32140845	1.2085916
5.5	.30560807	1.2243919
5.7	.29024762	1.2397524
5.9	.27536458	1.2546354

TC = 2.2185 DAYS
DEF = .52839 MG/L
DOC = 1.0016 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                          **
                                               **
      FLOW, CU.M/SEC.    =   120               **
      DO,   MG/L         =  1.53               **
      BOD,  MG/L         =  1.89               **   K1     =     .2
                                               **   K2     =     .3
WASTE CHARACTERISTICS                          **   BOD(M)= 1.8961
      FLOW, CU.M/SEC     =   .01               **   DO(M)  = 1.5300
      DO,   MG/L         =  1.24               **
      BOD,  MG/L         =  74.5               **   DEF(I)= .00002
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.08245632	1.4475437
.3	.22046611	1.3095339
.5	.32758806	1.2024119
.7	.40895867	1.1210413
.9	.46895041	1.0610496
1.1	.51127917	1.0187208
1.3	.53909713	.99090287
1.5	.55507292	.97492708
1.7	.56146076	.96853924
1.9	.56016008	.96983992
2.1	.55276700	.97723300
2.3	.54061843	.98938157
2.5	.52483037	1.0051696
2.7	.50633067	1.0236693
2.9	.48588705	1.0441129
3.1	.46413141	1.0658686
3.3	.44158066	1.0884193
3.5	.41865435	1.1113457
3.7	.39569004	1.1343100
3.9	.37295622	1.1570438
4.1	.35066364	1.1793364
4.3	.32897465	1.2010254
4.5	.30801135	1.2219886
4.7	.28786252	1.2421375
4.9	.26858939	1.2614106
5.1	.25023069	1.2797693
5.3	.23280679	1.2971932
5.5	.21632325	1.3136768
5.7	.20077381	1.3292262
5.9	.18614291	1.3438571

TC = 1.7609 DAYS
DEF = .56146 MG/L
DOC = .96854 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                  **
                                       **
        FLOW, CU.M/SEC.    =   120     **
        DO,   MG/L         =  1.53     **
        BOD,  MG/L         =  1.89     **   K1     =     .05
                                       **   K2     =     .15
WASTE CHARACTERISTICS                  **   BOD(M)= 1.8972
        FLOW, CU.M/SEC     =   .01     **   DO(M)  = 1.5300
        DO,   MG/L         =   1.6     **
        BOD,  MG/L         =  88.1     **   DEF(I)= -6.E-6
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.02133981	1.5086602
.3	.06115977	1.4688402
.5	.09738309	1.4326169
.7	.13027120	1.3997288
.9	.16006758	1.3699324
1.1	.18699901	1.3430010
1.3	.21127666	1.3187233
1.5	.23309714	1.2969029
1.7	.25264350	1.2773565
1.9	.27008615	1.2599138
2.1	.28558369	1.2444163
2.3	.29928373	1.2307163
2.5	.31132360	1.2186764
2.7	.32183109	1.2081689
2.9	.33092508	1.1990749
3.1	.33871611	1.1912839
3.3	.34530700	1.1846930
3.5	.35079333	1.1792067
3.7	.35526395	1.1747360
3.9	.35880146	1.1711985
4.1	.36148257	1.1685174
4.3	.36337856	1.1666214
4.5	.36455564	1.1654444
4.7	.36507526	1.1649247
4.9	.36499450	1.1650055
5.1	.36436631	1.1656337
5.3	.36323980	1.1667602
5.5	.36166054	1.1683395
5.7	.35967076	1.1703292
5.9	.35730960	1.1726904

TC = 4.7712 DAYS
DEF = .3650B MG/L
DOC = 1.1649 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                  **
                                       **
        FLOW, CU.M/SEC.    =   120     **
        DO,   MG/L         =  1.53     **
        BOD,  MG/L         =  1.89     **   K1     =      .1
                                       **   K2     =      .2
WASTE CHARACTERISTICS                  **   BOD(M)= 1.8972
        FLOW, CU.M/SEC     =   .01     **   DO(M)  = 1.5300
        DO,   MG/L         =   1.6     **
        BOD,  MG/L         =  88.1     **   DEF(I)= -6.E-6
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04219664	1.4878034
.3	.11817199	1.4118280
.5	.18387577	1.3461242
.7	.24037319	1.2896268
.9	.28862847	1.2413715
1.1	.32951405	1.2004860
1.3	.36381897	1.1661810
1.5	.39225652	1.1377435
1.7	.41547119	1.1145288
1.9	.43404499	1.0959550
2.1	.44850320	1.0814968
2.3	.45931963	1.0706804
2.5	.46692137	1.0630786
2.7	.47169312	1.0583069
2.9	.47398116	1.0560188
3.1	.47409693	1.0559031
3.3	.47232025	1.0576798
3.5	.46890235	1.0610976
3.7	.46406855	1.0659315
3.9	.45802070	1.0719793
4.1	.45093941	1.0790606
4.3	.44298608	1.0870139
4.5	.43430471	1.0956953
4.7	.42502364	1.1049764
4.9	.41525700	1.1147430
5.1	.40510612	1.1248939
5.3	.39466080	1.1353392
5.5	.38400037	1.1459996
5.7	.37319483	1.1568052
5.9	.36230568	1.1676943

TC = 3.0103 DAYS
DEF = .47410 MG/L
DOC = 1.0559 MG/L

```
**********************************************************
 RIVER CHARACTERISTICS                    **
                                          **
        FLOW, CU.M/SEC.    =   120        **
        DO,   MG/L         =  1.53        **
        BOD,  MG/L         =  1.89        **   K1     =     .15
                                          **   K2     =     .25
 WASTE CHARACTERISTICS                    **   BOD(M)= 1.8972
        FLOW, CU.M/SEC     =   .01        **   DO(M)  = 1.5300
        DO,   MG/L         =  1.6         **
        BOD,  MG/L         =  88.1        **   DEF(I)= -6.E-6
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.06257318	1.4674268
.3	.17124268	1.3587573
.5	.26038707	1.2696129
.7	.33264411	1.1973559
.9	.39033039	1.1396696
1.1	.43547852	1.0945215
1.3	.46987016	1.0601298
1.5	.49506532	1.0349347
1.7	.51242829	1.0175717
1.9	.52315071	1.0068493
2.1	.52827192	1.0017281
2.3	.52869707	1.0013029
2.5	.52521317	1.0047868
2.7	.51850308	1.0114969
2.9	.50915828	1.0208417
3.1	.49768989	1.0323101
3.3	.48453840	1.0454616
3.5	.47008243	1.0599176
3.7	.45464637	1.0753536
3.9	.43850715	1.0914929
4.1	.42190018	1.1080998
4.3	.40502476	1.1249752
4.5	.38804850	1.1419515
4.7	.37111163	1.1588884
4.9	.35433041	1.1756696
5.1	.33780048	1.1921995
5.3	.32159955	1.2084004
5.5	.30576986	1.2242101
5.7	.29042035	1.2395797
5.9	.27552852	1.2544715

TC = 2.2185 DAYS
DEF = .52870 MG/L
DOC = 1.0013 MG/L

```
**********************************************************
 RIVER CHARACTERISTICS                    **
                                          **
        FLOW, CU.M/SEC.    =   120        **
        DO,   MG/L         =  1.53        **
        BOD,  MG/L         =  1.89        **   K1     =      .2
                                          **   K2     =      .3
 WASTE CHARACTERISTICS                    **   BOD(M)= 1.8972
        FLOW, CU.M/SEC     =   .01        **   DO(M)  = 1.5300
        DO,   MG/L         =  1.6         **
        BOD,  MG/L         =  88.1        **   DEF(I)= -6.E-6
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.08247770	1.4475223
.3	.22057377	1.3094262
.5	.32776304	1.2022370
.7	.40918513	1.1208149
.9	.46921519	1.0607848
1.1	.51157139	1.0184286
1.3	.53940783	.99059217
1.5	.55539477	.97460523
1.7	.56178780	.96821220
1.9	.56048754	.96951246
2.1	.55309107	.97690893
2.3	.54093613	.98906387
2.5	.52513940	1.0048606
2.7	.50662931	1.0233707
2.9	.48617405	1.0438259
3.1	.46440590	1.0655941
3.3	.44184210	1.0881579
3.5	.41890245	1.1110976
3.7	.39592473	1.1340753
3.9	.37317760	1.1568224
4.1	.35087192	1.1791281
4.3	.32917017	1.2008298
4.5	.30819451	1.2218055
4.7	.28803378	1.2419662
4.9	.26874926	1.2612507
5.1	.25037969	1.2796203
5.3	.23294547	1.2970545
5.5	.21645215	1.3135478
5.7	.20089349	1.3291065
5.9	.18625390	1.3437461

TC = 1.7609 DAYS
DEF = .56179 MG/L
DOC = .96821 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =    120      **
        DO,   MG/L         =   1.22      **
        BOD,  MG/L         =   1.67      **   K1     =     .05
                                         **   K2     =     .15
WASTE CHARACTERISTICS                    **   BOD(M)= 1.6753
        FLOW, CU.M/SEC     =     .01     **   DO(M)  = 1.2200
        DO,   MG/L         =       1     **
        BOD,  MG/L         =    65.4     **   DEF(I)= .00002
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.01886679	1.2011332
.3	.05402826	1.1659717
.5	.08601382	1.1339862
.7	.11505432	1.1049457
.9	.14136476	1.0786352
1.1	.16514539	1.0548546
1.3	.18656268	1.0334173
1.5	.20585024	1.0141498
1.7	.22310971	.99689029
1.9	.23851156	.98148844
2.1	.25219583	.96780417
2.3	.26429288	.95570712
2.5	.27492397	.94507603
2.7	.28420194	.93579806
2.9	.29223176	.92776824
3.1	.29911105	.92088895
3.3	.30493059	.91506941
3.5	.30977479	.91022521
3.7	.31372211	.90627789
3.9	.31684546	.90315454
4.1	.31921261	.90078739
4.3	.32088648	.89911352
4.5	.32192554	.89807446
4.7	.32238406	.89761594
4.9	.32231244	.89768756
5.1	.32175743	.89824257
5.3	.32076240	.89923760
5.5	.31936758	.90063242
5.7	.31761027	.90238973
5.9	.31552503	.90447497

TC = 4.7711 DAYS
DEF = .32238 MG/L
DOC = .89762 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =    120      **
        DO,   MG/L         =   1.22      **
        BOD,  MG/L         =   1.67      **   K1     =      .1
                                         **   K2     =      .2
WASTE CHARACTERISTICS                    **   BOD(M)= 1.6753
        FLOW, CU.M/SEC     =     .01     **   DO(M)  = 1.2200
        DO,   MG/L         =       1     **
        BOD,  MG/L         =    65.4     **   DEF(I)= .00002
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.03728414	1.1827159
.3	.10437214	1.1156279
.5	.16239001	1.0576100
.7	.21227838	1.0077216
.9	.25488867	.96511133
1.1	.29099128	.92900872
1.3	.32128297	.89871703
1.5	.34639359	.87360641
1.7	.36689225	.85310775
1.9	.38329289	.83670711
2.1	.39605934	.82394066
2.3	.40561000	.81439000
2.5	.41232199	.80767801
2.7	.41653503	.80346497
2.9	.41855488	.80144512
3.1	.41865657	.80134343
3.3	.41708718	.80291282
3.5	.41406855	.80593145
3.7	.40979965	.81020035
3.9	.40445873	.81554127
4.1	.39820526	.82179474
4.3	.39118176	.82881824
4.5	.38351540	.83648460
4.7	.37531950	.84468050
4.9	.36669484	.85330516
5.1	.35773090	.86226910
5.3	.34850696	.87149304
5.5	.33909311	.88090689
5.7	.32955111	.89044889
5.9	.31993531	.90006469

TC = 3.0103 DAYS
DEF = .41866 MG/L
DOC = .80134 MG/L

RIVER CHARACTERISTICS

FLOW, CU.M/SEC. = 120
DO, MG/L = 1.22
BOD, MG/L = 1.67

K1 = .15
K2 = .25
BOD(M) = 1.6753
DO(M) = 1.2200

WASTE CHARACTERISTICS

FLOW, CU.M/SEC = .01
DO, MG/L = 1
BOD, MG/L = 65.4

DEF(I) = .00002

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05527737	1.1647226
.3	.15123548	1.0687645
.5	.22995221	.99004779
.7	.29375682	.92624318
.9	.34469494	.87530506
1.1	.38456144	.83543856
1.3	.41492960	.80507040
1.5	.43717696	.78282304
1.7	.45250824	.76749176
1.9	.46197570	.75802430
2.1	.46649713	.75350287
2.3	.46687180	.75312820
2.5	.46379466	.75620534
2.7	.45786872	.76213128
2.9	.44961625	.77038375
3.1	.43946862	.78051138
3.3	.42787478	.79212522
3.5	.41510906	.80489094
3.7	.40147792	.81852208
3.9	.38722589	.8327411
4.1	.37256085	.84743915
4.3	.35765878	.86234122
4.5	.34266770	.87733230
4.7	.32771142	.89228858
4.9	.31289260	.90710740
5.1	.29829571	.92170429
5.3	.28398935	.93601065
5.5	.27002850	.94997150
5.7	.25645635	.96354365
5.9	.24330604	.97669396

TC = 2.2185 DAYS
DEF = .46687 MG/L
DOC = .75313 MG/L

RIVER CHARACTERISTICS

FLOW, CU.M/SEC. = 120
DO, MG/L = 1.22
BOD, MG/L = 1.67

K1 = .2
K2 = .3
BOD(M) = 1.6753
DO(M) = 1.2200

WASTE CHARACTERISTICS

FLOW, CU.M/SEC = .01
DO, MG/L = 1
BOD, MG/L = 65.4

DEF(I) = .00002

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.07285379	1.1471462
.3	.19479659	1.0252034
.5	.28944753	.93055247
.7	.36134510	.85865490
.9	.41435273	.80564727
1.1	.45175371	.76824629
1.3	.47633324	.74366676
1.5	.49044926	.72955074
1.7	.49609355	.72390645
1.9	.49494442	.72505558
2.1	.48841216	.73158784
2.3	.47767803	.74232197
2.5	.46372813	.75627187
2.7	.44738227	.77261773
2.9	.42931880	.79068120
3.1	.41009604	.80990396
3.3	.39017074	.82982926
3.5	.36991358	.85008642
3.7	.34962285	.87037715
3.9	.32953578	.89046422
4.1	.30983857	.91016143
4.3	.29067467	.92932533
4.5	.27215198	.94784802
4.7	.25434892	.96565108
4.9	.23731963	.98268037
5.1	.22109829	.99890171
5.3	.20570292	1.0142971
5.5	.19113844	1.0288616
5.7	.17739930	1.0426007
5.9	.16447176	1.0555282

TC = 1.7609 DAYS
DEF = .49609 MG/L
DOC = .72391 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =   120       **
        DO,   MG/L         =  1.22       **
        BOD,  MG/L         =  1.67       **   K1    =    .05
                                         **   K2    =    .15
WASTE CHARACTERISTICS                    **   BOD(M)= 1.6761
        FLOW, CU.M/SEC     =   .01       **   DO(M) = 1.2200
        DO,   MG/L         =  1.24       **
        BOD,  MG/L         =  74.5       **   DEF(I)= -2.E-6
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.01885602	1.2011440
.3	.05403473	1.1659653
.5	.08603601	1.1339640
.7	.11509080	1.1049092
.9	.14141423	1.0785858
1.1	.16520662	1.0547934
1.3	.18665455	1.0333455
1.5	.20593170	1.0140683
1.7	.22319979	.99680021
1.9	.23860937	.98139063
2.1	.25230055	.96769945
2.3	.26440372	.95559628
2.5	.27504024	.94495976
2.7	.28432299	.93567701
2.9	.29235697	.92764303
3.1	.29923987	.92076013
3.3	.30506251	.91493749
3.5	.30990934	.91009066
3.7	.31385884	.90614116
3.9	.31698398	.90301602
4.1	.31935255	.90064745
4.3	.32102751	.89897249
4.5	.32206734	.89793266
4.7	.32252635	.89747365
4.9	.32245496	.89754504
5.1	.32189995	.89810005
5.3	.32090469	.89909531
5.5	.31950946	.90049054
5.7	.31775155	.90224845
5.9	.31566555	.90433445

TC = 4.7712 DAYS
DEF = .32253 MG/L
DOC = .89747 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =   120       **
        DO,   MG/L         =  1.22       **
        BOD,  MG/L         =  1.67       **   K1    =     .1
                                         **   K2    =     .2
WASTE CHARACTERISTICS                    **   BOD(M)= 1.6761
        FLOW, CU.M/SEC     =   .01       **   DO(M) = 1.2200
        DO,   MG/L         =  1.24       **
        BOD,  MG/L         =  74.5       **   DEF(I)= -2.E-6
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.03728194	1.1827181
.3	.10440206	1.1155979
.5	.16244778	1.0575522
.7	.21236018	1.0076398
.9	.25499107	.96500893
1.1	.29111122	.92888878
1.3	.32141771	.89858229
1.5	.34654069	.87345931
1.7	.36704954	.85295046
1.9	.38345841	.83654159
2.1	.39623139	.82376861
2.3	.40578705	.81421295
2.5	.41250270	.80749730
2.7	.41671820	.80328180
2.9	.41873948	.80126052
3.1	.41884168	.80115832
3.3	.41727199	.80272801
3.5	.41425239	.80574761
3.7	.40998190	.81001810
3.9	.40463888	.81536112
4.1	.39838287	.82161713
4.3	.39135644	.82864356
4.5	.38368685	.83631315
4.7	.37548745	.84451255
4.9	.36685908	.85314092
5.1	.35789126	.86210874
5.3	.34866331	.87133669
5.5	.33924533	.88075467
5.7	.32969915	.89030085
5.9	.32007911	.89992089

TC = 3.0103 DAYS
DEF = .41884 MG/L
DOC = .80116 MG/L

```
**********************************************************
 RIVER CHARACTERISTICS                    **
                                          **
        FLOW, CU.M/SEC.    =   120        **
        DO,   MG/L         =  1.22        **
        BOD,  MG/L         =  1.67        **   K1    =    .15
                                          **   K2    =    .25
 WASTE CHARACTERISTICS                    **   BOD(M)= 1.6761
        FLOW, CU.M/SEC     =   .01        **   DO(M) = 1.2200
        DO,   MG/L         =  1.24        **
        BOD,  MG/L         =  74.5        **   DEF(I)= -2.E-6
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05528356	1.1647164
.3	.15128725	1.0687128
.5	.23004152	.98995848
.7	.29387670	.92612330
.9	.34483938	.87516062
1.1	.38472526	.83527474
1.3	.41510835	.80489165
1.5	.43736683	.78263317
1.7	.45270599	.76729401
1.9	.46217856	.75782144
2.1	.46670276	.75329724
2.3	.46707826	.75292174
2.5	.46400030	.75599970
2.7	.45807218	.76192782
2.9	.44981644	.77018356
3.1	.43968462	.78031538
3.3	.42806587	.79193413
3.5	.41529469	.80470531
3.7	.40165766	.81834234
3.9	.38739942	.83260058
4.1	.37272796	.84727204
4.3	.35781933	.86218067
4.5	.34282164	.87717836
4.7	.32785873	.89214127
4.9	.31303334	.90696666
5.1	.29842996	.92157004
5.3	.28411722	.93588278
5.5	.27015014	.94984986
5.7	.25657193	.96342807
5.9	.24341573	.97658427

TC = 2.2185 DAYS
DEF = .46708 MG/L
DOC = .75292 MG/L

```
**********************************************************
 RIVER CHARACTERISTICS                    **
                                          **
        FLOW, CU.M/SEC.    =   120        **
        DO,   MG/L         =  1.22        **
        BOD,  MG/L         =  1.67        **   K1    =     .2
                                          **   K2    =     .3
 WASTE CHARACTERISTICS                    **   BOD(M)= 1.6761
        FLOW, CU.M/SEC     =   .01        **   DO(M) = 1.2200
        DO,   MG/L         =  1.24        **
        BOD,  MG/L         =  74.5        **   DEF(I)= -2.E-6
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.07286816	1.1471318
.3	.19486869	1.0251313
.5	.28956466	.93043534
.7	.36149667	.85850333
.9	.41452994	.80547006
1.1	.45194927	.76805073
1.3	.47654116	.74345884
1.5	.49066463	.72933537
1.7	.49631240	.72368760
1.9	.49516354	.72483646
2.1	.48862902	.73137098
2.3	.47789063	.74210937
2.5	.46393492	.75606508
2.7	.44758211	.77241789
2.9	.42951084	.79048916
3.1	.41027971	.80972029
3.3	.39034567	.82965433
3.5	.37007960	.84992040
3.7	.34977989	.87022011
3.9	.32968391	.89031609
4.1	.30997794	.91002206
4.3	.29080550	.92919450
4.5	.27227454	.94772546
4.7	.25446352	.96553648
4.9	.23742660	.98257340
5.1	.22119799	.99880201
5.3	.20579572	1.0142043
5.5	.19122469	1.0287753
5.7	.17747938	1.0425206
5.9	.16454603	1.0554540

TC = 1.7609 DAYS
DEF = .49631 MG/L
DOC = .72369 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.     =   120      **
        DO,   MG/L          =  1.22      **
        BOD,  MG/L          =  1.67      **   K1    =     .05
                                         **   K2    =     .15
WASTE CHARACTERISTICS                    **   BOD(M)= 1.6772
        FLOW, CU.M/SEC      =   .01      **   DO(M) = 1.2200
        DO,   MG/L          =   1.6      **
        BOD,  MG/L          =  88.1      **   DEF(I)= -3.E-5
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.01883982	1.2011602
.3	.05404431	1.1659557
.5	.08606907	1.1339309
.7	.11514523	1.1048548
.9	.14148807	1.0785119
1.1	.16529806	1.0547019
1.3	.18676188	1.0332381
1.5	.20605337	1.0139466
1.7	.22333436	.99666564
1.9	.23875549	.98124451
2.1	.25245699	.96754301
2.3	.26456934	.95543066
2.5	.27521397	.94478603
2.7	.28450384	.93549616
2.9	.29254406	.92745594
3.1	.29943236	.92056764
3.3	.30525963	.91474037
3.5	.31011038	.90988962
3.7	.31406316	.90593684
3.9	.31719098	.90280902
4.1	.31956167	.90043833
4.3	.32123825	.89876175
4.5	.32227924	.89772076
4.7	.32273899	.89726101
4.9	.32266795	.89733205
5.1	.32211292	.89788708
5.3	.32111734	.89888266
5.5	.31972147	.90027853
5.7	.31796267	.90203733
5.9	.31587554	.90412446

TC = 4.7714 DAYS
DEF = .32274 MG/L
DOC = .89726 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.     =   120      **
        DO,   MG/L          =  1.22      **
        BOD,  MG/L          =  1.67      **   K1    =      .1
                                         **   K2    =      .2
WASTE CHARACTERISTICS                    **   BOD(M)= 1.6772
        FLOW, CU.M/SEC      =   .01      **   DO(M) = 1.2200
        DO,   MG/L          =   1.6      **
        BOD,  MG/L          =  88.1      **   DEF(I)= -3.E-5
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.03727856	1.1827214
.3	.10444668	1.1155533
.5	.16253403	1.0574660
.7	.21248235	1.0075177
.9	.25514404	.96485596
1.1	.29129041	.92870959
1.3	.32161903	.89838097
1.5	.34676048	.87323952
1.7	.36728454	.85271546
1.9	.38370575	.83629425
2.1	.39648848	.82351152
2.3	.40605162	.81394838
2.5	.41277273	.80722727
2.7	.41699193	.80300807
2.9	.41901534	.80098466
3.1	.41911830	.80088170
3.3	.41754818	.80245182
3.5	.41452711	.80547289
3.7	.41025426	.80974574
3.9	.40490809	.81509191
4.1	.39864828	.82135172
4.3	.39161749	.82838251
4.5	.38394307	.83605693
4.7	.37573844	.84426156
4.9	.36710453	.85289547
5.1	.35813091	.86186909
5.3	.34889696	.87110304
5.5	.33947283	.88052717
5.7	.32992039	.89007961
5.9	.32029402	.89970598

TC = 3.0104 DAYS
DEF = .41912 MG/L
DOC = .80088 MG/L

```
**********************************************************
 RIVER CHARACTERISTICS                    **
                                          **
         FLOW, CU.M/SEC.    =    120      **
         DO,   MG/L         =   1.22      **
         BOD,  MG/L         =   1.67      **   K1    =     .15
                                          **   K2    =     .25
 WASTE CHARACTERISTICS                    **   BOD(M)= 1.6772
         FLOW, CU.M/SEC     =    .01      **   DO(M) = 1.2200
         DO,   MG/L         =   1.6       **
         BOD,  MG/L         =  88.1       **   DEF(I)= -3.E-5
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05529270	1.1647073
.3	.15136453	1.0686355
.5	.23017491	.98982509
.7	.29405579	.92594421
.9	.34505518	.87494482
1.1	.38497004	.83502996
1.3	.41537545	.80462455
1.5	.43765055	.78234945
1.7	.45300148	.76699852
1.9	.46248169	.75751831
2.1	.46701006	.75298994
2.3	.46738678	.75261322
2.5	.46430760	.75569240
2.7	.45837624	.76162376
2.9	.45011559	.76988441
3.1	.43997752	.78002248
3.3	.42835145	.79164855
3.5	.41557210	.80442790
3.7	.40192626	.81807374
3.9	.38765875	.83234125
4.1	.37297770	.84702230
4.3	.35805928	.86194072
4.5	.34305169	.87694831
4.7	.32807889	.89192111
4.9	.31324367	.90675633
5.1	.29863059	.92136941
5.3	.28430833	.93569167
5.5	.27033193	.94966807
5.7	.25674466	.96325534
5.9	.24357967	.97642033

TC = 2.2185 DAYS
DEF = .46739 MG/L
DOC = .75261 MG/L

```
**********************************************************
 RIVER CHARACTERISTICS                    **
                                          **
         FLOW, CU.M/SEC.    =    120      **
         DO,   MG/L         =   1.22      **
         BOD,  MG/L         =   1.67      **   K1    =      .2
                                          **   K2    =      .3
 WASTE CHARACTERISTICS                    **   BOD(M)= 1.6772
         FLOW, CU.M/SEC     =    .01      **   DO(M) = 1.2200
         DO,   MG/L         =   1.6       **
         BOD,  MG/L         =  88.1       **   DEF(I)= -3.E-5
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.07288954	1.1471105
.3	.19497636	1.0250236
.5	.28973964	.93026036
.7	.36172313	.85827687
.9	.41479473	.80520527
1.1	.45224149	.76775851
1.3	.47685185	.74314815
1.5	.49098648	.72901352
1.7	.49663944	.72336056
1.9	.49549100	.72450900
2.1	.48895309	.73104691
2.3	.47820833	.74179167
2.5	.46424396	.75575604
2.7	.44788075	.77211925
2.9	.42979784	.79020216
3.1	.41055420	.80944580
3.3	.39060711	.82939289
3.5	.37032770	.84967230
3.7	.35001458	.86998542
3.9	.32990528	.89009472
4.1	.31018622	.90981378
4.3	.29100101	.92899899
4.5	.27245770	.94754230
4.7	.25463478	.96536522
4.9	.23758647	.98241353
5.1	.22134700	.99865300
5.3	.20593440	1.0140656
5.5	.19135360	1.0286464
5.7	.17759906	1.0424009
5.9	.16465702	1.0553430

TC = 1.7609 DAYS
DEF = .49664 MG/L
DOC = .72336 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =   120       **
        DO,   MG/L         =  1.53       **
        BOD,  MG/L         =  1.89       **   K1    =     .1
                                         **   K2    =     .2
WASTE CHARACTERISTICS                    **   BOD(M)= 1.8979
        FLOW, CU.M/SEC     =  .013       **   DO(M) = 1.5300
        DO,   MG/L         =  1.24       **
       OBOD,  MG/L         =  74.5       **   DEF(I)= .00003
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04224700	1.4877530
.3	.11824594	1.4117541
.5	.18396997	1.3460300
.7	.24048466	1.2895153
.9	.28875454	1.2412455
1.1	.32965232	1.2003477
1.3	.36396733	1.1660327
1.5	.39241308	1.1375869
1.7	.41563428	1.1143657
1.9	.43421311	1.0957869
2.1	.44867504	1.0813250
2.3	.45949403	1.0705060
2.5	.46709731	1.0629027
2.7	.47186970	1.0581303
2.9	.47415760	1.0558424
3.1	.47427255	1.0557274
3.3	.47249446	1.0575055
3.5	.46907465	1.0609254
3.7	.46423849	1.0657615
3.9	.45818792	1.0718121
4.1	.45110360	1.0788964
4.3	.44314697	1.0868530
4.5	.43446210	1.0955379
4.7	.42517735	1.1048227
4.9	.41540690	1.1145931
5.1	.40525211	1.1247479
5.3	.39480280	1.1351972
5.5	.38413835	1.1458617
5.7	.37332874	1.1566713
5.9	.36243553	1.1675645

TC = 3.0103 DAYS
DEF = .47427 MG/L
DOC = 1.0557 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =   120       **
        DO,   MG/L         =  1.53       **
        BOD,  MG/L         =  1.89       **   K1    =     .1
                                         **   K2    =     .2
WASTE CHARACTERISTICS                    **   BOD(M)= 1.9293
        FLOW, CU.M/SEC     =  .065       **   DO(M) = 1.5298
        DO,   MG/L         =  1.24       **
       OBOD,  MG/L         =  74.5       **   DEF(I)= .00016
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04306671	1.4869333
.3	.12031478	1.4096852
.5	.18711856	1.3428814
.7	.24456121	1.2854388
.9	.29362316	1.2363768
1.1	.33519154	1.1948085
1.3	.37006867	1.1599313
1.5	.39897984	1.1310202
1.7	.42258040	1.1074196
1.9	.44146214	1.0885379
2.1	.45615918	1.0738408
2.3	.46715330	1.0628467
2.5	.47487878	1.0551212
2.7	.47972679	1.0502732
2.9	.48204944	1.0479506
3.1	.48216340	1.0478366
3.3	.48035319	1.0496468
3.5	.47687429	1.0531257
3.7	.47195578	1.0580442
3.9	.46580293	1.0641971
4.1	.45859936	1.0714006
4.3	.45050918	1.0794908
4.5	.44167885	1.0883212
4.7	.43223882	1.0977612
4.9	.42230517	1.1076948
5.1	.41198092	1.1180191
5.3	.40135736	1.1286426
5.5	.39051519	1.1394848
5.7	.37952555	1.1504745
5.9	.36845099	1.1615490

TC = 3.0101 DAYS
DEF = .48216 MG/L
DOC = 1.0478 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                  **
                                       **
      FLOW, CU.M/SEC.    =    120      **
      DO,   MG/L         =   1.53      **
      BOD,  MG/L         =   1.89      **   K1    =     .1
                                       **   K2    =     .2
WASTE CHARACTERISTICS                  **   BOD(M)= 1.9685
      FLOW, CU.M/SEC     =   .130      **   DO(M) = 1.5297
      DO,   MG/L         =   1.24      **
      OBOD, MG/L         =   74.5      **   DEF(I)= .00031
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04408680	1.4859132
.3	.12288937	1.4071106
.5	.19103687	1.3389631
.7	.24963433	1.2803657
.9	.29968199	1.2303180
1.1	.34208489	1.1879151
1.3	.37766156	1.1523384
1.5	.40715194	1.1228481
1.7	.43122460	1.0987754
1.9	.45048329	1.0795167
2.1	.46547292	1.0645271
2.3	.47668499	1.0533150
2.5	.48456254	1.0454375
2.7	.48950466	1.0404953
2.9	.49187054	1.0381295
3.1	.49198328	1.0380167
3.3	.49013311	1.0398669
3.5	.48658067	1.0434193
3.7	.48155967	1.0484403
3.9	.47527952	1.0547205
4.1	.46792756	1.0620724
4.3	.45967119	1.0703288
4.5	.45065983	1.0793402
4.7	.44102657	1.0889734
4.9	.43088981	1.0991102
5.1	.42035467	1.1096453
5.3	.40951427	1.1204857
5.5	.39845094	1.1315491
5.7	.38723725	1.1427628
5.9	.37593700	1.1540630

TC = 3.0098 DAYS
DEF = .49198 MG/L
DOC = 1.0380 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                  **
                                       **
      FLOW, CU.M/SEC.    =    120      **
      DO,   MG/L         =   1.53      **
      BOD,  MG/L         =   1.89      **   K1    =     .1
                                       **   K2    =     .2
WASTE CHARACTERISTICS                  **   BOD(M)= 2.0468
      FLOW, CU.M/SEC     =   .260      **   DO(M) = 1.5294
      DO,   MG/L         =   1.24      **
      OBOD, MG/L         =   74.5      **   DEF(I)= .00063
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04612840	1.4838716
.3	.12804212	1.4019579
.5	.19887892	1.3311211
.7	.25978760	1.2702124
.9	.31180804	1.2181920
1.1	.35588113	1.1741189
1.3	.39285785	1.1371422
1.5	.42350744	1.1064926
1.7	.44852495	1.0814750
1.9	.46853807	1.0614619
2.1	.48411328	1.0458867
2.3	.49576155	1.0342385
2.5	.50394347	1.0260565
2.7	.50907392	1.0209261
2.9	.51152635	1.0184737
3.1	.51163661	1.0183634
3.3	.50970646	1.0202935
3.5	.50600685	1.0239931
3.7	.50078074	1.0292193
3.9	.49424583	1.0357542
4.1	.48659686	1.0434031
4.3	.47800789	1.0519921
4.5	.46863422	1.0613658
4.7	.45861422	1.0713658
4.9	.44807098	1.0819290
5.1	.43711376	1.0928862
5.3	.42583939	1.1041606
5.5	.41433342	1.1156666
5.7	.40267132	1.1273287
5.9	.39091940	1.1390806

TC = 3.0094 DAYS
DEF = .51164 MG/L
DOC = 1.0184 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =   120       **
        DO,   MG/L         =  1.53       **
        BOD,  MG/L         =  1.89       **   K1    =     .1
                                         **   K2    =     .2
WASTE CHARACTERISTICS                    **   BOD(M)= 2.1250
        FLOW, CU.M/SEC     =  .390       **   DO(M) = 1.5291
        DO,   MG/L         =  1.24       **
        OBOD, MG/L         =  74.5       **   DEF(I)= .00094
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04816716	1.4818328
.3	.13318770	1.3968123
.5	.20671005	1.3232899
.7	.26992674	1.2600733
.9	.32391722	1.2060828
1.1	.36965819	1.1603418
1.3	.40803300	1.1219670
1.5	.43984019	1.0901598
1.7	.46580125	1.0641987
1.9	.48656775	1.0434323
2.1	.50272772	1.0272723
2.3	.51481158	1.0151884
2.5	.52329744	1.0067026
2.7	.52861598	1.0013840
2.9	.53115482	.9988451 8
3.1	.53126262	.9987373 8
3.3	.52925260	1.0007474
3.5	.52540603	1.0045940
3.7	.51997508	1.0100249
3.9	.51318576	1.0168142
4.1	.50524021	1.0247598
4.3	.49631909	1.0336809
4.5	.48658361	1.0434164
4.7	.47617741	1.0538226
4.9	.46522825	1.0647717
5.1	.45384955	1.0761504
5.3	.44214180	1.0878582
5.5	.43019382	1.0998062
5.7	.41808392	1.1119161
5.9	.40588096	1.1241190

TC = 3.0090 DAYS
DEF = .53126 MG/L
DOC = .99874 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =   120       **
        DO,   MG/L         =  1.53       **
        BOD,  MG/L         =  1.89       **   K1    =     .1
                                         **   K2    =     .2
WASTE CHARACTERISTICS                    **   BOD(M)= 2.2030
        FLOW, CU.M/SEC     =  .520       **   DO(M) = 1.5287
        DO,   MG/L         =  1.24       **
        OBOD, MG/L         =  74.5       **   DEF(I)= .00125
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05019840	1.4798016
.3	.13831430	1.3916857
.5	.21451229	1.3154877
.7	.28002846	1.2499715
.9	.33598170	1.1940183
1.1	.38338439	1.1466156
1.3	.42315215	1.1068479
1.5	.45611266	1.0738873
1.7	.48301379	1.0469862
1.9	.50453088	1.0254691
2.1	.52127345	1.0087265
2.3	.53379130	.99620870
2.5	.54257998	.98742002
2.7	.54808590	.98191410
2.9	.55071084	.97928916
3.1	.55081619	.97918381
3.3	.54872660	.98127340
3.5	.54473360	.98526640
3.7	.53909858	.99090142
3.9	.53205579	.99794421
4.1	.52381474	1.0061853
4.3	.51456270	1.0154373
4.5	.50446675	1.0255332
4.7	.49367578	1.0363242
4.9	.48232220	1.0476778
5.1	.47052357	1.0594764
5.3	.45838404	1.0716160
5.5	.44599567	1.0840043
5.7	.43343964	1.0965604
5.9	.42078731	1.1092127

TC = 3.0086 DAYS
DEF = .55082 MG/L
DOC = .97918 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
      FLOW, CU.M/SEC.    =   120         **
      DO,   MG/L         =  1.53         **
      BOD,  MG/L         =  1.89         **    K1    =     .1
                                         **    K2    =     .2
WASTE CHARACTERISTICS                    **    BOD(M)= 2.2808
      FLOW, CU.M/SEC     =  .649         **    DO(M) = 1.5284
      DO,   MG/L         =  1.24         **
      OBOD, MG/L         =  74.5         **    DEF(I)= .00156
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05222527	1.4777747
.3	.14342986	1.3865701
.5	.22229774	1.3077023
.7	.29010845	1.2398916
.9	.34802023	1.1819798
1.1	.39708107	1.1329189
1.3	.43823876	1.0917612
1.5	.47235012	1.0576499
1.7	.50018929	1.0298107
1.9	.52245536	1.0075446
2.1	.53977928	.99022072
2.3	.55273018	.97726982
2.5	.56182103	.96817897
2.7	.56751393	.96248607
2.9	.57022479	.95977521
3.1	.57032769	.95967231
3.3	.56815870	.96184130
3.5	.56401958	.96598042
3.7	.55818094	.97181906
3.9	.55088522	.97911478
4.1	.54234931	.98765069
4.3	.53276706	.99723294
4.5	.52231142	1.0076886
4.7	.51113650	1.0188635
4.9	.49937937	1.0306206
5.1	.48716171	1.0428383
5.3	.47459133	1.0554087
5.5	.46176353	1.0682365
5.7	.44876233	1.0812377
5.9	.43566157	1.0943384

TC = 3.0082 DAYS
DEF = .57033 MG/L
DOC = .95967 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
      FLOW, CU.M/SEC.    =   120         **
      DO,   MG/L         =  1.53         **
      BOD,  MG/L         =  1.89         **    K1    =     .1
                                         **    K2    =     .2
WASTE CHARACTERISTICS                    **    BOD(M)= 2.3584
      FLOW, CU.M/SEC     =  .779         **    DO(M) = 1.5281
      DO,   MG/L         =  1.24         **
      OBOD, MG/L         =  74.5         **    DEF(I)= .00187
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05424933	1.4757507
.3	.14853836	1.3814616
.5	.23007243	1.2999276
.7	.30017451	1.2298255
.9	.36004213	1.1699579
1.1	.41075882	1.1192412
1.3	.45330454	1.0766955
1.5	.48856515	1.0414348
1.7	.51734106	1.0126589
1.9	.54035508	.98964492
2.1	.55825955	.97174045
2.3	.57164290	.95835710
2.5	.58103550	.94896450
2.7	.58691512	.94308488
2.9	.58971178	.94028822
3.1	.58981223	.94018777
3.3	.58756395	.94243605
3.5	.58327893	.94672107
3.7	.57723693	.95276307
3.9	.56968863	.96031137
4.1	.56085828	.96914172
4.3	.55094627	.97905373
4.5	.54013144	.98986856
4.7	.52857310	1.0014269
4.9	.51641297	1.0135870
5.1	.50377687	1.0262231
5.3	.49077624	1.0392238
5.5	.47750961	1.0524904
5.7	.46406384	1.0659362
5.9	.45051530	1.0794847

TC = 3.0079 DAYS
DEF = .58981 MG/L
DOC = .94019 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =    120      **
        DO,   MG/L         =   1.53      **
        BOD,  MG/L         =   1.89      **   K1    =     .1
                                         **   K2    =     .2
WASTE CHARACTERISTICS                    **   BOD(M)= 2.4359
        FLOW, CU.M/SEC     =   .909      **   DO(M) = 1.5278
        DO,   MG/L         =   1.24      **
       OBOD,  MG/L         =   74.5      **   DEF(I)= .00218
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05626750	1.4737325
.3	.15363195	1.3763680
.5	.23782445	1.2921756
.7	.31021122	1.2197888
.9	.37202897	1.1579710
1.1	.42439669	1.1056033
1.3	.46832638	1.0616736
1.5	.50473290	1.0252671
1.7	.53444282	.9955718
1.9	.55820260	.9717940
2.1	.57668593	.9533140
2.3	.59050046	.9394954
2.5	.60019394	.9298060
2.7	.60625974	.9237402
2.9	.60914194	.9208580
3.1	.60923996	.9207600
3.3	.60691261	.9230873
3.5	.60248211	.9275178
3.7	.59623735	.9337626
3.9	.58843721	.9415627
4.1	.57931327	.9506867
4.3	.56907247	.9609275
4.5	.55789949	.9721005
4.7	.54595885	.9840411
4.9	.53339691	.9966030
5.1	.52034357	1.0096564
5.3	.50691394	1.0230861
5.5	.49320976	1.0367902
5.7	.47932073	1.0506793
5.9	.46532570	1.0646743

TC = 3.0076 DAYS
DEF = .60924 MG/L
DOC = .92076 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =    120      **
        DO,   MG/L         =   1.53      **
        BOD,  MG/L         =   1.89      **   K1    =     .1
                                         **   K2    =     .2
WASTE CHARACTERISTICS                    **   BOD(M)= 2.5132
        FLOW, CU.M/SEC     =   1.04      **   DO(M) = 1.5275
        DO,   MG/L         =   1.24      **
       OBOD,  MG/L         =   74.5      **   DEF(I)= .00249
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05828133	1.4717187
.3	.15871463	1.3712854
.5	.24555984	1.2844402
.7	.32022640	1.2097736
.9	.38399010	1.1460099
1.1	.43800530	1.0919947
1.3	.48331600	1.0466840
1.5	.52086596	1.0091340
1.7	.55150790	.9784921
1.9	.57601184	.9539881
2.1	.59507278	.9349272
2.3	.60931759	.9206824
2.5	.61931129	.9106887
2.7	.62556287	.9044371
2.9	.62853043	.9014695
3.1	.62862602	.9013739
3.3	.62621978	.9037802
3.5	.62164410	.9083559
3.7	.61519702	.9148029
3.9	.60714558	.9228544
4.1	.59772868	.9322713
4.3	.58715979	.9428402
4.5	.57562943	.9543705
4.7	.56330732	.9666926
4.9	.55034441	.9796555
5.1	.53687474	.9931252
5.3	.52301704	1.0069830
5.5	.50887625	1.0211238
5.7	.49454490	1.0354551
5.9	.48010434	1.0498957

TC = 3.0073 DAYS
DEF = .62863 MG/L
DOC = .90137 MG/L

```
**********************************************************
 RIVER CHARACTERISTICS                    **
                                          **
        FLOW, CU.M/SEC.    =   120        **
        DO,   MG/L         =  1.53        **
        BOD,  MG/L         =  1.89        **   K1    =     .1
                                          **   K2    =     .2
 WASTE CHARACTERISTICS                    **   BOD(M)= 2.5904
        FLOW, CU.M/SEC     =  1.17        **   DO(M) = 1.5272
        DO,   MG/L         =  1.24        **
       OBOD,  MG/L         =  74.5        **   DEF(I)= .00280
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.06029394	1.4697061
.3	.16379422	1.3662058
.5	.25329054	1.2767095
.7	.33023551	1.1997645
.9	.39594398	1.1340560
1.1	.45160567	1.0783943
1.3	.49829653	1.0317035
1.5	.53698925	.99301075
1.7	.56856262	.96143738
1.9	.59381028	.93618972
2.1	.61344849	.91655151
2.3	.62812329	.90187671
2.5	.63841704	.89158296
2.7	.64485429	.88514571
2.9	.64790716	.88209284
3.1	.64800032	.88199968
3.3	.64551523	.88448477
3.5	.64079447	.88920553
3.7	.63414519	.89585481
3.9	.62584261	.90415739
4.1	.61613292	.91386708
4.3	.60523615	.92476385
4.5	.59334862	.93665138
4.7	.58064526	.94935474
4.9	.56728164	.96271836
5.1	.55339589	.97660411
5.3	.53911037	.99088963
5.5	.52453323	1.0054668
5.7	.50975984	1.0202402
5.9	.49487402	1.0351260

TC = 3.0070 DAYS
DEF = .64800 MG/L
DOC = .88200 MG/L

```
**********************************************************
 RIVER CHARACTERISTICS                    **
                                          **
        FLOW, CU.M/SEC.    =   120        **
        DO,   MG/L         =  1.53        **
        BOD,  MG/L         =  1.89        **   K1    =     .1
                                          **   K2    =     .2
 WASTE CHARACTERISTICS                    **   BOD(M)= 2.6674
        FLOW, CU.M/SEC     =  1.30        **   DO(M) = 1.5269
        DO,   MG/L         =  1.24        **
       OBOD,  MG/L         =  74.5        **   DEF(I)= .00310
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.06230070	1.4676993
.3	.16885903	1.3611410
.5	.26099874	1.2690013
.7	.34021548	1.1897845
.9	.40786307	1.1221369
1.1	.46516645	1.0648336
1.3	.51323347	1.0167665
1.5	.55306561	.97693439
1.7	.58556771	.94443229
1.9	.61155692	.91844308
2.1	.63177071	.89822929
2.3	.64687427	.88312573
2.5	.65746719	.87253281
2.7	.66408956	.86591044
2.9	.66722750	.86277250
3.1	.66731823	.86268177
3.3	.66475454	.86524546
3.5	.65988911	.87011089
3.7	.65303822	.87696178
3.9	.64448522	.88551478
4.1	.63448360	.89551640
4.3	.62325989	.90674011
4.5	.61101624	.91898376
4.7	.59793274	.93206726
4.9	.58416958	.94583042
5.1	.56986895	.96013105
5.3	.55515686	.97484314
5.5	.54014465	.98985535
5.7	.52493050	1.0050695
5.9	.50960071	1.0203993

TC = 3.0068 DAYS
DEF = .66732 MG/L
DOC = .86268 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =    120      **
        DO,   MG/L         =   1.53      **
        BOD,  MG/L         =   1.89      **   K1     =      .1
                                         **   K2     =      .2
WASTE CHARACTERISTICS                    **   BOD(M)= 1.9032
        FLOW, CU.M/SEC     =   .013      **   DO(M)  = 1.5299
        DO,   MG/L         =    .24      **
        BOD,  MG/L         =    124      **   DEF(I)= .00014
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04246938	1.4875306
.3	.11867362	1.4113264
.5	.18457477	1.3454252
.7	.24124133	1.2887587
.9	.28964048	1.2403595
1.1	.33064736	1.1993526
1.3	.36505344	1.1649466
1.5	.39357421	1.1364258
1.7	.41685614	1.1131439
1.9	.43548304	1.0945170
2.1	.44998180	1.0800182
2.3	.46082769	1.0691723
2.5	.46844912	1.0615509
2.7	.47323197	1.0567680
2.9	.47552358	1.0544764
3.1	.47563636	1.0543636
3.3	.47385096	1.0561490
3.5	.47041942	1.0595806
3.7	.46556773	1.0644323
3.9	.45949836	1.0705016
4.1	.45239248	1.0776075
4.3	.44441196	1.0855880
4.5	.43570128	1.0942987
4.7	.42638914	1.1036109
4.9	.41659004	1.1134100
5.1	.40640561	1.1235944
5.3	.39592592	1.1340741
5.5	.38523055	1.1447695
5.7	.37438970	1.1556103
5.9	.36346507	1.1665349

TC = 3.0101 DAYS
DEF = .47564 MG/L
DOC = 1.0544 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =    120      **
        DO,   MG/L         =   1.53      **
        BOD,  MG/L         =   1.89      **   K1     =      .1
                                         **   K2     =      .2
WASTE CHARACTERISTICS                    **   BOD(M)= 1.9561
        FLOW, CU.M/SEC     =   .065      **   DO(M)  = 1.5293
        DO,   MG/L         =    .24      **
        BOD,  MG/L         =    124      **   DEF(I)= .00070
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04417983	1.4858202
.3	.12245556	1.4075444
.5	.19014593	1.3398541
.7	.24834876	1.2816512
.9	.29805781	1.2319422
1.1	.34017222	1.1898278
1.3	.37550521	1.1544948
1.5	.40479189	1.1252081
1.7	.42869647	1.1013035
1.9	.44781879	1.0821812
2.1	.46270020	1.0672998
2.3	.47382899	1.0561710
2.5	.48164533	1.0483547
2.7	.48654567	1.0434543
2.9	.48888690	1.0411131
3.1	.48898997	1.0410100
3.3	.48714323	1.0428568
3.5	.48360563	1.0463944
3.7	.47860933	1.0513907
3.9	.47236238	1.0576376
4.1	.46505089	1.0649491
4.3	.45684116	1.0731588
4.5	.44788162	1.0821184
4.7	.43830450	1.0916955
4.9	.42822742	1.1017726
5.1	.41775480	1.1122452
5.3	.40697915	1.1230208
5.5	.39598225	1.1340177
5.7	.38483620	1.1451638
5.9	.37360437	1.1563956

TC = 3.0092 DAYS
DEF = .48899 MG/L
DOC = 1.0410 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =   120       **
        DO,   MG/L         =  1.53       **
        BOD,  MG/L         =  1.89       **   K1    =     .1
                                         **   K2    =     .2
WASTE CHARACTERISTICS                    **   BOD(M)= 2.0219
        FLOW, CU.M/SEC     =  .130       **   DO(M) = 1.5286
        DO,   MG/L         =   .24       **
        BOD,  MG/L         =   124       **   DEF(I)= .00139
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.04630842	1.4836916
.3	.12716204	1.4028380
.5	.19707902	1.3329210
.7	.25719370	1.2728063
.9	.30853287	1.2214671
1.1	.35202557	1.1779744
1.3	.38851205	1.1414879
1.5	.41875188	1.1112481
1.7	.44343134	1.0865687
1.9	.46317019	1.0668298
2.1	.47852778	1.0514722
2.3	.49000863	1.0399914
2.5	.49806752	1.0319325
2.7	.50311409	1.0268859
2.9	.50551706	1.0244829
3.1	.50560804	1.0243920
3.3	.50368498	1.0263150
3.5	.50001538	1.0299846
3.7	.49483914	1.0351609
3.9	.48837119	1.0416288
4.1	.48080381	1.0491962
4.3	.47230884	1.0576912
4.5	.46303960	1.0669604
4.7	.45313273	1.0768673
4.9	.44270972	1.0872903
5.1	.43187845	1.0981216
5.3	.42073450	1.1092655
5.5	.40936235	1.1206376
5.7	.39783648	1.1321635
5.9	.38622237	1.1437776

TC = 3.0082 DAYS
DEF = .50561 MG/L
DOC = 1.0244 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =   120       **
        DO,   MG/L         =  1.53       **
        BOD,  MG/L         =  1.89       **   K1    =     .1
                                         **   K2    =     .2
WASTE CHARACTERISTICS                    **   BOD(M)= 2.1537
        FLOW, CU.M/SEC     =  .260       **   DO(M) = 1.5272
        DO,   MG/L         =   .24       **
        BOD,  MG/L         =   124       **   DEF(I)= .00279
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05056854	1.4794315
.3	.13658152	1.3934185
.5	.21095481	1.3190452
.7	.27489582	1.2551042
.9	.32949748	1.2005025
1.1	.37574867	1.1542513
1.3	.41454374	1.1154563
1.5	.44669118	1.0833088
1.7	.47292146	1.0570785
1.9	.49389423	1.0361058
2.1	.51020485	1.0197952
2.3	.52239031	1.0076097
2.5	.53093465	.99906535
2.7	.53627387	.99372613
2.9	.53880040	.99119960
3.1	.53886720	.99113280
3.3	.53679136	.99320864
3.5	.53285759	.99714241
3.7	.52732121	1.0026788
3.9	.52041096	1.0095890
4.1	.51233146	1.0176685
4.3	.50326560	1.0267344
4.5	.49337655	1.0366234
4.7	.48280970	1.0471903
4.9	.47169435	1.0583057
5.1	.46014529	1.0698547
5.3	.44826424	1.0817358
5.5	.43614107	1.0938589
5.7	.42385504	1.1061450
5.9	.41147582	1.1185242

TC = 3.0064 DAYS
DEF = .53887 MG/L
DOC = .99113 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                  **
                                       **
      FLOW, CU.M/SEC.    =   120       **
      DO,   MG/L         =  1.53       **
      BOD,  MG/L         =  1.89       **   K1     =     .1
                                       **   K2     =     .2
WASTE CHARACTERISTICS                  **   BOD(M) = 2.2853
      FLOW, CU.M/SEC     =  .390       **   DO(M)  = 1.5258
      DO,   MG/L         =   .24       **
      BOD,  MG/L         =   124       **   DEF(I) = .00418
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05482274	1.4751773
.3	.14598790	1.3840121
.5	.22481130	1.3051887
.7	.29257332	1.2374267
.9	.35043293	1.1795671
1.1	.39943877	1.1305612
1.3	.44053924	1.0894608
1.5	.47459164	1.0554084
1.7	.50237057	1.0276294
1.9	.52457555	1.0054245
2.1	.54183787	.98816213
2.3	.55472695	.97527305
2.5	.56375606	.96624394
2.7	.56938752	.96061248
2.9	.57203745	.95796255
3.1	.57208011	.95791989
3.3	.56985170	.96014830
3.5	.56565414	.96434586
3.7	.55975811	.97024189
3.9	.55240617	.97759383
4.1	.54381527	.98618473
4.3	.53417932	.99582068
4.5	.52367132	1.0063287
4.7	.51244540	1.0175546
4.9	.50063867	1.0293613
5.1	.48837283	1.0416272
5.3	.47575569	1.0542443
5.5	.46288255	1.0671174
5.7	.44983742	1.0801626
5.9	.43669416	1.0933058

TC = 3.0048 DAYS
DEF = .57208 MG/L
DOC = .95792 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                  **
                                       **
      FLOW, CU.M/SEC.    =   120       **
      DO,   MG/L         =  1.53       **
      BOD,  MG/L         =  1.89       **   K1     =     .1
                                       **   K2     =     .2
WASTE CHARACTERISTICS                  **   BOD(M) = 2.4164
      FLOW, CU.M/SEC     =  .520       **   DO(M)  = 1.5244
      DO,   MG/L         =   .24       **
      BOD,  MG/L         =   124       **   DEF(I) = .00556
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.05906124	1.4709388
.3	.15535956	1.3746404
.5	.23861665	1.2913834
.7	.31018557	1.2198144
.9	.37129112	1.1587089
1.1	.42304145	1.1069586
1.3	.46643879	1.0635612
1.5	.50238911	1.0276109
1.7	.53171100	.99828900
1.9	.55514363	.97485637
2.1	.57335413	.95664587
2.3	.58694424	.94305576
2.5	.59645634	.93354366
2.7	.60237897	.92762103
2.9	.60515184	.92484816
3.1	.60517043	.92482957
3.3	.60279003	.92720997
3.5	.59832963	.93167037
3.7	.59207529	.93792471
3.9	.58428329	.94571671
4.1	.57518288	.95481712
4.3	.56497894	.96502106
4.5	.55385426	.97614574
4.7	.54197173	.98802827
4.9	.52947617	1.0005238
5.1	.51649618	1.0135038
5.3	.50314568	1.0268543
5.5	.48952533	1.0404747
5.7	.47572391	1.0542761
5.9	.46181942	1.0681806

TC = 3.0034 DAYS
DEF = .60517 MG/L
DOC = .92483 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =    120      **
        DO,   MG/L         =   1.53      **
        BOD,  MG/L         =   1.89      **   K1     =      .1
                                         **   K2     =      .2
WASTE CHARACTERISTICS                    **   BOD(M) = 2.5472
        FLOW, CU.M/SEC     =    .649     **   DO(M)  = 1.5231
        DO,   MG/L         =     .24     **
        BOD,  MG/L         =    124      **   DEF(I) = .00694
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.06329062	1.4667094
.3	.16471106	1.3652889
.5	.25239229	1.2776077
.7	.32775993	1.2022401
.9	.39210442	1.1378956
1.1	.44659333	1.0834067
1.3	.49228261	1.0377174
1.5	.53012678	.99987322
1.7	.56098829	.96901171
1.9	.58564593	.94435407
2.1	.60480259	.92519741
2.3	.61909222	.91090778
2.5	.62908626	.90091374
2.7	.63529942	.89470058
2.9	.63819497	.89180503
3.1	.63818955	.89181045
3.3	.63565748	.89434252
3.5	.63093482	.89906518
3.7	.62432294	.90567706
3.9	.61609182	.91390818
4.1	.60648300	.92351700
4.3	.59571229	.93428771
4.5	.58397227	.94602773
4.7	.57143452	.95856548
4.9	.55825162	.97174838
5.1	.54455902	.98544098
5.3	.53047673	.99952327
5.5	.51611079	1.0138892
5.7	.50155469	1.0284453
5.9	.48689062	1.0431094

TC = 3.0021 DAYS
DEF = .63819 MG/L
DOC = .89181 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =    120      **
        DO,   MG/L         =   1.53      **
        BOD,  MG/L         =   1.89      **   K1     =      .1
                                         **   K2     =      .2
WASTE CHARACTERISTICS                    **   BOD(M) = 2.6778
        FLOW, CU.M/SEC     =    .779     **   DO(M)  = 1.5217
        DO,   MG/L         =     .24     **
        BOD,  MG/L         =    124      **   DEF(I) = .00832
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.06751415	1.4624858
.3	.17404964	1.3559504
.5	.26614890	1.2638511
.7	.34531002	1.1846900
.9	.41288898	1.1171110
1.1	.47011268	1.0598873
1.3	.51809072	1.0119093
1.5	.55782613	.97217387
1.7	.59022513	.93977487
1.9	.61610610	.91389390
2.1	.63620759	.89379241
2.3	.65119578	.87880422
2.5	.66167110	.86832890
2.7	.66817440	.86182560
2.9	.67119245	.85880755
3.1	.67116306	.85883694
3.3	.66847952	.86152048
3.5	.66349497	.86650503
3.7	.65652603	.87347397
3.9	.64785641	.88214359
4.1	.63773987	.89226013
4.3	.62640318	.90359682
4.5	.61404867	.91595133
4.7	.60085661	.92914339
4.9	.58698731	.94301269
5.1	.57258310	.95741690
5.3	.55777002	.97222998
5.5	.54265952	.9873404B
5.7	.52734979	1.0026502
5.9	.51192719	1.0180728

TC = 3.0009 DAYS
DEF = .67119 MG/L
DOC = .85881 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =    120      **
        DO,   MG/L         =   1.53      **
        BOD,  MG/L         =   1.89      **   K1     =      .1
                                         **   K2     =      .2
WASTE CHARACTERISTICS                    **   BOD(M)= 2.8080
        FLOW, CU.M/SEC     =   .909      **   DO(M)  = 1.5203
        DO,   MG/L         =    .24      **
        BOD,  MG/L         =    124      **   DEF(I)= .00970
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.07172537	1.4582746
.3	.18336099	1.3466390
.5	.27986540	1.2501346
.7	.36280892	1.1671911
.9	.43361292	1.0963871
1.1	.49356345	1.0364366
1.3	.54382358	.98617642
1.5	.58544470	.94455530
1.7	.61937672	.91062328
1.9	.64647744	.88352256
2.1	.66752102	.86247898
2.3	.68320572	.84679428
2.5	.69416092	.83583908
2.7	.70095351	.82904649
2.9	.70409371	.82590629
3.1	.70404042	.82595958
3.3	.70120586	.82879414
3.5	.69596017	.83403983
3.7	.68863522	.84136478
3.9	.67952838	.85047162
4.1	.66890560	.86109440
4.3	.65700457	.87299543
4.5	.64403736	.88596264
4.7	.63019290	.89980710
4.9	.61563921	.91436079
5.1	.60052545	.92947455
5.3	.58498373	.94501627
5.5	.56913083	.96086917
5.7	.55306967	.97693033
5.9	.53689075	.99310925

TC = 2.9999 DAYS
DEF = .70409 MG/L
DOC = .82591 MG/L

```
**********************************************************
RIVER CHARACTERISTICS                    **
                                         **
        FLOW, CU.M/SEC.    =    120      **
        DO,   MG/L         =   1.53      **
        BOD,  MG/L         =   1.89      **   K1     =      .1
                                         **   K2     =      .2
WASTE CHARACTERISTICS                    **   BOD(M)= 2.9380
        FLOW, CU.M/SEC     =   1.04      **   DO(M)  = 1.5189
        DO,   MG/L         =    .24      **
        BOD,  MG/L         =    124      **.  DEF(I)= .01107
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.07592756	1.4540724
.3	.19265236	1.3373476
.5	.29355248	1.2364475
.7	.38027029	1.1497297
.9	.45429242	1.0757076
1.1	.51696392	1.0130361
1.3	.56950125	.96049875
1.5	.61300404	.91699596
1.7	.64846578	.88153422
1.9	.67678364	.85321636
2.1	.69876729	.83123271
2.3	.71514702	.81485298
2.5	.72658106	.80341894
2.7	.73366232	.79633768
2.9	.73692441	.79307559
3.1	.73684726	.79315274
3.3	.73386200	.79613800
3.5	.72835573	.80164427
3.7	.72067555	.80932445
3.9	.71113241	.81886759
4.1	.70000448	.82999552
4.3	.68754033	.84245967
4.5	.67396174	.85603826
4.7	.65946628	.87053372
4.9	.64422966	.88577034
5.1	.62840787	.90159213
5.3	.61213907	.91786093
5.5	.59554536	.93445464
5.7	.57873439	.95126561
5.9	.56180076	.96819924

TC = 2.9990 DAYS
DEF = .73692 MG/L
DOC = .79308 MG/L

```
**********************************************************
 RIVER CHARACTERISTICS                    **
                                          **
        FLOW, CU.M/SEC.    =   120        **
        DO,   MG/L         =  1.53        **
        BOD,  MG/L         =  1.89        **   K1    =     .1
                                          **   K2    =     .2
 WASTE CHARACTERISTICS                    **   BOD(M)= 3.0679
        FLOW, CU.M/SEC     =  1.17        **   DO(M) = 1.5176
        DO,   MG/L         =   .24        **
        BOD,  MG/L         =   124        **   DEF(I)= .01244
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.08012720	1.4498728
.3	.20193810	1.3280619
.5	.30723126	1.2227687
.7	.39772108	1.1322789
.9	.47495937	1.0550406
1.1	.54035019	.98964981
1.3	.59516335	.93483665
1.5	.64054666	.88945334
1.7	.67753720	.85246280
1.9	.70707146	.82292854
2.1	.72999461	.80000539
2.3	.74706893	.78293107
2.5	.75898153	.77101847
2.7	.76635128	.76364872
2.9	.76973519	.76026481
3.1	.76963420	.76036580
3.3	.76649834	.76350166
3.5	.76073165	.76926835
3.7	.75269644	.77730356
3.9	.74271727	.78728273
4.1	.73108451	.79891549
4.3	.71805757	.81194243
4.5	.70386796	.82613204
4.7	.68872190	.84127810
4.9	.67280277	.85719723
5.1	.65627338	.87372662
5.3	.63927794	.89072206
5.5	.62194388	.90805612
5.7	.60438354	.92561646
5.9	.58669567	.94330433

TC = 2.9981 DAYS
DEF = .76974 MG/L
DOC = .76026 MG/L

```
**********************************************************
 RIVER CHARACTERISTICS                    **
                                          **
        FLOW, CU.M/SEC.    =   120        **
        DO,   MG/L         =  1.53        **
        BOD,  MG/L         =  1.89        **   K1    =     .1
                                          **   K2    =     .2
 WASTE CHARACTERISTICS                    **   BOD(M)= 3.1974
        FLOW, CU.M/SEC     =  1.30        **   DO(M) = 1.5162
        DO,   MG/L         =   .24        **
        BOD,  MG/L         =   124        **   DEF(I)= .01381
**********************************************************
```

TIME (DAY)	DEFICIT (MG/L)	DO (MG/L)
.1	.08431462	1.4456854
.3	.21119682	1.3188032
.5	.32087023	1.2091298
.7	.41512107	1.1148789
.9	.49556618	1.0344338
1.1	.56366841	.96633159
1.3	.62075076	.90924924
1.5	.66800913	.86199087
1.7	.70652402	.82347598
1.9	.73727114	.79272886
2.1	.76113105	.76886895
2.3	.77889795	.75110205
2.5	.79128771	.73871229
2.7	.79894512	.73105488
2.9	.80245048	.72754952
3.1	.80232572	.72767428
3.3	.79903969	.73096031
3.5	.79301335	.73698665
3.7	.78462414	.74537586
3.9	.77421022	.7557897B
4.1	.76207408	.76792592
4.3	.74848600	.78151400
4.5	.73368715	.79631285
4.7	.71789237	.81210763
4.9	.70129272	.82870728
5.1	.68405780	.84594220
5.3	.66633782	.86366218
5.5	.64826556	.88173444
5.7	.62995805	.90004195
5.9	.61151813	.91848187

TC = 2.9973 DAYS
DEF = .80245 MG/L
DOC = .72755 MG/L

ประวัติผู้เขียน

ชื่อ นางสาวแสงจันทร์ แซ่ลิ้ม

การศึกษา วิทยาศาสตรบัณฑิต (ชีววิทยา)

คณะวิทยาศาสตร์ มหาวิทยาลัยขอนแก่น ปีการศึกษา 2524