Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

Communication   Communicatio	NO OF SAMPLING			67	ლ	~	'n	9	~	∞	<b>ரை</b>	01	=	13	2	14	15	16
1.50   1.50	DATE OF SAMPLING	1	7.04	-1	82	53	61	:	=		22	24	22		AUC 18	0CT19	NOV18	DEC15
The respectance ( 11,00 E.S.) 10.00 H.S.) 12.00 E.S.)	General number of the la	boratory	9609	6912	9113	10929	11973	13423	1779	2761	4782	7977	9094	10944	12581	15516	16820	18540
The responsive (Total Michael No. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		TIN																
Name Criscial Section 1	Tibe		14.40	12. 50			12.00	12.00	11.20	12. 25	12.55	13, 10	11: 15	11.30	10.40	11.05	10, 10	10.25
Transporture C	Ţ,	ن	31.00	25.50			32.00	30.00	36.00	26.60	32.00	24, 00	25.00	29.00	27.00	29.00	31.00	31.00
Commence (1644) Stage 1859 177 187 187 187 187 187 187 187 187 187			27.09	21.00			26.21	8 3	30.00	26.30	26.20	21.38	19, 23	21. 16	20, 60	28.05	29. 21	23.81
Sulficient (1962) (2007			⊃ zó	12.0			ა ი ა	9.5	0.5 0.5	2.5 0.86	o xi		0.0	3,5	0.5	0.5	o, c	5.0
March   Marc			150	650	737	517	3	5	2	27.5	377		e e	2	6.5	. 0	÷.	6.6
Control   Cont				28	9	0.30	0.25	0.25			3							
Decirior   Second   Decirior		!	22	86	6.50		7, 19	7.3	,	5.20	6.40	6.45	6.75	6.82	f. 70	96.9	60 80 40	5. 23
### Commission and CVA1 (C.0.01)		92/1	30	0.40	Ö	1	0	6	6.6	. 2	2.6	1.0		4	, c		} } !	3
State   Stat		1 CN/1	<0.010	<0.010	0.010	<0.010	<0.010	010.00	0.030	0.040	0.010	0.020	0:030	0.083	0.004	0, 102	:	*
Considerated by   Registry   Re		1/81	15	on.	20	77"	13		600	8.	20	12	<b>∞</b>	20	28	20	40	40
Dissolved OD. \$2/1   1.50   1.00   1.		1/2/2	<b>6</b> 0	;	22 :	₹.	1	:								٠		
Total Proposed Series (C. 1976) (1.00) (2.00		mg/1	65	83	2 5	9 6	9	ę	30	40	S	06	62	7	94	98	125	126
Triangle brooks at \$71   1.55   2.56   2.59   2.50   2.59   2.50		1/8m	000	000	C 6	3 5	000	100 07		200	000	000	000	6	9	600	0	4
Part Notes   Par			25.	3	5	9		50-		7 70	9 6	7.	9 2		3,5	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		* * *
Orthophotostate mg Pri			88	1 1	 6	88	:	;	;	:	3		3	i	;	;	-	,
Nutrate Nitrogen eg N/1	Ċ		0.60	1. 90	1.30	S -0	0.40				0.52	0.93	0.75	2.04	1.50	1.38	1, 56	0.98
Nicrate Nicrogen ag N/1			0. 90	1.00	1. 20	0.40	0.80			,	0.40	0.81	0,31	0.06	0. 73	0.95		
Nitter Wittenger mg N1			3.20	2.70	12.00	2.60	3.00		14.00	0.55	1.45	6. 70	4.51	5. 57	6. 19	6.10	67.9	3, 38
Nitrigen ag Ni 0, 022 0, 036 0, 200 0, 00 0, 00 0, 00 0, 012 0, 006 0, 006 0, 008 0, 006 0, 008 0, 0			0.0	0.08	0.08	1.60	0.50		0.0	- 80	9	0.074	0.040	0.032	0.014	0.040	0.104	0.02
Dissolved from the control of the co			0.020	0.003	0.010	0.350	0. 200	5	0.010	0. 200	1.000	0.012	0.008	0.006	0.008	0.005	0,056	0.004
Diss. Nitrogen 87 1 2.80 12.00 4.00 0.80 1.00		Ę.	3 8	3 5	9 5	9 ¢	4. 20	3.6	20.00	÷ 50	4. 60	13.00	11.12		.8.31	10.01		*
Dissolved Total Nitrogen mg Ni 1.80 8.30 4.00 0.80 10.00 10.			3 8	3 6	9 5	; c	1,00		2, 00	20.6	5 55	12.30	8	10.28	19.39	15.		
Decision   Nitrogen   mg   Nit   6,090   15,095   16,090   6,950   4,600   16,010   5,500   11,117   15,90   11,117   15,90   11,115   11,117   15,90   11,117			8 8	8 8	4.00	8 6	1		ì	;	; i	į	;	2	;	:		
Diss. Or alculatine mg/1 5 .050 11.059 16.090 5.350 11.2 14.8 10.0 5.4 4.0 7.4 5.4 6.4 5.5 10.2 10.3 10.3 0.2 alculatine mg/1 9.1 9.3 9.0 10.4 11.2 9.6 11.2 14.8 10.0 5.4 4.0 7.4 5.4 6.4 6.5 5.5 10.3 0.2 alculatine mg/1 0.4 0.6 8 10.4 11.2 9.6 11.2 14.8 10.0 5.4 4.0 7.4 5.4 6.4 6.5 5.5 10.4 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5			6.090	15,069	16.090	6.950	4.600		16.010	5.500	5. 100	19.90	11.17		18.53	13,65		
Total Co alcaline mg/1   9.1   9.3   9.0   10.4   11.2   9.6   11.2   14.8   10.0   5.4   4.0   7.4   5.4   5.5     Diss. Co alcaline mg/1   0.4   0.6   0.4   1.2   0.4   1.2   1.2   1.4   1.0   1.5   1.4   1.0   1.5   1.4   1.5   1		mg N/1	5,090	11, 069	16.090	5.350					٠							
DOS. W. Stedining 22/1		ine mg/l	 ത്	တ တ	on o	<u>.</u>	11.2		11. 2	 	10.0	S.	4.0	7.4	'n.	. 6	c,	6.2
Suspended Solids mg/1			c	6	ó	<del>6</del>			•									
Suspended Solids mg/1		1/80 9(4)	÷ 7	3 T	70	7	- £	-	9 7									
10C   mg/1   *   15   15   15   15   15   15   15		ts ng/l	99	: 23	- 22	50	3 9	Ş	30	400	8	12	00	62	60	20	298	55
Dissolved TDC mg/l			*									2	13	20	ıû.	32	ιs	13
Fecal Coli x(100 MPA/100a) 50 5 230 300 110 30 1.7 280 300 80 90 90 90 90 90 90 90 90 90 90 90 90 90									;	;							į	•
Total Coli x(1000 MPA/1)(a) 300 170 50 500 300 800 300 170 30 500 2000 500 500 500 170 30 500 500 500 500 500 500 500 500 500					8	ינא	ខ្ល	8	8	30000	2	ଚ		280	300	008	300	
Cadanua mg Cd/1 (0.002 0					2. 2. 3.	8 8	200	2	2 2	30000	370	2 3	, ,	006	2400	2400	300	7 2 2
Copper ag Crif (0.005 0.004 0.005 0.		12 50/1	200.00	96.6	200.00	200 0	200 0	290 70	50.005 70.005	.0. 00 00 00	200.0	700.00	, 00 00 , 00 00	0.002	200.00	70.00	20, 00	20.00
Cutomium IV mg Cu/1 (0.0		1/0.2	20.00	5 6	20.00	900	20.00	70. 0¢	20.00	70.00	9	70.0	20.0	70.00	20.00	20.00	2000	2000
Chromium mg Cr/1 (0.01 (		1 Cn 7		0.03 0.01	90	00.00	300	600	3	30.0			0.00	600.0	0.00			
Mercury   ug Hg/1   0.20		ar Cr/1	<0.01	9	0.0	9	5 0	<0.01	(0, 0)	(0.0)	(0, 0)		(0.01	ca. 01	(0, 0)	<0.01	<0.03	<0,03
Zinc meg Zn/1 0.020 0.015 0.020 0.005 0.016 0.010 0.005 0.120 0.010 0.005 0.030 0.040 0.015 0.020 0.010 op DDT ug/1 (0.001 0.001		ug Hg/1	0.20	<0.10	(0.10	c0. 10	c0. 10	0.10	<0.10 •	0.15	ć0. 10		<0.10	0.10	<0.10	0. 20	<0, 10	<0, 10
pp DDT ug/1 (0.00) (0.0		ng Zn/1	0.020	0.015	0.020	0.005	0.015	0.010	c0. 005	0.120	0.010		0.030	0.040	0.015	0.020	0.010	<0.00\$
op DDE ug/1 <0.001 <0.001 op DDE ug/1 <0.001 <0.001 op DD ug/1 <0.001 PGS ug/1 <0.001 Op DD ug/1 Op DD ug/1 <0.001 Op DD ug/1 <0.001 Op DD ug/1 Op DD ug/		1/8n	0.001		6.00	9												
pp bub		1/3n	100.00		36.6	9 9												
PCB's ug/1 (0.01 (0.01		1/3/1	00.001		100	3 6												
		1/80			0 0	5 5												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

	ATE OF SAMPLING eneral number of the la			~	m	~7	n	o	-	xs ·	on.	10	Ξ	77	?	1.9	2.7	41
Particular   Color	eneral number of the la		MAY 05	1.1	12	8	23	24	=	8	12	3.4	22	r. 20		0CT19	NOV17	DECGE
Time decreases (1.14) (		boratory		6069	8783	10927	12240	13648	1780	4083	4783	7768	3606	10945	12582	15517	16684	17927
National Content Con	DE PARABETER	CRITY	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1														
Transport Core	:		11.45	13.20		10.45	16, 45	9.35	11.40	15.45	13.25	13.40	11.45	12.00	11.00	11.30	10. 20	11.50
The process of the control of the co			33	8 8 8		24.00	21.00	27.00	35, 50	28.50	32.50	26.00	21.00	30.00	27.00	30.00	34.00	34.00
Conduct (citati)   Signature		S e		21. 20		21.30	25. 48	26. 15	31, 90	26, 70	25, 40	22.85	20,87	22.35	21.57	97.2	27.77	4 5
Consistent (CHRIST) Signary (CHRIST) Sig			23.0	8	٤		- :	0.0	9.6	2.0	တ်	15.0	3.0	12.0	10.0	3. C	18 61	12.48
Comparison   Com			,	9000	9	Š	. 33	0. 22	. 5	0.17	•	6. 24	5 3		70 -7		0	
Control   Cont			0 22	2007	000	07.0	9	5			2							
Genicied Street Considered Str			16	8.40	3 6	2 5		2 f.		C 8 F	. 7.	9	5 04	6 27	6.65	6.58	33	6.30
Second Control		1/00	0.4		3		3	5	•	j o				, ~	2.7	3.5		ı
Principal String		1/8/1 als (18/1	(0, 0)0	40.010	0.010	000	0.610	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	;	0.0	0.0	0.00	0.008	0.00	0.012	0.006		*
Consistent bits and control of the c		202/1	8	r.	2	2	•		8		9		~	<2.0	w	•	∞	-
Dissolved Conceally		1/20	50		٠.	~	•	1	•	:	:	•	Ì	•				
Dissibly of CDD and A		18/1	25.4	91	,	40	8	9	20	40	40	20	20	18	28	16	,	•
Phenol Sast Proposition		53/1				ŝ										;		;
Total Procedures at FY1		BQ/1	<0.001	0.000	(0, 00]	(0.001	6,004	100.00	<0.001	0.005	0.003	0.010	0.001	<0.001	0.004	0.002	0.003	<0.001
State Note Name at Fig. 1		s 24g P/1	0.20	0.10	0: :0	0.40	0.20	0.45	0.15	0, 60	0.30	0.16	0	0.13	0.14	0, 15	-	*
Departed way Principle at \$71   0.13   0.03   0.02   0.03   0.05   0.10   0.01   0.01   0.01   0.05		1/4 8a	0.08	0.05	0.03	0.10											6	
Organic Microgen et al. 1		ng 9/1	0.03	0.03	0.02	0.08	0.05			0.20	0.10	0.01	0.11	0.05	0.03	90.0	70.0	5
Miritate Nitrogen ag N1 0.4 0.75 0.45 0.50 0.45 0.50 0.10 0.00 0.00 0.00 0.00 0.00 0.0		良 P/1	0.17	0.08	۵ 9	0.35	0.			0.40	02.0	0, 10	0.03	0.08	6.13	0 0	000	0
National Material M		1/5/2	9 2 9 2	0,0	6.6	2 8	eg e For in		0.20	0.10	90,0	0.26		0.32	200	0, 105	0.157	0.14
Significant Nationary 88 N1 120 2.00 1.00 1.00 1.00 1.00 1.00 1.00		/× 20 E	5 6	3 6	3 2	2 6 3 6 3 6	2 5		0.05	02.0	5 6	****	0.000	10.0	2 2 2	0.010	0.029	0.130
Dest Nitrogen ag NI   0.55   0.50   1.00		1 18 3/1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	36	. 020 2		0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0	6.010	6	900 0	3 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	0.0	10.0	300.0	20.0	33	0.38		*
Organic Nitrogen az N/1 0.80 1.25 0.80 1.20 1.85 0.80 1.10 1.54 10.74 0.71 1.42 1.11 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85		1/2 OC	3 5	3 8	3 8	2 5	3	90	7.7	7. 70		2			:			
Diss. Organic N.   St.   Co.			3 6	4 -	3 6	3 8			68		75	10 74	0 71	1.42	1.11	0.85		
Total Microgeneral Region		1/1/1/20	3 6	3 X	3 6	200	?		3		;		:	:				
Diss. Nitrogen mg N/1 0.560 2.150 1.220 1.830 1.84 10.0 9.4 9.0 12.2 10.4 3.6 9.0 9.4 2.2 4.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0		/N 64	200	2.130	30	230	760		4.054	1 640	1,650	11, 36	1 61	2, 13	1.69	1,09		
Total OC alcaline ms/1		N A	0.960	2, 130	1. 230	830												
Diss. Oc alcaline mg/l 1.6 2.6 2.7 3.0 10.2 2.2 5.5 5.5 17 2.6 30 125 1.6 5.5 1.3 5.5 1.7 2.6 30 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.		ne mg/1	യ്	40	00 00	10.4	10.0	ę,	9.0	12.2	10.4	3.6	3.0		2.2	4.8	9.0	vi
1.6   2.6   2.7   3   1.5   4   47   48   47   48   48   48   48		c mg/1	,		7.0	10.2												
Suspended Solids mg/1		1/80	1.6	69 64			2.3		<u>م</u>									
Suspended Solids mg/l		le ng/l	'n	Ś	으	4	t-	7	12							;	5	
TDC mg/l #		s mg/l	20	9	22	7,5	t~-	55	39	125	16	v,	<b>?</b>			7.7	÷	3 6
Dissolved TOC mg/l f		mg/1	*									\$\$	23	Ç	12	2	Ç	7
Fecal Coli x1000 NFY/100m																;	•	
Total Coli x1900 MPN/100m1 5 30 17 21 3 50 23 50 8 1.3 13 24 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5					€	60	=	<u>t</u>	60 60	13	2.3	20	2,3	9	2.3	57	o ;	
Cadehium mg Cd/1 (3,002 0.010 0.030 (0.032 (0.002 (						9	-	. 21	~>	20	23	20	60	1.3		24	יני	
Lead mg Pb/1 (6.02 0.04 0.12 0.04 0.02 (6.02 (6.02 0.04 (6.02 0.04 (6.02 0.04 (6.02 0.04 (6.02 0.04 (6.02 0.04 0.02 0.04 (6.02 0.04 (6.02 0.04 0.02 0.04 (6.02 0.04 0.02 0.04 (6.02 0.04 0.02 0.04 (6.02 0.04 0.02 0.04 (6.02 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0				0.010	0.030	0.030	<0.002	70.002	<0.002	<0.002	<0.002	<0 003	<0.002	<0.002		<0.002	0, 008	¢0,00
Copper mg Cu/1 (0.005 0.010 0.040 0.030 0.056 (0.002 0.020 - (0.005 (0.0		ms Pb/1	¢0.05	0.04	0.12	0.04	<0.02	(0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02		0.04	0.02	0.0
Chronium IV mg Cu/1 (0.001 (0.001		Do Cu/1	0.002	0.010	0.040	0.030	0.050	c0. 005	0.020	1			<0.005	<0.005		<0.005	0.008	S. 35
Chromium ang Cr/1 (d. 01 (d. 0	Chromium	1/0 14 15 15 15 15 15 15 15 15 15 15 15 15 15	(0.0)	0,0	(0.0]	(0.0)	0,0											-
Mercury   U.   U.   U.   U.   U.   U.   U.   U	Chromium	38 Cr/)	<0.01	0.03	6	5.0	(0.0)	(D. 0)	<0.01	<0.01	0.02	. 10.0>	<0.01	<0,01	<0.01	<0.01	<0, 01	8
Zinc mg Zinc (0.030 0.030 0.050 0.020 0.040 (0.005 (0.005 0.030 0.020 0.120 0.015 0.020 0.010 0.020 pp bbf ug/1 (0.001 (0.001 (0.001 0.001 pp bb ug/1 (0.001 (0.001 (0.001 0.001 pp bb ug/1 (0.001 (0.001 (0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001		ug Hg/1	6,	0.00	0.10	6.10	. E	0.10	<0.10	<0.10	Q. 10	<0.10	(0, 10	<0.10	<0.10	1. 20	Ġ. 10	00
pp 900		20 Zn/1	0.030	0.030	0.050	0.00	0.040	0.00	<0 00 0>	0.030	0.020	0.120	0.015	0.020	0.010	0.020	0.015	
pp DDC ug/1 (0.001 (0.0		,	90.0	3	36		5	3	· · ·	;				<u>;</u>				
op 200	-	7/80	100			9 6							•					
pp bob 48/1 (0.00) (0.00) (0.00)		1/20	300		100 0	90.00												
100 to 0 t		180	3 5		500	100												
		1/8/1	90.5		100 S	3 6								•				

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

Compact   Comp	NO. OF SAMPLING	רואכ		-	2	62	4	S	9	1	8	சு	10	=	12	13	14	15	15
MANAPER   NATT   NATE	DATE OF S.	WPLING		30 AVK	:	83	53	22	61		30	12		JUN 22	JUL 20	AUG 18	00719	NOV17	DECOG
The content of the	General n	unber of the labo	ratory	6162	6959	8724	10928	12239	13426	1781	4082	4784	1 00	9606	10945	12583	15518	16583	17928
Three controls of the control of the		PARAMETER	KLINA		, , , ,														
Transp. (table)		) Be	-	12.40	er.			16.05		12 20	14.50	14.00	19 95	İ	ì	11 30	12 00	0.5	11 20
Transp. (these) case		Vir temperature	ပ	27.00	, 22			22.00	29.00	36, 50	30,00	32.50	26, 00		28.00	27, 00	30.00	30.00	34.00
Condect ((feld) mS/ca		fater temperature	o,	24. 27	얺			20. 47	23. 44	30,00	25, 10	24.30	21. 67			20, 80	28, 58	29, 62	28. 73
Conduct (Tield) 65/cm   130   130   151		(ransp. (tube)		<u>&gt;</u>	8			11.0	0 F	0.7	7.0	20.0	10.0			13.0	5.0	10,0	10.0
Condition   Cond		Conduct. (field)				 O		0.05	0.08	0.05	0.03		00.00	•		00.00	0	0	0
Marche   March   Mar		Conduct. (field)		옲	30		21	0.03				51							
Deciritary   Dec		Salinity (field)	υ¢	0.08	0.01	0.00	0.00	0.05	0.04		-								
Description age (N)		of (field)	:	6.01	6, 45	6.62	6. 28	6.24	9	ı	5.28	5.34	6.31	6.20		7.15	7.06	6,35	5, 07
905 (COR1)  907 (COR1)  907 (COR1)  908 (COR1)  909 (C		o (field)	1/20	8	=	5.5	en i	ر دی ا	si i	es es	4.2	4.0	R,	5.0	4.5	ε, 3	8°.	t	•
Dissolved EQD		Janide	18 CV 1	010.00	, ,	60.010	0.010	0.020	0.010	<0.010	0,035	<0.010	0.003	0.015		0.003	0.003		*
Consideration   Consideratio		Socialise Bon	1 /2	۰ م	7.0	) () ()	5 ¢	?	00 00	CZ: 0	7.7	~	4	1.6		5	121	7	10
Presolved COO mg/1 - 7 5.9 10 10 001 0.001		Th (total)	1/8	ŦC	6	) <u>-</u>		-	9,5	•	;	•	•	•	:			•	č
Phenoi		Dissolved COD	1/66	•	5	2 1	3 8	?	2	2	2	2	4.0	-	7.5	o	3	<u>.</u>	3
Total Phosphorus mg Pri		Theno!	7 6	100 07	100	200 (7)	700	100	00 0			6	900	0		0	. 0.61	000	
Diss. Passphorus mg Pri 0.05 0.09 0.01 0.02 0.02 0.02 0.03 0.004 0.00 0.004 0.005 0.005 0.		Total Phosphorus	10 P/	0 0	0.05	0 0	. c	 	0.0	100.0	700	200	0 0 C	0.000	0.00		0.00	0.00	.00.0¢
Orthophoshate mg P/1 0.02 0.01 0.02 0.02 0.02 0.015 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.0		Niss, Phosphorus	EX P/1	0.02	0.03	3 3	0.04	3	3	2	,		2	>		5			٠
Organic Phosph         mg P/I         0.07         0.04         0.03         0.05		Orthophoshate	mg P/1	0.02	0.0	0.0	0.00	0.03			5	0 0	90 0	0 02		0.03	0 0	0.05	0 84
National Stronger mg N/1		Organic Phosph		0.07	0.04	03	0.08	0.13		-	0. 20	0.05	0.03	0.07		0.94	0.03		;
Nitrate Mitrogen mg M/1 0.10 0.20 0.15 0.35 0.35 0.10 0.25 0.10 0.258 Nitrate Mitrogen mg M/1 0.000 0.008 0.009 0.005 0.		Vamonia Mitrogen		0.08	0.05	0.01	0.05	0.09		0.20	0,0	0.01	0.02	0.04		0.07	0.03	0.08	0.0
Nitrices m m m m m m m m m m m m m m m m m m m		Vitrate Nitrogen		0.10	0.50	0. 15	0.35	0.35		0.19	0.25	0.10	0, 258	0.176		0,164	0.234	0.183	0, 2
Assistance of the control of the con		Witrite Nitrogen	1/k 3m	0.00	0.008	0.004	0.00	0.003		0.008	0.008	0.006	0.005	0.005	0,007	0.004	0,005	0,005	0.148
Diss. Organic N. mg N.1 0.74 0.10 0.19 0.55 0.94 0.35 0.45 1.05 0.72 0.45 0.95 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.4		Njerdani Mitroger Njer Kieldshi N	. 1/2 SE	200		200	3 6	1.00		0.32	0.80	1. 20	0.46	0.51		0.67	0.80		*
Diss. Organic K. mg M1 0.44 0.10 0.138 0.754 0.559 1.355 0.455 1.058 1.306 0.724 0.559 1.355 0.455 1.058 1.306 0.772 0.531 0.545 0.559 1.355 0.455 1.058 1.306 0.772 0.545 0.559 0.354 0.559 0.455 0.455 1.058 1.306 0.772 0.545 0.545 0.559 0.455 0.4		broanic Vireson	1/X 6E	2 2	2 <u>5</u>	3 2	2 4	0		0	0			•	2	0			
Total Nitrogen mg N/1 0.900 0.388 0.754 0.959 1.355 0.455 1.058 1.306 0.754 0.959 1.355 0.455 1.058 1.306 0.754 0.959 1.355 0.455 1.058 1.306 0.745 0.959 1.355 0.455 1.058 1.306 0.745 0.959 1.355 0.455 1.058 1.306 0.745 0.959 1.355 0.455 1.058 1.306 0.744 0.900 0.388 0.354 0.959 1.355 0.455 1.058 1.306 0.744 0.300 0.388 0.354 0.959 1.355 0.455 1.058 0.355 0.455 1.058 0.355 0.455 0.		Diss, Organic N.	1 /N 20	. O	200	5 C	3 6	i i		3	,	F. 1		÷.		3			
Diss. Nitrogen mg N/1 0.600 0.358 0.354 0.959  Diss. Nitrogen mg N/1 0.600 0.358 0.354 0.959  Diss. Oalcaline mg/1 6.9 8.5 3.8 9.6 7.2 5.8 8.4 7.2 7.4 2.0  Diss. Oalcaline mg/1 7.2 2.2 7.8 8.6 7.2 7.6 7.7 7.4 2.0  Diss. Oalcaline mg/1 7.2 7.4 2.0  Diss. Oalcaline mg/1 4 4 50 4 10 4 10 4 4 10 4 10 4 10 4 10		Total Nitrogen	ER N/1	0,900	0.358	0.754	0.959	1.355		0.455	1.058	1.306	0.72	0, 69	0, 91	0.83	1.08		
Diss. Or alcaline mg/l   6.9 8.5 8.8 9.6 7.2 5.8 8.4 7.2 7.4 2.0		Diss. Nitrogen	ng N/1	0.800	0.358	0.354	0.959												
DO HEAZE CALCALINE MENT 3.2 2.2 3.8 8.6 7.2 7.6 Feet Calculus ment 1.3 2.2 2.2 3.8 8.6 7.2 7.6 Feet Calculus ment 1.3 2.2 2.2 3.8 8.6 7.2 7.6 Feet Calculus ment 1.3 2.2 2.2 3.0 4.4 10 4.4 4.4 50 4.4 10 4.4 10 4.4 4.4 50 4.4 10 4.4 10 4.4 4.4 50 4.4 10 4.4 10 4.4 4.4 50 4.4 10 4.4 10 4.4 4.4 50 4.4 10 4		Total OC alcaline	730	9	 	တေ ( က် (	60	7.2			1.2	7. 4	2.0	2.8	1.0	1.0	1.6	2. 4	 
Hexan extractable mg/l 3.2 2.2 7.2 7.2 7.2 7.5 4.5 6.5 6.5 6.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7		JISS. 0. alcaline		, '	6	70 	S.			4									
Suspended Solidar mg/1		A layon axtmootohlo	1 (g)	71 7	7.7	e ti	-	2.5	:	æ ;									
TOC mg/1 * * 13	-	because the country of the		7 8	<u> </u>	Z "	5 5	2 6	ទ	<b>7</b> 8	5	-	•	5	•	÷	¢	•	•
Dissolved TOC   mg/l   *		OC.		3 *		D	0.7	3	8	0.7	ელ	2	,		۵.	17	~ ~	2 (	3 7
Fecal Coli x1000 MPN/100al 2.3 13 5 130 5 8 13 2.3 30 Total Coli x1000 MPN/100al 2.4 30 500 5 23 23 13 240 Caddhiun ang CA/1		Dissolved TOC	1/2d	*									?	?	?	•	;	;	;
Total Coli x1000 WFW/100ml 24 30 500 5 23 23 13 240 240 Codmium ang Cd/1 (0.002		ecal Coli x1000	MPN/100m1			23	S	130	5	82	13	2.3	30			ις		13	
Cadmium mg Cd/1 (0.002		fotal Coli x1000	1m001/NJK				ස	200	r,	23	23	e	240			86		30	
Lead mg Pb/1 (0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.00 <0.02 <0.00 <0.02 <0.00 <0.02 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00 <0.00		adnium.	28 28 28 28	<0.00Z	0,002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.602		<0.002	<0.002	<0.002	0.006	<0,002
Chrocium TV mg Cu/1 (0.015 0.029 (0.005 0.030 0.030 0.030 0.005 Chrocium TV mg Cu/1 (0.016 0.016 0.016 0.011 (0.011 0.011 Chrocium TV mg Cu/1 (0.011 0.011 0.011 0.011 0.011 0.011 Chrocium TV mg Cu/1 (0.010 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011  Mercury ug Hg/1 (0.010 0.015 0.100 0.015 0.005 (0.005 (0.005 0.010 0.005 0.010 0.005 pp DDE ug/1 (0.001 0.001		pro-	mg Pb/1	c0. 02	0.05	<0.02	<0.02	0.03	.0.05	<0.02	<0.02	0.04	<0.02		:	<0.02		<0.02	0.02
Chrosium mg Cu/l (U.01 (U.01)		opper	mg Cu/1	co. 002	0.050 0.050	6.005	0:030	0.030	:0.002	<0.005	ŧ					<0.005		<0.005	<0,005
Agency ug 1871 (0.10 0.015 0.100 (0.005 0.		Aronium (v	7 no 8 m	3 6	j 6	9 6		0.00	•			;	•	;		**		ć	40
Zinc mg Zn/1 (0.019 0.015 0.106 0.005 (0.005 (0.005 0.		fercury	ing Ho/1	5 S	3 5	5 S		5 E	5 C	76.01	10.00	70.01	70.07	3 5	70.07	3 5		, c	20.00
pp DPT ug/1 (0.001 (0.001 (0.001 up. 0.002 (0.003 (0.003 up. 0.003 up. 0.003 up. 0.003 up. 0.001 up. 0.001 (0.001 (0.001 up. 0.001 (0.001 (0.001 (0.001 up. 0.001 (0.001 (0.001 up. 0.001 up. 0.001 up. 0.001 (0.001 up. 0.001 up. 0.00		100	18,18	25	0.0	2 2	0.10	000	01.0	71.07	57.70	01.0	01.0	6, 18	0.00	70.10	01.0	01.0	7.10
op 005 ug/1 <0.001 <0.001 pp 005 ug/1 <0.001 <0.001 c0.001 pp 005 ug/1 <0.001 <0.001 <0.001 PCS s		TOO .ox	100/100	0.00	9	0.00	36	000	600	70.00	200.00	0.0	200	0.010	70.7	70.00		3	
pp DDE ug/1 <0.001 <0.001 pp DDD ug/1 <0.001 <0.001 PCB's ug/1 <0.01 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.		o DDE		<0.001		0.00	60.00												
pp DDD uR/1 (0.001 (0.001) PCB's ug/1 (0.01)		300 'qr	ng/]	0.001		(0.00)	¢0.001			-									
PCB's 08/1 (0.01 (0.01		.p. 000	ng/	<0.001		<0.00I	(0.001					٠							
		KB's	ug/]	·0.01		ं0. 01	0.01												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

Maintenant	20.55	SOLOH SIATION : G (BC-901) KIYEK MAKE	KIYEK MAKE	274	1 00000	31.6					200		1	1					1
	NO. OF SAS	UPL ING			7	ო	47	ιņ	ψo	-	, eo	ø	91	11	12	13	14	15	16
Name	DATE OF 5	MAPLING	; ; ; ; ; ;	85	22	; ; 23	83	93	61	1	08	13	£2	2.4	22	91 91	CT21	NOVIS	
Transportance	General n	umber of the labor		40	8269	8786	10928	11979	13424	1783	4080	4939	1920	9324	11061	124478	15527	16821	1
National Content Con	CODE		UNITY																
Natire Secretaries C. 25.55 2.50 2.50 2.50 11.50 2.50 2.50 11.50 2.50 2.50 2.50 2.50 2.50 2.50 2.50 2		Time			15.25		88	13.15	13.00	20. 84	10.05	10.10	14.40	13, 35	13, 15	11, 20	11, 55		~
Sample (Check)         2.9         2.9         2.9         2.9         2.9         2.9         1.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9         1.9         2.9	020625	Air temperature	: ບ		3 53		29.50	38	32.5	3:.50	26. 50	28.00	29.00	30,00	32.00	25.00	31.00		INPL ING
	02061F	Water temperature			83		21.40	26.58	22.50	29, 00	24.30	22. 40	21. 17	19.74	21 09	19.64	25.43	26.48	
Condent: (file1b) & Sical Bit Condent: (file1b) & Sical Bit Condent: (file1ch) & Sical Bit Co			8	330	330			12.0	13.0	0,7	9.0	22.0	17.0	15.0	15.0	12.0	21.0	5.0	
Condition (Circle) (Signer 1976) (Signer 197			<b>3</b> /3	;	;	0		0.03	0.05	0.4	0.04	0.03	0.00	0.00	0.00	0.00	0	0	
Statistic Cristal		Conduct. (field)	nS/ca	6	8	;	;;;	;	;										
Commission   Com		Salinity (field)	od o	9 9	33	ල : ල :	9 0	6	0.05			;							
Occidential aggly 1 (2) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4			3	ဘာ ရ တော် မ	န္တ ၊ မ		æ ;	9. 19.	2 32		7. 45	5. 55	67.9	20.0	, ,	2	, o	2	
Proposition			1/201	010	7. 0	o c	, , , ,	- c	on c	e e		o		. e	0.00	100 02	9 0		
Disciplant Street CD			#X C1/1	3 0	30	9.00	200	200	200	G. UIO	0.036	20.00	20.0	2 4	7		2	9	
Dissipation of the control of the co			1/20	9 %	į	9 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6	9 6	<u>ڊ</u>	÷	,	3	,	;	;	:		•	:	
Decision			ag/1	9	رب م	010	53	010	. 15	8	01	<10	9	20	20	2	35	<10	
Designations at all			mg/1	,		000	æ								:	;	;	;	
Total Procedures at Pri   0.08   0.08   0.08   0.08   0.08   0.08   0.08   0.08   0.08   0.08   0.08   0.08   0.08   0.08   0.09   0.	065341		ng/1	.0 .001	0.001	0.00	0.007	90. 90.	ć0. 001	(0,001	0.001	0.001	0.002	0.002	<0.001	0.005	0.003	0.014	
Dissolved at the property at a principle of the property at a	154081	t۸	#2 P/1	0.08	0.03		0.0	0.0	0.08	0.08	0.25	0.08	0.03	0.04	0.0	6,0			•
The proposal of the control of the c		Diss. Phosphorus	1/4 28	3 8 3 6	3 6	3 c	6.03	4			:			6	.0	000		00	
Amenial Mittogen as Wil 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.		Orthophoshate	12.0	70.0	70.00	56	- 6 - 6	3 5 3 6			7.0	700	, c	3 6			70.0	; ;	
Nitrate Nitrogen at Will   0.20   0.30   0.20   0.30   0.20   0.30   0		organic ritospii	7/2 56	9 6	200	3 5	9 8 3 6	5 6 5 6		6	2 2	3 6	0.0	0 0	0.02	0.08	0.03	0.09	
Historie Nitrogen ag NI 0 000 0 006 0 007 0 003 0 004 0 000 0 000 0 0 000 0 0 000 0 0 0 0 0 0		Nitrate Nitrogen	10 M/1	5 8	3 8	3 6	3 5	3 8		10.0	3 6	5 . 0	0.307	0.240	0.178	0.181	0.138	0.210	
		Nitrite Nitrogen	50 N/1	000	0.00	0.00	0.003	0.004		0.005	0.003	0.003	0,003	0.004	0.00	0.006	0.004	0.007	•
Dissertication   Margin   Ma		Kjeldahl Nitrogen	Il/N Sin	0.55	62,0	0.55	9	0.60	0.50	0.25	1.00	0.25	0.20	0.67	0, 39	0.34	0. 20		
Organic Mitrogen eg M.1 0.12 0.48 0.23 0.35 0.405 0.26 0.24 0.15 0.55 0.36 0.26 0.17 0.15 0.15 0.25 0.34 0.15 0.25 0.34 0.15 0.25 0.34 0.25 0.34 0.25 0.34 0.25 0.34 0.25 0.34 0.25 0.34 0.25 0.34 0.25 0.34 0.25 0.34 0.25 0.34 0.25 0.34 0.25 0.34 0.25 0.34 0.25 0.34 0.34 0.34 0.34 0.34 0.34 0.34 0.34		Diss. Kjeldahl N.	mg N/1.	0.45	0.30	0.30	0.52									;	,		
Diss. Organic N. ag N.1 0.736 0.596 0.596 0.596 0.596 0.405 0.405 0.405 0.405 0.510 0.51 0.51 0.596 0.		Organic Nitrogen	1/K 8m		0.12	0.48	53	0.35		0.25	96.0	0.24	0, 16	0.65	0.36	92 '0	9.17		
Diss. Or all time seq. 1		Diss. Organic N.	1/K 2/1	9.41	0 17	0.23	9 5	9		307	946	40.2		0 42	5.5	0.53	6.34		
Diss. Or alcaline mg/1		hier Witches	1/2/20	9 5	200		0.55	0.30		60.403		?	;	•	;	3	;		
Diss CC elcaline mg/l 7.5 8.8 8 4.4 2.6 8.2 7.8 8 9.0 10 11 10 10 11 10 10 10 10 10 10 10 10		fotal OC alcaline	: // : //	2.2	3			ei	.: 80	2, 2	5.8	9.8	9.0	1. 4	2.0	0, 4	1.0		٠
DO	08403L	Diss. OC alcaline	1/20	•		1.4	3° 6				*								
Heran extractable mg/1	081011	8	ng/l	7. 6	ထ			2 80		7.8									
Suspended Solids RA/1 5 10 5 15 10 5 10 5 10 5 10 5 10 5 10		Hexan extractable	1/20	2.5		\$ .	ਤ:	ਤ:	₹;	5.5		•	c	**	-	=	=	22	
Piscolved TOC   mg/l   F   Fecal Coli x1000 MPN/100ml   13		Suspended Solids	1 / Zu	₹.		ດຶ	2	≘;	ક	0.7	2	9	n ec	\$ 5	3 5	: 15	2	1 10	
Pecal Coli X1000 MPK/100al   13				- #							-		٠.	2	;	!			
Total Coli x1000 HPN/100al 30			MPN/100m1	60		13	1	=	230	200	56	20	. 23	11	urs	2.4	13	20	
Cadatus as Cd/1 (0.002		Total Coli x1000	MPN/100m1	8			•	8	230	1300	. 09	230	23	80	ဆ	2.4	8	G G	
Lead mar Ph.1 (4.02 0.04 (4.02 (0.02 (4.02		Cadmium	38 Cd/1	c0, 002	<0.002	0.005	O. 003	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0,002	
Copper as Cu/1 <0.005 0.010 <0.005 0.005 0.005 0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.00	٠.			<0.02	0.0	¢0.05	<0.02	<0.02	<b>.0.02</b>	<0.02	<0.02	0.10	<0.02	<0.02	<0,02	CO. 02	0,04	<0,02	
Chromium mg Cu/1 (0.01 (				c0, 00 <b>5</b>	0.010	ф. 005	900.0	0.030	<0.002	<0.005	ŀ			<b>co. 00</b> 5	<0.002	<0.00%	CC. 005	<0,00	
Chromium and Crf1 (0.01	24101L	2		6. 2.		ට පි	60.0	9.	;		;	;	;				10	10 07	
### ### ### ### ### ### ### ### ### ##					<u>.</u>	5 S	3 ; 3 ;	9 5	5 5	6.6	2 5	7.5	70.00	7 6	3 5	20.02	Ç0. 10	9 9	
pp bpT				0.10	0.00	25.0	00.00	0 00	⊇ <b>§</b>	20.10	27.5	7.7.	01.0	07.00	0.00	0.030	0.030	0.003	
op 006 ug/1 (0.001 (0.001 pp 006 ug/1 (0.001 (0.001 pp 006 ug/1 (0.001 (0.001 (0.001 PcB's s. 0.01 (0.001 (0.001 PcB's s. 0.001 (0.001 PcB's s. 0.001 (0.001 PcB's s. 0.001 (0.001 PcB's s. 0.001 PcB's s. 0.001 (0.001 PcB's s. 0.001 PcB's s. 0.001 (0.001 PcB's s. 0.001 PcB's s. 0.001 PcB's s. 0.001 (0.001 PcB's s. 0.001 P				8 6	2	90	000		20	2									
pp 00E ug/1 <0.001 <0.001 pp 705 ug/1 <0.001 <0.001 PCB's ug/1 <0.01 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.				90.00		000	0.00												
pp DDD ug/1 (0.001 (0.001 PCB's ug/1 (0.01				90		00.00	(0.00]					-							
PCB's ug/1 <0.01 <0.01				100.0		0.00	.0 00												
		PCB. s		0.0		.0.0	6.01												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

Control   Cont	**************		NO OF SAMPLING	~	က်	4-	เภ	9		8	6	01	11	12	13	14	91	15
Note: The processory   Note: The processor   Note: The	ATE OF SAMPLING	; ; ; ; ; ; ; ;	MAY 08	23	2,5	8	8	OV 19			13					0CT20	NOV18	
Handwerter (1982)  Although and the contention of the contention o	eneral number of the	laboratory	6417	6927	8785	10968	12002	13425	1692	4081	4940	7919	9325	11060	12447	15528	16822	
Here recognized Criscol Section 1.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5		YLIND					3											
Value   Valu		=======================================	07 1:	13.1			10.54	8 2	14 20	12 20	19 15	19 90	11 95		00 01	30 64	71 62 11	
Weather component         St. 2         2         2         1         2         2         1         2         2         1         2         2         1         2         2         1         2         2         1         2         2         1         2         2         1         2         2         1         2         2         1         2         2         1         1         2         1         3         1         2         2         1         3         2         2         1         3         2         2         1         3         2         2         1         3         2         2         1         3         2         2         1         3         2         2         2         3         2         2         3         2         2         3			26.50	33			31.00	35.00	34.00	27.00	32, 50	28.50	21,00	31.00	25, 00	27,00	32, 00 S	SAMPLING
Constant (Titled)		ature C	24. 20	24			25.09	23.61	31.00	24.80	23.78	22, 61	19.84	21, 28	20.68	26 42	27.61	
Conduct (Triet) & & & & & & & & & & & & & & & & & & &			8.5	∞			18,0	o ⊗	0.8	20.0	17.0	15.0	13.0	13.0	9.0	12.0	5.0	
Administry (Tiest) 25,524 1, 140 220 1, 150				;	0.5	;	0.08	0.06	0.11	0.01	0.31	0.00	0.00	0.03	0.03	0.03	0	
Marine (Tricked)			140	077		gg :	4				170				-			
Decirity   September   Septe		eld) &	0.03	== ! == !	0.10	0.00	6.04	₹ 5										
Opanice Service Servic		:		5.47	5. - 4.	7. 62	æ, (			6. 43	5.67	5.66	5, 79	5, 43	5. 62	5, 97	6.17	
Opinional Secret Construction and Constr		1/20	2.50		2		50.	 DO		7.0	- 2	2.3	4.2	1. 5	4.1	9.0	ì	
Deciro column   Second   Deciro column   Dec			9	6.010	010 iii	<0.010	0.010	010	0,010	0.015	<0.010	0.004	0.010	0.007	0.011	0.003		
Decironary   State   Coloration   State   Colorat			£ 8	20	3 8	<u></u>	₹	2	20	13.2	11.6	23	23. 2	90	09	40	ഗ	
Diss. Nicelands as \$Y1			2 5	6	2 8	<u></u>	ţ	5	;	1		4	1		:	;	,	
Parisite Control			2.7	<b>767</b>	227	3 8	G	3	0 8	e.	30	30	10	gr.	3.5	35	34	
Trial Phosphorus   27   1   1   1   1   1   1   1   1   1			010	0.00	0.0	900	600	100	400	. 00	9 6 6					0.00		
Company   Comp			200	900	2 2	100	200		200		0.00	720.0	200.0	710.0	710.0		0.00	
Charlest Control   Charlest Co			3 6	2 K	3 % 3 c	3 6	07	3	07 .0	07.0	. c	0.11	54 0	07.70	01.0	3		
Amonia Mircagen ag NI 0.18 0.18 0.28 0.21 0.08 0.11 0.15 0.12 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.0			3 6	3 2	3 2	3 2	e c			31.0	4	. 0	•		6	0		
Minister Nitrogen mg Ni			900	3 g	, c	3 8	3 -						, c		70.0	3 6	, ,	
Nitrate Nitrogen ag Ni			3 5	3 =		9 c	; ; ;		06.0	3 6	3 6	0.0	3 6		9.00	9.0	6	
Nitrice Nitrogen ag Ni 0,000 0		Cooper no N/1	50	5 5	-	2 5	3 =		3 5		3 5	125			200	200	1 6 7	
Figlician   Nitrogen   Reg   Nit   1.00   2.00   1.40   1.20   1.20   0.55		Open ap N/1	010	U U	0.003	0.00	200		0.00	200	200	0 005	900		000	0.000	0 10	
Diss.Kjeldahi M. ag Ni		ropen mp N/1	30	2 00	1.45	25.	1 20	0.35	200	0.00	0 0	2000	20.0		20.0	4 60		
Organic Mitrogen         R/I         0.36         1.90         1.26         1.05         1.00         0.30         0.55         0.93         0.67         0.93         0.67         0.93         0.61         0.93         0.68         0.68         0.93         0.68		11 N. 108 N/1	0.50	1. 20	90	0.45	3	3			ì	!	;		:	;		
Diss.Organic N. mg N/1 6.46 1.10 6.86 6.30  Total Mitrogen mg N/1 1.040 2.154 1.553 1.420 1.310 6.050 6.810 6.509 6.85 1.05 6.99 1.122 1.40  Total Calcaline mg/1 3.2 5.25 36.0 10.2 11.8 10.4 24.0 9.2 7.0 5.0 5.6 8.2 6.0 7.2  Diss.Organic N. mg N/1 6.300 1.554 1.553 1.420 1.310 6.000 6.000 6.85 1.05 6.0 5.6 8.2 1.05 6.99 1.122 1.40  Diss.Organic N. mg N/1 6.300 1.554 1.553 1.420 1.310 6.000 6.0			96 0	1. 90	1.26	1.05	1.00		0.30	0.56	0.38	0.67	0.92	0.95	0.84	1. 25		
Total Nitrogen			\$ .48 46	1.10	98	8							:		;			
Diss. Nitrogen mg N/1 0.540   1.554   1.153   0.670  Diss. Nitrogen mg N/1 0.540   1.554   1.153   0.670  Diss. Calcaline mg/1 3.2   5.2   5.6   0.02   10.2   11.8   10.4   24.0   9.2   7.0   5.0   5.6   8.2   6.0   7.2  Diss. Calcaline mg/1			1.040	2 154	1, 553	1. 120	1.310		0.520	0.810	0,509	0.85	1,05	0.98	1.22	1. 40		
Total CC alcaline mg/1   32.5   52.5   56.0   10.2   11.8   10.4   24.0   9.2   7.0   5.0   5.6   5.6   7.2   7.0   5.0   5.6   7.2   7.0   5.0   5.6   7.2   7.			0.540	1.354	. 53	0.670												
Diss. Oc alcaline mg/l 3 2 1.8 4 4 9 4 6 5 6 45 15 15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•	c.	32.5	52.5	36.0	10.2	:: 8	10.4	24.0	3.5	7.0					7.2	5.6	
Hostan extractable mg/1   3.2   1.8   4.2   4   5   5   45   5   5   45   5   5					30.0	တ တ												
Suspended Solids mg/1		1/80	ලා සේ	 :			7.5		•									
Suspended Solids mg/1   150   45   20   56   45   20   15   7   9   16   8   22   15   15   15   15   15   15   15			33	Ŧ.	\$	~7	တ	হ	65									
Tricol Control			120		45	ខ	S	99	45	20	15	-	ō,	9	~	23	32	
Dissolved TOC mg/1 **  Feral Coli x1000 MPV/100n1 3000			**									23	11	19	33	ç	s	
Freal Cali x1000 kPV/10041 3000   160 90 50 30 8 300 500 10 110 300 2300 500   10 10 10 10 10 10 10 10 10 10 10 10 10								•										
Total Coli x(1000 MPN/105ml 24000 CG 002 CG					160	8	20	30	œ	300	200	70		300	2300	200	900	
Cadaium ng Cd/1 0.000 c0.002 c					,	7160	2	8	20	1600	2200	50		5000	2300	5000	900	
Lead mg P3/1 (6, 02 0.03 0.04 (6, 02 (0.02				<0.002	<0.002	<0.002	<0.002	c0. 005	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	
Copper		I/Gd Sm		0.08	G. 04	<0.05	.0.02	<0.02	<0.02	<0.02	0.10	<0.02		<0.02	<0.02	07.50	<0,02	
Chromium IV esg Cu/1 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 <		ng Cu/1		0:010	0.010	090.0	0.002	(0, 002	<0.005	1				<0.005	<0.005	<0,005	<0.005	
Chromium eg Cr/1 (d.01 (d.01 (d.01 (d.01 0.02 (d.010 (o.01 (o.01 0.01 (o.01 (o.00 (o.01 (o	Chromium	mg Cu/1		ć0.0i	.0.01	.00	:0.01											
Nercury   US   Hg/1   (0,10		Eg Cr/I		6.01	.0°.0	<b>0</b> .0:	0.05	0.010	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0, 01	<0,01	
Zinc sg Za/1 0.040 0.080 0.040 0.010 0.030 0.005 0.005 0.005 0.006 0.040 0.010 0.010 0.010 pp DDT ug/1 (0.001 (0.001 (0.00) cg. 00) cg. 001 (0.00) (0.00) cg. 001 (0.00)		1/8H 8n		<0.30	0. 10	.0 01	ć0. 10	01 0	<0.10	<0.10	<0.10	<0.10	<0.10	<0, 10	<0.10	<0.10	<0, 10	
pp DDT ug/1 <0.001 <0.001 <0.001 <0.10 op DDE ug/1 <0.001 <0.001 <0.001 <0.001 pp DDD ug/1 <0.001 <0.001 <0.001 cl. 001 <0.001 <0.001		ng 2n/1		080.0	0.040	0.010	0.030	0.003	<0.005	0.008	0.060	0.040	0.010	0.010	0.010	0.030	0.010	•
00 00 00 00 00 00 00 00 00 00 00 00 00		1/20			00.00	9		2				;						
pp DDE ug/1 (0.001 (0.001)		1/01			000	200												
pp. DDD ug/1 (0.001)		10/1			3 6	3 6												
ממח ממו		1 /95			200	200												
10 0° 00 0°		7 / X			50.0	90.0												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

DATE OF	0.00			~	m	4	w	9	,	œ.	en.	01	Π	12	<b></b>	*	15	91
	DATE OF SAMPLING	; ; ; ;	MAY 07	103 23	AUG 27	SEP 38	OCT 22	NOV 24	FEB 10	MAR 31	APR 12 3	MAY 26	10% 23	JUL 21	AUG 17	0CT19	H0V17	DECOE
General	General number of the laboratory	ratory	6388	6930	9213	10967	12237	13649	1691	4177	4785	7895	9220	11026	12507	15519	16679	17929
300	PARAMETER	YT IN																
	Tipe	bes	14.10	<b>57</b>	97.50		15, 15	16.05	12.30	13.00	14.35	11.50	11.40	12, 25	11.00	12.25	9, 30	11.00
02062F	Air temperature	ပ	29.00	92	25.00	88	8	26.00	34.00	28.00	34.00	26.00	27 00	28.00	26.00	30,00	29.00	32,00
02061F	Tater temperature	ပ	29. 30	%	24.40		23. 10	26, 72	31.00	27.00	28.50	27.04	24.32	26,09	25, 55	29 45	29, 36	29.27
02080F	Transp. (tube)	អូ អូ	6. 0	28			÷:	S. 5	0.5	9.0	0.0	2.0	5.0	2.5	.5.	3	2.5	3.0
100000	Conduct (field)	5 E	1590	6530	0010	101	•	5	1. 64	0.31		0.74	25.0	0.38	1.24	4. 01	8. 24	1.12
173005	Salinity (field)	3 3 ×	0.7C1	5.5	3	~ C	-	44.0			1.0							
10300F	off (field)	đ	G 68	io	3 3	3 5 50 6	- Ç	÷ t-	,	4 47	7 63	40	57 6	7.7	er t-	7	8 24	5.55
08102F	DO (field)	177/1	2 40	0.4	0	C		0	c	,	9	3				- 6	; ; ,	; '
100990	Cyanide	1/NJ 2	0. 020	; ,	0.050	0.010	0.015	0.010	<0.010	0,040	0.025	0.022	0.039	0.029	0,030	0,080		•
08202		22/1	45	25	8	91	15	50	40	12	30	8	52	25	4.4	30	40	20
082051,	Dissolved 800	[/8a	22.	;	2	21		i					•					
U8361L	COD (total)	177	윤	o Si	G <	S 1	70	92	09	0	120	130	142	133	250	143	244	100
06534L	Pheno!	1/24	0.010	0.001	0.00	90 0	100 07	500	900	0.00	010	700	0.006	0.037	\$10.0	0.007	0.017	0.018
154081	Total Phosphorus	72 P/1	2, 29	3.00	2.50	1.30	0.60	. 25	2. 20	0.80	0.80	1.65	67	. 69	1.72	1, 16		4
15406L	22	5g P/1	8	2.00	2.10	20.	3	:	;	;	:	;	:	:	:			
15252L		ng P/1	0.30	0.20	2.10	0. 10	0.20			0.40	09.0	0,99	1.08	1.32	1.19	0.85	1.55	0.65
			2	2 8 8	0 40	6 6	0.40			0, 40	0. 20	0, 66	0.41	0.37	0.54	0.91		
07556L	Ammonia Nitrogen	1/N 38	S :	88	80°	8 9	4.00		2. 20	0.70	2.10	4. 20	60	96	2.40	2 7	4.41	3.7
073061	Mirrate Mirrogen	1/2 M	6.03	200	0.00	5 G	0.03		60.01	0.50	0.05	0.029	0. 105	0.045	0.012	9,00	0.036	1.32
01203	-	7/2 80	10 00	20.00	12 00	20.0	27.5 8	00 00	20.00	3.000	0.020	41 55	12 40	30.00	6 TO O	13.47		. 4
070541		1/2: 26	88	88	18. 19.	. 5	3	3	3	3	3			3	2			
07407L	5	ng N/1	9 20	0.50	10.00	. 8	4.00		7.80	2.80	5, 30	7, 35	9.65	11.23	12.81	7.76		
07408L		1/N 2012	7 50	9,0	8.8	83			:			:	;	;	;			
078071	Dies Nitrogen	17 ZH	900	339	1 kg	2 5	8.030		10.004	7. 000	8.040	11.58	13.62	15. 34	18.23			
084021			25.5	24.5	10.2	2.0	10.6	10.2	11.4	83	21.0	20.0	6.2	7.4	6,0	6.0	6.6	7.2
084031	s. OC alcaline	1/34			10.0	18.0							-					
081011	8	1/8	9 9 9	٥,	;	;	. 6	;	, ;					÷				
104011	Custonded Colide #4/1	1/8/1	<b>3</b> አ	<b>5</b>	₹ 8	కార	က ငွ	5.5	3 6	34	ç	68	ų,	ť	21	52	75	S
083061		mg/1	? *		3	3	3	3	2	•	3	3.4		3	, C4	58	15	22
08307L		mg/1	+															1
36111		MPN/100m1	30000		2008	9	800	808	00006	30000	0100	3000	S :	13000	1700	13000	240606	24000
76004	Codming	MPN/10081	0006	610	2400	91,	2300	12000	150000	00000	01000	3000	200	0001	2008	<0.002	200 02	0 004
\$2004L		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6,02	0.08	6.02	0.08	.0. 05 <0. 02	, 05 00 00 00 00 00 00 00 00 00 00 00 00 0	<0.02	<0.05 <0.02	0.02	<0.05 <0.02	<0.02	CO. 02	<0.02	0.55	<0.02	0.04
29005L		ag Cu/1	0.030	0.010	<0.005	0.060	0.030	0.010	<0.005				<0.005	<0.005	<0.005	0.010	0.010	0.010
241011	2	1/10 8th	10°0	60.03 20.03	6.03	6.0	<0.01	;	;	:		. :				•		;
24002	a .	7/5 8	: [] :	5 6	9,6	e e	6 6	0.00 30.00	9.6	000	6.6	<0.03 : 03	9,01	\$6.91 \$	6.01	300	1 to 1	20.07
300131	Mercury 73nc	1/8/1 20	0. IS	0.00	0.10	2 5	0.00	0.00	0,13	0.00	40.10 A 016	01.00	0.25	V0.10	<0.10 0.10 0.13	0.030	0.130	0 015
18001	Ħ	, , , , , , , , , , , , , , , , , , ,	1 (A)	3		3 5	5	200			210	9		20.0	, ,			,
180221	op DDE	1/87	000			0.00											:	
180231		. [/ <b>%</b> n	<0.001		0.00	0.00												
180131		ng/]	(0.00)		100.0	.0.001							-	•				
181700	7CB S	/Sa			10.0	(0,0)						1						

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

Comparison	NO. OF	NO. OF SAMPLING			63	m	*7	s	9	-	0C	ф	10	П	12	13	Ξ	15	16
Probative of the laboratory   Condent (filed)   Section	DATE O	SAKPLING		MAY 07	!	AUG 27	1	OCT 22	NOV 24	盟		53	2			AUG 17	0CT19	NOV17	DECOG
The compacture	Genera	number of the labo	ratory	6387	6931	9214	10966	12236	13650	1690	4178	1942	7896	9221	11021	12504	15520	16680	17830
The control of the	88	;	LIN LIA																
National State (Teles)         Section 10         CALON 22.93         TALE 0.00         CALON 21.00         CALON 21.00 <td></td> <td>:</td> <td>=</td> <td>13.50</td> <td>10.35</td> <td></td> <td></td> <td>14.55</td> <td>10.25</td> <td>12.05</td> <td>13.20</td> <td>13,35</td> <td>11, 25</td> <td>11.20</td> <td>12.05</td> <td>10.45</td> <td>12.45</td> <td>9.15</td> <td>10.4</td>		:	=	13.50	10.35			14.55	10.25	12.05	13.20	13,35	11, 25	11.20	12.05	10.45	12.45	9.15	10.4
Transportance C 25.50 22 21.40 21.30 22.60 10.00 25.50 22.70 11.70 15.60 15.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	02062F			31.00	23			22, 50	27.00	34.00	28.00	33, 50	26.00	25.00	31,00	26.00	30.00	29.00	31.00
Condect. (field) 65/cm 28 6 30	02061F		. 0	25. 26	23			20.46	22, 09	30.00	25.50	25, 23	21.78	18,91	21.99	21,09	29.47	30.23	29, 7
Condition   Second   Condition   Conditi	C2080F			28.0	š			22.0	10.0	0.7	9.0	22.0	10.0	13.0	14.0	8.0	5.0	5.0	n;
Consisted   Cons	02043F			5	5	ě	•	6.02	Φ	0.04	0.04	0.08	0.00	0,00	0.00	00.00	Φ.	0.02	0.0
### (Field) ag/1 C. 198 6.18 6.18 6.11 C. 10 C. 2.0	125020			3 8	25	2 2	<u>.</u>								•				
Description   Control	103005		×	3 S	900	3 5	3 4 3 4	20.0	10 to				4				9		
Consideration   Consideratio	200001			9 6	3 °	3 4	o 1	- 1 °	3 9	, ,		 	6. 82	2, 54	29.9	3.36	. ·	δ. 8	2. 80
Dissolved COO   Section   Cook   Co	088001			9.0	;	9 6	, o. o.	9 6	0.00						0 0	C . C	000	t	٠
CD0 (cotal)  Second CD0 (c	082021		mg/1	30	4	2 62	200	2.0		270.07 <20 0		(2.07)		100.00	0, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6,	0.040	3	~	•
Dissolved CDD	08205L		mg/1	₽ P		45.0	8	•				;	;		\$	;		•	
Dissolved COD	08301L		ng/1	17	8	20	2	20	2	<10	55	7.7	100	en	ř	10	28	1.6	1.7
Pener Prospherers ag P/1 (0.001 0.00	08303L		mg/1			. 15	91										-		
Total Purposers as P/1   0.10 0.09 0.07 0.05 0.06 0.07 0.05 0.01 0.09 0.01 0.09 0.01 0.09 0.01 0.09 0.01 0.09 0.01 0.09 0.01 0.09 0.01 0.09 0.01 0.09 0.01 0.09 0.01 0.00 0.00 0.01 0.00 0.00 0.01 0.00 0.00 0.01 0.00 0.00 0.01 0.00	36534L			<0.00 0.00	<0.001	<0.010	<0.003	<0.001	<0.001	<0.001	0.001	0.030	0.001	<0.001	9.002	0.002	<0.001	0.005	0.001
Descriptions as PT   0.06	24081			0. 10	0.09	0.20	0.08	0.06	0.08	0.07	07.0	0, 15	0,09	0.08	0.12	0.14	0.13		*
Organic Processor es #71 0.04 0.07 0.05 0.05 0.05 0.04 0.06 0.05 0.04 0.06 0.05 0.04 0.06 0.05 0.04 0.06 0.05 0.04 0.06 0.05 0.05 0.04 0.06 0.05 0.05 0.04 0.06 0.05 0.05 0.04 0.06 0.05 0.05 0.05 0.04 0.06 0.05 0.05 0.05 0.05 0.05 0.05 0.05	200		1/4 Si	500	2 5	0.07	ع د د										;	:	
Augmental Nitrogen ag N1 0.19 0.00 0.05 0.05 0.07 0.02 0.13 0.04 0.07 0.09 0.09 0.13 0.09 0.09 0.09 0.09 0.00 0.13 0.09 0.09 0.09 0.09 0.09 0.09 0.00 0.13 0.09 0.09 0.09 0.09 0.09 0.09 0.00 0.13 0.00 0.00 0.00 0.00 0.00 0.00	1252C		/ / /	3 S	0 05	0.04	0.03	0 0			0.20	0.02	0.05	0.04	0.06	0.04	0.05	0,06	0. 62
Mitrate Mitrogen as Mit 0.00 0.50 0.00 0.00 0.00 0.00 0.00 0.0	Varie A		7/2 8	5:	0.07	9 6	8	9.03			0.00	0, 13	0 0	0.04	0.01	0 10	0.08		•
Marine Nitrogen mg N/1	1900		1 /2 2	3 6 3 6	300	9 9	3 6	9 6		0.07	0.02	0,03	0.03	0.13	0.08	0.11	0.14	3 .	, i
Company   National	1000		7/2 20	9 6	3 6	9.50	96.5	35		07.0	0, 13	0.10	0.506	0, 40	0.435	0.336	20.00	2 0	; ;
Diss. Kjeldahi N. Bg N/I 0.20 0.40 1.10 0.50 0.50 0.51 0.53 0.13 0.57 0.11 0.55 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82	70031		. [/N 26	3 5	96	200	55	900.0		0.00	0.020	200	0.010	20.0	200.0	0.064	1.48	•	**
Organic Nitrogen ag N/1 0.15 0.30 1.04 0.46 0.39 0.53 0.13 0.57 0.61 0.55 0.82 0.82 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83	07054L		1/N 8	0 20	0.40	2	98	!		}	;	:	;	:	;				
Diss. Nitrogen mg N1 0.650 1.120 1.530 0.807 0.708 0.805 0.320 0.707 1.19 1.10 1.38 0.85 0.85 Nitrogen mg N1 0.650 0.900 1.530 0.807 0.708 0.805 0.320 0.707 1.19 1.10 1.38 0.85 0.807 0.708 0.807 0.708 0.807 0.709 0.807 0.708 0.807 0.709 0.807 0.709 0.807 0.709 0.807 0.709 0.807 0.709 0.807 0.709 0.807 0.709 0.807 0.709 0.807 0.709 0.807 0.709 0.807 0.709 0.7	74071		1/N 8m	0.15	0.30	1: 04	0.49	0.39		0.53	0.13	0.57	0.61	0.55	0.82	0.25	1, 33		
Diss. Not calcaline mg/l 1 0.520 0.907 0.708 0.805 0.320 0.707 1.19 1.10 1.38 0.807 0.704 0.807 0.708 0.805 0.320 0.707 1.19 1.10 1.38 0.807 0.704 0.805 0.320 0.707 1.19 1.10 1.38 0.807 0.704 0.805 0.304 0.807 0.708 0.805 0.306 0.307 1.10 1.38 0.807 0.704 0.805 0.805 0.807 0.707 1.19 1.10 1.38 0.807 0.704 0.805 0.807 0.704 0.807 0.705 0.807 0.706 0.807 0.707 0.807 0.807 0.707 0.807	74685		1/N 8a	0.05	0.0	1.04	0.46	;											
Total OC alcaline mg/l 4.5 3.1 4.0 5.2 4.6 5.0 3.4 4.0 5.0 3.4 2.0 2.4 2.8  Diss. OC alcaline mg/l 6.8 6 4 4.0 5.0 3.4 2.0 2.4 2.8 2.8  Diss. OC alcaline mg/l 6.8 6 4 4.0 5.0 3.4 2.0 2.4 2.8 2.8  Bush extractable mg/l 6.8 6 4 4.0 10 4.0 5.0 3.4 2.0 2.4 2.8 2.8  Bush extractable mg/l 20 6 4 4 10 4 6 5 5 20 8 1 1 4 5 5 20  Bush extractable mg/l 20 6 4 4 10 10 10 10 10 10 10 10 10 10 10 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1000		1/8 3/1	0.620	25	. 530	0.807	0.708		0.308	0.320	0.707	1.19	1. 10	1.38	0.91	7.04		
Diss. CC alcaline mg/l	084021		1/2/2m 4	020 i	076.7h	1: 330 4 0	7 7 7 7			-	ď			,	0		2.0	8	7
Decay expression   Fig. 1	08403L		1/8		5	. c.				ż	;	;		j	,	4		;	i
Hexan extractable mg/1	08101L		Eg/1	8	9	;	•	7.6											
Suspended Solids mg/l # \$ 20	06522L		1/80	20	ဖ	3	ζę	2	5	65									
TOC mg.11 ** Dissolved TOC mg.11 ** Feech Coli x1000 kPN/100n1 130	10401		1/8=	23		33	ç,	93	82	0.7	20	ф	57	(C)	20	14		6.3 	-
Dissolved TOC REAL # # # # # # # # # # # # # # # # # # #	CSSCET		18.	*									<b>(-</b>	3; V		2	S		
Pecal Coll x1000   MPN/100al   130   5   30   3   11   30   23   80   13   17   8	U830/L																•		
Compart Court Action at 250 Cab	361013					ر د د	음 t	eo .	= 3	8 3	23	8 8	13	1.1	œ (	vo (	o č	0000	
Lead Topogram as Cu/1 (0.002 (	400045					27 50	3 S	, ,	99	200	2 5	2 5		0.00	- 40	200	200 07	0000	7 0
Copper as Cu/1 (0.005 (	\$2004L		3 2	900		200.0	200.00	.0. 00Z	0.002	50.00 70.00	200.00	200.00		200.05	200.00	200.05	0.00	<0 05 <0 05	200
Chromium mg Cx/1 (0.01 (	990051		1 ( ) ( ) ( ) ( ) ( ) ( )	20.00		20.00	20.00	20.02	20.02	70.07	20.05	70.0		70.07	20.00	70.07	20 UV	20.00	
Chromium ag Cr/1 (0.01)	241011	Chronium		9 0		6.00	2 6	0.020	0.002	40,000	1			co. 063	<0.00	< 0.000 0.000			,
Mercury   UR   UR   UR   UR   UR   UR   UR   U	24002L	Chromium	# Cr/1	0.0		0.0	0.03	9	40.010	<0.01	<0.03	<0.01	0	<0.01	<0.01	<0.01	(0.01	<0,03	0.0
Zinc = 26 Zn/1 0.040	80013L		1/8/I 8n	<0.10		0.10	0, 10	0 0	(0.10	<0.10	<0.10	0, 20	6	¢0. 10	<0.10	¢0, 10	0.30	0.10	<0, 10
pp bp	30003L		ag 2n/1	0.040	ı	<0.005	0.002	0.013	<0.005	<0.005	0.005	0.005	ó	0.020	0.030	0.015	0.015	0.010	0,01
op 000 (0,001)	1808		1/80	0.001		<0.001	<0.10												
00.001 (0	180221		[/8n	9		6.00 6.00	0.00												
DOS (0.00)	180230		1/20	9 6		6.001	0.00											-	
	181701	12. v	7 2 2	9 6		9 6	5 6												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

ייני כני פעידו הזעם		-	2	co.	4	ເກ	છ	٠-	<b>co</b>	o,	10	11	12	13	14	15	16
DATE OF SAMPLING		WAY 07	JGK 23	AUG 27	Sec	85 123	NOV 24	FEB 10	MAR 31	APR 13	34. 26	JUN 23	JUL 21	AUG 17	0CT20	NOV17	DECOS
neral number o	General number of the laboratory	6386	6932	9215	10965	12238	13651	1589	4179	4941	7897	9222	11022	12505	15528	16631	17831
CODE PARAMETER	YLIND &																
Tine	pre	13.30	11. 10		5. 23.	15.40	10.40	11.40	13.30	13, 15	11.05		11.45	10.30	10.35	9, 00	10.25
	Air temperature C	32.60	27. 50	24.00	28.00	22.00	21 00	34.00	29,00	34.50	26,00	25.00	29.00	24, 50	27,00	28.00	30,00
	ture	25. 56	20.50		21.60	22	24.8	30.00	26,00	25. 24	20 93		20.56	19.45	27.03	27.81	23. 76
02080F Transp. (tube)		730.0	8			 	10.0	7.5	16.00	17.00	G .		10.0	æ.°	15.0	0 ;	
	Conduct (field) uS/cm	079	700	1:960	000	3	37 :5	,		0.31	. 9		7	7 7	27.67	70.02	77
17300F Salinity		32	\$ 85 C	3 5	3 5	3	3										
	9	5.03	9 t <del>,</del>	3 2	8 29	3 60 F 40	: ud	ı	EP 17	5 69	5.91	5, 73	6.10	6.33	6, 45	8	40
102F DO (field)			0.5	2.7	<	0	0.0		7	0	чэ 		2.1	6.1	2.3	1	
				<0.010	<0.010	0.010	<b>0.010</b>	0,020	<0.010	<0.010	0.008	<0.001	0.001	0.014	0.003		*
08202L BOD (total)		<b>с</b>	e,	₹	**	12	21	3.2	~	2	2	2	16	6.8	₩	0	2
205L Dissolved BOD		co ;		24	~												
		<u>.</u>	23.2	1.	<del>\$</del> \$	8	20	20	61 N3	0	40	73	31	310	•	F .	
USSUSE PISSOIVED CON		00	100	, ,	)÷ (		100				•				•	6	4
	fraction ag/1		9 6	. A.D.	.00.	3	6.001	<0.001	100 0	0.002	100.0	<0.005 0.001	0.001	100.0	700.0	0.003	100.00
			3 S	3 5	3 9		3	30	0.30	0. 20	97.0	0.13	77.0	0.40	. 62		•
199591 Orthorhophate			3 8	3 8	3 6	0			•	5		-	000		0.00		
	Process and P.1		3 5	38	9 5				67.0	3 5	5 6	100	0,00		7 6	, ,	70 -1
				3 8	3 2	3 -		•	60.0	3 6	7 .	5 6	2 .	3 6	, ,		
				3 5	3 8	3 8		3 6	3 3	50.0		200	3 20 0	60.0	2 0	7 6	9 0
			200	0 040	9.00	5 6		0 0			20.0	000	0.00	0.004	270	2 6	200
	Kjeldahl Nitrogen mg N/1	1. 40	. 80	9 1	0.50	7 50	09.0	1 40	0.40	0, 60	0.82	0.76	0.84	1.54	1,03	;	. *
			1.80	1: 19	8												
	5		0.60	0.15	9. 2	2,33		0.80	0, 40	0.56	0.71	6.68	0.72	1.45	0.30		
٠.			0. 90	0.15	2												
07801L Total Nitrogen	trogen mg N/1		1. 910	. 280	0.610	4,310		1.456	0.443	0.604	98	0.81	0,95	1, 65	1. 22		
	rogen Eg 3/1		1.910	280	0.910	•	;	•	•	•	-	•			•		
	lotal to alcaline mg/1	6.12	2.3	က လုံး	771	0.21	11: 0	10. 6	7.5	7.0	÷.	4. A	9	0	9	6	-:
		·	-	3	3	-		,									
06522L Hexan ex	Hexan extractable no/1	2	* 3	7	77	-	75	7			٠						
	Suspended Solids 22/1	9		9	0.	22	5	10	•	ď	9		œ	67	3.5	30	e,
		*		;	,	?	:				12	18		15	2.1	0.7	-
	d TOC #8/1	*															
	11 x1000 MPW/100			r.	1.1	240	300	20	23	ec)	1600<	<b>e</b> 0	23	'n		20	r)
	Total Coli x (000 MPN/100ml			S	m	300	900	80	30	30	1600<	::	13	13	30	80	Š
	1/PS 8td	0,000	<0.002	<0.002	c0. 005	0.005	:0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	CO 002	<0,002	0,05
82004L Lead	ng Po/,		9	<0.02	<0.05	0 05	0.05	<0 02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	0.08	<0,02	0.2
29005L Copper	ng Cu/.		0.010	:0, 005	0.060	0.030	0.005	0.015	1		<0.01	<0.005	<0.005	<0.005	0.008	<0.005	0.040
			:0.01	(0.01	(0.01	ć0.03										:	
24002L Chronium			(0.0]	<0.01	6.0	6.0	0.010	<0.01	<0.01	0.01	:	<0.01	<0.01	<0.01	<0.01	<0,01	<0,01
80013L Mercury			(0, 10	6. 70	0.10	(0.10	,0° 10	(0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	9 9	0.15	- - - -
	[/uz 8m		0.015	0.002	0.140	0.060	ි. 00 <b>2</b>	<0,005	<0 002	0.010	0.003	0.015	0.050	0.010	0.015	0.005	0.10
	ug/1			0.001	01 0>						٠.						
	/3n	(0. 00)		(0.00)	00.0												
	1/8n	:0.001		(0.001	¢0.001							•					
	1/011	100 07		100 07	יטייטיי												
	è			200.0	2												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

25				;		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			1 - 4 4 - 4 7 -				***********						
Supply   S		SAMPLING			۲۵	m	ਚ	s	ထ	<b>:</b> ~	හ	رم د	10	11	12	£ .	7	15	91
Paralle   Para	DATE OF	2 SAMPLING	1 1 1 1 1 1 1 1 1 1		23	27	ຂ	23	24		02:	R 13	¥ 26.	23	21	1.1		NOV1.7	DECOG
The properties   C   C   C   C   C   C   C   C   C	enera.	I number of the labo	ratory	6385	9269		10964	12235	13652	1688	4180	4943	7898	9223	11023	12506	15529.	16682	17932
He companies C	ODE		UNITY						<u> </u>										
Very Compute C. 25.0 (2.5) (2.5		Time	50	13.10	12.25			14.25	10.35	11.15	14, 10	14.00	10.40	10.35	11. 25	10.10	10.15	8.45	10.10
National Criscol Social State	2062F		၁	28.50	29.50			22.50	25.00	34.00	29, 00	29.00	25.00	24.00	28.00	24.00	26.50	27.00	30.00
Control   Cont	3190Z			25. 40	23.00			21.36	23.65	31.00	26.00	27.03	22.12	19.41	21.88	20.99	28, 53	29, 70	30.10
Communication   Communicatio	2080F			× 55.	, S			⊃ ;;	0.0	0. 10	15,00	22.00	10.0	10.0	10.0	0	10.0	5,0	9.0
Control   Cont	2010			900	0	1001	ć	99.	.; -	1, 29	0.03	0.16	0, 55	0. 20	0.45	0.59	14, 96	21, 59	7.91
Control   Cont	20000			350	0167	707	217		Ş										
Control   Cont	2000		ß	≃ £	ξ. 	2 5	⊃ 6 ⊃ 6	2 6 5 6	7 5		;	;	;	;	. ,	;	,	:	•
Control   Cont	2000		1/84	9 9 9	ġ.	, ç	٠ ٢	5. 3. 4	3 5	. `	8. 98 . 98	5.56	5.67	5. 02	5.75	5. 79	. 33	5.57	6. 45
Decicionary   Sectionary   Se	37070		1/30	0.30	~ E	o e	- 6 6 7 7 7	- 6 6 6	7 6	2.3	o .		9.6	3.5	9.4.6	4.5	2.2	1	١ .
Comparison   Com	99090		1/23 E	010	200	20.00	010.9	0.050 0.050 0.050	(i. 010	020.0	<0.010 0.010	<0, 010 3	0.006	0.002	0,004	0,006	0,006	. 6	÷
Control   Cont	2002		1/96	· •	r S	٠ د د د	9 6	į	4	7:0	7	7		۵.	?	~3	9	77	71
Dissolved CD	8301		1/2		7.	; ç	3 <u>4</u>	90	Ä	ć		;	4	-	,				
Proposition	83031		1/8m	3 .	<u>.</u>	3 =	2 =	3	3	9	2	o T	2	2	<b>⊅</b>	7	ı	,	1
Diss. Preparents ag PF1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	65341		az/1	<0.00	0.005	c0.010	00.00	(0.00)	(0.00)	70 001	0000	3000	200 0	100 02	0 00 0	100 07	0.001	0 000	100
Orthophosphase ag P/1 0.0g 0.0g 0.0g 0.0g 0.0g 0.0g 0.0g 0.0	\$408L			0.15	0.25	0.20	0.07	0.10	9 0	0.00	46.0	200	0.00	100.00	20.0	41.0	1000		
Orthophoshasiae as Pri G 00 C 00 C 00 D 00 D 00 D 00 D 00 D 00	54061			0.0	3 2	3 2	50	3	;		3			11.7	21.0	D			•
Operation Number         Reg No. 10. Lo. 10. L	5252L		mg P/1	0.03	0.05	0.0	0.01	0.03			0.20	0.03	. O	PO U	0 0	0.00	0	0.04	9.8
Microse			mg P/1	0.13	83 G	0.20	0.06	0.07			0.05	0.07	0 13	0.07		0.14	0.27		;
Niction Nicrogen ag Ni   0.10 0.00 0.00 0.00 0.00 0.00 0.00 0.	75561		Eg N/1	0.30	0.25	0.0	92	0.30		0, 20	0,03	0.05	0.06	0,13	6.11	0,13	0 13	0.01	2, 95
Natical Nitrogen ag Ni	306L		mg N/1	0.10	0.30	0.10	÷	0.45		07.0	0, 10	0.10	0.116	0.249	0, 200	0.218	0.601	0.024	6.11
Sissement No.   0.50	7209L		10g N/1	0.030	0.003	0.006	0.005	0.007		0.005	0.020	0.004	0.013	0.005	0.006	0.006	0.014	0.002	0.974
Page Noting Hand   No. 20   0.66   0.55	70081		N 28 1	0.30	0.60	1. 20	0.55	8:	0.52	0.80	0.25	0, 50	1.16	0.86	0.69	0.58	1.55		*
Dissolved TOC   Log	1054			කු: ප්	3 : o	0.50	- 55												
Decay   Control of C	7407L	_		9 0 0	5 5 5 5 7	c	9.35	08.0		0, 60	0.22	0.45	1. 10	0.73	0.58	0.44	1.37		
Cocal Nutroesis   Rg   M1   0.300   0.505   0.305   0.305   0.305   0.307   0.504   1.29   1.11   0.89   0.80   2.17     Diss. Oc alcaline mg/l   5.1   5.3   5.6   4.6   8.0   4.8   5.2   8.2   5.4   2.5   1.8   2.4   1.4   3.8     Diss. Oc alcaline mg/l   5.1   5.3   5.6   4.6   8.0   4.8   5.2   8.2   5.4   2.5   1.8   2.4   1.4   3.8     Diss. Oc alcaline mg/l   8   4.6   4.8   6.0   4.8   5.2   8.2   5.4   2.5   1.8   2.4   1.4   3.8     Diss. Oc alcaline mg/l   8   4.6   4.8   6.0	19095		1/8 88	3 8	3 8	64.0	2 E				,		;	;	;	;	•		
December	1007		1/2/201	999	900	1. 300	250	. 5		1.005	0.370	0.604	1. 29	1. 11	0.83	0.80	2. 17		
Diss. Collection mg/1	15072		7/2 %	) -	900	ရှိမ မ	: 25 25 26 27	0	•		•		ŧ				6		U
December Solids mg/1	1 2		,	5	÷	o v	D 4		o ÷	7.6	7 0	o.	6.3	7.8	\$ - 7	1. 4	9	·	,
Suspended Solids mg/l	1018			œ	6.	5	ò	~											
Suspended Solids mg/l # 1	35221	-	1 mg/]	, S		77		÷	7	-									
TCC	34011			Σ		2	2 =	2	F, <del>S</del>	20	Y		13		13	7.	677	20	60
Dissolved TOC mg/1 the propertion of the problem of	S3051			*		ì	:	•	•	3	,	•	: 5	: 5	2		1.5	: 13	10
Pecal Coli x1000 MPN/100ml	8307L		1/8											:		?			
Total Coli x 1000   MPN/100ml 30	6111L		*PN/100ml			83	24	80	300	13	130	30	900		50	23	∞	2000	30
Capacitus as CA/1 (0.002 0.005 (0.002	61011		MPN/100m1			1300	24	230	300	S	240	20	1600		300	23	\$2	30000	30
Lead	30041		# CE/1		0.006	<0.002	<0.005	(0.005	0.005	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	0.030
Copper: mg Cu/1 0.016 0.015 0.015 0.010 0.050 0.020 (0.005 - (0.005 - (0.005 0	2004L		mg Pb/1	<b>.</b> 0. 02	0.10	<0.02	<0.02	<0.05	:0.05	<0.02	<0.02	0.30	<0.02		<0.02	<0.02	0.12	0.03	0.14
Chromium 7V ang Cu/1 (0.01 (0.	9005L	Copper	28 Cu/1	0.010	0.015	0.010	0.050	0.050	<0.002	<0.005	ı				<0.005	<0.005	<0.005	<0,005	0.040
Chromium mg Cr/l (0.01 (0.01 (0.01 (0.01 (0.01 (0.01 (0.010 (0.01 (0.010 (0.01 (0.010	4101L	Chromium	ag Cu/1	0, 0, 0,	0.0	0.0	6.0	<0.01											
Mercury us Hg/1 (0.10 (0	4002L		1 Cr/1	60.03	.0. .0.	0.0	6.01	ć0.0j	<0.010	<0.01	<0.03	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0,01	<0,01
Zinc	2		u8 Hg/1	÷;		(0.10	÷ 0. 10	ć0. 10	·6. 10	<0.10	0.25	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	0.10	¢0.10
pp D07 ug/1 < 0.001 < 0.001 < 0.001 pp D06 ug/1 < 0.001 < 0.001 < 0.001 pp D09 ug/1 < 0.001 < 0.001 < 0.001 PCB s ug/1 < 0.01 < 0.001 < 0.001 PCB s ug/1 < 0.01 < 0.01 < 0.01	800		1/u2 8m	0.005	0.030	0.180	<0.005	0.010	0.005	<0,005	<0.005	0.010	001.0	0.040	0.020	<0.005	0.015	0.010	0.030
op DDE ug/1 <0.001 <0.001 pp DDE ug/1 <0.001 <0.001 pp DDE ug/1 <0.001 <0.001 PCB s ug/1 <0.001 <0.001 PCB s	300 IL		ng/I	6 8		00.00	·0. 10												
pp DDE ug/1 (0.001 (0.001 pp DDE ug/1 (0.001 (0.001 PCB s ug/1 (0.01 (0.001 PCB s	80221		ng/1	9.6		¢0 001	(0.00)		-										
pp b0b ug/1 <0.001 <0.001. PCB's ug/1 <0.01 <0.01	80231		1/8n	0. 0.		(0.00)	.0 .00 .00												
PCB's ug/1 (0.01 (0.01)	30131		1/8n	·0. 001		(0.001	<0.001												
	81700		ng/l	0.01		0.0	÷0.01												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

General number of the laboratory CODE PARMETER UNITY CODE Air temperature C COGGIF Vater temperature C COGGIF Transp. (tube) cm COMMON Conduct. (field) as/cm COMMON COMMON (field) as/cm COMMON COMMON (field) as/cm COMMON COMMON (field) as/cm	XAY 07	1 66 NII			:	! ;	1 5				-					
PARABETER The Air temperature Transp. (tube) Conduct. (field) Conduct. (field) Salinity (field) pH (field)		7,	AUG 25	SEP 30 C	22 23	22 75	FEB 13	MAR 31	APR 15 M	MAY 27	1UN 24	1UL 22	AUG 19	NOV03	DECOL	DECIS
PARMETER The fire temperature Air temperature Transp (tube) Conduct. (field) Conduct. (field) Balinity (field) pH (field)	6382	5923	5806	19601	12046	13470	1782	4181	5303	71917	9326	11059	12685	16047	17557	18671
Tibe Air Comperature Pater temperature Transp. (tube) Conduct. (field) Salimity (field) p8 (field)																
Air temperature Mater temperature Transp. (tube) Conduct. (field) Conduct. (field) Salinity (field) pB (field)	10.55			8.55	15.50	15.05	13, 55	15, 10	13, 55	10, 25	10, 10	9.45	9. 25	10.00	8, 55	9.05
Vater temperature Transp.(tube) Conduct.(field) Conduct.(field) Salinity (field) pH (field)	33.00	28.00	29.00	8	22.00	8	36, 50	25, 00	32.00	30.00	23,00	26,00	21.00	24.50	28.00	30.00
Transp. (tube) Conduct. (field) Conduct. (field) Salinity (field) pH (field)	25.25			22.10	26. 70	27.16	33,00	25.70	27.45	24, 19	20, 98	22, 80	21.83	26, 59	28, 38	29.68
Conduct, (field) Conduct, (field) Salinity (field) pH (field)	24. 0	28			20.0	14.0	0, 50	7, 00	18,00	14.0	10.0	12.0	5.0	8.0	13.0	5.0
Conduct (field) Salinity (field) pH (field)					20.5	\$	7.7	0.22	0.75	17.24	8, 12	15.41	34, 50	22.03	37, 25	25.14
Salinity (field) pH (field)	830	17390	18650	535	- 1						٠	÷				
pH (field)	0.40	11.23	1.50	0.30	11.80	9										
	6.40	5.30	6.38	6.21	6. 85	99.9	,	4.75	5, 98	5. 43	6, 61	5.45	6.57	6, 67		6.60
		Ö.3		9	 	 ت	8,5	6.3	0.4	.;	1.1	. o	; ;	•		1
Cyanide		0.010	<b>6.010</b>	<0.010	(0.010	0.010	0,040	0.020	0.01	0.001	0.024	0.015	0.007	0.001		*
BOD (total)	9	27	9	v	ន	<del>-</del>	10	20	50	ယ	12	60	æ	20	43	12
Dissolved ROD	ťΩ		2	4												
COD (total)	88	,	,	,		8	20	40	40	ı	1	1	1		1	1
Dissolved COD	Ū		•													
Phenol		0.020	010.0	:0.001	0.08 0.09	.0.001	<0.001	<0.001	0,006	0.008	<0.001	0.008	0.006	0.007	0.002	0.004
Total Phosphorus		90 :	0.70	0.20	0.45	0, 20	0, 30	0,40	0.30	0.41	0, 32	0.52	0.37	0.46		#
Diss. Phosphorus		0.40	0. 25	90	<u>!</u> ;	<b>i</b>	;	:	:	:		:	:	:		
		0.25	0.20	0.05	0.05			0.20	0.08	0.17	0.05	0.14	0.06	0.26	0.09	91.0
Organic Phospin		0.75	0.50	0, 15	0, 43			0.20	0.24	0, 30	0.27	0,38	0.31	0.21	; ;	;
Aemonia Witrogen		1.40	3.23	0. 70	36	-	1. 40	0, 20	0, 60	0.83	0,94	0.67	0.35	0.78	0.17	0.39
	0.03	0.03	0	0. 20	0.05		0.05	0.25	69.03	0.075	0.057	0,007	0, 108	0.023	0.030	0.0
Nitrite Nitrogen		0.00	0,003	0.020	0.005		0.005	0.030	0,002	0.024	0.033	0.002	0.071	0.007	0,010	0.011
Kjeldahl Nitrogen		4.00	8.3	1.10	2, 40	1.40	1.60	0.80	2.00	2.72	3.21	3.54	1.59	2.02		*
Diss. Kjeldahl N.		3.00	4.88	9												
Organic Nitrogen		2, 60	0.80	0.40	0.80		0, 20	0.60	1.40	1,89	2, 27	2,87	1.24	1.24		
Diss. Organic N.		1.60	0.0	0.40	;		:	:	: ;							
Total Nitrogen		.094	4,043	1.320	2, 122		1.625	1,080	2,002	2.82	3, 30	3.55	1.77	2.05		
Diss Nitmorn		3,094	4. 043	1.320	į											
Total OC alcaline		ថ	14.0	6	200	4	0		2.4	2.8	8,8	2.2	2. 4	33.05	6.0	4.4
	:	<b>)</b>		i a	2	5	;	•	i	i	;		i	ì	;	;
9	-	¢	, }	;	c:											
	2.7	, 7	7	đ	e ur	•	C.									
		2 1	2 2	6	3 6	, c	4 6	5	9		0	1.7	3	6	63	07
The posterior	Ω, <b>*</b>	?	3 .	કે	3	n.	3	2	2	- 5	, 0	- 0	2 44	7 6	3 "	? =
Digastrus mo	٠ ،									1	•	3	<b>.</b>	;	•	3
0000111			ķ	S					000	0	6	c	2		•	77
recar con x1000			₹.	3 5	3.8		90	25.1	2 6		2.6	0 7	2 0	1		2
וסנמו הסנו אומת	200	4		2 5	200		0007	900	200	2 6 6 6 7	757	757	0 0	.00		
Cadalua		0.040	हु : -	0.002	CO. 002	0.005	200.05	20n ny	500.00	50, 005	200.05	200.02	700.05	200 0	0.000	0.050
		02.0	F (	¢0.05	0.02	0.05	20 02	<0.02	0.02	Z0 02	<0.02	0.02	<0.02	20.02	0.18	0,40
Copper		0.060	0.020	0.060	0.080	്o. 002	<0.005	t			0.005	<0.005	<0,005	0.000	0.030	0,040
Chronium IV		(0.0)	:0,01	0.03	(0.0)											-
Chromium		ć0.01	0.01	0 01	60.03	<0.010	<0.03	<0.01	0.05	<0.01	<0.01	<0.01	60.01	<0.01	<0,01	<0,01
80013L Mercury ug 11g/1		<0.10	0 10	<0.10	6	<0.10	<0.10	<0.10	01.0	01.0	<0, 10	<0.10	<0.10	<0.10	0.10	0.25
Zinc		0.050	0.030	0.030	0.080	.0.005	<0.00 o	<0.005	0.050	0.020	0.020	0.010	0.010	0.015	0.060	0,050
no' 007		:	100	200				•	;	;						:
300,00	3 5			100												
200 00	0.00		100.00	100 20												
ann ad	0.00		3.5	ce: 001												
	ć0.001		0.00	<0.001												
3170L PCB's ug/1	<0.01		(C, 01	.0,01												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

AMPLING  Time conduct of the laboratory  PARAMETER  In temperature C  Frans, (tube)  Conduct. (field)  Conduct. (field)  Salinity (field) & Conduct. (field)  Conduct. (field) & Conduct. (field)  Salinity (field) & Conduct. (field)  Conduct. (field) & Conduct. (field)  Salinity (field) & Conduct. (field) & Conduct. (field)  Salinity (field) & Conduct. (f	****			<del>-</del>	-61	ო	7.7	ß	9	r-	œ	·	01	п	12	13	14	15	16
	DATE OF SAMPLE	Ş.	<b>2</b>		23	23	8	23	200	83		2		23			OCT18		DECOR
National Properties	Seneral number	of the labor	atory	5384	6925	9217	10963	12234	13471	1687	1997	4944	1893	9225	11025	12508	15338		17933
1.   1.   1.   1.   1.   1.   1.   1.	! !		YCIND	1					<b>.</b>										
Market clares   186	Tine	; ; ;	===	12.50	12.00	10.40		14. 05	10.55	11,00	12.05	14.30	10.16	10.15	į	9.50	12, 10 N	0	9, 5(
March Critical State   2.50   2.17   2.50   2.50   2.50   2.50   2.70   2.50   2.50   2.70   2.50   2.50   2.70   2.50				29.00	28.00	23.00		22. 50	32.00	33.00	31.00	32.00	24.00	23.00		24, 00	33.00 S	AMPL INC	28.00
Transic (tietal) 85/cm		ture	Ç	25.06	22. 50	21, 70		20.35	22. 90	32,00	27, 30	24.68	21, 61	19,06		20, 41	28.03		28.7
Compact (Cited)   Compact Cited)   Com		o (tube)	8 6	9	30.0			0 :	9.0	0.60	10.00	17.00	15.0	5.0		9.0	2.5		∾;
Control   Cont		ot. (field)	5 kg	2	5	5	į	60 60 70	4, 72	0.08	0.03	0.03	0.00	0.00		0.00	0		
Confidency   Con		ct. (Tield)	5 2 2	0110	140	200	25	00	47.										
Concided 30,11 and 10,12 a		leid)	ş	. v.	. w	5. 5.	9 13 15 15	9 2		ı		27.3	r.		44	5.6	60.3		61.5
## Carried Biology (Control)		ield)	,	88		2-	ιų	7.0		-		. 60			7. 1. 2		2,5		;
Particle	_			<0.010	ce. 010	c0.010	<0.010	0.020		<0.010		<0.010	0.007	0	0,006	0.005	0.004		#
Concideral   Con				ده 4	2	~	<b>∵</b>	c)		2.4		<2.0	30		₹	2.4			_
Dissilved CDO			. 1/8	S 2	c	4.5	Ĉ, F	ć		;		;	. ;		,		•		`
Phenois			78	3	ń	3 ï.	3 5	8	2	02	915	2	25	2	47	2.1	•		•
Third   Prosephorus   sep   1   0.20   0.2				<0.001	<0.001	(0.010	0.010	c0. 010	:0.001	190 02	0.001	0 003	0.003	0 000	0.002	0.002	0.001		<0.001
Diss. Prospherate me Pri		Phosphorus		0.30	0.20	0.20	0.09	0.10	9	0.15	9.15	0.08	0.13	0.15	0.28	0.21	0, 40		*
Organic Phosph at R P11 0.02 0.03 0.03 0.03 0.05 0.05 0.05 0.05 0.05			mg P/1	0.02	0.03	0.06	0.0			;	:			:	•	:			
National National Registration   National Registrational   National Registrational Registrational   National Registrational   National Registrational Registrational   National Registrational Registrational Registrational   National Registrational Registrational Registrational   National Registrational Registrational Registrational Registrational   National Registrational Registrational Registrational Registrational   National Registrational		phoshate	mg P/1	0.03	0.05	0.0	0.03	0.03				0.06	0,05		0,06	0.08	0.06		1.23
National Stronger ag N1		ic Phosph	ag P/1	ې 3.	0.18	0. 16	0,08	0.02			ι	0.02	0,03		0.22	0.16	0,34		
Nittier Mitrogen ag N/1 0.00 0.015 0.050 0.050 0.000 0		ia Nitrogen	1/N 300	9.49	6 6	0.50	0.20	င္း		0.25	0.08	0.05	0.16		0, 17	0.37	0, 51		Š
National Activities		te Aitrogen	mg N/1	0.20	0.15	 	0.50	, O		0.22	0,35	0.20	0.594		0, 140	0.073	0, 211		3
December   Color   C		te Nitrogen		U. 030	0.020	0.010	0.000	0.020		0.020	0.010	0,009	0.119		0.019	0.014	0.020		0,003
Organic Nitrogen as N/1         1.00         0.70         1.50         0.60         1.10         0.75         3.42         0.50         0.92         1.21           Diss. Organic M. say N/1         1.630         1.770         1.50         0.60         1.31         1.72         1.24         3.86         0.759         1.87         1.27           Diss. Aixtrogen as N/1         1.630         1.770         1.160         1.60         1.31         1.72         1.24         3.86         0.759         1.87         1.25         1.57           Diss. Aixtrogen as N/1         1.630         1.770         1.160         1.60         1.31         1.72         1.24         3.86         0.759         1.87         1.25         1.57           Diss. Collide apt/1         3.1         3.2         4.0         6.4         2.2         3.0         4.0         2.4         3.2         1.0           Diss. Collide apt/1         3.1         3.2         4.0         6.4         2.2         3.0         4.0         2.4         3.2         1.0           Do.         3.1         3.2         4.0         6.4         2.2         3.0         4.0         2.4         3.2         1.2         3.1 <td< td=""><td></td><td>ani na Liogen Geldahl N</td><td></td><td>. C</td><td>3 5</td><td>3 5</td><td>2 t 5 c</td><td>1:50</td><td></td><td>3) · C</td><td>3, 50</td><td>CC .</td><td>1. 14</td><td></td><td>7</td><td> 26</td><td>1: 63</td><td></td><td></td></td<>		ani na Liogen Geldahl N		. C	3 5	3 5	2 t 5 c	1:50		3) · C	3, 50	CC .	1. 14		7	26	1: 63		
Diss. Organic N. mg N.1		ic Nitrogen	N.I	8 :	0.70	2 2	9 2	10		0 75	3 62	0.50	90	0 66	0 42	1 21	1.34		
Diss. CC alcaline mg/1   1.630   1.770   2.660   1.310   1.720   1.240   3.860   0.759   1.85   1.45   1.25   1.57     Diss. CC alcaline mg/1   0.680   1.570   1.160   1.060   1.20   1.24   3.2   3.8   3.2   1.8     Diss. CC alcaline mg/1   2.2   4.4   4.0   6.4   2.2   3.0   4.0   2.4   3.2   3.8   3.2   1.8     Diss. CC alcaline mg/1   2.2   4.4   4.0   6.4   2.2   3.0   4.0   2.4   3.2   3.8   3.2   1.8     Diss. CC alcaline mg/1   2.2   4.4   4.0   6.4   2.2   3.0   4.0   2.4   3.2   3.8   3.2   1.8     Diss. CC alcaline mg/1   2.2   4.4   4.0   6.4   2.0   1.0   2.0   2.0   2.0   2.0   2.0     Diss. CC alcaline mg/1   3.3   4.4   4.0   6.4   2.0   1.0   2.0   2.0   2.0   2.0   2.0   2.0     Diss. CC alcaline mg/1   3.0   4.0   4.0   2.0   1.0   2.0   2.0   2.0   2.0   2.0   2.0   2.0     Diss. CC alcaline mg/1   4   4.0   6.4   4.0   6.4   4.0   6.4   4.0   6.4   4.0   6.4		Organic N.	1/N 3m	0.05	20	6.6	33			;	;	;		3	;				
Diss. Nitrogen ag N/1 0.680 1.570 1.160 1.066  Diss. Nitrogen ag N/1 0.680 1.570 1.160 1.066  Diss. Calculine mg/1 3.1 3.3 4.8 4.0 6.4 2.2 3.0 4.0 7.4 3.2 3.8 3.2 1.8  Diss. Calculine mg/1 2.2 4.4 3.2 4.0 6.4 2.2 3.0 4.0 6.4 2.2 3.0 4.0 5.1 1.8  Diss. Calculine mg/1 2.2 4.4 3.2 4.0 6.4 2.2 3.0 4.0 5.4 5.2 3.8 3.2 1.8  Diss. Calculine mg/1 2.2 4.4 3.2 4.0 6.4 2.0 1.1 3.0 3.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1		Nitrogen	mg N/1	1. 630	1. 770	2, 060	1.310	1. 720		1.240	3.860		1.85	1. 45	1, 25	1.57	2, 08		
10tat Ut alcatine mg/1   3.1   3.3   4.8   4.0   6.4   2.2   3.0   4.0   2.4   3.2   3.2   1.8		Witrogen	08 N/1	0.880	1.570	1. 160	1.060												
Suspended Solids mg/1   2.2   4.4   20   11   (4   4   4   4   4   10   10   10   10		C alcaine	1/36	 	3	4, c ∞ c	4, 4 5 c	ó		3.0	0	7,7	62	e.	es.	1. 8	9		27
Suspended Solids mg/1   33		2010	1/8/1	2.9	7 7	٥ خ	> ;	1											
Suspended Solids mg/1		extractable	1/20	; es	5	Ş	20	=	3	7									
TOC.  10 mg/1		aded Solids	1/80	8	ص:	- 40	2 2	: 83	· w	- 01	2.5	-0	<22	27	23	10	t-o		-
Dissolved TOC mg/1			mg/1	*					•		;		5.	. 27	}	\$	<b>\$</b> >		<\$
Fecal Coli x1000 MPK/100m1         80         130         8         130         80         300         220         250         80           Total Coli x1000 MPK/100m1         230		lved TOC		**															
Total Coli X1000 MPN/100m1 220 2400 3160 230 130 800 150 150 150 150 150 150 150 150 150 1		Coli x1000		8		1300	œ	130	1	80	300	230	230				130		20
Cadatum         mg Cd/1         0.000         0.040         0.002		Coli x1000	Ę	230		2400	, 160	230		130	800	300	1300				240		-
Copper mg Pay (u. vg u. vg v. vg vg v. vg		Ę		5.000	0.040	¢0.002	.0.002 6.002	. <0. 002 	.0. 002 .0. 002	<0.002	<0.002	<0.002	<0.002	Ç			500.00		5 5
Copper as Carl 0.100 0.010 0.010 0.010 0.020 0.020 0.020 0.005 0.0				20.00	50.5	20.05 	. U. U.	<0.02 0.02 0.03 0.03 0.03 0.03 0.03 0.03	50.05	<0.02	<0.02	0.04	<0.02	~			0 0 0		? ?
Chromium ms Cr1 (0.01 (0		<u>}</u>		010.0	20.0	9.65	0.050	0.020	0.007	<0.005	<0.005			0.002			0.00		3
Mercury we fight to 0.25 0.10 0.00 0.00 0.00 0.00 0.00 0.00 0.0					5 6	5 6	; ;		010		•			•	,		50		5
Zinc mg Zn/1 0.020 0.020 0.065 0.010 0.015 0.010 0.015 0.020		4		50. 70	5	50	5 07	. e	07.07		10.07	> 0	50.50	73.01	70.07	10.00	(0.10		9
pp DDT ug/1 (0.001 (0.001 (0.001 pp DDE ug/1 (0.001 (0.001 (0.001 pp DDE ug/1 (0.001 (0.001 (0.001 pp DDE ug/1 (0.001 (0.				0.00	0.00	0.005	010	21.0	010	0 0 0	2 2 2	0.10	27.70	01.0	76.70	0.00	0.040		0.005
op 006 ug/1 <0.001 <0.001 pp 006 ug/1 <0.001 <0.001 c0.001 c0.001				0.00	,	00.00	0.10	;	3	30.0		200	2.0	2	0, 2, 0	•			:
pp DDE ug/1 <0.001 <0.001 pp DDD ug/1 <0.001 <0.001		(1)		0.001		(0, 901	00.0												
pp. DD0 ug/1 <0.001 <0.001		· (1)		(0.001		<0.001	:00 0												
		6		<0.001		<0.001	0.001												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

		S	8834628828882888888888888888888888888888	22 288 23 23 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25	27 218 230 230 230 230 230 230 230 230	3862	12 89 7-	20 2469	10 1586	10	£	26	23		17	0CT18		
Probability (Fig. 1)			888 33.00 3.10 0.00 0.00 0.00 0.00 0.00 0.0		22. 30 22. 30 23. 30 395 0. 20	10962	12047	13469	1586	7665					12509			05006
The companies		UNITY  UNITY  I H  I H  I C C  C C C  II C C C  II C C C C  II C C C C	31.83 30.733 30.03		22.30 22.30 395 0.20				-	2	4945	7894	9228	11024		15337		17934
National Column   C		H  ure C  cature C  cature C  cature C  cature C  cature C  cat  cature C  c	28.13.00 20.13.00 340 340 340 340 340 36.0		10.55 22.30 22.30 395 0.20													
The experience C 25.13 E-25.9 2.25 0. 2.10 0. 2.05 0. 2.10 0.		ure C (1) (1) (2) (2) (2) (3) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	33.108 3.40 3.40 3.40 0.158 0.15		22.30 22.30 395 0.20		17. 10	10.25	10.30	11.50	14.55	9, 35	9.40	10, 40	9. 20	11. 40 NO		တဲ့
March (September C. 25.13 2.25) 2.20 2.16 2.20 2.16 2.10 2.10 2.10 2.10 2.10 2.10 2.10 2.10		ature C  C  C  L  C  L  L  L  L  L  L  L  L  L	25.13 90.00 91.00 91.00 92.00 93.00 93.00 93.00 94.00 95.00 96.00 97		22.30 39s 0.20		22.00	30.00	33.00	31.50	33,00	24.00	23,00	26,00	24.00	32.00 SAM	2K136	23
Complet (Held) Scott State) We say 30		(1) CC (1) CC (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	9. 08. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.		395 0. 20		23. 70	24, 19	31.00	27.00	25. 59	21, 89	19 91	21.04	20, 35	27. 52		27.
Conduct (filed) & Conduct (fil		140   155/cs   1414   155/cs   1414   155/cs   1414   14	6.000 000 000 000 000 000 000 000 000 00		395 0. 20		6	0.8	0, 80	14.00	22, 00	20 0	7.0	13.0	14 0	5.0		on
Salitity (field) \$\tilde{\text{Constraint}} \text{Set}		11d)   1.5/cs	64 - 44 - 44 - 44 - 44 - 44 - 44 - 44 -		5 33 5 33 6 3	,	0. 23	9.03	0.25	0. 22	0.16	0.24	0.53	0,83	0.25	0,02		o
Sulfishey (field) X. S. D. T. A. B. S. D. B. G. D. G.		## ## ## ## ## ## ## ## ## ## ## ## ##	0.000000000000000000000000000000000000		8 6	88		:										
Discription (Control) (Con		## 2011 ## 201	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	-	14	o. 6	0.12	0.03							:	- ;		
Discription Series (1.5) 2.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		78,1 78,1 70, 86,1 70, 86,1 70, 86,1 71, 71, 71, 71, 71, 71, 71, 71, 71, 71,	0.010 0.010 0.001 0.001 0.001 0.001 0.001 0.001	-	 	9	69 69	ις (C.	ı	4.98	5. 63	5. 75	5, 49	5.86	5, 65	6.08		vi
## Second State		## CA/1 ## CA/	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	-	200	9 6	7:3		ب د د د	40 E	C3 :	80 6	÷:	9:	e 1	en .		
Discolved (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c		#2/1 #2/1 #2/1 #2/1 #2/1 #2/1 #2/1 #2/1	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	-	0 6 0	0.010	40. U10	.i.	010.05	<0.010 10	) ()	0,00%	0.015	6.020	0,007	0.001		94-
Dissolved CDC and CDC		70 mg/1 mg/1 mg/1 mg/1 mg/1 mg/1 mg/1 mg/1	0.00 0.00 0.02 0.02 0.03 0.15 0.75	-	90	or -	0.7	3	7:1	7	-		40		7.0	7		
President Correction		70 mg/1 ccrs ag P/1 rrus ag P/1 cc mg P/1 cogen ag N/1	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	-	9	r «c	Ş	ñ	35	10	¥ 2	40	12	77	P .	=		
Parisity		eg/1 iorus ag P/1 ib, en g P/1 ib, en g P/1 cogen ag N/1 cogen ag N/1 trogen ag N/1 if, s, ag N/1 rogen ag N/1	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	-		·	3	2	3	•	3	2	3	÷	;	•		
Triant Miscophorus as Pri 1 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0		iorus ag P/1  irus ag P/1  ice ag P/1  iogen ag N/1  iogen ag N/1  irusgen ag N/1	200000° 200000° 200000°			, OU (O	D DOA	100 6	40.001	0.003	0.007	0.003	0.005	0.000	10.0	0.005		-
Diss. Priceding at Fig. 1 (2) (2) (2) (2) (2) (2) (2) (2) (2) (2)		to the second of	200000°			8	5	80	0 15	0.06	0.00	90 0	60	11.0	80 0	5.0		*
Optimization of the properties		th ag P/1 cogen ag N/1 cogen ag N/1 cogen ag N/1 regen ag N/1 il N. ag N/1 rogen ag N/1	20000°			30	3	\$	<u>:</u>	:	<0.07	;	;	;	;	i		
National Principal Region		10,000 mg N/1 10,000 mg N/1 10,000 mg N/1 11 N. mg N/1 10 N. mg N/1 10,000 mg N/1	9 9 9 9 9 8 5 5 5 8			60	9				•	0.01	0.01	0.12	0.01	0.05		•
Number   N		ogen ng N/1 cogen ng N/1 trogen ng N/1 trogen ng N/1 ti N, ng N/1 togen ng N/1	0.05 57.0 57.0 57.0 57.0 57.0 57.0 57.0			80	20	•		. 1	0.07	0.05	0.08	0.05	0.07	0.14		•
Nitrice Nitrogen ag Ni 0.25 0.20 0.06 0.06 0.06 0.07 0.05 0.20 0.25 0.055 0.022 0.191 0.117  Signature Nitrogen ag Ni 0.20 0.003 0.000 0.0		ogen ag N/1 cogen ag N/1 trogen ag N/1 ni N, ag N/1 rogen ag N/1	22.00			8	 		0.55	0.25	0.15	0.16	0.22	0,01	0, 37	0, 45		Ф
Nitrite Nitrogen ag Ni		ogen ag N/1 trogen ag N/1 hi N. ag N/1 rogen ag N/1	0.00			0, 40	.75		0.20	0, 20	0, 25	0.063	0.275	0.022	0, 191	0.117		0
Bissibali Nitrogen as N.1         2.0         2.0         2.0         2.0         1.0         1.0         1.40         1.90         1.93         2.22         1.44         1.18           Bissibali Nitrogen as N.1         1.6         2.00         2.00         0.55         0.00         0.55         0.00         0.55         0.00         0.55         0.77         1.40         1.85         0.77         1.40         1.85         0.77         1.40         1.85         0.20         0.77         1.40         1.60         1.85         0.22         1.46         1.85         0.74         1.72         0.77         1.40         1.85         0.74         1.72         0.77         1.40         1.85         0.75         0.74         1.72         0.77         1.40         1.85         0.74         0.77         1.40         1.85         0.74         1.40         1.70         0.75         0.75         0.75         0.77         1.40         1.40         0.75         0.75         0.75         0.77         1.40         1.40         0.75         0.75         0.75         0.75         0.75         0.75         0.75         0.75         0.75         0.75         0.75         0.75         0.75         0.75		trogen ag N/1 ti N, ag N/1 rogen ag N/1	3			0.010	0.060		0.030	0.020	0.020	0.003	0,024	0.000	0.023	0.014		9
Diss. Nicitabil N. ssg N/1 1.66 2.00 2.00 0.75 0.95 0.75 0.85 1.77 2.00 1.43 0.77 1.40 0.85 0.85 0.85 0.85 0.77 1.40 0.85 0.85 0.70 0.85 0.70 0.85 0.70 0.85 0.70 0.85 0.70 0.85 0.70 0.85 0.70 0.85 0.70 0.85 0.70 0.85 0.70 0.85 0.70 0.85 0.70 0.85 0.85 0.70 0.85 0.70 0.85 0.85 0.70 0.85 0.85 0.70 0.85 0.85 0.70 0.85 0.85 0.70 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.8		tl N. mg.N/l rogen ng N/l	5.20			9:	2. 20	8	1. 40	4.00	1.00	1. 93	2, 22	1.44	7 7	1.85		*
Organic Nitrogen         ag N/1         1.45         1.05         0.49         0.70         0.25         3.79         0.85         1.71         2.60         1.43         0.71         1.40           Diss. Nitrogen         ag N/1         2.86         2.05         0.270         1.40         3.00         1.650         4.250         1.270         2.00         2.52         1.46         1.36         1.96           Diss. Nitrogen         ag N/1         2.80         2.203         2.70         0.22         2.4         1.0         2.2         3.0         2.6         7.4         7.2         3.2         0.8           Diss. CC alcaline ag/1         5.5         2.7         1.40         3.00         1.0         2.2         4.2         7.4         4.2         7.4         7.7         7.2         9.8           Diss. CC alcaline ag/1         ag/1         6.0         2.6         7.0         1.2         3.0         1.2         7.4         4.2         7.4         7.7         7.2         9.8         7.7         9.8         7.7         9.8         7.7         9.8         7.7         9.8         7.7         9.8         7.7         9.8         7.7         9.8         7.7         7		rogen ag N/1	S :			0.55			Š		•	•	;	,				
Diss. Nitrogen			 				දි ර			2	C 82	7.	2. 60	1.43	o	1.40		
Diss. Mitrogen mg N/1   1.859   2.245   2.245   2.245   2.24   2.245		2 % Bg %/1	3 8			3 €	-		563	036	020	•	63			80		
Diss. Octabline mg/1   5.5   2.7   2.0   2.4   1.0   2.2   3.0   2.6   4.8   7.4   7.2   3.2   0.8   Diss. Octabline mg/1   5.5   2.4   2.4   2.4   2.4   3.0		260 mg 3/1	200			) 4 T	o. 010		2	,,	1: 0:0	7	7. 7	4				
Diss. Collection mg/1		n n x 1/1	3 u			2000	6	-	2.2	3	2.6	90	7 .	7 7		9.8		•
Hexan extractable mg/1		line mg/l	·			; c	:	• •			i			:				
Recan extractable mg/1		1/00	_			3	<b>C</b>									•		
Suspended Solids Rg/1		rable mo/3	; K	3	77	.6	, r-	3	**									
10C   25/11   2   15   15   15   15   15   15   1	٠.		3 3	: =	٠,	2 ⊆	. v.	- 60	S	70	w?	7	30	C)	ŧ-	60		
Fecal Coli xi000 MPN/10bel 80 110 30 50 50 60 80 50 8 50 13 80 50 50 50 50 50 50 50 50 50 50 50 50 50				:	•	?	;	,				12	13		v	ø,		
Fecal Cali xi1000 MPV/100ml 80 110 30 50 100 20 20 8 50 110 12 80 50 100 100 MPV/100ml 80 110 110 30 50 110 110 110 110 110 110 110 110 110			*															
Total Cali xi1000 MPN/100m1 230 110 50 130 130 230 110 13 80 22 80 50 E. Cadasium erg Ca/1 0.000		71000 NPV/100m1				30	22		20	80	20	80	20		6	20		š
Cadesium         rg Ca/I         0.060         0.040         0.002         0.003		(1000 MPN/100m)				: Si	130		130	230		13	80	22	80	20		) 1 2
Lead mg Pb/1 (0, 02 0, 06 (0, 02 (0,		(S)				<0.002	·0.002	c0. 002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0,002		\$ 0
Copper mg Cu/1 (0.107 (0.005 (0.005 (0.002 (0.002 (0.005 (		Eg Pb/1	60.02			<0.02	¢0.05	0.05	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	0.10		ô,
Chrosium TV mg CL/1 (0.0		mg Cu/1	0.030			0.020	0.020	0.005	<0.005	<0.005			<0.005	<0.005	<0.005	<0.005		\$0.0
Chromium eg Cr/1 (d. 01	Chronium	mg Cu/1	<b>.</b> 0.01			.0. 10.0	6,01											
Mercury ug Hz/1 (0,10 (0		ng Cr/1	ć0.01			0.01	0.0	0.010	69.61	(0.01 (0.01	0.03	<b>40.01</b>	<0,01	60.01	<0.01	<0.01		ŝ.
Zinc mg Zn/1 0,050 0,100 0,015 0,010 0,000 0,005 <0.010 0,010 0,020 0,030 0,030 0,020 0,040 pp.bp7 vg/1 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001		1/8/I Bn	6)	:		0. 10	9	0. 10	00.00	cu. 10	40.10	6. 10	0.10	<0.10	<0.10	0.10		9
pp bp7		ng 2n/1	0,020			0.010	0.060	0.002	<0.00	0.010	0.010	0.020	0.030	0.030	0.020	0.040		9
op'00E ug/1 (0.001 (0.001 pp 00D ug/1 (0.001 (0.001 pp 00D ug/1 (0.001 (0.001		ug/1	00. 00.			0, 10												
pp DDE vg/1 <0.001 <0.001 pp DDD ug/1 <0.001 <0.001		ug/1	6, 90			(O. 00I												
pp bbb ug/1 <0.001 :0.001	٠,	ug/1	0,001			·0.001												
		ng/1	0.001			ć0. 001				-								

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

DATE OF SAMPLING				63	es	ব	w	\$	<b>t</b> -	œ	on.	10	11	. 12	13	14	15	16
			!	61 KDF	AUG 25	SEP 28 (	OCT 21	XOV 24	FEB 10	MAR 10	APR 15 N	MAY 25	JUN 23	JUL 22	AUG 17	0CT18	08002	
General number of the laboratory	f the labora		6381	6922	9088	10854	12045	13653	1685	2665	5304	7810	9224	11020	12503	15336	17635	
CODE PARAMETER		UNITY	,	,														į
•	*		10.00	12. 45	10. 20	10.10	15.00	16.30	10.10	11. 10	15.05	12.30	9.00	10.10	8.55	11, 10	10.45	NO .
			27.00	23.00	8 8 8 8	25.00	22.00	25.00	32.00	32.00	32.00	26.00	21.00	26.00	22,00	33.00	27.00	SAMPL 19(
	ture	!	25.03	23.50	23. 10	20.02	28. 78	26.87	30.00	24, 10	27.45	22.85	21.82	22.93	21, 58	30,87	30.84	
02080F fransp. tube) 02043F Conduct.(fiel		5 S	٥ ن	ne.			15.04	. ki	0.85	1.63	0.75	1, 28	6.81	4, 22	3, 30	9. 13	13 26	
	Conduct, (field) u	uS/cm	3140	1580	7310	525			:		:		:					
	Salinity (field) %	. يور	1.58	0.84	4.60	0.20	8.06	2. 94										
3005 pH (field)		;		65 65 65 65		6.08 .08	16.9	9.	t	5. 75	5, 98	6.47	6.22	6,54	6,36	6.47	6.34	
		mg/1	6.39	0 0	00 c		2 2	9 6	1.7	en e	0.4	0.1	۵ ا	4 °	5	1 6	t	
		18 C2/1	070.07	200	0.0 0.0 0.0 0.0	9	(f. 010 10	010.0	620 u	010.05	<0.010 4	0.010	0,013	210.0	0.022	6.003	96	
		1/2/1	~	1	2 ⊆		•	•	š	o e	•	3			2	•	3	
		mg/1	5	51		· Ģ		ő	6.5	2.5	30	6.0	203	89	74	83	577	•
		mg/1				8												
		mg/]	:0.001	0.030	<0.010	<0.00I	0.003	:0.001	0.003	0.010	0,002	Q.012	0.002	0.013	0.004	0.010	0.002	
	-	% P/1	0; 20 ;	1.20	- 40	승 당	0.73	0.35	1.00	0.40	0.45	0.80	0.65	1.01	1.31	1.29		
	- v			0.40	99	0.07	Š				;		•		•			
			3 t	) ) )	2 8 3 6	5 t	3 5				0.10	7. 37	200	0,42	60	2 0	0,40	
	Organic Fnospa m	1/1 29		07 G	9 6	5 G	2 6 2 6		2 20		, - -		0.6	9.6	20,04	6.03	9 6	
		1 / K ou	3 5	3 42	5 6	6 E	30		, 0	5 0	2 6	0.053	0.00	0.032	0.025	0.042	0.047	
			0.010	0.004	0.003	0.00	0.002		0.001	0.003	0.060	0.002	0.002	00.0	0.002	0,003	0,002	
	***	118 N/3	2, 40	4.00	10.00	2.60	5.00	0.45	4.00	6.00	3.00	5.98	27 42	6.28	3.01	6.09		
		mg 3/1	5.00	33	6.6	8:	,		1	;		,	:	1		:		
	œ.	18 1/1	3 8	1.20	8 8 3 -	. 65	1. 20		0. 10	5.00	1.90	3, 55	25, 39	. 79	0, 01	1.18		
_	DISS. Organic R. M	: /: :/:	0.00	0 7 °	10 00	 	660 5		140	6 003	Urs	90 9	28 26	4	2 U &	**		
078091 Diss No		7/2	2.75	554	0.043	2.500	3. 02.		2		* · · ·	;	A		,	5		
	line	mg/1	8 1	7.7	16.0	10.6	6	œ	7.3	7.0	.ς. Θ	4.0	3, 4	5.2	4.6	2.8		
	Diss. OC alcaline m	1/8/1	,		8.0	∞												
	=	mg/1	0	0			က က		,									
	41	1/3/	\$ :	<b>y</b> :	ഗ	00	w ;	9	Ξ:	;	;		•	;			9	
10401L Suspend	Suspended Solids a	#8/1 		5	2	001	20	8	2.5	62	30	2 (	\$ 6	\$2	X) E	2 0	3 %	
	loc.	18/1	٠ +									?	3		•	?	;	
	50	(PN / 100m)			1100	7180	1300	070	1100	2300	200	3000					390	
		PN/100m1			: .	>160	2300	340	2100	2300	8000	9000					200	
_		1/80 M	0.010	0.008	0.012	<0.002	<0.002	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0,002	<0.002	0.030	
		78 Pb/1		0.09	0.08	(0.05	¢0.05	0.05	<0.02	<0.02	0.03	<0.02					0.18	
29005L Copper		1g Cu/1		0.015	0.020	0.020	0.040	<b>0.00</b>	0.030	0.015						•	6,030	
	2	ng Cu/1		0.0	0.0	.0 0.0	0°						,				,	
		3 CL/1		0.0		50.00	; ;	00.00	(0.01 (0.01	(0.01	20.0	(0, 0)	CO. 01	\$ 0.01 \$ 0.01	<0.01 50.01	2 5	5 6	
SUCISE Mercury		1/8: 8:		70. F3	9 6	0.00	2 6	01 50	200	2 6	20.50	3 6	21,50		25.5		030	
50003L 21EC		18 Cn/ 1		3	3 5	0.00	05.0	600.0	200	0.010	0.040	0.0	0.00					
		7	100 00		3 5	9 6												
18022L 09 DUE		7	00.00		3 6	56												
		/81	, c. 001		3 8 5 9	700			٠									
						70 35031												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

NO. OF SAMPLING		-	0	m	₽¥.	٧ſ	<b>છ</b> .	t	ಹ	o	91	H	7.7	22	14	33.	91
DATE OF SAMPLING		1	JUN 19	AUC 25	SEP 28	OCT 21	10v 24	FEB 10	MAR. 10	APR 14	MAY 25	JUN 21	JUL 21	AUG 17	OCT18	DECOZ	
General number of the laboratory	aboratory	6286	6917	0606		12044		1684	2664	5166	7809	8973	11019	12502	15335	17534	
CODE PARAMETER	ÆIN3				) ) ) ) )	5 5 6 6	•										į
Tine	=	13. 15	12. 10	11.45	10.35	14.30	17.00	9.35	10.50	15.45	12.00	11, 40	9.40	8.35	10, 35		NO
	ပ	26.00	25.00	27.00	26.00	23.00	25.00	32.00	31,00	32.00	26.00	25.00	26 00	22.00	33.00		PL IX
	ure C	88. 58.	24.00	22, 40		21. 14	26.64	30.00	28. 20	28, 45	23, 90	21. 91	23, 11	21: 66	29. 26	29.82	
02080F Transp.(tube)	8 Y	0 21	2			11.0	ა. _ ა.	9.0	0 ·	2.5	. c	0.4	7 t	2.5 5.8	. 67	2.87	
October Conduct (field)		560	740	360	215	;			9	3	3		;	;	•	;	
		3 5	0.37	200	70	9	0.67			-							
	{	у 13	83	9 5	. 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	3 6 6	, 	,	50	6.46	6.33	6, 31	6, 79	6.35	6. 78	6.58	
08102F DO (field)	ng/1	0:30	ල ප	0,2	4	ci 3	0.3	1.0	9.0	0.3	0.1		0.5	1.4	0.3	١.	
05600L Cyanide	mg_CN/1	<0.010	0,010	0.020	0.010	0.020	0.010	0.025	0.030	0.030	0.023	0.030	0.028	0,048	0.018		
03202L EOD (total)	1/8u	\$ 5	S.	40	ଛ -	8	16	13	20	30	<b>Ç</b>	<u>.</u>	40	7.7	07	27	
	1/00	3 89	40	. E	. K	75	69	5	9.0	140	80	80	95	83	225	141	
Dissolved CO	#2/1	,	2	\$	. K	•	;	?	3	:	•						
		0.010	0.009	0.00	0.010	0.010	0.008	0.010	0.020	0.008	0.019	0.080	0.026	0.022	0.622	0,014	
	10	2.00	ы 55	3 -:	7.30	1. 70	2.00	3, 10	2.10	2.20	1. 51	1.50	2, 52		5.06	. : "	
		<b>8</b> 1	88	S :	6 6 6 7	•				:	•						
15252L Orthophoshate		9.5	2 5	÷ 5	0.40	6 6 6 6			ı	1, 20	2 6	1.00	90 0	7.0	. d3	1. 30	
Organic rhospn	,	3 5	25.5	6 6 5 0	3 S	2 5		•	1 ~	3 5	200	9.00	3 - 2	2.5	807	5.50	
01336L Nitrate Witnown	1/K 55 US	4 d	9 6	g e n d	3 5	8 8		2 6	9.00	000	0.043	0.030	0.045	0.026	0.053	0.040	
		0.010	0.003	0.080	0.200	0,002		0.008	0.020	0.00	0.003	0.004	0,006	0.004	0.003	0.003	
		20.00	24, 00	10.00	3.00	10.00	11.80	19.00	15.00	16.00	17,14	10.00	16.29	12.83	14.00		
		8	17.00	90.0	8				:	:	:				•		
		17.50	20.50	8 8 	6 8	6		6.00	11.00	11.50	11.75	5.00	11.17	n	3. 46		
UTAUSL DISS ORGANIC R.		5 5 50 5 5 5 50	20.00	10 180	9. 61	910 01		0.00	15 050	16 005	17 19	10.03	16 34	12.86	14.05		
-		15. 160	14.033	10.180	8.400	3		0									
	**	e.	0.3	20.0	10.4	9.6	2 6	10.4	9,5	20.0	30.0	4.8	7. 2	5.6	vs	5.8	
				16.0	တ တ												
	/st !	<b>~</b> 2	3	;		<b>⇒</b> •	•	, ;					٠				
U65225 hexan extractable mg/1	ole ag/1	e ;	, &	\$ <b>\$</b>	n ç	» ς		976	32	08	<b>.</b>	UF	6	50	28	42	
		} **	3	2	3	3	3	3	3	3	3 8	5 5	;	25	v	20	
:		*					. '				;				2007	0000	
36111L Fecal Coli x1000		24000		17000	7.60	2300	3000	1100	13000	8000	3000				24000	13000	
36101L Total Coli x10		20000	6	, 00	) 160 v	8000	2000	1700	24000	13000	200	00077	20008	00000	<0.002	0.008	
20004L Catalum 20004L Lead	3 2	00 C	9 6	20.00	000	200 O	CO 02	0.02	<0.02	0.04	<0.02 <0.02				<0.02	0.08	
	Eg Cu/1	0.010	6.630	0.010	0.020	0.020	0.010	<0.00×	9,010	:					0.010	0.020	
	mg Cu/1	6.01	.0. 10.	10.0	0.01	<0.03										;	
	mg Cr/1	0.10	0.0	0.08	(0.01	5 <del>0</del>	(0.0) (0.0)	0.04	<0.01	0.0	0.00	0 03		0.06	0.14	(0.01 0.10	
	ug hg/1	e 6 0 6	60. ID	0.00	0.00	9.50	0.10	(0, 10 (0, 10	0.20	40.10	40.10	9 6	VG. 10	0.00	000	0.030	
30003L 210C	7/07 KM	25.5	0.040	0.040	000.00	0.020	000.0	co. 003	00.0		070.0			0.00			
	/67	3 5 3 6		9 5	C (0. 10												
	/80	8		6.00	0.00			٠									
	1/80	.00.00		00.00	(0.001)												
				,	5												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

General number o  CODE PARAMETING  CODE Time  COOGE Water ton  COOGE WATER  COOGE WATER  COOGUE  COOG	General number of the laboratory CODE PARAMETER UNITY CODE Time B 12062F Air temperature C COOSOF Transp. (tube) cm COOSOF Transp. (tube) cm COOSOF Conduct. (field) ms/ca COOSOF Conduct. (field) us/ca LT300F Salinity (field) us/ca LT300F Salinity (field) ms/ca COSOF Conduct. (field) ms/ca COSOF Conduct. (field) ms/ca COSOF Conduct. (field) ms/conduct. (field) ms/ca COSOF Conduct. (field) ms/coosof coosof conduct. (field) ms/coosof coosof c		;															
11 Tine 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	where is the labour to the labour the labour temperature temperature cer temperature duch. (field) linity (field) (field) (field) (field) (field) mide		- 93 XVX	/ 61 · ND/	AUC 25	SEP 28 0	OCT 20	NOV 20	FEB 09	*AR 10 /	APR 14 16	MAY 25 J	JUN 21 J	JUL 21	AUG 17	00118	DECOE	
	AMETER  . temperature .er temperature msp.(tube) monc.(field) dduct.(field) (field) (field)	ratory	6285	6921	9087	1	12006		1671.	2663	5165	7808	8972	11018	12501	15334	17633	
	te terperature ter temperature insp. (tube) iduct. (field) idity (field) (field) (field)	È			1 1 4 7 8				1									
•	temperature er temperature insp.(tube) iduct.(field) iduct.(field) (field) (field)		12. 20	11. 15	9.50	9.40	16, 30	16.00	11 40	10.05	14.50	11 15	10 55	00 6	8 00	10 10		5
	er temperature msp.(tube) duct.(field) duct.(field) linity (field) (field) (field)	Ų	28.00	88	23.00	25.00	29.00	35.00	33, 50	30.00	32, 00	25. 50	24.00	23.00	20. 00	31,00	27, 00 5	SAMPLING
	nsp.(tube) duct.(field) duct.(field) (inity (field) (field) (field)	ပ	25.68	23.00	21.00		28. 79	27. 24	32, 00	29, 30	27.83	24.09	21.39	22. 67	21. 21	28, 90		
	duct.(field) iduct.(field) inity(field) (field) (field) (field) mide		12.0	13			o 6	9.0	0.3	7.0	8	5.0	43	4.0	2	4,0	5.0	
	duct.(field) inity (field) (field) (field) mide	aS/ca					5.43	0.37	3.03	on on	3.07	3.56		4.89	1.58	6.48	7.07	
	inity (field) (field) (field) mide	uS/Ca	4500	3750	7850	896				٠				•				
	(field) (field) mide	ş.i	0.56	5	4.50	0. 20	2.71	0.18										
	(field) anide		5. 84	6. 22.	58	6.06	7.0	7.35	,	6.37	6.54	6.59	6.58	6.56	6, 48	6.67	5.38	
	inide	1/80	0.40	က	0.5	0.3	0.0	0.5	2.2	0.6	0.2	d			-	0.2	t	
		1/85 84/1	<0.010	<0.010	<0.010	¢6. 010	0.020	÷0.010	<0.010	0.040	0.020	0.030	0.060		0.039	0.011		
	BOD (total)	mg/l	ន	88	9	9	2	91	12	9	2	9	Q7	3 6	205	20	20	
	solved BOD	mg/)	01		9	7			!	!	;		?		;			
	COD (total)	08/1	•	53	430	55	220	170	69	90	140	=	010	229	181	378	326	
	Dissolved COD	mg/1			380	52			3	2	-	2	i		1	•		
	Phenol	/02	0.00	030	900	(Q Q)	0.030	0.00	000	500	000	100	0			0 00	000	
	Total Diocahomic		200	300	300	500	3 6		070.0	0.00	0.020	9	000	0.030	100.0	75.0	0.064	
15406! his	Dies Phoenhoms	7/4	96	3 6	3 -	3 6	7	3	2 :	₹	 C	1. 43	1.30	ř.	F	1.00		
	Orrhophochate	1 / C		3 6	3 -	36	60									;	,	
	riconosta te	7.7	2 6	3 8	200	3 6	3 9			,	<u> </u>	21 :	3	1. 24	02.1	7. 90 1. 90	1.40	
	Organic ringson	1/1 88	 00 :	36	0.50	0, 60	0.40			•	0.32	0.31	0. 25	0.30	0.69	0.02		
	Amonia Altrogen		3 6	3 8	27.60	30	10.00		9.00	4. 00	4.8	5. 23	2.00	4.35	5, 77	2. 71	4. 34	
07306L NIT	Nitrate Nitrogen		S S	60.0	0.03	35	0.04		0.05	0.0	0.01	0.062	0.060	0.048	0.017	0.059	0.045	
	Mitrie Altrogen	1/1 3	0.010	000	0. 003	0.400	200.0	í	0.010	0.030	0.005	0.006	0.005	0.003	0.002	0.002	0.002	
	Njerdani Altrozen eg N/1	7/1 20 1	200	3 5	3 5	3 5		o o	9.00	13.00	12.00	16. 25	12.00	13.62	11. 24	11.38		
	per A periodic in		99.57	3 5	3 8	3 6	5			•	•	:	;	,				
	Dige Orange a	1/2 2/2	1.5	3 8	3 6	2 F	9.0		3.06	9. G	œ.	11: 01	7. 00	9. 27	5. 47	7.5		
	Total Birthage	1/1 82	20.40		00.0	9 6	. 01			•		:	:	•	;			
	to Vitrogen	1/2	0.00	200	10.00	600	10.044		9. 000	10.010	17.015	10.01	12.07	13.0	11.20	10.71		
	Total Of alcaline ma/	1 (1) 2		200	20.50	200		č	9			9		•	ć	ų.	4	
	se Of alcaline	1/06	; ,		) C	ο α	) •	) :	7 .01	o .	7.0		7.6	).	o si	;	•	
		1/21	c	~	3	>	-											
	Sexan extractable mo/1	/01/	· <u>c</u>	7 7	a	<u>v</u>	; ;		ď									
-	Suspended Solids	1/00	Ş	. 5	3	3 5	2	: #	n 6	ě	-	Çc	96	ě	100	F	7.	
	2000		*	3	3	2	3	3	8	3	2	3 8	3 6	07	077	27	3	
08307L Dis	Dissolved TOC	mg/1	*									70	3		3	;		
	21 Coli x1000				20000	>160	50000		8000	2000	22000	13000	0000	9000	24000	130000	50000	
	Total Coli x1000	MPN/100m1				7.60	8000	,	24000	0008	28000	12000	00071	0000	2000	130000	00006	
	Cadmium		0.010	0,014	0.016	c0. 005	c0.002	600.00	200.00	0000	0000	0000	2000	200.0	2000	<0.002	0.013	
	30	ng Pb/1	0.04	0.50	0.0	0.05	¢0.05	0.00	60 0	60 00	90 0	60 0	2000	20.0	1000	<0.02	0.12	
	Copper	ng Cu/1	0.030	0.030	0.030	0.020	0.020	0.010	9 6	20.0	<b>?</b>	2	200	6.0	0.00	<0,005	0,020	
	Chronium TV	(Ji)	0	900	3 6	000	30	3		5				3.5				
		[/_U	100	5	5 0		; ;	0.0			0	3				10 07	10 02	
	Mercury	IIG Ro/		5 5	5 0	5 0		5 5	10.00	5 6	20.00		5 9	50	56	, c	0 10	
	نائ	mc 7c/1	000	001	200	200	0.00	2.5	00.00	0.70		2 5	0.00	0.73	200	0 030	0.070	
	200	1 /11 7 Pin			9 5	3	0.000	0.010	600.0	0.200	0.000	U. 100	0.020	0.000	6.100	2		
190011 90	1 S S	(X)	90.00		00.5	(6, 90)												
	300	1/20	c0. 001		ਤ ਹੁੰ	9												
18023L pp	300.00	1/8n	<0.001		00:	0.00												
	900	ng/]	(0.001		·0.001	ćo. 001	٠											
181701 PCE	PCB's	/Sn	ć0.01		0,0	0,01												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

Control   Cont	,	NO. OF SAMPLING			63	m	77	5	<b>ω</b> .	<b>(-</b> -	. <b>co</b>	- <b>c</b> p	10		13	13	14	15	16
Participation   Participatio	DATE OF	SAMPLING	1		i -		1		82	60		23	83	;	JOL 19	61 9AV	NOVOS		DEC06
No. of the control	General 1	number of the lab	oratory	6418		! ! !	•	12001		1672	2573	4945	7811	8974	10784	12687	16048		18572
Transportance   Conference	3000	PARAMETER	FLIN				t 1 1 1 1								; ; ; ; ; ; ; ;	 			
Transactions of the contract C 52.5 O 24.0		Tine	==:	10.25				9.30	9.30	12, 30		15, 45	13.35	12.30	11.20	11. 00			10.2
National Process   National Pr	02062F	Air temperature	U	85 90 90				30.00	32,00	34.50		32.00	25.00	26,00	28.00	21.00		WP1.1%G	38.0
Condext. (Titled) 5/67 at 18, 0 12	02061F	fater temperature	ڻ ب	25. 55				26.8	25.69	32, 50		28.85	25, 03	22, 99	23.02	21.64			29. 4
Condett. (Field) & Science 120   Science 120		Transp. (tube)		 				6	ည်	0.28		9.00	6	,-	c,	5,	2.0		6-5
Salinity (Titlet) & K. C. 20 120 120 120 120 120 120 120 120 120		Conduct (field)						o. 36	0.19	0.37		0.46	0.27	0.30	0.24	0.24	0.28		6.3
Strict (Titlet)		Conduct (field)		420	420	,	,												
### Circle   Control   E.59 & E.29		Salinity (field)	s#	0. 20	0.21			0	0.03										
Decirior		off (field)		8, 59		٠.		7.04	. 60 250 240		98	95	6.63	6.66	6. 53	6.63	50 9		
Control   Cont		(P(4) (A)	1/0	200	7	ť	,		; (-	- 0	3	3 -	3	5	;	3	•		:
ESPECIALLY SET 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Cyanide	200	300	000			270	2.5	5 6	3 6	7 6	9 6	000.0	7 6	5 6	000		1
Discipling 20, 20, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1	10000	מייים (יייים)		;	3			2 0	) )	770.0	30.0	3 6		900.0	0.00	-	0.00		ŧ
Description   Section   Color   Colo	720290	Ect (total)	1/2	3 5	8	•		40	a	9	2	73	3	₹	Ŕ	<b>2</b> 9	80		•
Dissolved too	75020	DISSOIVED BOD	1/2/1	3	į	,			;									•	
President COD   President CO	10830	CUD (fotal)	1/2	Đ.	Z			2	20	ន	ន	130	160	100	62	180	92		~
President   State   Control   Cont	083031	Dissolved COD				•	•					,							
The control of the	06534L	Pheno!	1/32		0.020		,	0.005	0.002	0.020	0.020	0.020	0.020	0.030	0.006	0.018	0.007		0.0
Disselvents at \$P\$   1.00	154081	Total Phosphorus		2 8	~; 공			1, 65	. S	1. 70	1.80	2, 35	1.62	1.50	1.23	1. 51	1,35		
Organic Nicrogen as N1 0.55 2.00 0.00 0.00 0.00 0.00 0.00 0.00	15406L	Diss. Phosphorus	17 Bit	2	2														
Properties National Process   Reg   1.15   1.15   1.00   1.00   1.00   1.29   1.29   1.20   1.29   1.20   1.29   1.20   1.29   1.20	152521	Orthophoshate	E2 P/1	0.33	8			0, 90				1.15	==	1.30	0, 96	1.07	1.05		ö
National Streeges   Nati		Organic Phosph		1. 15	8		,	0.75				1. 20	0.52	0.20	0. 27	0.44	0.29		
Nitrie Nitrogen at Ni 0.02 0.29  Nitrie Nitrogen at Ni 0.02 0.029  Nitrie Nitrogen at Ni 0.010 0.005  Ligidali Nitrogen at Ni 0.000  Ligidali Ni 0.000  Ligidali Nitrogen at Nitroge	075561	Amonia Nitrogen		8.00	88		,	8		9.00	4.90	3. 25	5. 10	4.00	3.44	E.	4.75		H
No.	07306L	Nitrate Mitrogen		0.05	0. 20	٠		0.04		0.02	0.03	0.01	0.059	0.040	0.057	0.013	0.029		ö
Vicelah Nitrogen by Ni   9.00   18.00   11.00   8.50   10.00   17.16   10.00   17.16   10.50   12.67   7.66   13.31     Diss. Vicelah Nitrogen by Ni   8.00   7.0	072091	Nitrite Nitrogen		0.010	0.002		٠	0.005		0.09	0.030	0,020	0.005	0.006	0.012	0.004	0.003		0
Diss. Vicidahi K. et N. I. S. 00 7.00 - 2.00 - 4.00 6.75 12.06 6.00 9.23 4.55 8.56 0.30 0.35 0.35 0.35 0.35 0.35 0.35 0.35	070081	Kjeldahl Nitrogen	1 CK N/1	9.00	18 00			11.00	8.50	10.00	8	10.00	17 16	10.00	12.67	7. 66	13.31		
Organic Nitrogen         mg NI, 1.00         15.00         4.00         4.00         4.00         6.75         12.06         6.00         9.23         4.55         8.56           Diss.Organic N. sig NI 1.00         mg NI, 1.00         0.00         4.00         4.00         4.00         4.00         4.20         8.56         8.56         8.56         9.23         8.56         9.23         8.56         8.56         9.23         8.56         8.56         9.23         8.56         8.56         4.4         8.56         8.56         4.4         8.56         8.56         4.4         8.56         4.4         8.56         4.4         8.56         4.4         8.56         4.4         8.56         4.4         4.4         8.56         4.4 <t< td=""><td>07054L</td><td>Diss. Kjeldahl M.</td><td>1/N/3</td><td>8.00</td><td>7.00</td><td>,</td><td></td><td>٠</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	07054L	Diss. Kjeldahl M.	1/N/3	8.00	7.00	,		٠											
Diss. Organic N. seg NJ. 0.00 4.00 11.042 11.042 10.029 8.060 10.030 17.22 10.05 12.74 7.68 13.34   Total Calcaline seg/1 9.1 21.5 11.0 11.042 11.029 8.060 10.030 17.22 10.05 12.74 7.68 13.34   Diss. Organic N. seg/1 9.1 21.5 11.0 11.042 11.0 10.0 10.0 10.0 10.0 10.0 10.0 10.	07407L	Organic Nitrogen		:8	15.00	,		2, 00		4.00	4.00	6.75	12.06	6.00	9. 23	4. 55	8,56		
Octal Nitrogen         Dis. Nitrogen	07408L	Diss. Organic 8,		8	4.8	•	,												
Diss. Nitrogen mg N/1 8,030 7,205	07801L	Total Mitrogen	Dg N/1	9, 030	18, 205	,	٠.	11.042		10,029	8, 060	16.030	17. 22	10.05	12.74	7. 68	13.34		
Total CC alcaline mg/l 1 21.5		Diss, Nitrogen	mg N/1	8, 030	7, 205														
Diss. Cc alcaline mg/1		Total OC alcaline	1,38	-	21.5	,		11.2	0.1	10.4	7.0	5.5	26.0	4.2	ς, 83	un vi	4.4		7
DO		Diss. OC alcaline	ng/1			,	•												
Hexan extractable mg/l 18 15 - 8 6 4 4 20 50 65 30 55 88 80  TCC  TCC  TCC  TCC  TCC  TCC  TCC  T		2	m2/1	8.0	0			9		,			-						
Suspended Solids ag/1		Hexan extractable	3 802/1	60	5			60	35	4									
TCC   mg/1	10401	Suspended Solids		6	8		•	· 58	82	70	20	53	65	30	55	88	60		
Dissolved TOC   Fig. 1   #   Fig. 2000   Fig. 2   Fig. 3   Fig.	083061	32		**	!			:	1				~	21	12	ŝ	25		
Pecal Coli x1000 kFY/100al 24000 13000	083071	Dissolved TOC		**															
Total Coli X1000 KPN/100al 50000 - 23000 - 23000 - 30000 615000 30000 17000 30000 - 2000 Coddaium mg Ca/1 0.000 0.004 - 0.002 (0	36111	Fecal Coli x1000		24000			,	13000		24000	2000	17000	24000	11000	2300	30000	ı. L		1600
Cadatium mg Cd/1 (0.00 0.004 - 0.002 (0.002	361011	Total Coli v1000		20000	:			23000		30000	615000	30000	3000	17000	3000	30000			
Lead ag Pa-1 (0.02 0.08 - (0.02 (0.02 (0.02 (0.02 (0.02 (0.02 (0.02 (0.02 (0.02 (0.02 (0.02 (0.02 (0.02 (0.03 (0.03 (0.04 (0.0	480041	Cadaina		000	0.004			0000	70 00 D	CD 003	\$0000 \$0000	<0.002 40.002	<0.00	c0.005	00 00	<0.002	<0,002		<0.0
Copper eg Ca/1 (0.10 0.030 - 0.010 0.010 0.010 0.015 0	20004 20004	10.00	36	30	200	,	,	200	200	50.00				20 60	60 0	0000	0.04		5
Chromium IV mg Gu/1 (0.01 - 0.01 - 0.01 - 0.01 - 0.01 0.05 0.01 0.06 0.01 0.06 0.01 0.05 0.01 0.01 0.01 0.01 0.01 0.01	20005	Comme	100	300	200			20.00	35	1 400	200	?		000		210	0 015		0
Chronium rig CL/1 (0.01 0.02 - 0.01 (0.02 - 0.01 0.06 0.01 0.06 (0.01 (0.01 0.05 chonium rig CL/1 (0.01 0.02 - 0.01 0.02 - 0.01 0.05 chonium rig CL/1 (0.01 0.02 - 0.01 0.02 - 0.01 0.00 0.05 chonium rig CL/1 (0.01 0.02 - 0.01 0.02 - 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.	10000	Chaperine 11	33	,	300			20.5	5	200	3			;					
Carcellus Rg C77 (0.10 0.25 - 0.01 0.05 0.10 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.2	10000		3 3	5 e	5 6			5 6	. 67			0 00		00		. 6	10 07		c
prince ag Za/1 (0.030 0.120 - 0.040 0.035 (0.060 0.140 0.040 0.080 0.080 0.090 0.090 pp DDF ug/1 (0.001 - 0.040 0.090 0.090 0.090 ug/1 (0.001 - 0.040 0.090	120062	Margara	1 / 1 S	5 6	3 c			, ,	5 9	10.0	9 6	9 6	5 6	9 6	, c	, 2 1	0.25		ć
22.00	101000	Act cut y	1 /2 /2	2 60	3 5		٠	- c	0.00	200	3 6	3 2	3 6	000	200	300	000		; ;
1 / 20	10001	2007	7 /U7 Sta	3 5	0. 120	•		÷	0.00	00.00	200.5	3	0.040	000.0	0.000	0.000 0.000	2		
1/8n 000 od 1/8/1	10001	100 00	1/80	9 6			• .											-	
pp 500 ug/1	12000	op not	1/8n	3 5		•	•												
וואס ממל מלל	167081	500 od	1/8/1	9						:									
	18013	ong de	18/1	(A)			,												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

Control   Cont	DATE OF				63	က	4	w	9	۲-	8	თ	10	11	12	13	14	15 16
Name of the laboratory   City   Cit		SAMPLING		8	2	25	887	21	22	60	60	Ξ	23	21	UL 19		OCT18	DEC02
Application	лепетат	number of the labo	ratory	6284	6915	9036		12005		1670	2572	5164	7807	8971	10783	12446	15333	17832
The transportance of the control of	300	PARAMETER	אדואט									· ·	; ; ; ;					
Mit respectance C		Time	<b>*</b>	11. 45	10.45		9.25	16.00	16, 45	11.15	11.00		10.45	10.30	10.40	9.30	9, 40	
National Content (Total)   Score   1.0	02062F	Air temperature	, O	26.00	20.00		26.00	29. 50	31.00	33.00	30, 50		25.00	23.00	25.00	23.00	29. 50	
Consider (States)   State	02061F	Water temperature	ن د	27.01	25.00			29.68	27.15	32.00	31, 30		25. 22	23.27	23, 78	22. 94	28.62	
Consert (Titled)	)2080F	Transp, (tube)	8 3	7.0	2			ထ	ις Ο	0.30	9.00		5, 0	5.0	4.0	2.5	2.0	5, O
Authors (Figles)	20435	Conduct. (Ileid)	5/g				į	3. 12	2.63	1.09	=			2.89	0.97	0.88	4.11	5, 46
### Control	72005	Calinity (field)	8 2 3 4	- 850 - 8	1860	0218	3		3			-						
Decirio   Section   Control   Cont	DROPE	of the control of the	ė	, d	6 6 5 4	3.5	3 S	1. 32	t			4				t		;
Control 200 (1904)	0000	M (field)	5	9 6	; <	6.	3	3.5	3,5		6.5U	b, 45	6.6	6. 73	9.	e e	, a.	27.9
Discipling State   Column	2800	Cvanida	1/80 CM/1	200	3 5		- 6	3 6	3 C	5.6	و م د د	7 6	7.5	0	7.0	200	7.0	ı
Dissolved 500 ag/1 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	16068	ROD (soral)	1 / 1/2	3 8	3 8	30	3	30.5	210	0.010	. u4	u. 040	0.02	0.070	670.0	cen :	270.0	Š
December 200   Early   Colored 200   Early   Colored 200   Early   Colored 200   Early   Ear	82051	Discolved POD	1/2	8 5	3	3 5	3 9	3	Z	9	40	2	9	) 	140	120	02	0.0
Decision of Control	83011	(MS (rotal)	1,0	3 3	2	2 8	2 5	010	001	ć	5		0		6	•	0	
Paramic Prospherous ag Pri 2 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	83031	Dissolved COD	16/1 mg/]	3	5	2 8	3 8	2.7	771	2	9	E .	202	400	202	426	767	997
Total   Prospicors   strict   Total	65341	Phenol	1/9	0.020	0.00	9 6	300	000	000		0,0		.00	0	200		0.0	5
Comparison   Com	24001	Total Phoenhome	100	35		5	700.	0.020	0.000	0.030	0.040	0.045	0.02	0.000	0. 625	0.022	0.012	6. U.Z
Orthophosher R	54061.	Disc Phoenhoms	1 / L Z	3 6	3 5	0 0	2 5	CI '2	2.00	2. 20	06.7	99.	 	1.60	2. 11	1.94	1.03	
National Property   1.50   1.60   1	10565	Orthonhoshara	76	3 -	3 6	9 9	3 5											
Machine Nitrogene	1	Ordanio Phoenh	7/1 SE	3 6	9 6	88	3 6	⊋ i				3 5		3 3	 		5.5	1 7 7
Mitrate Mitrogen 88 M1 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	. 19552	Janonio Kittoro	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 5	3 5	3 8	3 8	3 5		,	, ,	26	3	0 10	5.55	0.03	50.0	;
Nitrice Nitrogen as N.1 2.15 0.10 0.00 0.00 0.00 0.00 0.00 0.00 0	19061	Nitrate Nitrocen	7 / N	9 5	9 6	3 5	3 8	25.00		2 :	9.60	9. 6	96.96	6.00	4.96	7.67	1. 67	3.01
Section   Nicrogen et al.   Section   Sectio	75041	Nitrite Nitrogen	1/2/20	2	60.00	36.9	200	ე ი ი		0.0	9 5	0.01	0.000	0.010	0.065	0.041	5 6	0.031
Diss. Kjeldahi M. 18 N. 1 20.00 4.00 8.00 6.00 1.00 1.00 1.00 1.00 1.00 1.00 1	7008L	Kieldahl Nitrogen	1 / A	24.5	2 5	3 5	3 6	200		200	3 5	0000	20.00	3 - 60	50.0	700.0	50.0	4.00.0
Organic Nitrogen as NI 21.50   17.60   3.00   4.70   2.00   4.70   2.00   4.00   17.19   5.00   18.58   21.69   7.21   Diss. Organic Nitrogen as NI 24.10   21.40   2.00   1.00   3.70   Diss. Nitrogen as NI 24.10   21.40   2.00   1.00   3.70   Diss. Nitrogen as NI 24.10   21.00   1.00   3.70   Diss. Nitrogen as NI 24.10   21.00   1.00   3.70   Diss. Nitrogen as NI 24.10   21.00   21.00   1.00   Diss. Nitrogen as NI 24.10   21.00   21.00   21.00   Diss. Nitrogen as NI 24.10   21.00   21.00   Diss. Nitrogen as NI 24.10   21.00   Diss. Organic as NI 24.10   Diss. Di	0541	Diss. Kjeldahi M.	58 N/1	20.00	4.00	88	9 2	ċ		? ?	3	3		11. 00		25.00	3 .	
Diss.Organic M. sg N/1 17.50 0.60 1.00 3.70  Total Nitrogen sg N/1 20.110 1.00 1.00 1.00 1.00 1.00 1.00 1	7407L	Organic Nitrogen	ER N/1	21.50	17.60	3.00	4.70	2.00		6.00	3.00	4.00	17.19	5.00	18.50	21,69	7, 21	
Total Nitrogen   Early   Strogen   Early	7408L	Diss. Organic M.	1/K 8a	17.50	0.60	8	3.3	<b>3</b>		}	3	3		•	3			
Diss., Clifforgen ag N/1 20, 110 4,040 8,460 7,000  Diss., Claidine ag/1 21.2 19.5 26.0 10.0 1.6 10.8 11.2 22.0 80.0 5.8 7.0 6.4 1.4  DO	78011	Total Mitrogen	E8 N/1	24.110	21.040	10, 160	8, 000	14, 052		14, 009	9, 120	9.008	24, 20	11.02	23, 61	29, 40	8.92	
Docation Eag/1   21.2   19.5   25.0   10.0   1.6   10.8   111.2   22.0   60.0   5.8   7.0   6.4   11.4     Dos Calcaline Eag/1   2   20.0   7.4   0   0   0     Hexan extractable Eag/1   27   35   7   19   8   5   8   5   8   5   8     Hexan extractable Eag/1   27   35   7   19   8   5   8   5   8   5   8     Hexan extractable Eag/1   27   35   7   19   8   5   8   5   8   5   8     Hexan extractable Eag/1   27   35   7   19   8   5   8   5   8   5   8     Hexan extractable Eag/1   27   35   7   19   8   5   8   5   8     Subpended Solids Eag/1   100   35   25   30   35   40   30   30   40   30   213   213   55     Subpended Solids Eag/1   100   35   25   30   35   40   30   30   40   30   213   213   55     Subpended Solids Eag/1   100   25   25   30   35   40   30   30   40   30   213   213   25   45     Subpended Solids Eag/1   100   25   25   30   35   40   30   30   20   25   25   25   25   25     Subpended Solids Eag/1   100   25   25   30   35   40   30   20   25   25   25   25   25   25   2	7802L	Diss. Nitrogen	1/N 8a	20, 110	4.040	8. 460	7,000						;			:	-	
Diss. Octaline mg/1	8402L	Total OC alcaline	ng/1	21.2	19.5	26.0	10.0	9	10.8	11.2		22.0	90.0		7.0	6.4	1.4	5.4
Packar   P	8403L	Diss. OC alcaline	ng/1			20.0	7.4											
Heydan extractable mg/1	81017	8	ng/1	0	0			0	0									
Suspended Solids mg/l	65221	Hexan extractable	mg/]	53	જ	¢	61	œ	· un	660								
Section   Sect	04011	Suspended Solids	1/80	601	જ	ន	දි	S	46	93	99	99	40	e	213	213	55	30
Ferent Cali x1000 WPN/10bal 2400 2230 > 160 130000 616000 616000 50000 17000 80000 130000 13000 13000 10000 WPN/10bal 24000 24000 13000 13000 13000 13000 13000 13000 130000 130000 130000 130000 130000 13000 13000 130000 130000 13000 13000 130000 130000 130000 13000 13000 130000 13	19330	22	m2/1	**									43	51	56	Ð	\$	10
Feeal Cali x1000 MPN/100ml 34000 2300 y160 130000 50000 616000 5000 50000 17000 8000 13000 13000 13000 Colembral Cali x1000 WPN/100ml 34000 - >160 23000 140000 160000 616000 50000 50000 50000 50000 17000 24000 13000 13000 Colembral 34000 - >160 230000 160000 160000 616000 50000 50000 50000 17000 24000 13000 13000 Colembral 35000 10.016 0.016 0.002 0.00	8307L	Dissolved 700	mg/1	#														
Octat   Coli   X   Col	101111 1011111111111111111111111111111	recal Coli x1000	MPN/100m1	24000		2300	×160	130000	20000	00006	C16000	2000	20000	17000	8000	13000	13000	14000
Leadersum mig Cd/1 U.016 0.016 0.004 00.002 0.002 0.002 0.002 0.009 0.006 0.006 0.002 0.00	71010	lotal Coll XIV00	MPN/100m1	30000			) I 60	230000	160000	160000	C16000	9000	90000	17000	24000	24000	13000	14000
Copper and Cu/1 0.031 0.045 0.022 0.022 0.022 0.022 0.02 0.02 0.02	30041	Cades um	16 Se/1	0.010	0.016	0.004	<0.002	<0.002	<0.002	0.005	6. 002	c0.005	0.008	0,006	<0.002	<0.002	<0.002	0.014
Chronium IV mg Cu/1 0.039 0.015 0.015 0.015 0.010 0.005 0.005 0.005 0.005 0.015 0.015 0.015 0.030 0.03	20004	read	1/0/ 8	ਣ ; = ;	9.0	0.05	0 05	<b>40.0</b> 5	0.05	0.05	.05 .02	0.05	<0.05	ć 0.02	<0.02	<0.05	0.02	0.10
Chromium as Cu/1 (0.01 (	10005	Copper	1/m) 8m	0.030	0.015	0.015	0.015	0.050	0.010	0.002	0.002			0.015	0.015	0.020	0.030	0.015
Controlled as Carl (L.D. 1 (L.	41016	VI multiple Ly	1/33	0.0	0.0	6 6	9	÷							- ;		;	;
##FFCOLY	12008	E LEGICA	1/20 88	j :	÷ 6	6.03	9.01	.0 10 10	0.0	6.0	.0 .0	0.0		0.0	9.	0.01	0.02	(0, 0)
2.10 ms 2.1/1 U. 39 U. 0.1 U. 0.1 U. 0.1 U. 0.0 U.	2000	xercury Till	1/8µ 8n	G 5	÷ :	9 9 1	<0. 10	 	0. 10	0	6. 10	0. 0.	0.10	60. 10	0.	0.32	0. 20	0.10
PP DDT ug/1 (0,001 (0,001 (0,001 pp DDT ug/1 (0,001 (0,001 (0,001 pp DDE ug/1 (0,001 (0,0)(0,001 (0,0)(0,001 (0,0)(0,0)(0,0)(0,0)(0,001 (0,0)(0,0)(0,0)(0,0)(0,0)(0,0)(0,0)(0,0	1000	2017	ng 2n/1	03.0	0.070	0.060	0.040	0.060	0.05	<0.005	0.080	0.060	0. 100	0.140	0.080	0.090	0.080	0.080
op DDE ug/1 <0.001 <0.001 pp DDE ug/1 <0.001 <0.001 pp DDD ug/1 <0.001 <0.001	3003E	TOO .dd	1/8n	  		(0.001	(0.001											
pp DDE ug/1 <0.001 <0.001 pp DDD ug/1 <0.001 <0.001	8022L	op. DDE	1/80	.0.001		.00	0.001											
ug/1 <0.001 <0.001	80231	pp, 00E	ug/l	ć0.001		0.00	6.001											
	80131	000 dd	1/8n	(0.001		<0.001	<0,001											

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

Name	National Control of the Lancatory   822   823   823   824	SMI JANAS: 30 OK	SAMPL ING		-	,		*****	4	ย			0	91	11	1.0	·	17	3.5	1 9 0
		i	Street Later of			,	3	-			~ :	0		į	;;	4	-	* -		۱ ا
PANNETER   DIVITY		DATE OF	F SAIPLING	(AK	g g	13	ន	83	8	7.7	60	69	UPR 14 M.		,		9	3CT18	05002	
Note   Comparison   Compariso	Market 1941	Genera	1 number of the labor		6283	8169	9085		12004		1669	2571	5163	7918	8970	10782	12445	15332	17531	
The contract of the color of	Transportance   Conference	89 E	25	TEINI				: : : :	•	: : :				1 1 1 1	i i i i i	) 1 1 1 4 4 8 9				
Accordance   Control   C	Here respectance C Reg 9, 25, 25, 25, 25, 25, 25, 25, 25, 25, 25		Tipe	-	92	10.15	9, 15	0. 0	15.30	14.45	55 02		14.05	9.10	10.60	10. 15	9. 15	9. 20	N 01 6	
Transfer (tue) 56.00 15.0 15.0 15.0 15.0 15.0 15.0 15.0 1	Agentication         Conduct (field)         28.5         14.5         14.6         27.5         11.6         2.6         11.6         2.6         2.6         12.6         3.6         2.6         1.6         3.6         1.6         3.6         1.6         3.6         2.6         3.6         2.6         3.6	020525		. W	90	22, 00	25.00	: 55 : 55 : 57	32.00	205	3 5		33.5	3 5	23.50	25.00	8	29.00	26.00.8	ABPLIE
Transectively, aside (i.e.) 8/cm 5.25 9.1400 15.2 9.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	Transfer (tab.) Signatury (tried) Signatury (tri	02061F		. 64	83	24.50	21.40	;	27.66	2.2	3 2		2 2	24.20	22.66	23.65	22.83	27, 30	28. 29	
Compact. (filted) 8, 55ca    Salitaty (filted) 8, 5ca    Sal	Conduct. (filed.) 8/45 8/45 8/45 8/45 8/45 8/45 8/45 8/45	02080F		8	11.0	23			⊗i	8	0.25		9	9	ı,	5.5	5,	2.0	5.0	
Author (filed) 46/24 (2014) 2014 (2014) 20	Additive (field) 46/54 (214) 4	02043F	Conduct, (field)						5.38	2,39	. 68		60	11.06	2.98	1. 56	87	4.48	3.5	
Statistical Notice   Statistic   Statist	Salitative K. S.	020/25		sS/Sa	6320	5390	14300	622												
## Chicking way 68 ft Reid	## Control	17300F		×i	(i)	5 38	8 8	0.30	2 13	9:										
Contricted) 25 (1914) 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Conticted by Section 1 20 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	10300F			6, 57	6.74	6.	6.45	6	9		6.70	6.40	6.52	6,68	8.81	6, 57	6.64	6. 44	
Objectived COD (1924)  By 200 (1924)	## SECONOLOGICAL SECONOLOGICA	C3102F	DO (field)		0.30	0.4	9	C.	C	6	-	9		e:		c	9	0	,	
Decision of the continue of	Particle	700990	Cyanide		020	0.010	10.010	<0.010	0.015	0.010		0.35	090	0.028	0.065	0.072	0.064	0.013		
Dissolved DD each 1	Dissolved COD early 1 54 159 2 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	082021,	ROD (total)		40	1	S	12	5	4	2	200	70	52	90	440	360	60	20	
Discolved CDD, (1921)	Dissolved Consolved March 1867 159 159 159 159 159 159 159 150 150 150 150 150 150 150 150 150 150	08205L	Dissolved 800		9		X.		:	:	2	\$	2	:	;	•				
Parameter may 1, 10 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Principle Construction ag/1 1 2 0 0 0.00 0.00 0.00 0.00 0.00 0.00	083011	COD (total)		Š	159		90	£	S	5	6.0	210	130	270	1427	850	396	237	
Parameter   Para	Parameter   Para	083031	Dissolved COD		,			8	•	:	;	3	;	:	;		;	-	i	
Total Prospherate at P1   1.00   2.00   1.50   0.55   2.00   2.70   2.	Distance in the control of the contr	065341			010	0.020	0,003	0.00	0.030	0.020	010.0	0.030	0.030	0.013	0, 030	0.022	0.017	0.029	0.027	
Diss. Prosphorius         27 pt         2.00         2.00         0.00 <td>Diss. Proceedings of Print Pri</td> <td>54081</td> <td>hosphoras</td> <td></td> <td>90</td> <td>3.00</td> <td>S</td> <td>80</td> <td>3 45</td> <td>900</td> <td></td> <td>200.0</td> <td>000</td> <td>88</td> <td>60</td> <td>2 82</td> <td>65.6</td> <td>7.8</td> <td></td> <td></td>	Diss. Proceedings of Print Pri	54081	hosphoras		90	3.00	S	80	3 45	900		200.0	000	88	60	2 82	65.6	7.8		
Cyclebrachater ag P/1 1.70 2.60 6.80 6.55 2.50 4.60 1.60 6.60 1.60	Companies Processes	154061	Diss. Phospharus		2.00	5 6	3 6	88	ì	3	<u>}</u>	<u>2</u> 3	3	20.1	3	,	i	:		
Organic Microgen ag N1 1 20 0 45 0 55 0 55 0 55 0 55 0 55 0 55 0	Organic Microgen ag N1 1 29 1 00 0 0 5 0 5 0 5 0 5 0 0 0 0 0 0 0 0	152521	Orthophoshate		1, 70	8	0.80	52.5	2.50				35	08.0	1.50	77	2, 04	1.69	1.66	
National Nitrogen mg Ni	Micrie Nicrogen ag Ni   2 gr 3 gr 3 gr 2 gr 3 gr 3 gr 3 gr 3 gr		Organic Phosph		2	2	6	15. C	i c			,	9 29		12	2.13	48	0.09	:	
Nitrite Nitrogen az NI 0.09 0.04 0.20 180 0.04 0.00 0.00 0.00 0.00 0.00 0.00 0.	Nicrosen ag Ni   0.09	075561	Ammonia Nitrogen		2.80	30	8	2 30	16.00		90.00	9.00	2 69	7	3.15	55	6, 79	3, 88	4, 72	
Nitrice Nitrogen at M1 0 010 0.004 0.025 0.030 0.005 0.010 0.022 0.010 0.002 0.003 0	Naticity   National State   National S	073061	Nitrate Nitrogen		0.09	9	0.20	80	6		(0.0)	0	0.0	0.046	<0.01	0.026	0.026	0.051	0.045	
Victorial Nitrogen as N/1   2.2 00   19.00   10.00   7.00   21.00   13.00   17.00   12.00   12.00   12.00   22.03   45.44   9.139     Diss. Nitrogen as N/1   21.00   10.00   9.00   9.00   21.00   13.00   13.00   12.00   12.00   12.00   12.00   12.00     Diss. Nitrogen as N/1   21.00   10.044   9.220   8.600   21.042   13.010   1.004   12.010   10.044   9.220   8.600   10.04   9.220   8.600   10.04   9.220   8.600   10.04   9.220   8.600   10.04   9.220   8.600   10.04   9.220   8.600   10.04   9.220   8.600   10.04   9.220   8.600   10.04   9.220   8.600   10.04   9.220   8.600   10.04   9.220   8.600   10.04   9.220   8.600   10.04   9.220   8.600   10.04   9.220   8.600   10.04   9.220   10.04   9.220   8.600   10.04   9.220   8.600   10.04   9.220   10.04   9.220   8.600   10.04   9.220   10.04   9.220   10.04   9.220   10.04   9.220   10.04   9.220   10.04   9.220   10.04   9.220   10.04   9.220   10.04   9.220   10.04   9.220   10.04   9.220   10.04   9.220   10.04   9.220   10.04   9.220   10.04   9.220   10.04   10.04   9.220   10.04   10.04   9.220   10.04   10.04   9.220   10.04   10.04   9.220   10.04   1	Signature   Sign	07209L	Nitrite Nitrogen	1/N 3n	010	00.0	0, 020	0.800	0.002		0.010	0.020	0.010	0.005	0.000	0.014	0.003	0.003	0.005	
Diss. Siellahi M. Reg. M. 1 21.00 10.00 9.00 6.00 5.00 1.00 5.00 7.96 11.85 16.50 38.65 5.51 5.50 5.50 5.50 5.50 5.50 5.50 5.5	Diss. Kirchen R W I 21.00 10.00 9.00 6.00 11.00 5.00 11.00 5.00 11.00 5.00 11.00 5.00 11.00 5.00 11.00 5.00 11.00	070081	Kjeldahl Nitrogen	ng N/1	8	19.00	10.00	8	21.00	18.00	13.00	1.00	12.00	12.38	15.00	22.03	45.44	67 67		
Organic Mitrogen ag X/1   19, 20   15, 70   2, 00   4, 70   5, 00   1, 00   5, 00   7, 96   11, 85   16, 59   38, 65   5, 51    Total Mitrogen ag X/1   19, 22   67   1, 00   3, 70   2, 00   3, 70   10, 70   10, 70   1, 00   3, 70   10, 70   1, 00	Dissolved Tockman National Nat	07054L		1/N Ba	1.00	10,00	9.00	8,8												
Diss. Organic N. sz N.1 18.20 6.70 1.00 3.70 Diss. Nitrogen ag N.1 22.100 19.44 10.22 8.500 21.042 Diss. Nitrogen ag N.1 22.100 10.044 10.22 8.500 21.042 Diss. Nitrogen ag N.1 22.100 10.044 10.22 8.500 Diss. Nitrogen ag N.1 22.100 10.044 10.22 8.500 Diss. Nitrogen ag N.1 21.100 10.044 10.22 8.500 Diss. Nitrogen ag N.1 21.100 10.044 10.22 8.500 Diss. Organic ag N.1 21.100 10.044 10.04  Diss. Organic ag N.1 21.100 1	Diss. Organic N	07407L	Organic Nitrogen		9. 20	15. 70	5.00	4.70	5.00		5.00	1.00	s. 8	7.96	11.85	16.50	38. 65	5. 51		
	Dotal Nitrogen ms Ni   22 100   18 044   10, 220   8, 600   19 044   10, 220   8, 600   19 044   10, 220   8, 600   19 044   10, 22 100   18 044   10, 22 100   18 044   10, 22 100   18 044   10, 22 100   18 044   19, 21   10 0 10 044   2, 22 0   8, 600   19 04   19, 20   19 0   1	074081	Diss. Organic N.		8. 20	6. 70	9:	3. 70												
Diss. Nitrogen ag Wil 21, 100 10.044 9, 220 8, 600  Total Calculation ag/1 10, 0, 28, 5 28,0 10,4 5,6 10,4 10,6 22,0 5,2 5,6 14,0 13,5 6,7 6  Diss. Nitrogen ag Wil 21, 100 10.044 9, 220 8, 600  Diss. Occalculation ag/1 10,0 28,5 28,0 10,4 5,6 10,4 10,6 22,0 5,2 5,6 14,0 13,5 6,7 6  Diss. Occalculation ag/1 25 26,0 7,8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Diss. Nationage mag N1 21.100 10.044 9.220 8.600	078011	Total Nitrogen		물:	13.044	10. 220	3, 500	21.042		13.010	7,040	12.010	12. 42	15.01	22.09	45, 43	9, 45		
Diss. Oc. alcaline mg/1	Diss. C. alcaline ag/1 10.0 28.5 28.0 10.4 5.6 10.4 10.6 22.0 5.2 5.6 14.0 13.5 5.7 5.0 5.0 5.1 5.2 5.5 5.5 5.5 5.5 5.7 5.7	7,000	Diss. Nitrogen	··· ~ .	96	10.04	9, 220	8. 500	,			-	. ;			:	:			
DO Hexan extractable mg/1 25 < 4 7 20 9 4 10 10 10 10 10 10 10 10 10 10 10 10 10	## Second control of the control of	70890	Total Ut alcaline		0 0 0	60 60 61		10.4	uri (ru	10.4	10.6		22.0	NI Un	က်	4.0	23.51	6.	6.4	
Heach extractable mg/1	Heach extractable mg/1	160,60	DISS. OF AICHUR				25.0	33 1~÷	•	•										
Suspended Solidas mg/l 38 39 25 30 35 50 16 25 20 15 1126 775 11126 779 103 105 105 105 105 105 105 105 105 105 105	Suspended Solida mg/1 38 30 25 30 35 50 16 27 1126 775 1126 739 103 105 1125 mg/1 4 4 76 40 10 125 mg/1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	777197		780	Þ y	<b>&gt;</b> ;	,	5	<b>-</b> •	<b>-</b> :	· <u>•</u>									
TOC	TOC	10401		1/X/1	3 %	7 5	- 12 - c	3 8	יי מ	ទីដ	2 €	2	Ċ	96	7,	1196	190	103	G.	
Dissolved TOC   mg/l   #	Dissolved TOC	083061	TOTAL PROPERTY.		3	3	3	3	3	3	3	2	3	3 5	2 7	77	5 15	97	3 6	
Fecal Coli xi000 kPV/100al 5000 50000 160 23000 50000 24000 23000 24000 24000 24000 30000 24000 30000 24000 30000 5000 500000 50000 50000 50000 50000 50000 50000 50000 50000 50000 50000	Fecal Coli xi000 kPV/100al 5000 50000 160 23000 50000 24000 23000 24000 24000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 30000 24000 3000 30000 3	083071	Dissolved TOC	1/2/1	. 40									i	=		•	:	:	
Total Coli x1000 MPV/100al 13500 160 30000 90000 615000 90000 15000 24000 30000 5000 500000 500000 500000 500000 500000 500000 500000 500000 500000 500000 500000 500000 500000 500000 5000000	Total Coli x1000 MPN/100al 13500 - 360 300000 90000 615000 90000 150000 24000 24000 30000 26000 250000 250000 250000 250000 25000 2500000 250000 250000 250000 250000 250000 250000 250000 250000 2500000 2500000 2500000 2500000 2500000 2500000 2500000 2500000 2500000000	36111	Fecal Coli x1000	30m	0005		_	0.150	220000	50000	50000	0000	24000	2300	30000	30000	0.4000	30000	30000	
Caddatum         rig Cd/1         0.010         0.014         0.025         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002         <0.002	Cadatum         rg Cd/1         0.010         0.014         0.025         0.022         0.032	361011	Total Coli x1000		3000			2 2	30000	00000	00000	615000	900	180000	30000	20000	24000	30000	30000	
Lead mg Ph.1 0.06 0.10 0.12 0.02 0.02 0.02 0.02 0.02 0.02	Lead mg Pb.1 0.06 0.10 0.12 0.02 0.02 0.02 0.02 0.02 0.04 0.02 0.06 0.04 0.05 0.05 0.05 0.05 0.05 0.05 0.05	48004L	Cadaium	:	010			200 07	00000	0000	2000	200.00	2000	00 DO	0000	000	000	<0.002	0.008	
Copper mg Cu/1 0.080 0.040 0.040 0.060 0.010 0.040 0.040 0.040 0.120 (0.060 0.010 0.040 0.040 0.040 0.040 0.050 0.010 0.040 0.040 0.040 0.050 0.050 0.050 0.040 0.040 0.050 0.	Copper mg Cu/1 0.080 0.040 0.040 0.050 0.010 0.040 0.0	82004L	)csq		9.08			60	50	0000	¢6.02	0.05	D 0	0.02	¢0.02	0.08	0.04	<0.02	0.10	
Chromium 7v zg Cu/1 (0.0	Chromium TV zg Cu/1 (0.0	2900SL	Copper	,	080	•		0.010	0.060	0.010	0.040	0.640	;		0.040	0, 160	0, 120	<0.005	0.020	
Chreatum ag Cr/1 (0.01 (	Chreaium ag Cr/1 (0.01 (	24101L	Chromium IV		0.01			10.0	0.03	:										
Neceury   UR Hg/1		240021	Chrosium		0.0			0 0	Ü.0.	(O D)	(0.01	0.01	90 0	0.18	0.04	0.10	0.13	<0.01	<0.07	
Zinc mg Zn/i 0.080 0.070 0.120 0.020 0.020 0.005 0.070 0.100 0.090 0.050 0.020 0.005 0.070 0.100 0.040 0.090 0.500 0.020 0.020 0.005 0.070 0.100 0.040 0.090 0.050 0.020 0.020 0.005 0.070 0.001	Zinc mg Zn/1 0.080 0.070 0.120 0.020 0.020 0.020 0.050 0.070 0.000 0.020 0.020 0.000 0.070 0.000 0.020 0.020 0.000	\$00131			97			0	. 15	01.0	0.0	9	9	(0, 10	0.10	8	0.60	<0,10	0, 10	
pp DDT ug1 (0.00) (0.00	pp DT	300031			080			000	200	000	200	100	200	200	000	000	250	0.00	ם משט	
op 005 ug/1 (0.00) (0.0	op 005 ug/1 (0.00) (0.0	180011			3 5			200	000.0	050-0	.0.	5	20.5	5	. 000	. 200	000		2	
20 20 1/2 1/2 20	PG S	180031			3 2			100.00											٠	
10 00 10 10 10 10 10 10 10 10 10 10 10 1	PCB'S URT (0.01 (0.01) PCB'S URT (0.01) (0.01) PCB'S URT (0.01) (0.01) PCB'S URT (0.01) (0.01)	10001			3 8			1 6 1 6 1 6				-								
10 07 10 07 1/8h don'dd	PCB'S: ug/1 :0.001	107001			3 5			ću. 001												
	10.35 10.35 1/8n c c c c	107.0			5 6			10.00												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey

	NO. OF SAMPLING		, <b></b> -	2	m	₽.	ιΩ	co		∞	6	10	Ξ	12	13	14	15	16
क्ष	DATE OF SAMPLING		4AY 06.	61 KM	AUG 25	SEP 28	эст 20	50V 24	FEB 09	KAR 09	APR 14	*AY 25	JUN 21	JUL 19	AUG 16	0CT20	DEC02	
General	General number of the laboratory	laboratory	6282	6920	9084		12003	ì	1668	2570	5162	7806	8968	10781	12444	15525	17630	
CODE	AMETER	UNITY					:											
	Time	-	10.20	9, 20	8.50	8.50	14. 45	14. 45	10, 15	10,05		10.00	9.15	9.35	8.50	8.40		
02062F	Air temperature	U	31.00	22.00	23, 00	24, 00	28 29 20	28.50	33, 50	30.50		22.00	21.00	23.00	23.00	26.00		SAMPL ING
02061F	Cure	ບ	26.00	22. 20	20.40		28.91	27. 24	29. 90	29. 10		24.00	21.45	22. 45	21.09	26.17	28.05	
02080F		5		<u> </u>			0.7	э с С	9.30	 	3.00		, y,	6.0		5,0	e .	
300000	Conduct, (11e1d)		650	1000	1000	100	0.35	65	2			<u>-</u>	, to	. 3a	2	1. 4.1	7. ∩R	
175070		E /2 %	900	000	0701	0 0	97	-										
2005	1616)	Æ	2 2	20 G	₹ 3 u	2 C	9 6	2 €		•				,	•			
100001	Ceresto Ma	5	8 6	3 3	0	9 6	# T	9 6	. :	÷ ÷	25.0	2.5		ر د د د		4, 54	b. 24	
170100		1/88	3 5	2.5	3 6	300	- u	3 5		7.0	200	2 00	0					
200000	Cyantoe	1/2/28	0.010	20.0		20.00	200	610	0.015	020.0	0.030	. 020	620.0	0.029	0.0	070.0	•	
150500	۶	1/8	3 8	3	3 =	Ξ,	3	<u>*</u>	0.7	ű	0.7	20	3	និ	e C	2	4	
10000		* / ¥ / *	3 5	57	2 5	5	180	O	S.	97	6	9	010	600		Š		
783031	2	1 7	₹ .	5	3 5	3 8	2	3	200	÷.	007	140	9e7	373	140	?	> -	
065341			0.00	0.00	0 007	0 007	0.030	0.00	000	000	000	000	070			3000	6600	
15,4061	Ohoenhorne	70	50.5	36	5 -	0.00	90	30	000.0	9 6	200.	0.00	0.0.0	50.	20.0	, , , , , , , , , , , , , , , , , , ,	4	
		1 / A P/ 1	3 5	3 =	2 %	2 9	3	3	S. 00	1. 30	7	-	9	 -:	7. 4	3		
165651		1/2 26	8 8	2	3 6	2 2	58			,	4	ر م	0.80	08.0	Ç.	0 80	68.5	
	_	1/d ou	12	× -	8	9	6				3 -	; c	2.5	3 6	3 20		;	
5561	ç	/N 201	2.40	3.00	9.00	2, 40	15.00		8.00	3.50	4	2 2	2,00	8	3 6	67 6	3.47	
073061		1/X 201	: eg	0.08	0.0	20:1	0.03		0.03	0.03	0.03	0.080	0.040	0.031	0.019	0.024	0,009	
072091		EQ N/I	0.010	0.00	0.400	0.300	0.003		0.020	0.030	0.040	0.00	0,003	0,008	0,001	0.005	0,004	
7890		1/N 3m	16, 00	14.00	30.00	7.00	17. 00	18.00	10.00	5.00	17.00	15.25	8.00	12.92	12, 83	8, 18		
102 103 103 103 103 103 103 103 103 103 103	Diss. Kjeldahl N.	1/N Ba	16.90	S .	7.00	9.												
07407L	Organic Nitrogen		13.60	8:3	8 :	4.60	2.00		5.00	1. 50	3 00	10.91	4.75	9.94	8.95	4. 69		
408L	Diss. Organic N.	N/ See	13. 60	2.00	3	3.60										,		
188	Total Mitrogen	IN SM	9. 190	13.064	520	8.800	17.033		10.040	5.060	17.014	15.31	ත් ත්	12.96	12, 85	8. 21		
7705.0	Diss Nitrogen	1/V 8th	9,	등 등		3.800		,		•	į	•				٠		
084025	Total OC alcaline mg/1	1/26	n n		20.0	တ ( ဘ (	do do	10.4	10.0	6. E	27.0	30.0	٠٠; ١٠		6.0	e,	, c	
084031	Mass, of alcaline	7/音		•	<u>.</u>	9	c	•										
710100	Howan oversamia	7 /8	- ç	2	•	•	<b>5</b> F-	2 5										
10700	Sugnanded Solide	1 / 2	3 5	3 4	r K	r (	÷ ;;	. F	<u>.</u>	00	01.0	8	7.0	10	100	75	25	
190250	TO.	7.0	3	?	3	3	3	3	5	3	?	£ 0	3 2	, t-	3 6	t to	35	
08307L	Dissolved 700	[/56	*									?	2	5	3	:	!	
361111	Fecal Coli x1000	MPN/100m1			160000	0910	80000	50000	11000	0.16000	30000	20000		2000	13000	80000	30000	
361011	Total Coli x1000	MPN/100m1				> 160	130000	00006	30000	016000	3000	00006		8000	13000	130000	30000	
48004L	_	28 Cd/1	¢0.005		0.004	<0.002	0.005	<0.005	<0.002	<0.002	<0.002	<0.002	<0.002	:0.005	0.005	<0.002	0.002	
82004L	Lead	ng Pb/1	<0.02		0.04	ر0.02 ا	<0.02	0.05	<0.02	<0.02	0.04	<0.02		<0.02	<0.02	0.04	0.08	
300SL	Соррег	ng Cu/1	0.020		0.015	0.015	0.060	0.010	0.010	0.002				0.030	0.040	0.020	9,020	
241011	Chromium IV	mg Cu/1	<b>.0</b> .03	0.0	6.01	0.0	:0.01										. ;	
240021	Chronium	mg Cr/1	0		0 0 0	(0.0)	0.01	0 0	0.01	10.0	0.05	0.01	(0.01	,0.01	<0.01 0.01	0.01	10 0>	
80013L	Kercury	ng lig/1	9 9		0 10	0.10	 -:	°0. 10	© 10	0. 20	0.10	(0.10	9.	0.15	0. 10	0.10	0, 10	
300031		mg Zn/1	0.020		0.020	0.040	9.	0.020	ć0. 005	090.0	0.050	0.050	0.030	0.100	0.090	0.080	0.060	
80011		ug/]	.0. 00I		:0001	.0. 00I												
18022L	301.do	[/8n	6.8		.0.00i											,		
80231	pp. DDE	ng/j	.0.00i		(0, 00]	0.001												
180131	000,dd	1/8n	100 '0'		(0, 001	<0.001												
					,	,												

Table APP. 1-4 Results of River Water Quality Analysis of Regular Survey NO. OF STATION : 25 (MN-000) RIVER NAME : Canal do Mangue 1992

Charge SAMPLING	NOV 20 FEB NOV 20 FEB 11.15 31.05 32.27 58 28 28 28 28 28 28 28 28 28 28 28 28 28	09 WARE 1557 100 3 1.70 2 1.20 1	09 APR 14 2569 5161	MAY 25 7805	JUN 21	101. 19	AUG 16	0CT18	.DEC02
PARMETER	20 FT 1.05 FT	09 MAR 1667 1.25 1.20 1.20 1.50 1.50	APR 1	#AY 25 7805	JUN 21 8968	101, 19	AUG. 16	0CT18	DEC02
PARMETER   ENITY   S. 28   S. 20   S. 20		6361	[5	7805	8968				
Newhere   Newh						10780	12443	15331	17629
Time  Air temperature  C  SB: 13									
Afr tesperature C 27.00 22.00 21.50 4.00 Eater temperature C 25.13 23.50 21.50 Eater temperature E 25.13 23.50 21.50 Eater temperature E 25.13 23.50 21.50 Eater temperature E 25.10 Eater temperature E 25.	· ·		30 11,00	9.00	8.30	8.40	8.20	8, 30	8.20 NO
Transp.(tube)	, and the second		20		21.00	23, 00	20.00	27.50	
Transp. (tube) cm   11.0   15   15   15   15   15   15   15   1	· ·		30		21.95	22. 47	21.87	25, 58	27. 25
Conduct. (field) ENCED Conduct. (field) ENCED Conduct. (field) ENCED Solimity (field) ENCED Solimity (field) ENCED Solimity (field) ENCED Solimity (field) ENCY DO (foral) ENC	· ·		20		'n		2.5	2 0	10.0
Consuct (Treid) \$5/cm   1340   3570   2200   2500   Salinity (field) \$\$\times   15   15   15   15   15   15   \$\text{DOTKILL}\$ (field) \$\$\times   15   15   15   15   15   15   \$\text{DOTKILL}\$ (field) \$\$\times   15   15   15   15   15   15   \$\text{DOTKILL}\$ (field) \$\$\times   15   15   15   15   15   15   \$\text{DOTKILL}\$ (field) \$\$\times   15   15   15   15   15   \$\text{DOTKILL}\$ (field) \$\$\times   15   \$\text{DOTKILL}\$ (fi	· ·		.1		ς. 33		4,84	2. 48	3. 23
## Salinity (Tele) ## 1.00   1	· ·								
## Chieful ## 1971 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.5				٠					
Cyalifed 3 27,1 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.					10. 25.		9.40	2 .	6. 54
Cyanide  Cya					410		1 7	20.5	•
Dissolved BOD mg/1		0.010 0.0	0.009 0.025	0.045	00.010	0,003	0. UZ1	0.011	
CONTINUED   CONT					2		2.	?	0.7
Control   Cont					:	vec	ć		
Phenosolvec			201 00		007	n	100	e e	201
Total Diss. Nitrogen ag N/1 1.50 2.00 0.00 0.00 0.00 0.00 0.00 0.00 0					000	0	6	6	
Diss. Prosphorus				,	0.00	5 -	6.0.5	35.	710.0
Diss. Processor ag 7/1 1.30 1.00 0.10 0.20 0.20 0.20 0.20 0.20 0.2		5			. 77	2	÷	7: 10	
Authophospate mg 7/1 1.30 0.30 0.30 0.50 0.50 0.50 0.50 0.50 0		•			00		8		
Aurganic Mospin ag 771 2.00 3.00 0.50 0.50 0.50 0.50 0.50 0.50 0					) c	∯ ç 3 c	300	3 5	7
Amazonia Aitrogen az A/1 1.50 2.50 0.00 2.90  Nitrite Nitrogen az A/1 0.09 0.50 0.35  Nitrite Nitrogen az N/1 0.09 0.50 0.35  Nitrite Nitrogen az N/1 0.000 0.007 0.095 0.150  Niselabil Nitrogen az N/1 19.00 12.00 8.00 5.00  Diss. Nitrogen az N/1 17.09 8.00 2.00 2.00  Diss. Nitrogen az N/1 15.70 5.00 2.00 2.10  Diss. Nitrogen az N/1 17.090 8.507 8.410 8.350  Diss. Nitrogen az N/1 17.090 8.507 8.410 6.350  Total Nitrogen az N/1 17.090 8.507 8.410 6.350  Diss. Nitrogen az N/1 17.090 8.507 8.410 6.350  Diss. Nitrogen az N/1 17.090 8.507 8.410 6.350  Diss. Nitrogen az N/1 1.001 25.5 14.0 7.8  Diss. Nitrogen az N/1 1.090 8.507 8.410 6.350  Diss. Nitrogen az N/1 1.090 8.507 8.410 5.00  Diss. Nitrogen az N/1 1.090 8.507 8.410 5.000  Diss. Nitrogen az N/1 1.000 8.700 9.100  Cadaiu Sign NPA/100m1 3000 0.10 0.00 6.002  Lead Sign NPA/100m1 2.000 0.10 0.00 6.002  Lead Sign NPA/100m1 2.000 0.10 0.00 6.002					3 9	7,7	77.0	. 4.	,
Nitrige Mittogen eg N/1 0.000 0.007 0.000 0.150 0.150 0.150 0.007 0.000 0.007 0.000 0.150 0.150 0.007 0.000 0.150 0.150 0.150 0.007 0.000 0.150		10.00	00 00 00 00		60.0	2	90.0	T. 53	6.80
					969	5	0.100	) C	0.032
National N	60 61				700.01	90.0	9 6	1.00.1	200.0
Diss. Notice in the way   1.7 to 0.00 c. 00 c.					3	70.05	3		
Diss. Organic N. Rg. N/1 15.70 5.00 2.00 2.10 Total Nitrogen Rg. N/1 19.70 8.507 2.40 2.10 Diss. Nitrogen Rg. N/1 19.000 12.507 8.410 8.350 Diss. Nitrogen Rg. N/1 17.009 8.507 8.410 6.350 Diss. Or alcaline Rg/1 10.1 25.5 14.0 7.8 Diss. Or alcaline Rg/1 10.0 0.00 24000 > 160 Total Coli x1000 MPN/100m1 3000 - 160 Total Coli x1000 MPN/100m1 3000 - 160 Cadaium Rg Cd/1 0.010 0.016 0.002 Lead Rg Ph/1 0.02 0.10 0.06 0.002			8.00 7.00	10.89	6.60	7.45	12.74	5. 59	
Total Nitrogen ag N/1 19.090 12.507 8.410 8.350 biss. Nitrogen ag N/1 17.090 8.507 8.410 6.350 biss. Nitrogen ag N/1 17.090 8.507 8.410 6.350 biss. Oc alcaline ag/1 10.1 25.5 14.0 7.8 biss. Oc alcaline ag/1 0.0 25.2 bo lecan extractable ag/1 0.0 5.2 bo lecan extractable ag/1 50 40 20 45 for TOC ag/1 **  Dissolved TOC ag						:	: !	:	
Diss. Nitrogen at N/1 17,090 8,507 8,410 6,350 Total OC alcaline ag/1 10.1 25.5 14.0 7.8 Diss. OC alcaline ag/1 10.1 25.5 14.0 7.8 Diss. OC alcaline ag/1 0 0 8.2 Diss. OC alcaline ag/1 6 11 5 10.0 8.2 Disspended Solids ag/1 5 40 20 45 TOC ag/1	Ξ	0.400 13.020	20 13.027	15, 29	10.03	10.77	18.40	7, 40	
Total OC alcaline mg/1   10.1   25.5   14.0   7.8									
Diss.OC alcaline mg/l	10.6	,	7.6 18.4	20.0	5.2	7:0	7. 4	*. S	4.4
DO   DO   DO   DO   DO   DO   DO   DO									
Hexan extractable mg/1   16   11   5   45     Suspended Solids mg/1   * 40   20   45     TOC   mg/1   *		က							
Suspended Solids mg/l	<b>\$</b>	30							
10C	30	S	£:	S	<u>:</u>	Ş	66	2.2	15
Dissolved TCC mg/l * Fecal Coli x1000 MPN/100ml 800 24000 >160 Total Coli x1000 MPN/100ml 3000 -160 Cadaium ag Cd/l 0.010 0.016 0.002 Lead				25	20	4	£3.	-	91
Fecal Coli x1000 MPN/100ml 300 24000 >160 Total Coli x1000 MPN/100ml 3000 -160 Cadalum ng Cd/l 0.010 0.014 0.006 <0.002 Lead ng Pb/l <0.02 0.10 0.06 <0.02									
Total Coli x1000 MPN/100ml 3000 - >160 - >160 Cadmium ag Cd/l 0.010 0.014 0.005 <0.002 Lead ag Pe/l <0.02 0.10 0.06 <0.02 <0.02				_	17000	2008	24000	13000	30000
Cadaium ag Cd/1 0.010 0.014 0.006 <0.002 1.002 0.10 0.00 <0.02				_	22000	30000	24000	24000	30000
Lead Mg Pb/1 (0.02 0.10 0.06 (0.02	0.002	.0. 002 <0. 002	002 <0.002	<0.002	<0.002	<0.00Z	0.005	<0.002	0.006
200 0 210 0 000 0 000 0 000 0		:			00	(0, 02	0.05	9 0	9.10
Copper ng Cu/1 U.020 U.030 U.015 U.005					0.010	0.002	0, 010	CO. 002	50, 005
Chromiten IV and Cu/1 (0.01 (0.01 (0.01 (0.0)					•		,		•
Chromium ag Cr/1 (0.0] 0.03 (0.0] (0.0]					5		i. 0.	70.07	70,00
v ug 4g/1 (0, 10 (0, 10 (0, 10 (0, 10			20 0.10	00.10			07.70	2 5	70.10
Zinc ag Zn/l 0.100 0.350 0.030 0.040	•			_	0.030	0.060	0.000	0.040	020.0
(0.001				,			, :		
op' DDE uz/1 (0.001 (0.001									
pp, DDE ug/1 (0.001 (0.001									
20 000 ug/1 <0.001 <0.001			•						
PCB's ug/1 <0.01 <0.01					1				

## APPENDIX 2

RESULTS OF HOURLY CHANGE SURVEY ON THREE MODEL RIVERS ON CLEAR DAYS

Table APP. 2-1 Runoff Load of Hourly change Survey on Four Model Rivers on Clear Days

(19-20 APR. 1993)
NAME OF THE RIVER
RIO ACARI(Urban Area)

	SS Load	(t/2hrs)	1.974		2. 132	2.656	2.330	2.661	1, 535	1, 258	2, 084	1, 629	1.092	1, 225		22.067	
	T-P Load	(t/2hrs)	0.106	0.142	0. 166	0.163	0.167	0.164	0.139	0.119	0, 103	0. 100	0.098	0. 101		1.571	
noff Load	T-N Load	(t/2hrs)	0.515	0.549	0.579	0.649	0.609	0.513	0.377	0.382	0, 385	0.308	0.255	0.340		5.462	
Value of Runoff Load	CODmnLoad	(t/2hrs)	0.283	0.308	0.330	0.324	0.317	0.294	0.262	0.254	0, 236	0.210	0. 193	0.226		3, 235	
Estimated Va	BOD Load CO	(t/2hrs) (	1,630	2, 252	3, 408	3. 522	2. 799	2.873	2.807	2.616	2, 200	1.627	1.271	1. 225		28. 229	
3	Discharge	(m3/s)	6.438	6.920	7. 264	6.929	6.480	6, 160	5. 772	5.590	5.283	5.017	5.056	5.672		72 580	6.048
_	SS Load D	(t/2hrs)	1. 792	2, 156	0.828	3, 436	1.877	2, 783	2, 539	0.530	1.985	2, 182	1.076	1. 108	1.342	TOTAL(t/d)	
	T-P Load	(t/2hrs)	0.096	0.115	0.168	0.164	0.162	0.172	0.157	0.122	0.115	0.102	0.099	0.094	0.107		
Runoff Load		(t/2hrs)	0.451	0.578	0.520	0.637	0.660	0.558	0.468	0.287	0.478	0.292	0.324	0. 186	0.494		
	CODmoLoad T-N Load	(t/2hrs)	0.269	0.297	0.321	0.338	0.310	0.325	0.262	0.261	0.246	0.226	0. 194	0. 192	0.259		
	BOD Load (	(t/2hrs)	1.344	1.916	2.587	4. 228	2.815	2. 783	2, 963	2.651	2.581	1.819	1.435	1.108	1.342		
	SS	(mg/1)	40	45	16	65	40	90	99	53	20	8	33	93	30		
	1-P	(mg/1)	2.15	2.40	3. 25	3, 10	.s.	3, 70	3. 70	3.00	2. 90	2.80	2.75	2, 55	2.39		
ty	T-N	(mg/1)										8.040		5.033	11.043		
Water Quality	CODman	(mg/1)	9.0	6.2	ę. 9	6.4	9.9	7.0	23 (9)	6	6.2	6.2	rų 4	ري دن	κi		
Tax.	goa	(mg/1)	30	9	8	80	99	90	2	99	88	S	\$	8	30		
	ischarge	(m3/s)	6. 223	6.653	7. 187	7, 341	6.517	6. 442	5.878	5.665	5.514	5.052	4.982	5, 130	6.214		
	TIKE	(Hour)	101	12	7	9	18	20	22	24	2	**	9	90	10		

NAME OF THE RIVER : RIO MACACUCNatural Area)

	SS Load	(t/2hrs)	0.650	0.506	0.630	0, 752	0.719	0.573	0.454	0.590	0.843	0.961	0. 704	0.852		8, 239	4
	T-? Load	(t/2hrs)	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.003	0.003		0.031	
noff Load	T-N Load	(t/2hrs)	0.050	0.037	0.037	0.035	0.030	0.033	0.034	0.027	0.026	0.030	0.030	0.031		0.402	
Estimated Value of Runoff Load	CODunitord	(t/2hrs)	0.045	0.020	0.030	0.025	0.074	0.092	0.036	0.036	0.038	0.038	0.028	0.024		0.487	
Estimated	BOD Load CODmilload	(t/2hrs)	0, 100	0.101	0.101	0.100	0.096	0.092	0.091	0.091	0.094	0.096	0.093	0.095		1.150	
	Discharge	(m3/s)	6.969	7.031	6.998	6, 966	6.656	6.361	6.308	6.301	6.520	6,673	6.456	6.629		79.875	6.656
	SS Load	(t/2hrs)					0.746	0.691	0.455	Ö	0. 726	ö	0		1. 248	TOTAL (t/d)	
2	T-P Load	(t/2hrs)	0.003	0.003	0.003	0.003	0 005	0.003	0.005	0.002	0.005	0.002	0.002	0.003	0.003		
Runoff Load	T-N Load	(t/2hrs)	0.059	0.041	0.033	0.041	0.030	0.030	0.037	0.032	0.023	0.059	0.031	0.030	0.033		
	CODmuLoad T-N Load	(t/2hrs)	0.059	0.031	0.010	0.021	0.000	0.147	0.036	0.036	0.036	0.039	0.038	0.018	0.030		
	BOD Load	(t/2hrs)	0.039	0.102	0.100	0. 101	0.100	0.092	0.091	0.031	0.031	0.097	0.095	0.091	0.100		
	B	(mg/1)	16	2	01	13	53	13	0.5	2	91	23	83	01	25		
	ŤΞ	(mg/1)	0.06	0.0	0.08	0.02	0.09	0.06	0.05	0.02	0.05	0.05	0.02	0.08	0.08		
ty	T-X	(mg/1)	1. 203	0.804	0.653	0.803	0.603	0.654	0.803	0.703	0.504	0.604	0.654	0.653	0.653		
ater Opalit	CODun	(1/2/1)	1.2	0.6	0.5	1.0	0.0	က (၁	0 8	800	o S	0	0.8	Ö	0.9		
1	E09	(mg/1)	2	دع	2	63	2	2	2	2	2	62	2	67	67		
	)ischarge	(m3/s)	6.851	7.087	6.974	7.021	6.911	6, 400	6. 321	6.296	6.305	6. 734	6.611	6. 321	6.936		
!	TIME I	(Hour)	10	12	7.	91	52	20	22	24	2	₩.	9	00	10		

Table APP. 2-1 Runoff Load of Hourly change Survey on Four Model Rivers on Clear Days RIO ACARI(Urban Area) NAME OF THE RIVER.

	SS Load	(t/2hrs)	3.718	8. 632	9.190	5.312	5, 534	4. 681				_	1.065	4.063		49.850	
	T-P Load	(t/2hrs)	0.087	0.131	0.147	C. 136	0.128	0.113	0.031	0.074	0.068	0.058	0.029	0.063		1.157	
noff Load	T-N Load	(t/2hrs)	0.607	0.782	0.966	0.919	0.775	0.575	0.435	0.395	0.304	0.291	0.373	0.315		6.738	
alue of Ru		(t/2hrs)	0. 195	0.259	0.308	0.287	0.255	0.237	0.212	0.190	0.173	0.162	0.175	0.199		2.653	
Estimated Value of Runoff Load	BOD Load CODminoed	(t/2hrs)	2.323	2, 845	2.883	2.841	3.010	2, 729	2.384	2.065	1. 703	1, 072	0. 778	1.064		25. 697	
ដ	Discharge	(m3/s) (	6.454	7.142	7. 631	7, 248	6.683		6.012	5, 735	5. 218	5.005	5.406	5.872	:		p. 22.1
-	d proof SS	(t/2hrs)	3.589	3.846	13.419	4.960	5.664	5.404	3.958	2.130	1.999	1: 055	1. 108	1. 023	6.982	TOTAL(t/d)	
,	T-P Load §	(t/2hrs) (	0.074	0. 101	0.162	0.132	0.140	0.115	0.110	0, 072	0.076	0.060	0.057	0.061	0.065	F	
Runoff Load	T-N Load	(t/2hrs) (	0.586	0.628	0.936	0.997	0.841	0.708	0.442	0.428	0.362	0.247	0.334	0.411	0.219		
	CODmilload 3	(t/2hrs) (	0.179	0.212	0.307	0.309	0.266	0.244	0.229	0.196	0. 184	0.162	0.162	0. 188	0. 209		
	BOD Load CC	(t/2hrs) (	2.243	2 2 3	3.286	2.480	3. 201	2,819	2, 639	2. 130	1.999	1.406	0. 738	0.818	1.309		
	SS	(1/8/1)	8	8	245	96	115	115	8	20	S	8	8	23	160		
	7-P	(mg/1)	1.65	2.10	2. 95	2, 40	2. 85	ري ئ	2.50	1. 70	1.90	1. 70	1. 55	3.50	1.50		
ty.	£-1	(mg/1)	13.065									7,035					
Mater Quality	80 File File File File File File File File	(ng/1)	4.0	4.4	5	ry O	5.4	5.2	52	4.6	4.5	4.6	4.4	4.6	<del>4,</del>		
3	83	(mg/1)	જ	S.	8	45	65	99	99	23	20	40	20	20	93		
	scharge	(s/gm)	6. 231	6. 677	7.607	7.655	6.840	6, 526	6. 108	5.916	5.554	4.382	5. 128	5. 683	6.061		
	TIME	(hour)	10	12	14	16	18	20	23	24	67	4	9	83	2		
			1													<u> </u>	

							_				•			·	·	_	
	SS Load	(t/2hrs)	0.866	0.892	0.967	0.823	0.523	0.639	0.687	0.459	0.565	0.675	0.708	0.889		8.665	
	T-P Load	(t/2hrs)	0.002	0.003	o. 04	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0,002	0.003		0.034	
noff load	T-N Load	(t/2hrs).	0.029	0.025	0.048	0.052	0.029	0.028	0.035	0.035	0.038	0.046	0.061	0.048		0.475	
alue of R	CODmiload	(t/2hrs)	0.058	0.062	0.071	0.063	0.055	0.029	0.052	0.057	0.102	0.107	0.085	0.086		0.855	
Estimated Value of Runoff Load	BOD Load	(t/2hrs)	0.115	0.124	0.129	0, 126	0.123	0.117	0.115	0.114	0, 113	0.124	0.147	0.137		1.485	
-	Discharge	(E3/S)	8.019	8.587	8.958	8. 775	8.515	8.143			7.863	7.815	7.855	7.963		98. 381	8, 198
	SS Load	(t/2hrs)	0.856	0.876	0.913	1.020	0.626	0.420	0.859	0.515	0.342	0. 787	0.563	0.852	0.926	TOTAL (T/d)	
1	T-P Load	(t/2hrs)	0.003	0.002	0.004	0.004	0.003	0.003	0.003	0.005	0.003	0.003	0.002	0.003	0.003		
Runoff Load	I-N Load	(t/2hrs)	0.035	0.024	0.027	0.069	0.034	0.024	0.031	0.039	0.031	0.046	0.046	0.077	0.020		
	BOD Load CODminLoad	(t/2hrs)	0.057	0.058	0,065	0.076	0.020	0.060	0.057	0.046	0.068	0.135	0.079	0.091	0.081		
	BOD Load	(t/2hrs)	0.114	0.117	0.130	0.127	0.125	0.120	0.115	0.115	0.114	0, 112	0.135	0.159	0.116		
	SS	(1/8/1)	15	53	7	91	01	t~	2	o	G	14	10	75	16		
	T-P	(ag/1)	0.05	0.03	0,06	9, 06	0.02	0.05	0.05	0.04	0.05			0.05	0.08		
l Ty	T-N	(88/1)	0.611	0.407	0.407	1.086	0.543	0.407	0.543	0.679	0.543	0.814	0.814	1.357	0.339		
ater Quality	CODen	(mg/1)	J. 6	1.0	1.0	1.2	0.8	1:0	- 0	8 0	1.2	2.4	1.4	1.6	1.4		
	808 800	(年以/1)	2	2	<b>~</b> 4	۶3	۵,	62		2	5	2	5	ero	2		
	Discharge	(m3/s)	7. 925	8. 112	9.062	8.853	8. 697	8, 332	7.953	7, 954	7.918	7.808	7.822	7. 888	8, 038		
	TIE	(Hour)	19	12	7	16	22	8	ន	24	63	7	9	∞	20		

RIO MACACU(Natural Area)

NAME OF THE RIVER :

Table APP. 2-1 Runoff Load of Hourly change Survey on Four Model Rivers on Clear Days

(7 to8 DEC. 1992)
NAME OF THE RIVER : RIO SAO JOAO DE MERITI(Urban Area)

			_														
	Salinity	8	0.330	0. 730	6.930	2.520	0.680	0.640	0.350	0.560	10.960	8. 930	2.900	2.400	1.950		
	Raterlevel	(E)	0.900	1.300	1. 780	1.850	1.580	1, 100	0.960	1.240	1.870	2, 100	1.760	1.450	1. 120		
	SS Load	(t/2hrs)	-5, 050	-3.076	5. 176	12, 220	11.247	6.655	2. 722	-19.265	-11. 221	7, 543	6.535	4, 367		17, 853 ;	
	T-P Load	(t/2hrs)	-0.138	-0.014	0.206	0.391	0.781	0.670	0.060	-0.464	-0.068	0.378	0.466	0.556		2.822	
noff Load	T-N Load	(t/2hrs)	-0.596	0.159	1. 250	1.327	3, 527	3. 77.	0.386	-2.527	0.897	3.937	4. 797	5.996		22, 923	
Value of Runoff	CODmn Load	(t/2hrs)	-1.351	0.040	2.131	3.695	7. 105	6.325	0.826	-6.048	-1.873	3.925	4, 733	5.978		25, 537	
Estimated V	Do Load	(t/2hrs)	-2. 322	-0.671	2.802	5. 270	9, 734	9, 325	1.612	-7, 334	-1.591	6.004	8. 122	9, 754		40.705	
ш	۱.,	(m3/s)	-9. 728	0.296	15. 732	30.019	62, 173	53. 616	5.342	-36.381	-1. 786	32. 661	31, 336	37. 631		220.910	18, 409
	g peor ss	(t/2hrs)	3.447	-13.548	7.396	2. 957	21.484	1.009	12, 301	-6.857	-31. 573	9. 230	5.855	7.215	1.520	TOTAL(t/d)	
	T-P Load	(t/2hrs)	0.085	-0.361	0.333		0, 703	0.858	0.481	-0.362	-0.567	0.431	0.325	0.606	0.507	H	
Runoff Load		(t/2hrs)	0.529	-1. 721	2.040	0.459	2.194	4.859	2, 682	-1.911	-3. 143	4, 938	2. 936	6.658	5.335		•
~	CODmus Load T-N Load		0.730	-3. 432	3,513	0.750	6.641	7. 570	5.081	-3. 429	-8.688	4.923	2, 928	6.638	5.319		
	BOD Load C		1.135	-5. 780	4, 438	1. 166	9, 375	10.093	8.557	-5.334	-9.335	6. 154	5.855	10.390	9.118		
	88		88	55	9	F	53	2	46	99	S	8	99	22	9		
	T-1	(mg/1)	2. 10	8	1.80	06 1	1.30	1.70	1.80	1. 90	1. 70	1.40	2.00	2, 10	2.00		
ty	T-N	(ag/1)	13.039	9, 529	11.033	11.033	5.617	9.629	10.030	10.030	9, 428	16.048	18.054	23. 069	21.063		
ater Quality	CODmn	(mg/1)	18.0	19.0	19.0	18.0	17.0	15.0	19.0		28.0	16.0		23.0	21.0		
ar.	003 033	(四名/1)	28	32	. 54	28	24	20	32	58	58	20	36	36	36		
	1.scharge	(m3/s)	5. 632	-25.088	25. 680	5. 784	54, 253	70.092	37.140	-26.456	-46.305	42, 733	22, 589	40.083	35. 178	:	
	TIME	(Hour)	10	12	14	16	18	20	22	24	63	7	9	00	10		_

NAME OF THE RIVER : RIO GAPIMIRIM

(14tol5 Oct. 1993)

	Waterlevel Salinity	(F)	0.900 0.350			1.850 2.520				_	_	2, 100 8, 930	-	1,450 2,400	
_	SS Load Wat	(1/2hrs)	2.075	0.691	0.839	2 48	4, 395	4, 131	2, 310	1, 250	. 445	2.511	4, 755	4.846	_
	T-P Load S	(t/2hrs) (	0.013	0.007	0,005	0.000	0.017	0.017	0.010	0,007	0.007	0.012	0.021	0.022	
Runoff Load	T-N Load	(t/2hrs)	0.086	0.041	0.046	0.107	9.140	0.128	0, 110	0.082	990.0	0. 104	0,177	0,186	
Value of Ru	Coban Load	(t/2hrs)	0.214	0.111	0.120	0.238	0.338	0,326	0.231	0.1.0	0.131	0, 163	0.415	0.553	
Estimated V	ţ —	(t/2hrs)	0, 255	0.158	0.172	0.381	0,495	0.407	0.302	0.201	0, 187	0.342	0.539	0,485	
Li i	Discharge	(m3/s)	:7.725	:0.959	11.924	26, 458	34, 362	28. 265	20,968	13, 930	12, 973	23, 767	37. 432	33. 554	
	SS Load D	(t/2hrs)	3,514	0,636	0.745	0, 933	4,030	4, 750	3, 601	1.019	1.481	410	3.812	5.698	3, 995
	T-P Load	(t/2hrs)	0.018	0,007	0.006	0.007	0.012	0.022	0.012	0.007	0.007	0.007	0.018	0.024	0.020
Runoff Load	T-N Load	(t/2hrs)	0.135	0.037	0.044	0.048	0.167	0.114	0, 142	0.077	0.086	0.046	0.163	0, 19;	0.182
2	ODmn Load	(t/2hrs)	0.316	6, 111	0, 110	0.131	0.345	0.331	0.320	0, 143	0.138	0, 123	0.203	0.627	0.479
	BOD Load C	(t/2hrs)	0.351	0.159	0.157	0.187	0,576	0,414	0.400	0. 204	0.197	0.176	6, 508	0.570	0.399
	-	(1/24)	30	оф	2	01	7	23	80	91	15	91	15	20	20
	ď-i	(1/20)	9, 103	0.690	0.080	0.010	0.040	0, 104	0.062	0.067	0.059	0.080	0.010	0.083	0.033
t.y.	¥-3	(1/84)	0.770	0.470	0.550	0,510	0,580	0.550	0.710	0.760	0.870	0.520	0.640	0.670	0.910
ater Quality	CODmn	(mg/1)	1.	÷.:	l. 4	1.4	1. 2	1.6	.: 6:	<b>*</b> :	÷:	1.	8	2.2	2. 4
*	805	(1/84)	2		2	2	63	2	6-1	23	2	62	2	~	2
	Discharge	(m3/s)	24.402	11.048	10,889	12,958	39.978	28.745	27, 785	14.151	13, 709	12. 237	35. 297	39, 567	27.740
1	J. SWIT	(Kgirl)	0.1	12	7	9	 80	20	22	24	61	₩.	 Ø	e0	10

Table APP. 2-2 Results of River Water Quality Analysis of Hourly Chnage Survey

Number of sampling	•	,						•		•	,		
	-•	2	er3	7	ir)	œ		×9	a.	n .	11	12	ed ed
Date of sampling	21/8/82	21/9/92	24/6/12	24/6/13	21/8/82	21/9/92	24/8/12	28/8/82	28/8/82	28/8/82	28/8/82	28/8/82	28/8/82
General number of the jaboratory	12383	12384	12385	12386	12307	12388	12389	12390	12391	12392	12393	12394	12395
CODE PARAMETER UNITY													
	11.00	13.00	15.00	17.00	19-00	21.00	23, 00	1.00	3.00	5.00	7.00	3.00	11,00
08262L BOD (total) mg/l 08361L COD (total) mg/l	<2.0 10	(2.0	<2. 0 30	<2.0 15	<2.0 10	<b>62.0</b>	<2.0	(2.0	<2.0	<2.0 <.5	2.4	2.8	<2.0
15408L Total Phosphorus mg P/1	0.05	0.03	0.06	0.06	0.05	0.05	0.05	0.04	010	010	010	0 03	01.0
07008L Kjeldahl Nitrogen mg N/1	0.45	0.30	0.30	0.80	0.49	0.30	0, 40	0, 50	0 40	0, 60	0.80	1.00	0.25
U8402L lotal OU alcaine mg/! 10401L Suspended Solids mg/! 08306L TOC mg/!	1.0	1.0	1. 0 14	1, 2	0.8	1.0	1.0	8 6	1 2 2	2. 4	1.4	1. 6	1.4
	4 7 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	<u> </u>					; ; ;	1	# E # # # # # # # # # # # # # # # # # #	 		. 4	
August of sampling	-4	2	c~3	*	49	9	7	₩	<del>0</del> 1	10	11	12	1.3
Date of sampling	9/04/93 19/04/93			4	19/04/93	19/04/93 1	19/04/93	19/04/93	20/04/93	20/04/93	20/04/93	20/04/93	20/04/93
General number of the laboratory	5554	5855	5556	5657	5658	5659	5650	5661	5562	5663	5554	5665	5866
CODE PARAMETER UNITY	1		1 1 1 1 1	1	1	1 1 1 1	]    -  -  -	! ! ! !	 	1	í ! !	\$   	1
Time H temperature C	10.90	12.00	14.60	16.00	18,00	20.00	22.00	24.00	22.00	4.00	5,00	8.00	10,00
02061F Water temperature C	23, 77	24.88	26.24	26.59	26.07	25. 56	24.84	24, 32	23, 57		22.50	٠.	23.07
082021 BOD (total) mg/1	<2.0 <10	<2.0 2.0	< 2.0	<2.0 /10	<2.0	(2.0	<2.0 .:0	<2.0	<2.0 <.5		<2.0 7.10		<2.0
**	90 0	0,06	0.05	0.05	0.00	90.0	0.05	0.05	0.05		0.05		0.05
Nitrate Mitrogen	6.5	0.2	0.15	0.2	0.1	0.2	0 2	0	0.15		0 2		0.2
07209L Withite Mitrogen ag N/1	0.003	0.004	0.003	0.003	0.003	0,004	0.003	0.003	0.004	_	0.004		0.003
	1, 203	0.804	0.553	0.803	0.00	0.43	0 .00	0.20	20.0				0.43
Total OC alcaline	1. 2	0.6	0, 2	1,0	0	72	9 60	. C	9.0			:	900
10401L Suspended Solids mg/1	<u>.</u>	9		-	7	÷		5	•		ć		

Table APP. 2-2 Results of River Water Quality Analysis of Hourly Chnage Survey

Number of sampling         1         2         3         4         5         6         T         8         9         10         11         12         13           Date of sampling         27/9/92         27/9/92         27/9/92         27/9/92         27/9/92         27/9/92         27/9/92         27/9/92         27/9/92         28/9/92<					111111111		1111111111	111111111					
12396 12397 12398 12399 12400 12401 12402 12403 12404 12405 12404 12402 12404 12402 12407 12402 12407 12402 12404 12405 12406 12407 12407 12402 12404 12405 12406 12407 12407 12402 12404 12405 12406 12407 12408 12407 12408 12408 12407 12408	Mumber of sampling	. 69	69	~	S	<b>to</b> :	<b>₹</b> —	63	6°	10	#	12	~
12396   12397   12398   12400   12401   12402   12404   12405   12405   12407   12407   12396   12407   12405   12407   12404   12265   12407   12407   12408   12404   12405   12407   12407   12408   12407   12408   12408   12407   12408   12408   12407   12408   1240	24/6/12	21/8/82	26/6/12	25/6/12	21/8/82	28/8/12	24/6/12	28/8/82	28/8/82	28/8/82	28/3/32	28/6/82	28/6/82
11.00 13.00 15.00 17.00 19.00 21.00 28.00 1.00 3.00 5.00 7.00 9.00 34.00 35.00 35.00 35.00 29.00 28.50 27.00 24.00 24.00 25.00 28.50 28.50 27.30 29.00 35.00 30.26 30.02 28.50 27.23 26.72 26.33 26.07 25.88 25.97 25.89 15.00 190 280 280 220 225 180 180 180 145 50 100 1.50 13.00 17.00 18.00 17.00 15.00 10.00 9.00 7.00 9.00 10.00 9.00 7.00 9.00 10.00 4.4 5.6 5.4 5.2 5.2 5.2 4.6 4.5 4.6 4.6 80 80 245 90 115 115 115 90 50 50 50 50 30 25		12397	12398	12399	12400	12401	12402	12403	12404	12405	12406	12407	12408
Fine H II. 00 13.00 15.00 17.00 19.00 28.00 1.00 3.00 5.00 7.00 9.00 11.00 38.00 38.00 38.00 28.50 28.50 28.50 27.00 24.00 25.00 28.50 28.	CODE PARAMETER UNITY												
Lir temperature C 34.00 35.00 35.00 38.00 28.00 28.00 28.50 27.00 24.00 24.00 25.00 28.50 28.50 28.50 28.50 27.30 20.00 20.26.00 28.50 28.		13.00	15.00	17.00	19.00		23.00	1.00	3.00	5,00		9, 00	11.00
Tater temperature C 27.30 29.00 30.26 30.02 28.99 28.04 27.23 26.72 26.33 26.07 25.88 25.97 25.00 (total) mg/l 50 50 80 45 65 50 60 80 80 40 20 20 20 20 20 20 180 180 145 50 100 20 100 20 100 20 20 20 20 20 20 20 20 20 20 20 20 2		35.00	35.00	33.00	29.00		28.50	27,00	24.00	24.00		28.50	34.00
SOD (total) mg/l 50 50 80 45 65 50 60 50 80 40 20 20 20 20 20 135 180 145 50 100 100 100 145 50 100 100 100 100 145 50 100 100 100 100 11.70 11.50 11.		29.00	30, 26	30.02	28.99		27.23	26, 72	26.33	26.07		25,97	27.16
COD (total) mg/l 150 190 280 280 220 225 180 180 145 50 160 160 101 101 150 145 50 160 160 101 101 101 101 101 101 101 10	BOD (total) mg/1	. 20	80	4.5	55		60	\$0	50	40		20	3(
Total Phosphorus mg P/1 1.65 2.10 2.95 2.40 2.85 2.45 2.50 1.70 1.90 1.70 1.55 1.50 [Seldah] Nitrogen mg N/1 13.00 13.00 17.00 18.00 17.00 15.00 10.00 9.00 7.00 9.00 10	COD (total) mg/1	190	280	280	220		225	180	180	145		100	10(
Kjeldahl Nitrogen mg N/1 13.00 13.00 17.00 18.00 17.00 15.00 10.00 10.00 9.00 7.00 9.00 10.00 10.00 Total OC alcaline mg/1 4.0 4.4 5.6 5.4 5.2 5.2 4.6 4.5 4.6 4.4 4.6 5.8 Suspended Solids mg/1 80 80 245 90 115 115 90 50 50 50 30 25 10.00 TOC	Total Phosphorus mg P/1	2.10	2.95	2.40	2.85		2.50	1.70	1.90	1,70		1.50	.5
Total OC alcaline mg/l 4.0 4.4 5.6 5.4 5.2 5.2 4.6 4.5 4.6 4.4 4.6 5.8 5.2 5.2 5.2 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Kjeldahl Nitrogen mg N/l	13.00	17.00	18.00	17.00		10,00	10.00	9.00	7,00		10,00	. 5
Suspended Solids mg/l 80 80 246 90 115 115 90 50 50 30 25 25 10C	Total OC alcaline mg/1	4.4	\$.8	5.6	5.4		5.2	£. 5	4.5	4.6			**
	Suspended Solids mg/l TOC	60 C)	245	96	115		6	20	20	30		25	160

Number of sampling		~•	2		~,	ur s	ထ	-	PC)	တ	10	CI CI	12	ä
Date of sampling		19/04/93	9/04/93 19/04/93 19/04/93	19/04/93	19/04/93 19/04/93			19/04/93 19/04/93	19/04/93	20/04/93	20/04/93	20/04/93	20/04/93	20/04/93
General number of the laborator	oratory	5886	5590	5591	5535	5593	5564	5555	5596	5597	5598	5599	5600	5601
CODE PARAMETER UNITY	NITY		1 1 5 5 6 6	1		F        -  -  -  -								
Time		i	12.00	14.00	16.00	18.00	20.00	22.00	24, 00	2.00	4, 00	8,00	8.00	10.00
3062F Air temperature C			28.00	29.00	28.00	25.00	25.00	24.00	24.00	22,00	21,50	22, 50	24, 50	27.00
1051F Water temperature C			28,04	29, 17	29.05	27.85	27, 23	26.49	25.11	25, 91	25, 79	25.58	25.80	26.55
1202L BOD (total) m	1/8		40	50	80	60	90	7.0	65	65	50	40	30	30
3301L COD (total) m.	1/8		7.5	06	160	150	190	175	150	100	0.6	5.5	80	20
408L Total Phosphorus m	8 P/1	2, 15	2.40	3. 25	3, 10	3.45	3.70	3, 70	3 00	2.90	2.80	2, 75	2.55	2, 39
7309L Nitrate Nitrogen m	1/8		0.07	0.04	0.03	0.05	0.03	0.04	0.03	0.02	0.03	0.04	0.03	0.04
7209L Nitrite Nitrogen m	3 3/1		0.003	0.007	0,007	0.02	0.01	0.00	0.008	0.01	0.01	0.008	0.603	0.003
7008L Kjeldahl Nitrogen m	8 11/1		12.00	10.00	12.00	14.00	12.00	11.00	7,00	12.00	8,00	9.00	5, 00	11.00
7801L Total Nitrogenm	8 1/1		12.073	10.047	12,057	14.07	12.04	11,049	7,038	12.03	8.04	9.046	5, 033	11.043
8402L Total OC alcaline m	1/8		6.2	6.3	5.4	9.	7.0	6.2	6.4	5.5	6.2	5,4	5.2	بن 8
10401L Suspended Solids mg/l	1/8/		4.5	16	6.5	0.7	90	60	en •••	20	90	30	30	30

Table APP. 2-2 Results of River Water Quality Analysis of Hourly Chnage Survey

:		œ	Rio S.J. de	S.J. de Meriti (1992)	9923	ų								
Number of sampling	1	  4    4	2	0	4	W7	9		8	6	10		12	13
DATE OF SAMPLING DEC	. 92	07/12	07/12	07/12	01/12	07/12	07/12	07/12	07/12	08/12	08/12	08/12	08/12	08/12
General number of the laboratory		14354	14355	14356	14357	14358	14359	14350	14361	14362	14363	14364	i	14366
CODE PARAMETER	UNITY													
		00.6	11 00	ļ										
ATTITUDE ATT TOTAL TOTAL	. , .	25.00	30 00											
COURTY Marks tobaconstate		25.00	27.45											
689011 Http://ckipointing	7/20	282	3.2	24	73	24	20	32	282	28	02 1	36	5 36	35
08301L COD (total)	[2/]	120	160											
15408L Total Phosphorus	1/2 20	2.10	2 00											
070081 Kieldahi Nitrogen	1/8 20	13,00	9.50								٠			
084021 Total OC alcaline	(×/	8.0	19.0											
10401L Suspended Solids mg/1	1/2	8.5	15											
08306L TOC	1/3													

		. !	Rio Gu	Guapimirim	(1993)						) 1 1				. 1
NO. OF SAMPLING	O. OF SAMPLING		1	2	ဗ	77	S.	sp.	7	∞	œ	10	11	12	13
DATE OF	DATE OF SAMPLING	Oct93	10/14	10/14	10/14	10/14	10/14	10/14	10/14	10/14	10/14	10/14	10/14	10/14	10/14
General	the last	laboratory	15270	15271	15272	15273	15274	15275	15276	15277	15278	15279	15280	15281	15282
ECODE	PARAMETER	UNITY												-	
	Tibe		10,00	12.00	14.00	16.00	18.00	20.00	22.00	24.00	2.00	4.00	6.00	8.00	10.00
	Air temperature	ပ	26, 50	29, 00	32.00	31.00	29, 50	25.00	23, 50	21.50	21.00	20.00	19.00	24.00	26.00
	Water temperatur	၁ ခ	24.90	26. 24	25.70	25, 96	25, 42	27.76	27.34	27.24	27.11	26.70	26.71	26.01	25.80
	BGD (total)	mg/1	. 2>	<2	<2>	\$	<b>\$</b>	<b>2</b> >	?	7	<b>\$</b>	<2	\$	<b>2</b> >	\$
	COD (total)	ng/1	10	V10	<10	<b>C10</b>	01>	<10	<10	010	<10	<10	<10	<10	<10
154081	Total Phosphorus mg P/1	mg P/1	0.103	0.000	0.080	0.010	0.040	0.104	0.062	0.067	0.059	0.080	0.070	0.083	0.039
	Ammonia Mitrogen	mg N/1	0.010	0.002	0.000	0.002	0.002	0.007	0.007	9.000	0.002	0.013	0.005	0.003	0,004
	Nitrate Nitrogen	I/N Bu	0.198	0.169	0.176	0.135	0.170	0.202	0, 130	0,157	0, 201	0.210	0.168	0.185	0.144
	Nitrite Nitrogen	#8 N/1	0.025	0.000	0.004	0.004	0.004	0.005	0.004	0.004	0,004	0.004	0.005	0.004	0.009
	Kjeldahl Nitroge	1/K 2m m	0.57	0.30	0.38	0.37	0.41	0.35	0.57	0.59	0.66	0.30	0.47	0.48	0,77
	Total Nitrogen	mg N/1	0: 77	0.47	0.56	0.51	0.53	0.53	0.71	0.75	0.87	0.52	0.64	0. 67	0.91
	Total OC alcalin	е щ8/1	1.8	1.4	1.4	1.4	1.2	1,8	1.6	7	1.4	1.4	8.0	2.2	2.4
	Suspended Solids	mg/1	20	60	9.5	10	14	23	13	10	15	16	15	20	50
	T0C	1/89	\$	7	\$	\$\$	<b>-</b>		<b>;-</b>	\$\$	on	\$	æ	∞	\$
	94179+++						1111111111								

## APPENDIX 3

RESULTS OF CONTINUOUS SURVEY ON TWO MODEL RIVERS ON RAINY DAYS

Table APP. 3-1 Runoff Load of Continuous Survey on the two Model Rivers on Rainy Days

Rio Acari (16to29 Nov. 1992)

1			506	Tater Quali	I I Y		SS	ROD La-4		Runoff Loa	TP Load	SS Loa
Date	Time (Hour).	Discharge (m3/l)	80D (mg/l)	CODmn (mg/l)	TN (mg/1)	TP (mg/1)	22 (#8/1)		CODmnLoad (t/lhrs)	(t/lhrs)	(t/lhrs)	22 Foa
11/18	12	7, 08					**********		,			,,,,,,,,,,,
11/17		18.03						! ·				
	8	12.10						l			•	
	9	11.40										
	10	7.08			10.0	1.0	65	1.39	0.35	0.32	0.03	2.
	15	8.80	44.0	11.0	8.5	1.0	55	3.00	0. 78	0.58	0.07	3.
[	18	18. 91 20. 73	44.0 40.0	11.4	2.8	1.0	100	2.99	0.85	0.21	0, 07	7.
11/18	21	25.65	38.0	12.8	2.6	1.0	300	3. 51	1.18	0, 24	0.09	27.
11/10	3	23. 13	34.0	9. 0	1.0	0.4	60	2.83	0, 75	0.08	0.03	5.
1	6	8.21	30.0	9. 2	1.0	0. 5	30	0.89	0. 27	0.03	0.01	0.
	9	8. 21	22.0	9. 6	6.0	0.5	16	0.65	0. 28	0.18	0.01	0.
	. 12	8.80	34.0	11. 2	9. 5	0.5	20	1.08	0.35	0.30	0.02	0.
	15	8.80	28.0	10.0	10.5	1.0	24	0.89	0.32	0.33	0.03	Q.
	18	8.21	30.0	9. 8	9. 0	1.0	36	0.89	0. 29	0. 27	0.03	1.
	21	10.39	30.0	9. 6	9. 0	1.0	30	1.12	0.36	0.34	0.04	<u>1</u> .
11/19	. 0	9.74	28.0	10.0	9. 5	1.0	60	0.98	0.35	0.33	0.04	2.
	3	9, 11	26.0	9. 2	6.5	1.5	0.8	0.85	9.30	0.21	0.05	2. 1.
	6	8.80	26.0	9.2	7.0	1.5	00	0.82 0.61	0. 29 0. 22	0.22	0.05 0.33	9.
	9	1.08	24:0	8.8	7.5	1.0 1. \$	16 20	1,00	0. 28	0. 28	0.04	0.
	12		34.0 40.0	9. 4 9. 2	9. 5 12. 0	2.0	20	1.14	0, 28	0. 24	0.04	0.
	15 18	7. 92 7. 35	49. U 60: O	9, 2 3, 2	9.5	2.0	30	1.59	0. 08	0. 25	0.05	0.
	18 21	7. 35	64.0	12.6	10.0	2.0	14	1.69	0.33	0. 26	0.05	Ö.
1/20	0	7. 08	34.0	10. 8	7. 5	2.0	22	0. 87	0.28	0. 19	0.05	Ö.
17.0	3	7. 08	54.0	11.2	11.0	2.0	30	1.38	0. 29	0. 28	0.05	0.
	6	6, 81	38.0	9, 1	10.0	2.0	32	0.93	0.23	0.25	0.05	0.
	12	6.81	40.0	10. 2	16.0	2.0	38	0.98	0.25	0.39	0.05	0.
	18	7.63	52.0	18.0	11.0	2.0	50	1.43	0.49	0.30	0.05	
1/21	0	7. 92	60.0	10.6	9. 5	2.0	30	1.71	0.30	0.27	0.08	0.
.,	6	6.28	16.0	1.2	7.0	1. 5	26	0.35	0.10	0.16	0.03	0.
j	12	7.35	22.0	9. 6	14 0	2. 0	46	0.58	0. 25	0.37	0.05	1.
	18	7.63	56.0	20.0	10.0	2.0	10	1, 54	0, 55	0. 27	0.05	!.
1/22	0	7. 35	48.0	9. 8	11.5	2. 0	40	1. 27	0. 26	0.30	0.05	1.
	6	6.81	22.0	9.8	7. 5	1.5	22	0.54	0. 24	0.18	0.04	9. I.
1	12	7. 35	28.0	15.6	8.5	2.0	. 60	0.74	0.41	0.22	0, 05 0, 04	1.
	18	7. 63	22.0	9, 4	1.9	1.5	50	0.60	0.26	0.05 0.12	0.04	i:
1/23	0	1. 92	20.0	9.0	4.3	1.5	\$5 70	0.57 0.66	0. 25 0. 47	Q. 22	0.04	1.
- 1	6	7. 63	24.0	17.0	8. 6 13. 0	1.0 2.0	85	1.65	0. 29	0.36	0.05	2.
- 1	12	7. 63	60.0	10. <b>4</b> 9. 0	2.3	1.5	70	0.53	0. 24	0.06	0.04	1.
1/24	18	7.35 8.21	20.0 16.0	7. 4	0.8	0. 5	100	0. (1	0. 22	0.02	0.01	2.
1/44	6	8. 80	14.0	8.0	2.6	1.5	12	0.44	0. 25	0.08	0.05	0.
	12	8. 50	32.0	16.0	2.0	1:5	40	0.98	0.49	0.06	. 0. 05	1.
	18	7. 63	24.0	60.0	4.8	1.5	25	0.66	1.65	0.13	0.04	0.
11/25	0	7.35	12.0	26.0	6.8	1. \$	26	0.32	0.69	81.0	0.04	0.
	ě	6, 81	32.0	24.0	34	1.5	60	0, 78	0.59	0.08	0.04	1.
	18	10.08	50.0	28.0	4.0	2.0	40	1.81	1.01	0.14	0.07	
1/25	6	17. 60	74.0	45.0	10.5	0. \$	140	4 69	2.91	0.67	0.93	8.
	9	73.87						l ,	,	4		0.00
[	13		30.0	26.0	6.0	0.1	500	13.56	11.75	2.71	0.03	225. 317.
	14	117.63	30.0	30.0	1.4	0.1	750 620	12.70 9.41	12. 70 3. 62	0.59 0.43	0.04 0.01	224.
1	15	100.54	26.0	10.0	1.2	0.0	620 710	7.49	3. 62	0.43	0.02	221.
1	16	86.69	24.0	11.6	1.8	0. 1	1)0	1. 49	ə. 02	0. 30	0.00	261.
	. 17		26.0	18.0	1.4	0.1	310	6, 43	4. 45	0, 35	0.02	76.
	18 19		20. Q	32.0	1.4	0.1	230	4.82	1. 12	0.24	0.02	\$5.
1.5	20		18.0	10.0	4.5	0.3	220	1.34	2. 41	1.09	0, 07	53.
·	20	66.17	16.0	20.0	0. 2	0. 5	200	3.81	4. 76	0.04	0.03	47.
	22		18.0	34.0	2. 2	0.3	210	1. 29	8.10	0. 52	0.07	50.
	23		10.0	8.0	1.2	0.1	130	2.32	1.86	0.28	0.02	30.
1/27			14.0	14.0	1.2	0.1	160	3. 17	3. 17	0. 27	0.02	36
	6		12.0	10. 8	2.6	0.1	130	2.68	2.41	0.58	0.01	29.
	9		14.0	10. 2	4.0	9. 2	90	3. 13	2. 28	0.89	0.03	20.
	13		16.0	9.4	3.5	1.0	70	0.89	0.53	0. 20	0.08	3.
	15		16.0	12. 2	9.5	1.0	85	0.74	0.56	0.44	0.05	
11/28	6	9.42	4, 0	2, 2	1. 2	0. \$	20	0.14	0.07	0.04	0.02	0.
	18		20.0	10.8	10.0	1.5	20	0.55	0.30	0.27	0.04	Q.
1/23	6		10.0	5. 8	1.6	1.0	7	0, 26	0.23	0.04	0.03	O.

Table APP. 3-1 Runoff Load of Continuous Survey on the two Model Rivers on Rainy Days
Rio Wacaeu (171030 Nov. 1992)

	Date	Tiso	Discharge	BOD	Water Quality CODmn TA	TP	SS	BOD Load O		unoff Load TN Load - TP Lo	ad SS Load
		(Hour)	(87/8)	(ng/1)	(eg/1) (ng/	1) (mg/i)	(ag/1)	(1/1hrs) (	(t/lhrs)	(1/1hrs) (1/11	rs) (1/1hrs)
1	11/17										
11   31.70   1.2   7.1   0.5   0.1   0.1   0.45   0.46   0.02   3   1   1   1   1   1   1   1   1   1		9	40, 81	1. 4	1.0	0.8 - 0.3	300	0.24	1.03	0.12	. 04 14. 69
12											
15		112	27. 91	1. 2	8. 4	0.4 0.2	40	0.12	0.64	0.04	. 02 4. 02
15   20.54   1.4   4.4   0.7   0.1   34   0.11   0.44   0.55   0.00   2   1   1   1   1   1   1   1   1   1											
15   10,75   1,2   4,2   0,4   0,1   4   0,09   0,45   0,64   0,01   0,02   5   20   27,11   1,4   0,0   1,0   0,5   3   30   0,14   0,68   0,10   0,02   5   27   27   27   27   27   27   27		16	20.96	1.4	6. 4	0. 7 0. 1	34	0.11	0.48	0.05	.00 2.51
11   12   12   13   13   13   13   13											
11/15   21   10.07   2.0   3.4   1.0   0.5   110   0.22   1.04   0.11   0.05   121   121   13.23   1.3   1.2   1.0   0.5   121   0.15   0.05   121   13.23   1.3   1.2   1.0   0.5   121   1.15   0.15   0.05   1.2   1.15   1.15   0.15   0.05   1.2   1.15   0.1   0.05   1.2   1.15   1.15   0.1   0.05   1.2   1.15   1.15   0.05   0.2   1.17   1.15   0.05   0.2   1.17   1.15   0.05   0.2   1.17   1.15   0.05   0.2   1.17   1.15   0.05   0.2   1.17   0.05   0.2   1.17   1.15   0.05   0.2   1.17   0.05   0.2   1.17   0.05   0.		19	25. 48	.0.8	8.0	0.6 0.2	\$5	0.07	0.73	0.06	. 02 5. 05
11/15											
11/14   2   34.84   0.4   1.4   0.5   0.4   1.70   0.03   1.24   0.09   0.05   0.02   3   8   24.25   0.5   0.5   0.5   0.7   0.5   0.2   30   0.65   0.15   0.2   3   1.24   0.5   0.25   0.2   3   1.24   0.5   0.25   0.2   3   1.24   0.25   0.2   3   0.25   0.2   3   0.2		22	\$8.29	1. 8	8.2	1.0 0.5	170	0. 25	1. 13	0.14 : 0	.06 23.41
11/21	11/11										
11	31/40										
11/21   11/21   0.8   2.2   0.4   0.2   38   0.64   0.17   0.03   0.01   2   1   1   1   2   0.5   0.2   1.5   0.4   0.1   0.1   2   0.61   0.13   0.04   0.01   2   0.01   1   1   1   1   1   1   1   1   1											
11/21   20.05   0.2   1.8   0.6   0.1   28   0.01   0.13   0.04   0.01   2   11/15   0.1   1.4   0.1   0.1   20   0.07   0.11   0.02   0.01   0.01   11/15   0.1   1.0   0.4   0.1   20   0.07   0.11   0.02   0.00   0.01   11/15   0.1   1.0   0.4   0.1   20   0.01   0.01   0.01   0.01   0.01   11/15   0.1   0.1   0.0   0.01   0.0											
11/19		. 17	20.05	0. 2	l.B	0.6 0.1	28	0.01	0.13	0.04	.01 2.02
11/21											
6   13-75   0.4   1.5   0.5   0.1   20   0.03   0.07   0.07   0.00   1	11/19	0	19,75	0.8	1.8	0.4 0.1	20	0.06	0.13	0.03	.00 \$.47
1	ł										
11/20		9	18. 67	0. 2	1. 2	0, 4 0.,1	20	0.01	0.08	0.03	.00 1.30
11/20 0   14.51   1.0   0.4   0.4   0.1   5   0.06   0.05   0.02   0.00   0   12   15.80   0.4   0.0   0.4   0.1   1   0.05   0.00   0.02   0.00   0.00   0.00   11/21   0   11.50   0.4   0.0   0.4   0.1   10   0.02   0.00   0.02   0.00   0.00   0.00   0.00   11/21   0   11.50   0.0   0.0   0.4   0.1   2   0.05   0.00   0.02   0.00   0.0											
11/21	11/20		16, 61	1.0	0.4	0. 4 0. 1		0.06			
11/21			16.07	0.8	0.0	0.4 0.1	8	0.05	0.00	0.02 0	.00 0.44
11/21   0	:										
12	11/11	0	14.50	1.0	0.0	0.4 0.1	2.	0.05	0.60	0.02 0	.00 0.10
11											
11/22		17	14.50	0.8	0.8	0.4 0.1	20	0.04	0.04	0.02	.00 1.0
11/22   20											
11/24   1.1		20	37.87	2.0	1.4	0.8 0.4	120	0, 27		0.11 0	. 05 16. 36
11/25	11/22	_									
11/25											
11/23   0   20.98   0.8   0.0   0.3   0.1   30   0.06   0.00   0.04   0.01   2   12   14.24   0.6   3.4   0.3   0.1   16   0.03   0.17   0.02   0.00   0.01   18   13.50   1.5   0.6   0.5   0.00   0.02   0.02   0.02   0.02   0.02   0.02   0.02   0.02   0.02   0.02   0.02   0.02   0.02   0.02   0.											
1	11/23										
11/24			15, 27		0.0	0, 3 0. 1		0, 0\$	0.00	6. 02 0	.00 1.1.
11/24											
11/25	11/24	0	13. 25	0.6	0.0	0, 2 0, 1	16	0.03	0.00	0.01 0	. 00 0. 76
11/25											
12		P	20.96	1.0	1. 6	0. \$ 0. 2	70	0.08	0. 12	0.04 0	. 01 5. 24
11/25											
1		14	16,34	0.8	1. 2	0.4 0.1	40	0.05	0, 07	0.02 0	.00 2.3
12	11/25										
11/26	ļ	12	14.24	0, 6	1.0	0, 2 0, 0	16	0.02	0.05	0.01 0	.00 9.83
16	11/25										
17	/		14.76								
19		17	16.89	1. 2	<b>\$</b> . 0	1. 2 0. 2	32	0.01	û. 3¢	6.07	. 01 1. 9!
20											
11/27		20	101.52	3. 2	11.0	2.0 0.1	\$80	1.17	4. 02	0.73 0	. 02 231. 91
9 32.70 1.0 7.6 0.8 0.0 55 0.12 0.89 0.09 0.00 6. 12 29.70 1.2 8.4 0.6 0.0 300 0.13 0.68 0.06 0.00 32. 18 31.56 0.8 4.8 0.4 0.2 50 0.09 0.55 0.04 0.02 5. 20 36.66 0.4 5.4 0.5 0.2 60 0.05 0.71 0.06 0.02 5. 21 40.81 0.2 8.4 0.3 0.2 70 0.03 0.94 0.06 0.02 1.  11/28 0 36.84 3 3 35.84 4 32.70 5 30.44 6 30.44 0.6 6.5 0.3 0.2 53 0.07 0.71 0.03 0.02 5. 12 28.26 18 25.48 0.8 6.5 0.3 0.1 36 0.07 0.71 0.03 0.02 3. 11/29 0 24.15 0.4 2.4 0.3 0.0 28 0.07 0.71 0.03 0.00 2. 11/29 0 24.15 0.4 2.4 0.3 0.0 28 0.03 0.21 0.03 0.01 3. 11/29 1 0 24.15 0.4 2.4 0.3 0.0 28 0.03 0.21 0.03 0.00 2. 12 20.35 0.8 2.2 0.8 0.0 15 0.06 0.24 0.02 0.01 2. 12 20.35 0.8 2.2 0.8 0.0 15 0.06 0.24 0.02 0.01 2. 11/30 0 18.58 0.6 2.6 0.3 0.1 20 0.04 0.19 0.02 0.00 1.	11/27										
18		9	32.19	1.0	7. 6	0, E D. O	55	0.12	0.89	0.09 0	.00 6.41
20 36.6€ 0.4 5.4 0.5 0.2 60 0.05 0.71 0.06 0.02 7. 21 40.81 0.2 6.4 0.3 0.2 70 0.93 0.94 0.03 0.93 10.  11/26 0 36.6€ 3 35.84 4 32.70 5 30.44 6 30.44 0.6 6.5 0.3 0.2 53 0.07 0.71 0.03 0.02 5.  12 28.26 18 25.48 0.8 6.5 0.3 0.1 35 0.07 0.60 0.03 0.01 3.  11/29 0 24.15 0.4 2.4 0.3 0.0 28 0.03 0.21 0.03 0.00 2. 6 22.21 0.8 3.0 0.3 0.1 30 0.06 0.24 0.03 0.00 2. 12 20.35 0.8 2.2 0.6 0.0 16 0.06 0.16 0.04 0.00 1.  18 19.16 0.8 2.8 0.3 0.1 20 0.04 0.19 0.02 0.01 2.  11/30 0 18.58 0.6 2.6 0.3 0.1 40 0.06 0.17 0.02 0.01 2.											
11/28 0 36.84 3 33.84 4 32.70 5 30.44 6 5 0.5 0.3 0.2 53 0.07 0.71 0.08 0.02 5. 12 28.28 18 75.48 0.8 6.5 0.3 0.1 36 0.07 0.60 0.01 0.01 3 11/29 0 24.13 0.4 2.4 0.3 0.0 24 0.03 0.21 0.03 0.00 2 6 22.21 0.8 3.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		20	36.6€	0.4	5.4	0.5 0.2	60	0.05	0.31	0.06 0	, 02 7. 92
3 35,84 4 32,70 5 30,44 6 6 30,44 0.6 6.5 0.3 0.2 53 0.07 0.71 0.03 0.02 5. 12 28,26 18 75,48 0.8 6.5 0.3 0.1 36 0.07 0.60 0.03 0.01 3. 11/29 0 24,15 0.4 2.4 0.3 0.0 28 0.03 0.21 0.03 0.00 2 6 22,21 0.8 3.0 0.3 0.1 30 0.06 0.24 0.03 0.00 2 6 22,21 0.8 3.0 0.3 0.1 30 0.06 0.24 0.02 0.01 2 12 20,35 0.8 2.2 0.6 0.0 16 0.06 0.16 0.04 0.00 1. 18 19,16 0.8 2.8 0.3 0.1 20 0.04 0.19 0.02 0.00 1. 11/20 0 18,58 0.6 2.6 0.3 0.1 40 0.04 0.17 0.02 0.01 2	11/28			0,1	5.4	0. 1 0. 1		0.01	0. 94	5.04 0	. 03 10, 21
4   32, 70   5   30, 44   6   6   5   0, 3   0, 2   53   0, 07   0, 71   0, 03   0, 02   5, 12   28, 26   18   25, 48   0, 8   6, 5   0, 3   0, 1   36   0, 07   0, 60   0, 03   0, 01   3, 11/29   0   24, 13   0, 4   2, 4   0, 3   0, 0   28   0, 03   0, 21   0, 03   0, 00   2, 4   2, 21   0, 8   3, 0   0, 3   0, 1   30   0, 66   0, 24   0, 02   0, 01   2, 12   20, 35   0, 8   2, 2   0, 6   0, 0   16   0, 06   0, 18   0, 04   0, 00   1, 11/30   0   18, 58   0, 6   2, 8   0, 3   0, 1   20   0, 04   0, 19   0, 02   0, 01   2, 11/30   0   18, 58   0, 6   2, 6   0, 3   0, 1   40   0, 04   0, 17   0, 02   0, 01   2, 11/30   0   18, 58   0, 6   2, 6   0, 3   0, 1   40   0, 04   0, 17   0, 02   0, 01   2, 11/30   0   18, 58   0, 6   2, 6   0, 3   0, 1   40   0, 04   0, 17   0, 02   0, 01   2, 11/30   0, 18, 58   0, 6   2, 6   0, 3   0, 1   40   0, 04   0, 17   0, 02   0, 01   2, 11/30   0, 18, 58   0, 6   2, 6   0, 3   0, 1   40   0, 04   0, 17   0, 02   0, 01   2, 11/30   0, 18, 58   0, 6   2, 6   0, 3   0, 1   40   0, 04   0, 17   0, 02   0, 01   2, 11/30   0, 17   0, 02   0, 01   2, 11/30   0, 18, 58   0, 6   2, 6   0, 3   0, 1   40   0, 04   0, 17   0, 02   0, 01   2, 11/30   0, 18, 58   0, 6   2, 6   0, 3   0, 1   40   0, 04   0, 17   0, 02   0, 01   2, 11/30   0, 18, 58   0, 6   2, 6   0, 3   0, 11/30   0, 17   0, 02   0, 01   2, 11/30   0, 17   0, 02   0, 01   2, 11/30   0, 17   0, 02   0, 01   2, 11/30   0, 17   0, 02   0, 01   2, 11/30   0, 17   0, 02   0, 01   2, 11/30   0, 17   0, 02   0, 01   2, 11/30   0, 17   0, 02   0, 01   2, 11/30   0, 17   0, 02   0, 01   2, 11/30   0, 17   0, 02   0, 01   2, 11/30   0, 17   0, 02   0, 01   2, 11/30   0, 01   0, 0	11/60	3	35, 84								
12   28   28   28   25   25   28   25   25			52.70								
12 28.26   18 72.48 0.8 6.5 0.3 0.1 36 0.07 0.60 0.03 0.01 3.   11/29 0 24.13 0.4 2.4 0.3 0.0 28 0.03 0.21 0.03 0.00 2.   6 22.21 0.8 3.0 0.3 0.1 30 0.06 0.24 0.02 0.01 2.   12 20.35 0.8 2.2 0.6 0.0 16 0.06 0.16 0.04 0.00 1.   18 19.16 0.8 2.8 0.3 0.1 20 0.04 0.19 0.02 0.00 1.   11/20 0 18.58 0.6 2.6 0.3 0.1 40 0.06 0.17 0.02 0.01 2.	1			0.6	6. 5	0.3 0.2	53	0.07	0.71	0.01 0	. 02 \$. 8
11/29 0 24.15 0.4 2.4 0.3 0.0 24 0.03 0.21 0.03 0.00 2. 6 22.21 0.8 3.0 0.3 0.1 30 0.06 0.24 0.02 0.01 2. 12 20.35 0.8 2.2 0.6 0.0 16 0.06 0.16 0.04 0.00 1. 14 19.16 0.8 2.4 0.3 0.1 20 0.04 0.19 0.02 0.00 1. 11/20 0 18.56 0.6 2.6 0.3 0.1 40 0.04 0.17 0.02 0.00 1.		12	28.26								•
6 22.21 0.8 3.0 0.1 0.1 30 0.06 0.24 0.02 0.01 2. 12 20.35 0.8 2.2 0.6 0.0 16 0.06 0.16 0.06 0.16 0.00 1. 14 19.16 0.8 2.8 0.3 0.1 20 0.04 0.19 0.02 0.00 1. 11/20 0 18.58 0.6 2.6 0.7 0.1 40 0.06 0.17 0.02 0.01 2.	11/29										
18 19.16 0.6 2.8 0.3 0.1 20 0.04 0.19 0.02 0.00 1. 11/20 0 18.58 0.6 2.6 0.3 0.1 40 0.04 0.17 0.02 0.91 2.		. 6	22. 21	0.8	3.0	0.1 0.1	10	0.06	0.24	8.02 0	. 61 2. 40
11/30 0 18.58 0.6 2,6 0.3 0.1 40 0.06 0.17 0.02 0.01 2.		12									
6 18.01 1.0 2.6 0.3 0.1 20 0.06 0.17 0.02 0.01			1 19.18								

Table APP. 3-2 Results of River Water Quality Analysis of Continuous Survey

		707	16/11	17/11	+7/11	19/11	14/11	17/11	17/11	19/11	19/11	/		/	11/11	/	
חשוב סו		36	17/01	11/11	77/17	11/11	11/11	11/11	11/11	1 (/ 11	11/17	17/17	11/11	1777	17/17	11/11	11/11
General	number of the laboratory	tory	13204	13205	13206	13207	13208	13209	13210	13211	13212	13213	13214	13215	13216	13217	13218
CODE	PARAMETER UN	UNITY			 	; () () () ()											
020628 020618 020305 173008	ature eraturec be) leld) field)		24.00 24.00 24.00 26.00 0.03 6.94	8.00 25.00 22.44	9.00 28.00 22.38	10,00 25,00 22,24	11.00 25.00 22.00	12.00 24.00 23.00	14, 35 23, 00 22, 00	15.00 23.00 22.50	16, 00 22, 00 22, 00	17.00 22.00 23.00	18.00 4.00 22.50	19.50 19.50 21.00	20.00 20.00 22.00	21.00 19.00 22.00	22.00 19.00 21.00
05102F 02041L 10301L 08202L	DO (11e1d) 32 Conduct. (1ab) um pH. (1ab) BOD (total) 32 COD (total) 33	m8/1 umbo/cm mg/1	7. 20 0. 8 2. 5	. 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0	6.79 1.6		6.75	6, 72	6.3 0.3 2.8 2.8 2.8	30 7.19 1.2 30	7. 3. 3. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	7.08	1.4.22		6. 96 1.4 30	35 7. 15 2. 0 40	31 7.03 1.8 40
15408L 07008L 08402L 10401L 08306L	rogen rogen taline	8 P/1 8 P/1 8 P/1 8 P/1 8 P/1	0.06 0.06 2.8 2.8	0.22 0.38 0.88 3.88	0.30 0.8 7.0 100	0 0,6 0,8 2,8 8.4.8	0. 20 0. 5 7. 2 50	0.15 0.4 5.6 40	0.15 0.6 7.2 38	0.0 0.0 6.8 8.8	0.10 0.7 5.4 34	0.10 0.5 3.4	0.10 0.8 6.2 6.2	0.20 0.6 8.0 5.5	0,30 1.0 8.0 90	0.50 1.0 180 180	0.45 1.0 8.2 170
						·										·	
Date of	samp   ing	NOV, 92	17/11	18/11	18/11	18/11	18/11	18/11	18/11	18/11	18/11	18/11	18/11	19/11	19/11	19/11	19/11
General	number of the laboratory	tory	13219	13220	13221	13222	13223	13436	13437	13438	13439	13440	13441	13442	13443	13444	13445
CODE	PARAMETER UN	UNITY	1 	         				, , ,		<u> </u>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1	1	1		1
02062F 02061F 02080F 02042F 17300F	Time Air temperature C Water temperaturect Transp. (theb) cm Conduct. (field) m Salinity (field) %.	e .	23.00 20.00 21.50	2.00 19.50 21.00	5.00 20.00 21.00	8.00 22.00 21.00	11,00 24.50 23.00	14.00 23.00 23.00	17. 00 22. 00 22. 00	17. 30 21. 00 22. 00	20, 30 20, 00 21, 00	21, 00 20, 00 21, 00	24.00 19.50 21.00	3.00 20.00 21.00	6, 00 19, 00 18, 00	9, 00 25, 00 21, 60	12:00 28.00 23.00
10300F 08102F 02041L 10301L 08202L		ng/i unho/cm ng/l	6. 1. 9. 2. 1. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	7. 29	7.18	7.03	7. 15 0.6	30 0.8	31 7.04 0.2	1 28 0 4	7.01	7.02		7.11	30 7.3 10.4	6. 9.9.5 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	30 7.27 0.8
	(rotal) il Phosphorus idahi Nitrogen si OC alcaline cended Solids	as 1/1 as 5/1 as	0.40 0.7 8.8 150	0.35 0.6 8.6 120	. 0.15 7.8 7.8	0.15 0.5 0.5 70	0, 10 0, 5 5, 8 30	0,15 0,4 2,2 38	0, 10 0, 6 1, 8 1, 8	0.0 0.0 2.0 2.0 2.0	0.08 0.3 1.6 20	0.06 0.4 1.0 20	0.06 0.4 1.8	0.06 0.6 1.2 20	0, 07 0, 3 1, 0 20	0.05 0.4 1.2 20	0.07 0.5 1.0 24
08306L	Toc	mg/l						:							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

Table APP. 3-2 Results of River Water Quality Analysis of Continuous Survey

Date of	Date of sampling	NOV. 92	19/11	19/11	20/11	20/11	20/11	20/11	21/11	21/11	21/11	21/11	21/11	21/11	2: 11	22/11	22/11
General	General number of the laboratory	ratory	13533	13534	13535	13536	13537	13538	13539	13540	13541	13542	13543	13544	13545	13546	13547
3000	PARAMETER L	UNITY													·		
02062F 02061F 02080F 02042F 17300F	Time Air temperature C Water temperaturecC Transp, (tube) c Conduct. (field) m Sainnity (field) % pH (field) %	အပ်ပွဲ <sup>ပို့</sup> ရေး ေ	18, 00 29, 50 22, 50	24. 00 20. 00 21. 00	6. 00 18. 00 20. 00	12. 00 22. 00 23. 00	18.00 24.00 24.00	24. 00 22. 00 23. 00	6, 00 21, 00 21, 00	12.00 26.00 23.00	17, 00 25, 00 25, 00	18. 00 24. 00 25. 06	19.00 23.00 24.00	20.00 22.00 23.00	24, 00 21, 00 22, 00	4. 30 20. 30 20. 00	8.00 22.00 21.00
02041L 10301L 03202L 03301L 15408L	Conduct. (lab) pH (lab) BOD (total) COD (total) Total Phosphorus B	ng/; unho/cm ng/! ng/!	7. 23 7. 33 0. 65 0. 09	1, 22 1, 22 0, 04 0, 05	7.19 0.8 710 0.06	30 7,27 0.4 <10 0.07	6.82 0.8 0.0 0.01	29 7.26 1.0 1.5 0.06	7. 32 0. 8 0. 6 0. 06	7, 18 0. 0 15 0. 0	3. 0.8 0.08 0.08	30 0, 56 0, 09 0, 09	7.81 1.0 7.00 1.0	30 2.52 2.0 1.50 4.0	30 7.52 1.2 30 0.30	7. 43 1. 0 35 0. 10	30 0.6 0.0 0.09
07008E 08402E 10401E 08306E	Kjeldahl Nitrogen mg N Total OC alcaline mg/l Suspended Solids: mg/l TOC	BE N/1 BE/1 BE/1 BE/1	0.5 0.4 10	ට 4 ක ය	0.0 4.0 &	0.0	0 0 2 0 0	4.0.2	၈ ဆ တ ဝ ဝ	2.0	0.8 20 20	0 0 4 6 8 1	0.3 1.2 150	0.8 3.4 120	1.0 120	3.2	9.0 0.0 30
Date of	sampling	NOV. 92	22/11	22/11	22/11	23/11	23/11	23/11	23/11	24/11	24/11	24/11	24/11	24/11	24/11	24/11	25/11
General	number of the labor	ratory	13548	13702	13703	13704	13705	1370\$	13707	13708	13709	13710	13711	13712	13713	13714	13715
02062F 02061F 02080F 02042F 17300F	ature eraturec be) (eld) field)	င္တပ္ပင္သန	12.00 29.00 24.00	18.00 27.00 26.00	24.00 22.00 23.00	5.00 21.00 21.00	12.00 25.00 23.00	18.00 23.00 23.00	24.00 22.00 22.00	6.00 21.00 21.00	7.00 22.00 22.00	8.00 22.00 22.00	22.00 22.00 22.00	12.00 24.00 22.00	18, 00 22, 00 23, 00	24.00 20.00 21.00	6.00 21.00 21.00
08102F 02041L 10301L 08202L 08301L 15408L 07008L 08402L	DO (field) Conduct. (lab) DR (lab) BD (total) COD (total) Total Phosphorus mg/l Total Phosphorus mg/l Total OC alcaline mg/l Suspended Solids mg/l Total OC alcaline mg/l Suspended Solids mg/l	98/1 UshO/cs 88/1 88/1 1 88/1 1 88/1 1 88/1		6.8 0.8 0.0 0.06 0.5 1.0	30 70.8 710 710 710 710 710 710 710 710 710 710	45 5.10 1.0 10 0.08 0.3	6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5. 33 5. 98 7. 6 7. 0 0. 04 0. 5 1. 6	6.87 0.6 0.6 0.05 0.05 1.6	28 6.03 1.2 <10 0.07 0.3 0.4	2. 95 1. 4 710 710 0. 15 0. 6 60	27 5, 70 1, 0 10 0, 15 0, 5 1, 6	25 25 0 8 0 10 0 10 0 8 0 8 40	5.87 1.0 1.0 0.10 1.2 2.8 5.5	36 5. 53 0. 6 0. 6 0. 4 1. 2	28 6.94 0.6 710 0.4 1.0	28 6.14 0.4 710 0.06 0.4 1.6
			7	1	1111111		1										1111111

Table APP. 3-2 Results of River Water Quality Analysis of Continuous Survey

Date of	Date of sampling NOV. 9	NOV. 92	25/11	25/11 2	26/11	26/11	26/11	11/92	26/11	26/11	26/11	27/11	27/11	27/11	27/11	27/11	27/11
General	number of the labor	atory	13716	13716 13717	13936	14137	13935	14139	13937	13938	13939	13940	13941	13942	14124	14125	14126
CODE	CODE PARAMETER UNITY	UNITY															
	- 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		12.00	18.00	6.00	16.00	17.00	18,00	19.00	20.00	21.00	3.00	9, 00	12.00	18.00	20.00	21.00
12062F	Air temperature	ေပ	26.50	25.00	23.00	22.00	21.00	21.00	21.00	22.00	22.00	21.00	21.00	21.00	20,00	20.00	20.00
32061F	Water temperatured	ن ن	23.00	24.50	22,00	23.00	23.00	23.00	21.00	21.00	21.00	20.00	21,00	20.00	20,50	20.00	20.00
12080F	Transp. (tube)	ē												٠			
2042F	Conduct. (field)	E												•			
7300F	Salinity (field)	≱€															
10300F	pH (field)																
8102F	DO (field)	1/8#											:				
2041L	Conduct. (lab)	umbo/cm	28	31	53	30	32	31	27	24	23	24	26	25	29	52	28
10301L	pH (lab)		6.11	6.08	7.62	6.90	1. 20	6.90	6.56	6, 79	7.03	6.93	7.42	7,46	6.98	7.01	5.92
12028C	BOD (total)	mg/1	0.4	9.8	0.3	0.4	1.2	0.8	4, 3	3.2	.; 9	o. 8	1.0	1: 2	0.8	9,0	2.0
8301L	COD (total)	#g/1	<10	<10	<10	<10	10	20	340	70	90	15	15	13	10	01V	10
154085	Total Phosphorus	mg P/1	0.04	0.05	0.06	0.17	0.17	0.15	0.10	0.05	0.02	0.01	0.01	0.01	0.15	0.15	0.20
370085	Kjeldahl Mitrogen	mg N/1	0.2	е С	0.50	1.00	1.2	1.40	6,50	2.00	1,60	0.60	0.80	0.50	0.35	0.45	0.30
38402L	Total OC alcaline	ng/1	1.0	0 0	2:2	3, 2	9	11.0	52.0	11.0	10.6	5.8	7.6	6.4	4.8	5.4	5.4
104015	Suspended Solids	mg/1	16	50	<2	35	32	260	200	580	170	40	43	300	20	90	10
79759	100	1/8															

Sate of	sampling	NOV. 92	28/11	28/11	29/11	29/11	29/11	29/11	30/11
Jeneral	number of the laboratory	ratory	14127	14128	14129	14133	14130	14134	14135
CODE	PARAMETER	UNITY							
		 	18.00					24.00	6.00
12052F	Air temperature	· U	20.00			23 00	22.00		
12061F	Water temperature	ပ္ပ	21.00	20.00	17.00				-
32080F	Transp (tube)	E							
12042F	Conduct. (field)	E							
17300F	Salinity (field)	%.							
10300F	pH (field)								
38102F	DO (field)	1/2=							
020411	Conduct. (lab)	umho/cm	27						
10301	of (1ab)		6.88						_
082021	B00 (total)	mg/1	0.8						
083011	Con (total)	1/28	15						
154021	Total Phosphorus	1 / A Z I	0.10						
0.700.81	Kieldahi Nitrogen	ME N/1	0.33				0.30	0.30	0.30
084021	Total Of alcaline	1/34	5.6						
10401L	Suspended Solids mg/	mg/1	36	28	30	16			
083061	T0C	пε/1							

Table APP. 3-2 Results of River Water Quality Analysis of Continuous Survey RIO ACARI

Date of sampling	YOV. 92	XOV. 52 17/11	17/11	17/11	18/11	18/11	18/11	18/11	18/11	18/11	18/11	18/11	19/11	19/11	19/11	19/11
General number of the laboratory 13229	he laborator	y 13229	13230	13231	13232	13233	13234	13235	13236	13427	13428	13429	13430	13431	13432	13433
CODE PARAMETER	YTIKO			! ! !	} } }											
Time 02052F Air temperature C 02051F Water temperaturecC 02080F Transp. (tube) c 02042F Conduct. (field) m 17300F Salinity (field) x	ure c aturecc ;) ca i(d) w	15.00 27.00 25.06	18, 00 25, 00 30, 02	21. 00 23. 00 28. 30	2.00 20.00 23.04	3.00 23.00 20.02	8.00 24.00 24.02	2 8.00 24.00	12, 86 23, 00 20, 03	25.00 20.05	24.05 24.05	21.00 2.00 23.00	0. 00 19. 00 21. 00	3 00 19 00 20 00	5, 00 20, 00 21, 36	9. 00 26. 00 25. 03
08102F DO (field) 02041L Conduct, (lab) 10301L DB (lab)	ng/1 unto/cm	<b>(-</b>	370	380 7. ŝ	270	290	320 7.85	350	7.74	400	380	410	430	360	340	320 7.36
)S202L B0D (total) )8301L C0D (total)	1 / 8 d	26 30	26 50	61 63 44 13	35	22 °8	60 G	10	14	20	16	13	18 10	** 05	2 09	2 25
15408L Total Phosphorus mg P/1 07008L Kieldahl Nitrogen mg N/1	orus mg P/1		1.00	1.00	1.00	0.35	0.50	0.50	0.50	1.00		4	U: σ	- 14 K	-4 €	,
08402L Total OC alcaline mg/l 10401L Suspended Solids mg/l 08306L TOC mg/l	aline mg/l	11.0 65	11.4	11.4	300	9.6	30	9.6 16	11. 2	10.0	8 58 8 19	9.6 30.8	10.0	2.08	6.09	8.8 15 15
								 			:					
Date of sampling	NOV. 92	NOV. 92 19/11	19/11	19/11	19/11	11/02	20/11	20/11	20/11	20/11	21/11	21/11	21/11	21/11	22/11	22/11
General number of the laboratory 13434	he laborator	y 13434	13435	13473	13474	13475	13476	13477	13478	13479	13480	13481	13482	13483	13484	13485
CODE PARAMETER	UNITY															*
Time	B2 (	12.00	15.00	18.00	21.00	00.00	3.00	6.00	12.00	18.00	0.00	5.00	12.00	18.00	0.00	6.00

Date of sampling	NOV. 92 19/11 19/11	111	19/11	19/11	19/11	20/11	20/11	20/11	11/02	20/11	21/11	21/11	21/11	21/11	22/11	22/11
General number of the laboratory 13434	aboratory	13434	13435	13473	13474	13475	13476	13477	13478	13479	13480	13481	13482	13483	13484	13485
CODE PARAMETER	UNITY	1										***************************************			-	
Time	24	12.00	15.00	18.00	21.00	00:0	3.00	6.00	12.00	18 00	0.00	60.8	12.00	00 81		
02062F Air temperature C	ပ	30.00	34.00	25.00	26,00	20.00	20.00	20.00	32.00	31.00	21.00	20.00	31.00	28 00	28.00	9 6
02061F Water temperatur	ဥ္သ	27.04	28.04	20.00	20.00	20.04	20.04	20.00	28, 99	28,00	20.04	20.00	28.00	26.00		
02080F Transp. (tube)	C.										,		,			
02042F Conduct, (field)	8						,									
17300F Salinity (field)	34															
10300F pH (field)												٠,				
08102F DO (field)	mg/1			٠												
02041L Conduct (lab)	unho/cm	340	430	380	430	460	470	150	430	470	05 ¥	330	470	0 # 9		666
10301L pH (1ab)		7.03	7, 28	7. 42	7.40	7 49	7,56	7.63	7.49	7.46	7 48	7.5		2	075	200
08202L BOD (total)	1/84	20	24	36	38	20	32	22	24	25	909					
08301L COD (total)	1/20	20	60	70.	70	35	47	9	60	100	001	2.5	3 6	2 6		7 5
15408L Total Phosphorus	mg P/1	1.5	2	2,00	2.00	2.00	2,00	2,00	2, 00	2.00	200	50.5	,	,		2 4
07008L Kjeldahl Nitrogen mg N/l	n ng N/l	9, 5	12.0	S.	10.0	7.5	11.0	10.0	16.0	11.0	6	-	. C	200		, ,
08402L Total OC alcalin	e mg/1	6	9. 2	3.2	12. 6	10.8	11.2	4	10.2	0 0	10.6		, c	0.01		
10401L Suspended Solids	mg/l	20	20	30	14	22	3.0	32	ec er	08	8	36		0.0		
083061, 700	1/04					!		!	:	;	3	2	?	2		77

Table APP. 3-2 Results of River Water Quality Analysis of Continuous Survey

General number of the laboratory 13488 19796 19794	7 75 . 26 6	2/11	NOV. 92 22/11 22/11 23/11	23/11	23/11	23/11	23/11	24/11	24/11	24/11	24/11	25/11	26 /11				
	e laboratory	13485	18786	19791	8040						** /**		3	77/67	11/97	25/11	26/11
				10-01	207.07	13.138	13740	13741	13742	13743	13744	13745	13746	13920	13925	13921	13922
CODE PARAMETER	UNITY															į	
9 2 2 2	m	12.00	18.00	0.00	8.00	12.00	18 00	000		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1000						
02062F Air temperature C	re C	31.00	30.00	29.00	28,00	28.00	27.00	26.00	00,00	27,00	18.00	0.00	6.00	18.00	6,00	13,00	14.00
2061F Water tempera	turecc	29.00	28.00	28,00	26,00	26.00	25.00	95.00	00.60	, ,	70.60	25.00	21.00	27.00	21.00	27.00	1425,00
2080F Transp. (tube)	E								00.69	64.00	72.00	25.00	25.00	26.00	25,00	26.00	25.00
2042F Conduct. (fiel-	g) ==																
7300F Salinity (fie	1d) %																
0300F pR (field)																	
8102F DO (field)	1/84																
2041L Conduct. (lab)	unho/cm	360	310	300	360	340	210		ć		;			-			
0301L pH (lab)		-1	7.11	2	2 C	2 4	210	200	975	360	130	380	390	400	310	170	170
8202L BOD (total)	mg/]	200	2.2		,			2	1.14	5,53	7.07	6.54	7.64	6,97	7,05	7,03	7.05
8301L COD (total)	1/ZB	130	30	2 5	# C	000	07	9 4	<del>र</del> ज्य	35	24	12	22	50	>74	30	30
5408L Total Phospho.	I/d and sha	2 00		2	2 6	071	2	30	40	10	120	30	. 60	90	350	0.80	10,
7008L Kjeldahl Nitro	oxen mg N/1	ec	3 -	30		00.7	1.50	0,50	1.50	1.50	1.50	1.50	1, 50	2.00	0.50	0.06	
8402L Total OC alea	ne mo/			7 6	0 5	o	2, 3	0	9.2	2.0	. 8 . 8	6,8	, t	4.0	10.5	· tc	7.
0401L Suspended Solids #4/8	1/25 30:		7 ( . u	2 !	0:/7	10.4	6	7.4	8. 0.	16.0	60.0	26.0	24.0	28.0	0 Y Y		* 6
18306L TOC	1/0E	5	e e	r,	70	80 100	70	100	12	40	25	25	08	67	140	800	, c

Date of sampling	NOV. 92 26/11		26/11 28/11	28/11	26/11	26/11	26/11	26/11	26/11	27/11	27/11	27/11	27/11	27/11	28/11	98/11	20/11
General number of the laboratory 13923 13924 13	aboratory	13923	13924	13928	13929	13930	13931	13926	13927	13932	ì	i	14081	14069	i	1 8	11/2
CODE PARAMETER	YTIND					-			-				***************************************	7,02,4		14004	14000
Tipe	1	15.00	16.00	×	10 00									ļ	ł		
02062F Air temperature	: ပ	1526.00	1626.00	25.00	28.00	26.00	28.00	25.00	23.00	9.00	6.00	9.00	13,00	15.00	6.00	18,00	9,00
02081F Water temperaturecC	Joa.	25,00	25.00	26	25.00						•	24.90	26.00			26.00	27, 00
02080F Transp. (tube)	E S			;	,	4					•	24.00	25.00			24.00	25,00
02042F Conduct. (field)	Æ																
17300F Salinity (field)	»ė																
10300F pH (field)																	
08102F DO (field)	18/1																
02041L Conduct. (lab)	umbo/cm	170	170	200		260		250		000	000	6	9	007			į
10301L pH (lab)		7.05	7.17	7.18		7, 13	7 15	27	727	630	0.57	202	257	430	320	050	380
08202L BOD (total)	mg/1	52	24	25		× +		1 5			2 .	7	1.44	7.48	1. 72	1, 61	[· ]
08301L COD (total)	mg/l	130	90	30		90		9 0		4.6	7.1	14	91	10	4	20	10
15408L Total Phosphorus	: mg P/1	0.04	0.06	0.10		08.0		0		2 6	9 6	30	501	071	70	110	ליו
07008L Kjeldah! Nitroge	an mg N/I	1. 2	1.8	7			`	, ,		2.	0.00	CT .0	1, 00	1.00	0.50	1.50	1, 00
08402L Total OC alealin	ie mg/	0.0		. 41				;		7:	7.9	 		ъ, Э	1.2	10.0	7. 6
104011 Suspended Solids	, t	000						9. e		14.0	10.8	10. 2	9.4	12.2	2.2	10.8	60 60
08305L TOC 31103 318/1	1/8#	0.70		010		022		210		160	130	90	70	6.5	20	44	<b>r</b> ~

Table APP. 3-3 Rating Curves of the two Model Rivers

RIO ACARI	H	-QCURVE			
NO.	н . н	<b>^2</b>	0	<b>√</b> 0	H≠√Q
1.000	0.940	0,884	25, 197	5.020	4, 718
2.000	0.750	0.583	9, 060	3.010	2. 25
3,000	0.700	0.490	8.504	2.916	2.04
4.000	0.680	0.462	6.661	2, 581	1.75
5,000	0.620	0.384	6, 367	2, 523	1.56
6.000	0.680	0.462	6, 937	2, 634	1, 79
1,000	0.670	0.449	6.868	2, 621	1. 75
8,000	0.660	0.436	6. 231	2.496	1.64
9.000	0.650	0.423	5.989	2.447	1. 59
10.000	0.630	0.397	5.554	2. 357	1.48
11.000	0.620	0.384	5. 283	2. 298	1.42
12.000	0.600	0.360	5. 128	2. 265	1.35
Σ	8. 200	5. 694	97.779	33.158	23. 39
n[H√Q]	280.683				
[H](√Q)	271.974				
n[H^2]	68.323				
[H]^2	67.240				
[H^2][√Q]	188.843				
[ŊŢH] [H]	191.800				
a	n[H√Q]-(H)	[√0]	8.709	8.040	
	n[H^2]-[H]^	2	1.083		
b	[B^2][√Q]-	-[H][H√°0]	-2, 957	-2. 730	
_	n[n]-[s]n]n		1.083		
a^2	64.638		•		
b/a	-0.340				

, RIO MACACU		H-GCURAE			
					:
NO.	<b>H</b> .	H^2	Q	<b>√</b> 0	H+√Q
1.00		3. 204	31. 785	5.638	10.092
2.00			31.312	5. 596	9. 792
3.00		2.310	24.022	4.901	7.450
.4.00		0.397	3. 528	1.878	1.183
5.00		0.865	7. 330	2.707	2, 518
6.00		1.850	17. 154	4.142	5.633
7. 00		0. 922	8.420	2. 902	2. 785
8.00		0.903	8.038	2.835	2. €93
9. 00		0.884	8.106	2.847	2. 676
10.00	0.930	0.865	7. 942	2.818	2. 621
Σ	11.760	15. 261	147.637	35. 254	47.444
n{H√Q}	474.442				
[H](√Q]	426. 468				
n[il 2]	152.610				
[H] ,S	138.298				
[8 <sup>^</sup> 2][√ <sup>°</sup> Q]	553, 430				
(H)(II√0)	557.944	* .			
a	n[H√Q]-[H		47. 974	3. 352	
•	n[H^2]-[H]	^2	14.312		
ь	[H_S][^0]	-(H](H)-01	-4.514	-0.315	
	n[H <sup>2</sup> ]-[H]		14. 312	0.010	-
a^2	11.235				
b/a	-0.094				
RIO MACACU Q=a-2(H-b/s	a) /a)^2=	11. 235	*(H-0.094)	^2	

RESULTS OF DETAILED SURVEY ON MAJOR HIGHLY POLLUTED RIVERS ON CLEAR DAYS

Table APP. 4-1 Water Quality and Runoff Load of Detailed Survey on Major Highly Polluted Rivers on Clear Days

NAME   Basin Area NO.   Cas7-3    Cas7-11
MANGE   Sasin Area NO   Discharge   EDD   COD(CT)   COD(CT)   Cap(1)   Ca
MAND   MAME   Basin Area NO. Discharge   BOD   COD(Cr)   COD(Mn)   TN   TP   BOD   Load   COD(Cr)   COD(Cr)   Load   COD(Cr)   COD(
NAME   Basin Area NO.   Discharge   BOD   COD(Cr)   COD(Un)   (mg/l)   (m
NAME   Basin Area No. Discharge   BGD   COD(G-7)   COD(4n)   Th   TP   BOD Load
NAME   Basin Area NO. Discharge   BOD   COD(Cr)   GOD(MA)   COD(MA)   CANAL DO MANGUE   CANAL DO CURBA   CAN
NAME   Basin Area NO. Discharge   BDD   COD(CT)   COD(Mn)
NAME   Basin Area NO. Discharge   BOD   COD(Gr)   COD(Gr)
NO   NAME   Basin Area NO. Discharge   BGD   COD(Cr)
NO
NO
NO
NO
NO MNODO MNODO CM030 TR060 MR042 CN100 JC120 FR142 TM40 1J20 1J2

Table APP. 4-1 Water Quality and Runoff Load of Detailed Survey on Major Highly Polluted Rivers on Clear Days

								_				_			_					
			ĝ			-	CDD(Cr.)			8	CCD(JIII)			Æ				ß		
	KARE		(ING/1)		Mean Value	- 1			kean Yalue		(mg/1)	Sean Value				Hean Value		(1/24)		Henn Value
		2	Nov. 1992   A	br. 1993		84	S	rr. 1993	<b>*</b>		22	£3	Kor. 1982	2 Nov. 1992	Apr. 1993		Kov, 1992	52	pr. 1933	
-		11-13	22-22	23-22		11-13	25-27   2	2-22				_	11-13	22 23			11-13	25-27	23	
8	_	240.0	•	30.0	103.67	360.0	0	190.0		_			_				25.53	-	 S	1.1
	CHALL DO MANGUE	72.0	250.0	190.0	170.67	110.0		380.0									28	25	8	8
9	0 RIO ESTRELA	8	8	8	96.96	190.0		290.0									2 00	8	1. 45	
1306	0 RIO TRAPICHEIRO	92.0		8	\$ 61	130.0		300.0									8	8	8	1.83
18042	2 RIO KARACAKA	\$.0		80.0	69.33	90.0		200.0									28	23	 23	8
838	┝	16.0	25.5	3	ਦ ਲ	130.0		130.0					Ŀ.				3	2.88	33.	1.62
7 3020		28		8	103, 67	386		530.0									S	5.20	1.75	7 22
8 173142	Z RIO FARIA	2		55.0	58.33	280.0		175.0				:					යි ස්	88	1.89	23
9 7384		8		28.0	163.00	350.0		380.0									8	28	. 8	5.4
002(1 01		9		6.0	37.33	180.0		175.0								į	8	3	23	1.70
11 1202		42.0		8	30.67	210.0		90.0				٠					28	1.83	23	- 8
12 11210		100.0		80.0	78.67	39.0		185.0		-				-			8	2 8	1.70	2 03
13 PN 30	D CANAL TO PENTA	36.0		70.0	44, 67	140.0									_	į	8	2 20	1.40	.97
14 SJZ20	D RIOS, J. E MERITI	22.0		30.0	27.80	180.0	130.0	69.0								11.50	28	:: S	1.40	33
15: ACM		ž		30.0	88	130.0	S S	140.0									28	3	1.20	1.57
		88		8	8. 8.	5. 58.	170.0	160.0									دن ج	8 7	55	72
17 75/20		40.0	52.0	8	89	190.0	150.0	380.0									3	8	S .:	.; SS
18 16010		0.09		45.0	8 8	170. C	140.0	110.0									8	8	1.40	8
19 PV980	D. KIO PAYINA	8		70.0	99	180.0	160.0	165.0									25	8	1.75	48
20 PY983		72		90	8	170.0	9.0	110.0									28	. 50	1.70	13
21 \$7300	RIO SARAPUI	23	24.0	8	88.	80	S	65.0									2 23 23	28	1.40	1.97
22.22		8		45.0	3.8	S;	0.0	165.0									1.50	8	8	8
22 8733	0 RID SARAPUI	2.0		40.0	8	8,	40.0	80.0							-		8	0.07	7.40	98
24 14260		(G)		10.0	₩	190.0	20.02	90.0					_	_			0.45	0.50	0.55	25.5
25 12.70	B RIO TCUACU	3	© 89	10.0	\$.20	40.0	20.0	20.0						_	_		8:3	6.35	0.65	2.67
26 13280	D RTO ICUNCS	2.2	2.0	2.5	2.47	20.0	20. C	20.0									000	0.25	0.20	0 23
27 BTD40		38.0	16.0	S	8 8	3	55.0	150.0	93.33	14.0	10.0	.4 12.80	14.00	6.50	11. B	•	8	S	1.70	1.57
28 ET080	- :	3	48.0	g	3	140.0	110.0	165.0								11.48	3, 89	25	8	9
9 1,380	D RIO PILAR	26.0	8.0	30.0	21.33	50.0	30.0	55.0		6.4	9.2		- Table		<b></b> -		5	1 00	5	1.95

Table APP. 4-1 Water Quality and Runoff Load of Detailed Survey on Major Highly Polluted Rivers on Clear Days

	Discharge of seven(7) Rivers	/en(7) Ri	ivers				٠			i.					
-			-		Discharge				BOD Load				COD(Cr)Load		
Name	Basin Area NO.	2	Name		(m3/s)		Mean Value		(t/day)		Mean Value		(t/day)		Hean Value
	(Km2)			Nov, 1992	Nov, 1992	Apr. 1993	•	Nov. 1992	Nov. 1992	Apr. 1993		Nov. 1992	Nov, 1992	Арг. 1993	
				11-13	25-27	23-25		11-13	25-27	23-25		11-13	25-27	23-25	
CANAL DO MANGUE	42.80 23			7.614	4.207	4. 227	5.349	157.88		10.96	63.07	236.83	50.83	68.38	
		2		0.338	0.340	0. 102	0.260	2.10		1.67	3.71	3.21	13.83	3.35	
	:	Š		0.526	0.473	0.356	0.452	4.36		2.77	3.52	8 63	8.58	8 92	
		4 TR(		0.420	0.360	0.354	0.378	88		2.75	2.90	4.72	5.80	9. 18	
-		S KR	MR042 RIO MARACANA	1.167	0.994	0.455	0.872	4.84		69 14	4.95	19.16	18,89	7.86	
CANAL DO CUNBA	60.50 21	₹ 9			17.692	1.681	13.895	30.84		7.28	26.97	250.60	183, 43	18.88	
	_	7			0.920	1.349	1.054	6.64		13.99	9.66	25. 46	25, 44	38. 46	
		8 FR	FR142 RIO FARIA		1.141	0.290	0.996	11.30		1.63	6.15	37.67	14.79	4.38	
		9 TH			1.360	0.609	1.024	8. 58		6.84	8. 28	33.38	25.85	18.94	
RIO IRAJA	27.30 20	10 13			4. 431	2. 608	4.365	20.93		13. 52	13.02	94.20	57.43	39, 43	
		11 13			1.160	1.119	1.134	4.08		2 80	2.99	20.38	5.01	8. 70	
		12 17	1		0.537	0.309	0.411	3.34		2.14	2.69	6.35	6.50	7.8	
CANAL DO PENHA	1	.3 P			1.252	0.378	1. 125	5.43		23	3.58	21.11	17.31	0.00	
RIO S. J. DO MERITI	163.50	14 SU			29. 210	15. 323	30.933	91. 74		39. 72	50.65	667.23	328.09	211.83	
					6.048	5.891	6.406	33. 96		15.27	17.11	81.75	15.68	71.26	
-		91 80 81		1. 481	1. 786	0. 927	1.398	8. 70		4.81	7. 38	37.11	26.23	12.81	
				0.652	0.631	0.500	0.594	2.25		3.89	2, 99	10.70	8 18	16.42	
				2 731	3.064	1.747	2 514	14.16		6. 79	12. 28	40.11	37.06	16.60	
			PY980 RIO PAVUNA	0.294	1.679	1. 128	1.034	1.42		6.82	6. 23	4.57	23. 21	16.08	
		1	- ;	0.515	0.816	0.174	0.502	2.85		1.35	2.43	7.56	6.35	1.65	
RIO SARAPUI	159.80 17-6			38. 100	25.065	13. 698	25. 621	72. 42		35.51	53.30	296. 27	108.28	76.93	
				3. 485	5.036	2.084	3.535	9.83		8 10	10.93	27. 10	30.46	29.71	
- Inter-to- manufacture objects and activities of		- 4	SP330 RIO SARAPUI	1.989	4.439	2.007	2.812	4.12		6.94	6.24	15.47	15.34	13.87	
RIO IGUACU	544. 20 17-1			62, 442	41.842	26, 266	43.517	19. 42	į	22.69	18.86	1025.05	72.30	204.24	
				36.694	25 267	8. 200	23.387	20. 92		7.08	15.16	126.81	43.66	14.17	
		¥ : 82 :	1A280 R10 IGUACU	1. 478	2.619	1. 320	1.806	0.28	0.45	0.38	0.37	2.55	4.53	2.28	3.12
				2. 537	2. 969	1, 669	2, 392	7.89		7.21	6.40	17.54	12.83	21.63	
				0.765	0.816	0.518	0. 700	3.57		4.03	3.66	9.25	7.76	7.38	
			PL380 RIO PILAR	2.506	1.438	0.944	1.629	5,63		2. 45	3.02	10.83	6.7 6.7	4.49	

Table APP. 4-1 Water Quality and Runoff Load of Detailed Survey on Major Highly Polluted Rivers on Clear Days

Runoff Load of seven(7) Rivers	ırs													
		÷		XD(IIn)Load			-	TN Load				TP Load		
NO NAM	MAN	ωì		(t/day)		Rean Value		(t/day)		Mean Value		(t/day)		Mean Value
			Nov, 1992 11-13	Nov. 1992 25-27	Apr. 1993 23-25		Nov. 1992 11-13	Nov. 1992 25-27	Apr. 1993 23-25		Nov. 1992 11-13	Nov. 1992 25-27	Apr. 1993 23-25	-
1 WNOOD   CANAL DO MANGUE	CANAL DO MAN	분	6.84	3.42	4	4.93	=	3.63	4.77	7.41	1.62	L	0.47	0.89
2 MENDOI CANAL DO MANG	CANAL DO MANG	岩	0.18	0.31	Ċ	0.18	0.29	0.53	0.14	0.32	0.08		0.01	0.05
3 CM030 RIO ESTRELA	RIO ESTRELA		0.48	0.42	Ö	0.35	0.86	0.86	0.40	0.71	0.03		2	0.07
4 TR060 RIO TRAPICHEI	RIO TRAPICHEI	8	0.17	0.32	Ċ	0.23	0.51	0.65	0.37	0.51	0.07		0 05	0.00
5 KR042 RIO MARACANA	RIO MARACANA		1.13	0.94	Ö	0.76	1.41	1.98	0.47	1. 29	0.20		0.06	0.16
6 CN100 CANAL DO CUNHA	CANAL DO CUNHA		¥.3	16.20	2.32	17.74	23. 13	29.04	1.90	18.03	2.89	3.06	0.20	2.05
7 JC120 RIO JACARI	RIO JACARI		2.31	0.83	O	1.30	2.16	1.83	1.98	1.99	0.35		0.20	0.23
8 FR142 RIO FARIA	RIO FARIA		2 15	1.10	0	1.13	5. 78	2.46	0 35	2.87	0.47		2	0.24
9 TM840 RIO TIMBO	RIO TIMBO		2.67	1.39	-	1. 79	2.00	2.12	0. 79	1.64	0.33		0.10	0.22
10 IJ200 RIO IRAJA	RIO IRAJA		11.51	2.60	က	6.03	7.85	0.69	4.07	4. 20	1.05		0.36	0.66
1 11202 RIO 1881A	RIO IRAJA		0.78	1. 12	Ö	68	1.55	1.30	1.64	1.50	0.24		0.15	0.18
12 1J210 RIO IRAJA	RIO IRAJA		0.90	0.52	Ö	0.58	0. 67	88	0.46	0.67	0.08		0.05	0.07
PK180			1.51	1. 10		1.04	2.71	1.19	0.56	1.49	0.38		0.05	0.21
4 \$1220 RIO S. J. E MERITI			.34	22. 21	~	12. 57	50.04	21.45	18.54	30.01	8.34		:: 82	4.66
	RIO ACARI		5.03	4. 18	ત્રં	4.05	9.43	i. 23	4. 50	6.42	1.26		0.61	% 
PD890	RIO DAS PEDRAS		2, 56	1.82	o,	1.61	2.43	2 78	0.80	2.00	0.45		0.12	0.29
10120	RIO TINGUI		0.11	0.53	Ö	0.30	0.62	0.55	0.74	0.63	0.08	:	0.06	0.08
MC010	RIO MARANGA		0.94	2. 75	Ö	1.53	2.80	2.91	1.97	2.49	0.47		0.21	0.40
PV980	RIO PAVUNA		0.30 30	1.51	0	0. 79	0.48	2.61	1.86	1.64	0.09		0.17	0.17
PV982	RIO PAVUNA		0.44	0.80	0	0.44	0.49	0.49	0.35	0. 44	0 0		0.03	0,07
SP300	RIO SARAPUI		28.97	23.39	16	22.98	31.27	11.91	14 24	19.14	8 23		1.66	4.74
SP310	RIO SARAPUI		3,97	4. 70	m	3.94		4.35	2.89	3.52	0.45		₹ 6	0.55
23 SP330 RIO SARAPUI	RIO SARAPUI		2.06	4.14		2.45	1.55	2.30	1.74	1.86	0.26		0.24	0.18
4 1A260 RIO IGUACU	RIO IGUACU		32.37	40.49	Ξ	28. 22	11.87	5.53	6.86	8.41	2.43	_	1.25	1.83
1A270	RIO IGUACU		11.41	20.52	¢ή	11.83	1.90	2.62	2.21	2.24	3.17		0.46	1.46
14280	RIO IGUACU		0.59	1.58	Ċ	0.82	0.13	0.91	0.07	0.37	0.0		0.05	
27 BT040 R10 DA BOTA	RIO DA BOTA		3.07	2.57	∾ં	2, 57	3.07	1.67	1.59	2.11	0.33		0.25	0.32
81080	RIO DA BOTA		1.08	2.26	Ċ	1. 43	1.19	0.10	0.67	0.65	0.20		0.09	
9 PL380 RIC PILAR	RIO PILAR		1.39	1,14	ن	0.99	0.35	0.15	0.30	0.26	0, 22		0.0	

Table APP. 4-1 Water Quality and Runoff Load of Detailed Survey on Major Highly Polluted Rivers on Clear Days

۲			-r																												
1992)	TP Load	(t/day)																												0.20	
(11-13 Nov. 1992	TN Load	(t/day)	13.81	0.29	0.86	0.51	1.41	23. 13	2.16	5.78	2.00	7.85	1.55	0.67	2.71	50.04	9.43	2.43	0.62	2.60	0.46	0, 49	31.27	3.31	1.55	11.87	1.90	0. 13	3.07	1.19	0.35
	Runoff Load	(t/day)	6.84	0.18	0.48	0.17	1. 13	34.70	2.31	2.15	2.67	11.51	0.78	09.0	1.51	80 34	5.03	2.56	0. 11	0.94	0.30	0.44	28.97	3.97	2.08	32.37	11.41	0.59	3.07	1.08	1.39
	) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )	(t/day)	236.83	3.21	8.63	4.72	19, 16	250.60	25.46	37.67	33.38	94.20	20.38	6.35	21.11	667.23	81.75	37.11	10.70	40.11	4.57	7. 56	296. 27	27. 10	15.47	1025.05	126.81	2.55	17.54	9. 25	10.83
		(t/day)	157.88	2. 10	4.36	3.34	4.84	30.84	6.64	11.30	8.58	20.93	4.08	3.34	5.43	91.74	33, 96	8. 70	2.25	14.16	1.42	2.85	72. 42	9.03	4.12	19.42	20.92	0.28	7.89	es 57	5.63
	Ê	(mg/1)	2.50	2.00	2.00	1.90	2.00	1.50	4.50	3.50	3.50	2.00	2.50	2.50	2.50	2.00	2: 00	3, 50	1.50	2.00	2. 50	2.00	2.50	1.50	1.50	0.45	1.00	0.30	1. 30	3.00	1. 00
	ity TN	(mg/1)	21.00	10.00	19.00	14.00	14.00	12.00	28.00	43.00	21.00	15.00	16.00	20.00	18.00	12.00	15,00	19.00	11.00	11.00	18.00	11.00	9.50	11.00	9.00	2.20	0. 60	1.00	14.00	18.00	1. 60
	Water Quality COD(Mn)	(18/1)	10.4	6.2	10.6	4,	11.2	18.0	30.0	16.0	28. 0	22.0	တ ထ	18.0	10.0	2.0	0.8	20.0	2.0	4,0	12.0	10.0	တ တ	13.2	12.0	.0 .0	က်	4.6	14.0	16.4	6.4
	_	(mg/1)	360.0	110.0	190.0	130.0	190.0	130.0	330.0	280.0	350.0	180.0	210.0	190.0	140.0	160.0	130.0	290.0	190.0	170.0	180.0	170.0	90.0	90.0	90.0	190.0	40.0	20.0	80.0	140.0	50.0
	60	(mg/1)	240.0	72.0	96.0	92.0	48.0	16.0	86. 0	84.0	90.0	40.0	42.0	100.0	36.0	22.0	54.0	68.0	40.0	60.0	56.0	64.0	22.0	30.0	24.0	3.6	6.6	2.5	36.0	54.0	26.0
	Discharge	(m3/s)	7.614	0.338	0.526	0.420	1.167	22.311	0.893	1.557	1.104	6.057	1. 123	0.387	1.745	48. 266	7. 278	1. 481	0.652	2. 731	0.294	0.515	38. 100	3, 485			36.694	1,478	2.537	0. 765	2.506
) Rivers	Governing Basin Area NO		42.80 23					60.50 21				27. 30 20			- 20	163, 50 19							159.80 17-6			544. 20 17-17					
Runoff Load of seven(7) Rivers	NAME BAS		CANAL DO MANGUE	CANAL DO MANGUE	RIO ESTRELA	RIO TRAPICHEIRO	RIO MARACANA	CANAL DO CUNHA	RIO JACARI	RIO FARIA	RIO TIMBO	RIO IRAJA	RIO IRAJA	RIO IRAJA	CANAL DO PENHA	RIO S. J. E MERITI	RIO ACARI	RIO DAS PEDRAS	RIO TINGUI	RIO MARANGA	RIO PAVUNA	RIO PAVUNA	RIO SARAPUI	RIO SARAPUI	RIO SARAPUI	RIO IGUACU	RIO IGUACU	RIO IGUACU	RIO DA BOTA	RIO DA BOTA	KIO PILAR
	Q.	·	1 KN000	2 MN001	3 CN030		5 MR042			FR142	9 T#840			12 15210			15 AC241	16 PD890				_	SP300	22 SP310	1	24 IA260				28 BT080	29 71.380

Table APP. 4-1 Water Quality and Runoff Load of Detailed Survey on Major Highly Polluted Rivers on Clear Days

										ا														·					۰	<u>.</u>
1992)	TP load (t/day)	0.55	0.07	0.08	0.08	0.21	3.06	0.20	0.20	0.24	0.57	0.15	0.03	0.22	3. 79	0. 78	0.31	0.08	0.53	0.29	0.11	4.33	0.87	0.03	1.81	0.76	0.06	0.38	0.18	0.12
(23-25 Nov. 1992)	TN Load (t/day)	3.63	0.53	0.86	0.65	1.98	29.04	1.83	2.46	2. 12	0.69	1.30	0.88	1.19	21.45	5.23	2. 78	0.55	2.91	2.61	0.49	11.91	4.35	2.30	6.51	2.62	0.91	1.67	0.10	0.15
	Runoff Load COD(Mn)Load (t/day)	3. 42	0.31	0.42	0.32	0.94	16.20	0.83	1, 10	1.39	2,60	1.12	0.52	1. 10	22. 21	4.18	1.82	0.53	2.75	1.51	0.80	23.39	4.70	4.14	40.49	20. 52	1.58	2.57	2.26	1.14
:	COD(Cr)Load ( (t/day)	50.89	13.81	8, 58	5. 60	18.89	183. 43	25.44	14. 79	25.85	57.43	5.01	6.50	17.31	328.09	15.68	26.23	8.18	37.06	23.21	6.35	108.28	30.46	15.34	72. 30	43.66	4.53	12.83	7.76	3. 73
	BOD Load ( (t/day)	20.36	7.34	3, 43	2.61	6.87	42.80	8. 35	5.52	9.40	4.59	2.00	2. 60	3.03	50.47	2.09	8.64	2.83	15.88	10.44	3.10	51.97	15.68	7.67	14.46	17.46	0.45	4.10	88 69 69	0.99
	TP (mg/1)	1.50	2.50	2 00	2 00	2.50	2 00	2, 50	5.00	2,00	1,50	 S	2,00	2,00	1.50	1.50	2.00	1, 50	2.00	2,00	1.50	2.00	2, 00	0.03	0.50	0.35	0.25	1.50	5.50	8
	(1y TN (mg/1)	10.00	18.00	21.00	21.00	83.00 83.00	19.00	23.00	22.00	18.00	1.80	13.00	19,00	11.00	8.50	10.00	18.00	10.00	11.00	18.00	7.00	5.50	10.00	6.00	1.80	1.20	4.00	6.50	1.40	1.20
	Water Quality COD(Mn) (mg/l) (m	9.4	10.4	10.2	10.4	11.0	10.5	10.4	11.2	11.8	න න	11.2	11.2	10.2	တ လ	% 0	11.8	∞ ori	10.4	10.4	11.4	10.8	10.8	10.8	11.2	o;	7.0	10.0	32.0	9.2
	000(Cr) (mg/1)								٠								170.	150.	140.	160.	90.	50.	70.	40.	83	29	20.	50.	110.0	30.
	BOD (mg/1)	56.0	250.0	84.0	84.0	80.0	28.0	105.0	56.0	0.0 0.0	12.0	20.0	56.0	28.0	20.0	4.0	36.0	52.0	60.0	72.0	44.0	24.0	36.0	20.0	4.0	% O.	20	16.0	48.0	8.0
	Discharge (m3/s)	4. 207	0.340	0.473	0.360	0.994	17.692	0.920	1.141	1.360	4.431	1.160	0.537		29. 210	6.048	1.786	0.631	3,064	1.679	0.816	25.065	5.036	4	4.	25. 267	2.619	2. 969	0.816	1.438
		23					21				23			ន	5							17-6			7-15					
(7) Rivers	Coverning Basin Area NO. (Km2)	42.80					60.50				27. 30			-	163.50						-	159.80			544.20 17-1 5	•				-
Runoff Load of seven(7) Rivers	NANE	CANAL DO MANGUE	CANAL DO MANGUE	RIO ESTRELA	RIO TRAPICHEIRO	RIO MARACANA	CANAL DO CUNHA	RIO JACARI	RIO FARIA	RIO TIMBO	RIO IRAJA	RIO IRAJA	RIO IRAJA	CANAL DO PENHA	RIO S. J. E MERITI	RIO ACARI	RIO DAS PEDRAS	RIO TINGUI	RIO MARANGA	RIO PAVUNA	RIO PAVUNA	RIO SARAPUI	RIO SARAPUI	RIO SARAPUI	RIO IGUACU	RIO IGUACU	RIO IGUACU	RIO DA BOTA	RIO DA BOTA	RIO PILAR
124	2	1 KN000	2 KN001	3 CM030	4 TR060	5 KR042	6 CN100	7 JC120	8 FR142	9 TW840	10 13200	11 11202	12 11210	13 PN180	14 \$3220		16 P0890	17 TG120	18 MG010		20 PV982	21 SP300		23 SP330		25 IA270	26 1A280		28 BT080	29 PL380
Į											_											<u> </u>								

Table APP. 4-1 Water Quality and Runoff Load of Detailed Survey on Major Highly Polluted Rivers on Clear Days

	Discontinuity of Lond Of Discours	(7) Dinong			٠							(95-97 425 1009)	(600)
	KUNDII 10an oi seve	ILL) KIVELS					-					1.20 12-02)	3307
						Water Quality	ity				Runoff Load		
2	NAME	Basin Area NO. (Km2)	Discharge (m3/s)	800 (mg/1)	000(Cr) (mg/1)	(mg/1)	TN (mg/1)	TP (ng/1)	BOD Load (t/day)	COD(Cr)Load (t/day)	COD(Mn)Load (t/day)	TN Load (t/day)	TP Load (t/day)
1 MN000	CANAL DO MANGUE	42.80 23		30.0	190.0	12.4	13.	1.30	10.96	69	4.53	4.77	0.47
2 MN001		-		190.0	380.0	ŝ	5	. 3	1.67	e si	0.06	0.14	0.01
3 CN03(				0.06	290.0	ις	13	1.45	2.77	∞	0. 17	0.40	0.04
4 TR060		- -		90.0	300.0	6.0	12	1.60	2.75	တ်	0. 18	0.37	0.05
5 MR041				80.0 0	200.0	5.5	12.	1.50	3.14	<u></u>	0.21	0. 47	0.08
6 CN10	-	60.50 21		50.0	130.0	16.0	ဣ	1.35	7. 26		2.32	1. 90	0.20
7 JC12(				120.0	330.0	6. 6.	17.	1.75	13.99	<b>8</b> 9	0.77	1.98	0.20
8 FR14.	2 RIO FARIA			65.0	175.0	sis Sus	14.	1. 60	. I. 63	Ą	0.13	0.35	0.04
9 7184				130.0	360.0	25.0	15.	1.90			1.32	0. 79	0. 10
10 1720		27.30 20		60.0	175.0	17.6	≅	1. 60	13.52	39.	3.97	4.07	0.36
11 1320.				30.0	90.0	6.0	17.	1.50	2.90	ೲ	0.58	1.64	0.15
12 1121				80.0	185.0	22.8	17.	1, 70	2. 14	wai.	0.61	0.46	0.05
13 PN18	O CANAL DO PENHA			70.0		15.6	17.	1.40	2.29	Ö	0.51	0.56	0.05
14 \$122		163.50 19		30.0	160.0	5. 4	14,	1. 40	39. 72	211.	7. 15	18.54	1.85
15 AC24				30.0	140.0	5	တ်	1. 20	15.27	71.	2.85	4.60	0.61
16 PD89(	0 RIO DAS PEDRAS			90.0	160.0	بر. 8	10.	1.50	4.81	12.	0.46	0.80	0.12
17 TG12(				90.0	380.0	6.2	17.	1.50	3.89	16.	0.27	0.74	0.00
18 #601				45.0	110.0	9.0	13.	1.40	6. 79	16.	0.91	1, 97	0.21
19 PV98	0 RIO PAVUNA	*		70.0	165.0	ις. ∞	9. 19	1.75	6.82	16.	0.57	1.86	0.17
- 1				90.0 0	110.0	က် လ	23.	1. 70	1.35	<u>,_</u> ;	0.08	0.35	0.03
	1.	159.80 17-6		30.0	65.0	14.0	12	J. 40	35.51	76.	16.57	14. 24	1. 66
				45.0	165.0	17.5	16.	1. 90	8, 10	29	3.15	2.89	0.34
- 1	0 RIO SARAPUI		બં	40.0	80.0	6.6	10.	1.40	6.94	E.	1.14	1.74	0.24
		544.20 17-15	<u> </u>	10.0	90.0	5.2	က်	0.55	22.69	204	11.80	6.86	1.25
				10.0	20.0	5.0	က	0.65	7. 08	14.	3.54	2.21	0.46
				83 23	20.0	3.4	Ö	0. 20	0.36	ં	0.39	0.07	0.02
27 BT040	0 RIO DA BOTA		1.669	50.0	150.0	14.4	11.04	1.70	7. 21	21.63	2.08	1, 59	0.25
				90.0	165.0	21.5	15.	2.00	4.03	7.	0.96	0.67	0.09
				30.0	55.0	5.4	crò	1.15	2, 45	Ψ̈́	0.44	0.30	0.00

Table APP. 4-2 Results of River Water Quality Analysis of Detailed Survey

First Sampling	1 1 1 1 1	e-1	2	en	~c#	ιά	11~13 NOV 6	7	<b>80</b> °	<i>6</i>	10	11	12	en en	14	
Date of sampling	NOV. 92	11/11	11/11	11/11	11/11	11/11	12/11	12/11	12/11	12/11	12/11	12/11	12/11	12/11	12/11	
General number of the la	the laboratory	12993	12994	12992	12890	12991	13001	13006	13007	13008	13003	13009	13005	13002	13004	
Station CODE PARAMETER	UNITY	MN-000 Canal do	MX-601 o Canal do Mangue	CK-J3C R. Com- prido	TR-060 R. Trapi- cheiros	KR-042 R. Mara- cana	CN-100 Canal do Cunha	JC-120 Rio Ja- care	FR-142 Rio Fa- ria	TM-840 Rio Tim- bo	lJ-200 Rio Ira- ja	13-202 Rio 1ra- F ja	J-210 Rio   Ira- ja	PN-180 Canal da P Penba	SJ-220 R.S. Joac Meriti	4.
11. 11. 11. 11. 11. 11.		11, 35 33, 00 26, 00	12.00 33.00 25.64	11. 20 30. 00 24. 60	10.25 32.00 24.73	10.50 32.09 24.62	8, 55 30, 50 25, 36	11. 35 37. 00 27. 26	11. 55 36. 00 29. 50	12.15 37.00 29.56	10. 10 33. 00 26. 25	12, 45 37, 00 30, 38	11.00 35.00 27.56	9. 45 34. 50 26. 12	10.30 35.00 26.70	
V2000F Transp. (tube) 02043F Conduct. (field) 17300F Salinity (field) 10300F PB (field) 08107F DG (field)	E N , C	0.39 0.18 5.62	1. 0.80 7.80 7.80	0.38	0.37 7.33		1.16 7,17	0.50 0.23 7.21	0.37 0.17 0.99		1.39 7.25	0. 48 0. 21 7. 54	0.20 7.33	2.16 1.08 7.23	3. 30 7. 18	
082021 BOD (10131)	# # # # # # # # # # # # # # # # # # #	240 240 360 2.50 21.0	2.00 2.00 10.0	2, 00 1, 190 1, 00 1, 0	1.8 130 1.90 1.90 1.4.0	2, 00 1, 00 1, 00 1, 00 1, 00	130 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 88 88 88 89 89 89 89 89 89 89 89 89 89	2 8 4 8 4 8 4 8 9 9 9 9 9 9 9 9 9 9 9 9 9	3.50 3.50 3.50 2.10	2.00 2.00 15.0	2 210 2 50 16.0	100 190 2.50 20.0	140 35 1 36 1 36 1 3 5 1 3 5 1 3 5 1 3 5 1 3 5 1 3 5 1 3 5 1 5 1	22 22 160 2.00 12.0	
	1 /23 E	140	42	200	000		06	320	310		24	10	100	9	9 9 9	
Pirst samo		<del></del>	<del>.</del>	<u>-</u>	. «	<b>0</b> ←	20		6		,	£.	26	27	œ	
Date of sampling	NOV92	12/11	12/11	12/11	12/11	12/11	12/11	13/11	13/11	13/11	13/11	13/11	13/11	13/11	13/11	13/11
General number of the laboratory	boratory	13011	13010	13015	13014	13012	13013	13031	13036	13037	13032	13034	13039	13035	13038	13033
Station CODE PARAMETER	ALINO	AC-241 Rio Aca- ri		TG-120 Rio Tin- I gua	MC-010 Rio Ma- ranga	PV-980 Río Pa- vuna	PV-982 Rio Pa- vuna	SP-300 Rio Sa- rapui	SP-310 Rio Sarrapui	SP-330 Rio Sa- rapui	1A-260 R. 1gua- F cu	1A-270 R. 1gua- 1 cu	1A-280 R. 1gua- cu	BT-040 Ric da Bota	BT-080 P Rio da 'R Bota 1	PL-380 Rio Pi- lar
Time 02062F Air temperature 02061F Water temperature		15, 20 34, 00 30, 21	14. 30 37. 00 29. 96	17.00 35.00 26.74	16.30 34.00 28.92	15, 45 35, 00 31, 28	16.10 35.50 29.08	8.55 32.50 25.92	11.30 34.50 28.84	12.00 37.00 28.59	9.30 32.50 28.37	10. 25 31. 00 27. 12	13, 15 35, 00 26, 54	11.00 34.50 27.40	12.35 35.00 29.84	10.00 30.00 26.74
02005 / Mansp. (Cook 02043F Conduct. (field) 17300F Salinity (field) 10300F pH (field)	aS/ca	0.53 0.23 7.28	0.56	0.37	0.41 0.18 7.88				0.45 0.20 7.39	0.39 7.45	5, 89 2, 97 6, 84	0.17	0.09 0.05 7.13	0.44	0.62	0.53 0.24 6.92
	#8/1 #8/1	130	0.1 290	190	0.1 60 170				3000	24 .	3.6.1 130.6.1	9.9 9.9 9.9 9.9	2.2	. 8 8 .	9.2 54 140	0,1 25 50
15406L lotal Phosphorus mg P/1 07008L Kieldahl Nitrogen mg N/1 08402L Total OC alcaline mg/1 10401L Suspended Solids mg/1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2.00 15.0 8.0 60	3, 50 19, 0 20, 0 80	1. S0 11. 0 2. 0 60	2, 00 11, 0 4, 0 60	2.50 18.0 12.0 40	2.00 11.0 10.0 100	2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1.50 11.0 13.2 50	1.50 8:0 12.0	0.45 2.2 6.0 210	3. 6 3. 6 1. 6	1. 0 1. 0 4. 6 20	14.0	3.00 18.0 16.4 140	1.00 1.5 5.4 22
- 1	1/20									1		1	-			

Table APP. 4-2 Results of River Water Quality Analysis of Detailed Survey

Second sampling	apling		-	2	e2	4	r,	ur.		∞	<b>о</b> п	10	=	12	63 1~1	14
ate of sampling	npling	NOV. 92 23/11	NOV. 92 23/11	23/11	23/11	23/11	23/11	23/11	23/11	23/11	23/11	25/11	25/11	25/11	25/11	25/13
neral nu	eneral number of the laboratory 1358	laborator	y 13584	13585	13579	13577	13578	13583	13580	13581	13582	13692	13695	13694	13691	13693
tation		:	300-NW	MN-001	CN-030	TR-060	MR-042	CN-100	JC-120	FR-142	TM-840	11-200	13-202		PN-180	\$1-220
ODE PARAMETER	PARAMETER UNITY Mangue	UNITY	UNITY Mangue	Canal do Mangue	K. Com prido	R. Trapi- cheiros	R. Mara- cana	Cana] do Cunha	Jacare	Rio Fa-	Kio Tim- bo	Kio Fra-	Rio Ira- ja	Hio Ira- ja	Canal da Penha	K. S. Joao Meriti
Tim	Time	æ	17.30	17,55	10.05	9.25	9.50			10.55						
052F Ail	2052F Air -temperature			36.00	30.00	30,00	30,00			30, 50	-					
06.1F Wat	er temperatu	re C	26.50	26, 57	26.09	25, 50	26, 15			27.50						
080F Tra	insp. (tube)	t c		2.5	4.0	6.0	5.0			6.0						
043F Cor	iduct. (field)	mS/cm	4. 51	0.36	0.41	0.42	0.37			0,45						
300F Sal	inity (field	٠ د	0.75	0.17	0.19	0.20	0.18			0.22						
300F pH	(field)		7, 13	6.48	7, 50	7, 53	7,58			8.0						
102F DO	(field)	m8/!	0.4	0.5	1.8	. 1	0.7			0.2						
202L BOI	(total)	п8/1	5.6	250	84	80	30			56						
301 001	(total)	mg/1	140	470	210	180	220			150,00						130
408L Tol	al Phosphoru	S mg P/1	1.50	2, 50	2, 00	2.00	2.50	2.00	2.50	2.00	2.00	1.50	1,50	2.00	2,00	
008L Kje	eldahl Nitrog	en mg N/1	10.00	18,00	21.00	21.00	23.00			25.0						
4021 701	tal OC alcali	ne mg/1	6	10.4	10.2	10.4	11.0			11.2						
1401L Sut	10401L Suspended Solids mg/l	S # 8/	30	130	80	80	80			80						

second sampling			15	15 16	1.1	138	19	20	21	22	23	54	25	92	27	28	53
Date of sampling	0%	NOV. 92 25/11 25/11	, 11	25/11	25/11	25/11	25/11	25/11	26/11	26/11	26/11	26/11	26/11	26/11	26/11	26/11	26/11
General number of the laboratory 13696	the labor.	atory	13696	13697	13701	13700	13698	13699	13856	13861	13862	13857	13859	13854	13860	13863	. 13858
		• •	AC-241 PD-890 Rio Aca- Rio das		TG-120 Rio Tin-		PV-980 Rio Pa-	PV-982 Rio Pa-	SP-300 Rio Sa-	SP-310 Rio Sa-	SP-330 Rio Sa-	1A-250 R. 1guacu		1A-270 1A-280 Rio Iguack, Iguacu	BT-049	BT-030 Rio da	Pi-380 Rio Pi-
CODS PAKAMEIER	50	UNIIY ri			Sui	ranga	vuña	vuna		rapui	rapui				Bota	Bota	lar ar
Time	203		10.55	11.40					9, 20	11.15	11.40						10,00
02052F Air tempera	ture C		30.00	30.00					28.00	31.00	31.00			/ 29.00	31,00	30.00	28.00
02051F Water temperature (	rature C		25.99	26.61					26.16	26.26	25.81	25.48	24.66	\			25, 29
02080F Transp. (tub	e) ca		0.8	9.0													
02043F Conduct. (f)	eld) mS,		0.36	0.45					0.5	0.34	0.3	0.89		0,06	0.42	0, 55	0.36
17300F Salinity (f	ieid) %.		0.13	0.21		•			0.24	0.16	0.14	0.43		0.04	0.20	0.25	0.17
10300F pH (field)			7.37	7, 55					7.11	7.42	7.45	6, 92		7.08	7, 35	7.31	6.83
08102F D0 (field)	86		0.5	1.1					0.4	0, 4	0.3	9.3		6, 1	 	0.5	0.3
08202L BOD (total)	90 81		₹.7	55					24	36	20	4		2	16	90 7	<b>σ</b> 3
08301L COD (total)	E		30	170	150				50	10	40	20		50	50	110	30
15408L Total Phosp	horus mg		1, 50	2, 00	1.50	2.00	2.00	1.50	2, 00	2,00	0.07	0.50	0,35	0.25	1.50	2.50	1.00
07008L Kjeldahl Ni	trogen mg		10,00	18, 00					5.50	10,00	6,00	1,80		4,00	6, 50	1.40	1,20
08402L Total 0C al	caline mg.		8. 0	11.8				٠	10.8	10.8	10.8	11.2		7.0	10.0	32.0	9, 2
10401L Suspended Solids mg/l	olids mg.		36	20					90	260	100	10 10		32	50	80	26
08308L 10C	E	•															

Table APP. 4-2 Results of River Water Quality Analysis of Detailed Survey

irst sampling		-	2	63	4	53	မ	- 1	<b>8</b> 3	ch	22	=	12		14
date of sampling	APR. 93	25/04	25/04	25/04	25/04	25/04	25/04	25/04	25/04	25/04	25/04	25/04	25/64	25/04	26/04
Reneral number of the laboratory	aboratory	5892	5904	5903	2901	5902	5893	2900	5898	5899	5894	5896	5885	5897	5959
Station	<b>a</b> (	900-XX	KN-001	CX-030	TR-060	#R-042	CN-100	JC-120	i	14-840		11-202		PX-180	SJ-220
CODE PARAMETER	ALLES	Canal do Kangue	Canal do Kangue	K. Com-	R. Trapi- cheiros	7. Sara- 5. Sara-	Cana do Cunha	Rio Ja- care	Rio Fa- ria	Rio Tia- bo	Rio Ira- ja	Rio Ira- 3a	Rio Ira- ja	Canal da Penha	R. S. Joao Meriti
Time	Н	9.20	15.20	15.00	14.25	14. 35	10.00	12.50	12.00	12.30	10.35	11. 20	10.55	11.45	10.00
062F Air temperature	ပ	28. 50	29. 50	30.00	30.00	31.50	28.00	32,00	31.8	33 00	31.00	8	31.50	33,00	30,00
061F water temperatur.	c L	26. 77	27.67	28, 80	27. 47	27. 42	27.14	29. 18	29. 75	29.53	28. 07	29. 67	28. 56	29.30	26. 69
080F Transp. (tube)	용	0 63	2	63		Ġ	6.0	c.j	5.0	2.5	7.0	7.0	5.0	0.0	5.0
043F Conduct. (field)	8/2	3.08 3.08	0.24	0. 15	0.33	0.27	2. 12	0.4]	0.49	6.33	<u>~</u> 3	0.31	9	19.50	7. 82
300F Salinity (field)	s d	 Se	= -	0.12	7.	6		0.18	0.23	0.17	9.41	0.14	0.16	10.26	4.5]
300F pf (field)		6. 67	6	5.55		53	у У	6.47	7. 63	6.49	6.65	6.80	5.56	6.39	6.51
102F DO (field)	1/20	61 6	-:	=	4,	о С	0.5	0.2		0.5	ö	Ç	5	0	0.2
202L BOD (total)	1/80	8	130	8	8	80	S	120	65	39	99	8	8	2	S
3011, CCD (total)	1/2	190	380	98 83	30	200	130	330	175	360	175	8	58		160
408L Total Phosphorus	E2 P/1	33	.: 8	1.45	. <del>9</del> 9	: 20	<u>.</u>	1.35	3.6	.: 8	 9	3	1, 70	1.40	1.4
309L Nitrate Nitrogen	#8 N/3	0.02	0.40	0. 33	8	0.03	9	ô 9	0.03	0.07	60.03	0.05	0.07	9	0, 03
209L Nitrite Nitrogen	78 N/1	0.003	0.004	8	0.006	0.002	0.00	0, 007	0.003	0.005	0.002	0.008	000	0.002	0.005
108L Kjeldahl Nitroge	n ng 3/1	13, 00	16.00	13.00	12.00	12.00	13.00	17.00	15.00	18.00	17.00	17.00	17.00	14.00	9
801L Total Nitrogen		5.05	16.04	13.03	7. 2.	12.04	13.09	17. 01	15.07	18.08	11.8	17.06	17.07	14: 00	0
402L Total OC alcalin	e mg/1	2	<del>ග</del> ප්	uj	O			u võ	67 10	23.0	17.6	6.0	22.8	15.6	5.4
10401L Suspended Solids 1	(/8 <mark>4</mark>	99	8	ঙ্গ	ê	\$	2	쫎	8	132	10	20	43	30	12
ימומה ותר															

rirst sampling		2	Δ.	-	2	2	P.7	7	27	3	57	3	97	77	83	53
Date of sampling	APR. 93	26/04	26/04	26/03	26/03	26./04	26/04	27/04	27/04	27/04	27/04	27/04	27/04	27/04	27/04	27/04
General number of the	the laboratory	5961	2960	\$96\$	5964	5962	5963	6053	6058	6909	6054	9509	606	6057	6909	6055
Station		AC-241	PD-890	75-120	MC-010	Pr-980	Pr-982	SP-300	SP-310	SP-330	1A-260	14-270	14-280	BT-040	BT-080	PL-380
CODE PARAMETER	YT IND	Kio Aca-	Kio das Pedras	Kio Tin- gua	Kio Ka- ranga	Kio Pa- vuna	Kio Pa- vuna	Kio Sa- rapui	K10 Nar	Kio Sa- rapui	8. igus	, 20 , 20 , 20 , 20	C. 1808	K10 da Bota	Kio da Bota	Rio Pi- Iar
Tise		11.35		13.20	:	12.05		9.25	11.50	12. 20	9.50		13.35	•		10.20
2062F Air teapera	ture C	33		35.98		32 00		23.00	32 00	34.00	29.00		31.00		٠.	32.00
02061F Water temperature (	rature C	27 38	27 62	27 78	28.03	28. 63	27. 50	26, 84	28.69	27. 49	25.89	25. 75	24. 94	27.00	27.73	25. 11
2080F Iransp. (tub	6	6.0		n,		5.0		2.0	: :	5.0	12.0		11.0			5.0
2043F Conduct. (f)	old) as/ca	0.47		0.28		0.45		0.58	0.36	0. 27	2. 23		90.00			0.34
7300F Salinity (f	ield) K	0.22		0.13		0.19		0.27	0.16	0.12	1. 10		0.0		-	0.17
0300F pR (field)						6.6		5, 25	6.63	6.61	6.02		6.05			5.00
\$102F DO (field)	. mg/l	9.3		Ö		0.3		0.2	0.2	0.5	0		6.3		-	0.1
8202L EOD (total)		30		8		2		ଞ	5	40	2		33.5			8
8301L COD (total)	[/86	140		380		165		53	165	8	8		8			S
5408L Jotal Phosp	horus ng P/1	1.20		. 50		. 75		1.40	7.80	1.40	0.55		0, 20			1.15
7309L Nitrate Nit	rogen ng N/1	0.03		0.02		0.03		0.05	0.03	0.03	0.05		0.30			0.03
7209L Mitrite Nit	rogen ng N/I	0,002		0.020		0.010		0.008	0.002	0.002	0.00		0.02		Ť	0.00
7008L Kjeldahl Ni	trogen ng N/1	10.00		14 00		19.00		12.00	16.00	10.00	3.00		0.25			3.60
7801L Total Nitro	Ren mg N/1	10.03		77.04		19.04		12.03	16.04	10.03	3, 02		0.57			3.63
3402L Total OC al	caline mg/l	i.		5.7		ę, S		14.0	17.5	6.6	5.2		c.s			7,
10401L Suspended Solid:	olids mg/l	8		S		3		œ	8	55	2		2			
93061 TOT																

RESULTS OF RAIN WATER QUALITY ANALYSIS

Table APP. 5-1 Results of Rain Water Quality Analysis

Sampling	Observation	PH	BOD	COD(Cr)	TN	K j - N	TP	COD (Mn)	\$\$	Observation	Total
date	Station		48/1	ag/l	ng/l	mg/l	mg/1	ng/l	mg/l		Precipatation
	VFF (NITEROI)	**	⟨2.0	<10	01	0,6	0.0	1,0	<2		
	UFRJ (FUNDAO)										
	PETROBRAS (CAXIAS)							,			
	VFF (NITEROI)	. ~~~~	` <2.0	<10		<0.15	0.0	1.0	32		
	NERI (FUNDAO)										]
	PETROBRAS (CAXIAS)							!		}	
	UFF (NITEROI)										
	UFRI(FUNDAO)	5. 9	<2.0	<10		0.4	0.0	0.6	< 2		
	PETROBRAS (CAXIAS)	4.7	<2.0	<10		0.3	0.0	0.3	< 2		
05/21/93	UFF (NITEROI)										
	UFRJ(FUNDAO)	7.1		20	4.02	3, \$0	0.050	[ -	. 35		
	PETROBRAS (CAXIAS)			]					:		
06/01/93	UFF (NITEROI)	59.0		<10	0.62	0.40	0.024	0.4	<2		·
1	UFRI(FUNDAO)										
	PETROBRAS (CAXTAS)	6.0		28	2. 11	1.84	0,053	1.2	14		
06/08/93	UFF (NITEROI)	5.8		- 15	0.86	0.62	0.021	0.0	<2		
	UFRJ(FUNDAO)										
	PETROBRAS (CAXIAS)	5.0		2.2	1.29	0.95	0.027	1.0	4		
	UFF (NITEROI)							1			
	UFRJ (FUNDAO)										
	PETROBRAS (CAXIAS)			57	12.08	10.53	0.372	4.8	29		
1	UFF (NITEROI)	5.8		13	2. 28	1.51	0.063	2. 2	2.8		
	UFRJ(FUNDAO)										
	PETROBRAS (CAXIAS)										
	UFF (NITEROI)				1						
	UFRJ(FUNDAO) j							·			
	PETROBRAS (CAXIAS)			48	8. 62	6.07	0.115	4.8	29		
	UFF (NITEROL)	8.1		77	2.42	1.60	0.276	5.4	69		İ
	UFRJ(FUNDAO)										
	PETROBRAS (CAXIAS)	5. 3	····	40	2.82	2, 21	0.092	3.0	17		L

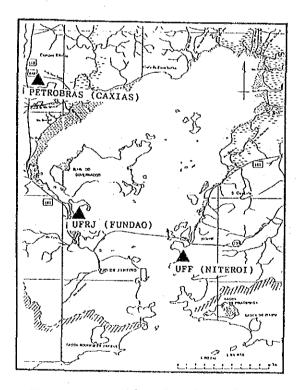


Fig. APP. 5-1 Sampling Station of Rainwater

RESULTS OF SURVEY OF THE DRAINAGE CANALS
DISCHARGING WATER INTO JURUJUBA BAY

Table APP. 6-1 Inflowing Load into Jurujuba Bay (MAK. 1998)

					Water Qual	ity				Runoff Load	Ę.	
0k	Basin AreaDischarge (Km2) (m3/s)	Discharge (m3/s)	80D (mg/l)	COD(Cr) (mg/1)	COD(Mn) T= (mg/l) (mg,	T-N (mg/l)	T-P (mg/1)	BOD LOAD (kg/day)	~	CODerLOADCODmnLOAD T-N LOAD (kg/day) (kg/day)	T-N LOAD (kg/day)	T-P LOAD (kg/day)
1 7-1		0.0027	5, 20	80.00	2.20	6, 70	0.35	1.21	į	0.51	1.56	0.08
2 1-2		0.0024	2.80	60.00	1.80	10.26	0, 15	0.58		0.37	2.13	0.03
3 1-3		0.0120	180.00	640.00	2, 40	39, 31	3, 10	186,62	663, 55	2.49	40.76	3, 21
4-1-4												
5 1-5		0.7050	42.00	240.00	16.10	22.75	1.55	2558.30	2558.30 14618.88	930,68	1335, 44	94.41
8 J-6A										÷		
7 7-6		0.0066	600.00	2400.00	7.80	80.20	4.50	342, 14		4.45	45, 73	2, 57
8 1-1		0.0009	32.00		0.80	36, 20	2,00	2.49		0.06	2.81	0.16
9 7-8		0.0011	120.00		3.40	45.20	2, 00	11, 40	60,83	0.32	4, 30	0.19
10 J-8A		0.0029	5600.00		30.00	172, 20	5, 70	1403,14		7.52	43, 15	1. 43
11 5-9												 :
12 J-10		0.0021	450,00	1200.00	7. 80	52, 15	3.10	81,65	217.73	1.42	9.46	0.56
13 J-11		0.0003	200:00	720.00	6.60	46, 10	1.45	5, 18	18.66	0,17	1.19	0.04
14 1-12	-	0.0007	275,00	960.00	7.90	54.16	3.38	16, 63	58,06	0.48	3.28	0. 20
TOTAL	0.00	0.7387						4609, 36	609.36 18462.30	998.47	1539.81	102.88
*(1)		0.054.0	00 07	,	000	: 31	-					
(2) 1-5		0.7600	46.00	240 00	30.08	20.00	7.0					
*(1) J-12		0.0007	350.00	1200.00	7, 20	59.10	. 4. 5					
(2) J-12		0.0007	200,00	720.00	8.60	49.21	3,30					

(JUN. 1993)

					Water Qua	ity				Runoff Load	rq.	
ON.	Basin AreaDischarge (Km2) (m3/s)	Discharge (m3/s)	BOD (mg/l)	COD(Cr) (mg/l)	COD(Mn) (mg/l)	T-N (mg/l)	T-P (mg/1)	BOD LOAD (kg/day)		CODerLOADCODmnLOAD 1 (kg/day)	T-N LOAD (kg/day)	T-P LOAD (kg/day)
1 1-1		0.0059	60.00	180.00	5, 20	25. 12	2.96	35.77	107.31	3, 10	14, 98	1.76
2 ]-2		0.0046	2,00	50,00	1.60	24,82	0.14	0.79	19.87	0.64	8.80	0.06
3 1-3	-	0.0165	40.00	110.00	5.60	9,76	0.13	57,02	156.82	7.92	13.91	0.19
7-4		0.0029	20.00	40.00	4, 00	14, 90	1.96	5.01	10.02	1 00	3, 73	0.49
5 J-5		0.8500	32.00	110.00	5.40	22, 72	2, 16	2350,08	8078 40	396, 58	1668, 56	158,62
6 J-6A		0.2270	300.00	1200.00	14.00	66.40	6	5883, 34	23535 35	274. 58	1302, 29	191.62
- 1-6		0.0048	60.00	470.00	5.20	23.36	3,04	24,88	194.92	2, 16	9,69	1.26
8 <u>1-1</u>		0.0011	90.00	230.00	10,80	34.05	4.45	8,55	21.85	1.03	3.24	0.42
9-1-8		0.0011	500.00	2600.00	7, 00	84.85	7.74	47,52	247.10	0.67	8.06	0.74
0 J-8A		0.0029	2800,00	5400.00	15.60	170.69	28.66	701.57	1353 02	6	42.77	
1 1-9		_					;					•
2 J-10	_											
3 5-11		0.0002	300.00	630,00	6, 10	52, 30	38	.c.	10.89	0.31	06.0	0.11
4 5-12		0.0010	560.00	1100.00	12.40	74.52	11.00	48,38	95, 04	1.07	6.44	0.95
Total		00 5					1					

Table APP. 6-2 Results of Water Quality Analysis of Inflowing Load Survey into Jurujuba Bay

	the laboratory	7513	7514	7515	7516	7525	7517	7518	7529	7524	7520	7521	7522	7523
Station			J-2	7-3	1-5	3-2	1-6	1-1	7-8	J-8.4	1-10	11-5	J-12(1)	J-12(2)
CODE PARAMETER	UNITY					ŧ	 				  -  -			
	 	8, 45	8.55	9, 10	9.30	15.45	9.45	10.05	10.10	15. 20	10.20	10.30	10.35	14.45
02062F Air temperature	O	19.50	19, 50	19, 50	21,00	20.00	21.00	21,00	21.00	20.00	23.00	23.00	23.00	23, 00
		22.00	22.00	22.00	22,00	22.00	22.00	21.00	25.00	24.00	22.00	22,00	23, 50	23.00
08202L BOD (total)	1/84	5.2	2.8	180	40	7.4	009	60 23	120	5600	450	200	350	200
083011, COD (10131)	1/80	08	9	048	,	240	2400	280	540	5600	1200	720	1200	720
SEASON TOWN DESCRIPTION		2.0	· ·	,	u t		7	, ,	00%	200		4	3 7 2	
adoption in the second		,	3 6	,	> i.		2 6	200	200		3 6		2 6	,
Ul3U6L Mitrate Mitrogen		4	10.60	0.30	3	0.10	0.20	0. 20	0.20	0. 20	0.15	0.10	0. 10	2. 20
07309L Mitrite Nitrogen		0, 150	0.060	0.007	0:030	6.003	0.001	0.002	0.001	0.004	0.002	0.001	0,001	0.010
07008L Kjeldabl Nitrogen mg	in mg N/1	2.20	0.20	39.00	15.00	29.00	80.00	36.00	45.00	172.00	52,00	46.00	59,00	49.00
078011, Total Nitrogen	N 82	6.70	10.26	39, 31	15, 38	29, 11	80, 20	36, 20	45.20	172, 20	52.15	46.10	59, 10	2.63
0.1018 1018   First Sec. 18	1/02					3.0.5	r-	. C		000	, p	44		
מימים מיים מי מיים מיים מיים	1 / K	;	, e	r c	3 C			,			0.0			
10401L Suspended Solids		7 ;	99	0 1	2 .	2	1300	ָר מ	180	1300	330	0.7	091	9
08306L TOC	1/80	es	91	130	<b>43</b>	S.	260	20	202	840	152	183	121	201
Dischage	1/3	2.7	2.4	12.0	650.0	760.0	6.6	6.0	1.1	2.9	2.1	0.3	0, 7	0.0
Date of sampling	1UNE. 7 (19	93}												
General number of the labora	tory	3306.00	8307	9308	9308	8310	8311	8312	8313	8314	8315	8316	8317	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,														÷
Station		1-1	2-5	5-3	5-4 4-1	5-5	j-6A	5-6	ting .	8-1	J-8A	5-11.	5-12	
CODE PARAMETER	UNITY													
Time	ac (	9, 20	9. 23	9.30	3.33	20 C	10.43	20.83	10.40	10.43	10.50	00.11	11.13	
02052F Air temperature	، د	21.00	22.00	00.77	22.00	24.00	25 - 5		00.57	00.57	20.67	00.00	20.00	
02051F Water temperature	. د	22. 50	00.22	21.00	21.00	06.12	06.12	00.12	20.57	70.47	77.00	70.62	77.77	
08202L B0D (tota!)	m8/1	Q g	2	¢0	20	32	300	9	0	200	2800	300	990	
08301L COD (total)	mg/1	180	8	110	40	110	1200	470	230	2600	2400	630	1100	
15403L Total Phosphorus	É	2.96	0.14	0.13	1.96	2.16	9. 17	3.04	4:45	7.74	28.66	5.36	. 11.00	
07306L Mitrate Nitrogen	EI EI	1.21	23.59	1.14	0, 50	0.48	0.58	0.67	0, 71	0.53	0.82	0.34	1.19	
07309L Mitrite Nitrogen	K	*	*	*	*	*	*	*	*	*	*	*	<b>.</b>	
		23.91	1.12	. 63 63	14, 40	22. 24	65.83	22, 68	33, 34	84.32	169.88	51.95	73, 33	
		25.12	24.82	9.75	14.90	22, 72	66.40	23, 36	34.05	84.85	170.69	52, 30	74.52	
08402L Total OC alcaline mg/	16 BR/	22	1.6		4.0	5.4	14.0	5, 2	10.8	7.0	15.6	6,4	12.4	
	1/201 2	67	40	600 E	Ξ	83	377	53	44	272	1232	11	250	
			1111111											
A	, ,	ď	4	a.	0	C y a	227	•	-	-	0	0	-	

PRECIPITATION DATA AT DUQUE DE CAXIAS (1989-1993)

Year	JAN	888	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
77													
38	-												
79													
80													
81													
1982													
80 63						-							
84													•
85													
98				ē									
8.7													
88				161.6	56.9		48.3		59.8	177.2			
65 80				46.0	54.0	164.9	26.0						
06			147.5	6.3	20.6		92.1	79.1	169.6	123.3	125.4	167.9	
1991	352.8	341.1	390.6	143.1	185.6	89.8	17.7	0.0	292.0	193, 3	33.7	280.5	2,320.2
1992	284.4	130.6	82.9	125.7	53.6	1.5	44.5	9.0	106.6	206.8	368, 9	114.2	1,528.7
1993	226. 4	371,4	65.6	43.0	00	129 7							

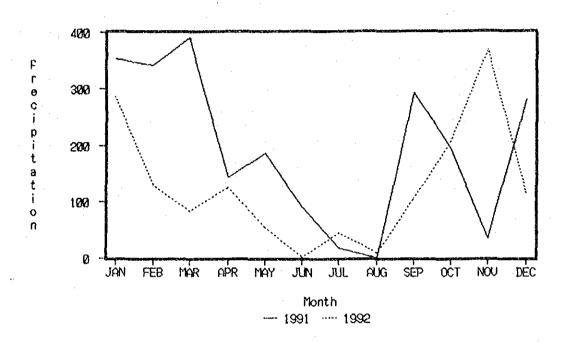
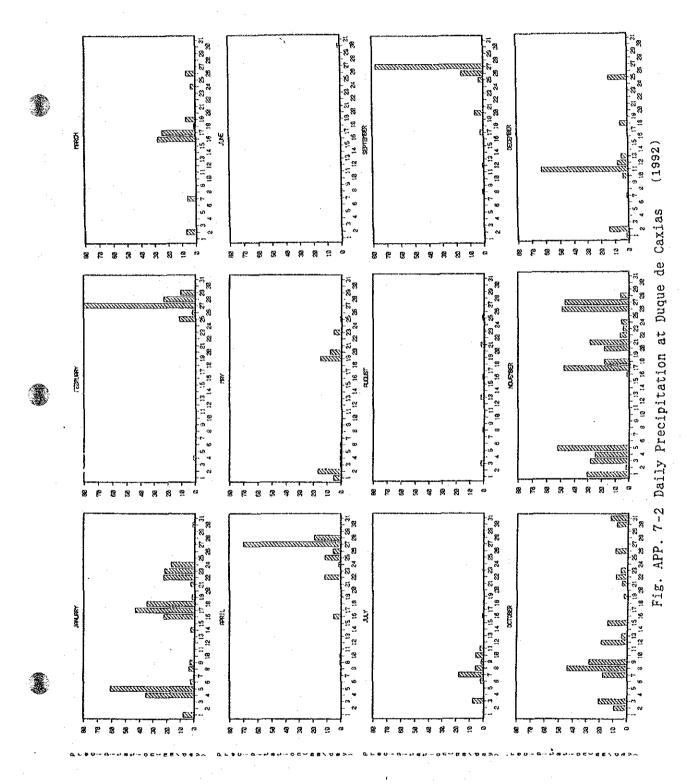
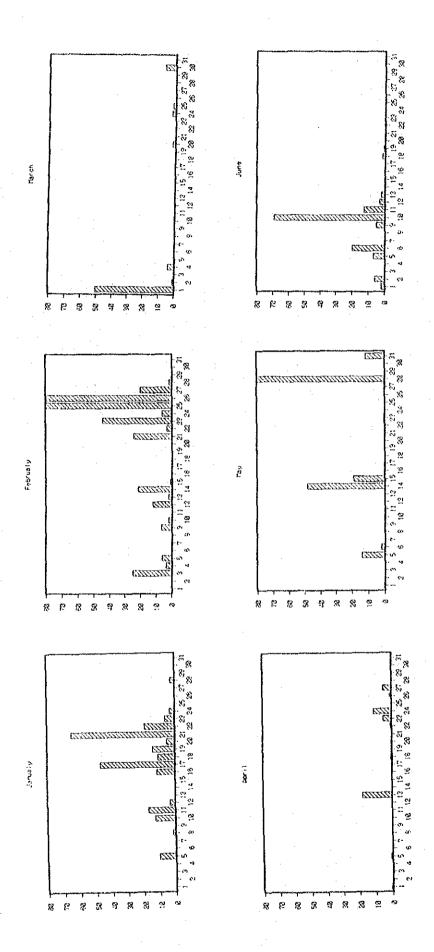


Fig. APP. 7-1 Monthly Change of Precipitation at Duque de Caxias (1991 and 1992)





A7-4

Table APP. 7-2 Daily Precipitation at Duque de Caxias (1988-1993)

		Duque de									unit:mm/da	
Date	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				7.0	0.0		1. 2		0.0	0.0		
2				11.0	0.0		0		0.0	0.0		
3				0.8	0.0		0.0		5.1	0.0		
4				0.0	0.0		0.0	:	6.0	2. 4		
5				6. D	3. 4		0.0		0.0	0.4		
6				0.0	3. 5		0.0		0.0	12.3		
7			L	0.0	0.0		0.2		0.0	0.0		1
8				3. 7	0.0		5.8		0.0	0.0		
9				7.0	0.0		2. 7		0.0	0.0		
10				0.0	0.0		1.7		0.0	0.3		
11				0.0	0.0		2. 5		0.0	0.4		
12				0.0	0.0		8.0		0.0	34.5		
13				16.5	0.0		17.4		0.0	0.1		l
14				0.0	8.4		1.4		3. 2	0.0		
15				0.0	0.0		0.0		8.9	0.0		
16				0.0	0.0		0.0		5.3	0.0		
17				2. 3	0.7		0.0		4.3	50.1		
18				0.0	0.0		0.0		13.3	0.0		
19				0.0	0.0		0.0		0.2	4.0		
20				0. 1	0.0		0.0		0.0	4. 4		
21				0.0	0.0		0.0		0.0	1.9		
22	·			0.1	3.0		0.0		0.0	0.0		
23	·		L	3. 9	0.0		0.0		0.0	13.3		
24				0.3	10.4		1.4		0.0	0.0		l
25				0.0	1.7		2.0		0.0	10.0		<u> </u>
26	I		<u>                                      </u>	0,0	7.4		2.9		0.0	14.8		<u> </u>
27				0.0	0.0		1.1		0.2	26.3		
28				80.5	0.0		0.0		8. 1	2. 0		
29				12.7	0.0		0.0		5. 4	0.0		
30				9.7	18.4		0.0		1.8	0.0		
31					0.0		0.0			0.0		
otal	0.0	0.0	0.0	161.6	56. 9	0.0	48.3	0.0	59.8	177. 2	0.0	0

S	St. Name :	Duque de	Caxias		aily Preci	pitation				(1989)	ยกit:ตก/da	y
Date	KAL	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOY	DEC
T <sub>1</sub>					0.0	0.0						
2					0.0	0.0						
3					0.0	0.9						
4					0.0	0.0						
5					6.6	0.0						
6					3.7	0.0						
7					27. 1	0.0						
8					0.0	0.0						
9					0.0	0.0						
10				0.0	0.0	6.7						
11				5. 1	0.0	145.5						
12				2. 8	3.3	12.7	0.0					
13				10.0	0.0	U. 0	0.0					
14				1.0	0.0	0.0	0.0					
15				1.1	0.0	0.0	0.0					
16				0.8	0.0	0.0	0.0					
17				0.0	3. 3	0.0						
18				0.0	0.0	0.0						
19	•			16.7	0.0	0.0	0.0			l		
20				7.5	0.0	0.0	0.0					
21				0.0	0.0	0.0	0.0			<u> </u>		
22				0.0	0.0	0.0	0.0			<u></u>		
23				0.0	0.0	0.0	0.0					
23				0.0	0.0		0.0			ļ		
25		1		1.0	3, 8		0.0					
26				0.0	6. 2		0.0			L		
27				0.0	0.0		5. 5					
28				0.0	0.0		13.4			L		
29				0.0	0.0		0.0					
30				0.0	0.0		7.1					
31		I			0.0		0.0					· · · · · · · · · · · · · · · · · · ·
fotal	0.0	0.0	0.0	46.0	54.0	164.9	26.0	0.0	0.0	0.0	0.0	0.0

Table APP. 7-2 Daily Precipitation at Duque de Caxias (1988-1993)

	St. Namo :	Duque de	Caxias				1			(1989)	unit:mm/da	
Date	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	oct	NOV	DEC
1					0,0	0.0				_		
2_					0.0	0.0					l	
3					0.0	0.0						
4					0.0	0.0						
5_					6, 6	0.0		_				
6					3.7	0.0						
1					27.1	0.0						
8					0.0	0.0						
9					0.0	0.0						
10				0.0	0.0	6.7						
11				5.1	0.0	145. 5	1					
12				2.8	3.3	12.7	0.0					
13				10.0	0.0	0.0	0.0					
14 15				1.0	0.0	0.0	0.0		•			
15				1.1	0.0	0.0	0.0				1	
16				0.8	0.0	0.0	0.0					Í
17				0.0	3. 3	0.0						
18				0.0	0.0	0.0						
19				16.7	0.0	0.0	0.0					
20 21				7.5	0.0	0.0	0.0					
21				0.0	0.0	0.0	0.0					
22				0.0	0.0	0.0	0.0					
23				0.0	0.0	0.0	0.0				T	
24			i	0.0	0.0		0.0					
25				1.0	3.8		0.0					
26				0.0	6.2		0.0					
27				0.0	0.0		5. 5				1	
28				0.0	0.0		13.4		-			
29		l		0.0	0.0		0.0					
30				0.0	0.0		7.1				1	
31		I			0.0		0.0					
Total	0.0	0.0	0.0	46.0	54.0	164.9	26.0	0.0	0.0	0.0	0.0	0.0

	St.Name :	Duque de	Cartas	. 1	Daily Preci	pitation				(1990)	unit:¤m/da	
ate	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	001	NOV NOV	DEC
1			0.0	0.0	0.0	7011		0.0	1. 7	0.0	0.0	0.
2			0.0	0.8	0.0			0.0	0.3	11.1	0.0	6.
3			0.0	0. 1	0, 0		0.0	0.0	0.0	0.0	0.0	0.
4		[i	0.0	0, 6	0.9		0.0	1.1	2, 2	1.6	4, 0	0
5			0.0	0. 5	0.0		10.3	0.0	4. 5	0,0	9. 4	0.
6	<del> </del>		0.0	0.0	0.0		0,0	2.7	0.0	0, 0	11.2	0.
7			0.0	1.1	0.0		0.0	0.0	0.0	0,0	0.0	Ö.
8			4.3		0.0		0.0	0.0	0.0	0.0	0, 0	53.
9			0.0	0.7	0.0		0.0	0.0	0.0	0.0	0.0	0.
10			0.0	0.3	0.0		5, 5	0.0	0.0	0.0	0.0	Ö.
11			0.0	0.0	2.6		40. 2	0.0	0.2	0.0	0.0	0.
12			0. 0	1. 5	11.8		24. 4	0.0	65. 8	13. 2	0.0	14
13			0.0		0.0		0.0	0.0	1.1	1. 2	0,0	0.
14			0.0	0.7	0.0		0.0	0.0	0.0	0.0	0.0	22.
15			0,0	0.0	0.0		0.0	0.0	C. 0	3, 4	0.0	5.
16			0.0	0.0	1.9		0.1	0.0	0.0	12.7	0.0	2.
17			0.0		0.2		0.0	5. 5	0.0	3, 7	0, 0	23.
18					2.3		0.0	17.7	0.0	0.0	3.5	0.
19			40.0		0.0		2. 1	0.0	0.5	7, 9	0.0	0.
20			17.5		0.0		0.0	13.2	0.0	6.7	0.0	0.
21			20.0		0.0		0.0	0.4	12. 1	0.0	0.0	0.
22_			3.0		0.6		0.0	9. 6	55.9	0,6	0.0	0
23			10.1		0.0		0.0	17.4	2. 3	0.0	41.3	0.
24		ļ	13.9		0.0		0.0	0.4	17. 1	25, 5	49.3	1.
25			29.8		0.0		2. 1	0.0	3. 7	34.8	0.0	31.
26		l	5. 3		0.0		0.0	0,0	0. 2	0, 9	0.0	0.
27			0.0		0.0		0.2	0.0	0.0	0.0	6. 7	3.
28			0.0		0.1		6.4	2. 3	0.0	0, 0	0.0	0.
29			3.6		0. 2		0.0	8.8	0.0	0, 0	0.0	11.
30		ļ	0.0		0.0		0.0	0.0	0.0	0,0	0.0	0.
31		<b>I</b>	0.0		0.0		0.8	0.0	1.0	0.0		
otal	0.0	0.0	147.5	6.3	20.6	0.0	92.1	79.1	169.6	123 3	125 4	167

Table APP. 7-2 Daily Precipitation at Duque de Caxias (1988-1993)

S	t. Name :	Duque de (	Caxlas								unit:mm/day	
Date	JAN	FEB	MAR	APR	MAY	JUN	JÜL	AUG	SEP	OCT	NOY	DEC
1	8.6	0.3	5. 5	0.0	0.0	0.0	0.0		24.0	50.1		3. 1
2	0.0	0.4	8.5	10.3	0.0		0.0		10.3	56.5		3.4
3	35.0	5.5	0.8	0.0	0.0	0.0	0.0		0.0	12.8		0.0
4	0.0	0.0	35.0	0.0	0.0		2. 4		0.0	0.0		0.0
5	0.3		5. 4	21.1	0.0		0.0		0.0	0.0		0.0
6	0.0	3.0	1. 2	0.2	96,0		0.0		0.0	25.5		0.0
7	3.5	78.0	1.1	0.0	45.0		0.0		0, 0	30.3		0.0
8	0.0	13.9	1.8	0.0	4.2		0.0		0.0	4. 2		16.1
9	0.0		1.0	4, 0			0.0		0.0	2.0		0.0
10	46.6			0.0		0.2	0.0		0.0	0.7		0.3
11	29. 5		·	0.0		0.0	0.0		0.0	0,0		0,0
12	0.0		•	0.0		0, 0	0.0		0.0	1.4		13.9
13	5.5			0.0	0.0	0.0	0.8	0.0	0.0	0.0		9.0
14	6. 5	0.4	10.2	0.0	9.0	0.0	12. 9	0,0	0.0	0.0		0.0
15	11.9	10.7	0.0	1.4	0.0	0, 2	0.0	0.0	0.0	0.0		0.0
16	79.0	152.3	0.0	0.0	30.6	0.0	0.0	0.0	27.7	0.0		8.0
17	18.1	1.2	0.0	0.0	0.0	0.2	1.5	0.0	0.0	0.0		18.4
18	0.0	56.4	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0		7.6
19	0.0	1.5	0.0	8.3	0,0	0.0	0.0	0.0	31.8	0.9		33.8
20	1.0	0.0	0.0	33.4	6.8	. 0,0	0.0	0.0	16.7	8.9		17.7
21	0.0	0.0	22.4	0.0	3.0	0,0	0.0	0.0	0,0	0.0	<b></b>	2.0
22	1.9	0.3	27.0	0.0		0.0	0.1	0.0	0.0	0.0		0.2
23	6.4	6.4	17. 3	0.0		6.0		0.0	0.0	0.0		0.0
24	9.3	5.8	17. 2	0.0		10.6	l	0.0	7. 9	0.0	ļ	0.0
25	23.5	1.1	77.5	2. 3		0.0		0.0	50.4	ļ	ļ	4.3
26	1. I	1. 2	38.7	51.3		0.0		0.0	11.4	<b></b>		0.8
27	43.1	0.8	48.5	4.8		0.0		0.0	2, 1	<b> </b>	ļ	129.4
28	6.6	0.9	4.6	0.0		0.0	l	0.0	43. 2	ļ	0.0	10.0
29	15. 2		62.6	1.9		39. 6	L	0.0	62.0		0.0	2.5
30	0. 2		1. 3	4.1	0.0	39.0	ļ	0.0	4.5		33.7	0.0
31	0.0		2.0		0.0	L		0.0				0.0
Total	352.8	341.1	390.6	143.1	185.6	89.8	17.7	0.0	292.0	193.3	33.7	280.5

Daily	Precipi	tation
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	St.Name:	Duque de	Caxias								Jnit:mm/da	
Date	JAN	FEB	MAR	APR	MAY	JUN	JVL	AUG	SEP	OCT	NOV	DEC
1	8. 1	0.0	0.0	0.0	5. 4	0.0	0.0	0.0	0.0	0.0	30. 6	1, 4
2	0.0	0.0	7.1	0.0	16. 7	0.0	0.0	0.0	0.0	9.8	2.0	14.2
3	0.0	0. 0	0.0	0.0	0.7	0.0	7.6	2. 0	0.0	21.1	28. 3	0.0
4	35. 5	1.3	0.0	0.0	0. 8	0.0	0.0	0. 0	0.0	0.0	24.8	0.0
5	61. 2	0.0	0.0	0.0	0.5	0.0	0.0	0. 0	0.0	0.0	52. 3	0.0
6	2. 7	0.0	0.0	0.0	0.6	0.0	2. 2	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	6.0	0.0	0.0	0. 0	17.8	0.0	0.0	17.7	0.0	1.0
8	3. 5	0. 0	0.0	0.0	0.0	0.0	5. 6	1.0	1.0	43. 9	0.0	0.0
9	2. 9	0.0	0.0	0.7	0.0	0. 0	1.4	0. 0	0.0	27.9	0.0	0.0
10	0.0	0.0	0.0	0.6	0.0	0.0	5. 2	0.0	0.0	0.0	0.0	3.4
11	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	62. 6
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	19.0	: 0. 0	7.6
13	0.0	0.0	0.0	0.3	0.0	0.0	0. 0	2. 0	0.0	4.0	0.0	4.6
14	2.6	0. 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0. 0	0.0	14.4	0.0	0.0
16	22. 7	0.0	27. 7	5. 4	0.0	0.0	0.8	1.0	0.0	0.0	1.4	0.0
17	43. 4	0.0	24. 2	0.0	0.0	0.0	0.4	0.0	2.0	0.0	47.6	0.0
18	34.7	0.0	1.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	18.0	5.4
19	1. 9	0.0	6.8	0.0	15.0	0.0	0. 0	0.0	0.0	2. 8	0.0	0.0
20	0.0	0.0	0.0	0. 0	7.9	0.0	0.0	0.0	6.0	0	18. 1	0.0
21	2. 6	0.0	0.0	0.0	0.0	0. 0	0.0	2.0	0.0	3. 7	28. 5	0.0
22	22.7	0.0	0.0	11.6	0.1	0.0	0.0	0.0	0.0	8. 2	6.5	0.0
23	21.7	0.0	0.0	0.0	5. 3	0.0	0.2	0.0	0.0	4.6	4.0	0.0
24	17. 1	0.0	3. 2	1. 3	0. 0	0.0	0. 2	0.0	0.0	0.0	5.5	0.0
25	0.0	11.9	0. 2	11.3	0. 5	0. 1	0. 3	1.0	3. 1	0.0	0.0	14.0
26	0.0	2. 1	6. 7	5. 4	0.0	0.0	0.2	0.0	16.0	9.0	48, 7	0.0
27	0.0	81.6	0.0	69. 8	0. 1	0. 0	0.0	0. 0	77. 5	0.0	46. 6	0.0
28	0.0	23. 1	0.0	19. 3	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0
29	0.0	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	1.1	-	0.0	0.0	0.0	1.4	0.0	0.0	0.0	8.0	0.0	0.0
31	0.0	-	0.0	-	0.0		0.0	-	0.0	12.7	-	0.0
Total	284. 4	130. 6	82. 9	125. 7	53. 6	1.5	44. 5	9. 0	106.6	206. 8	368. 9	114.2

Table APP. 7-2 Daily Precipitation at Duque de Caxias (1988-1993)

\$		Duque de (				· .					unit:ma/da	
Date	JAN	FEB	NAR	APR	MAY	JUN	JUL	AUG	SEP	001	NOY	DEC
	0.0	0.0	50. 2	0.6	0.0	2.0						
2	0.0	0.0	1.0	0.0	0.0	5. 9						
3	0.0	24.9	0.0	0.0	0.0	0.0						
4	0.0	3. 6	3.8	0.0	0.0	0.0				<u></u>		
5	10.1	6.0		0.6	14.0	6.8					<u> </u>	
6	0.0	0.0		0.0	2. 0	19.7					1	
7	0.0	0.0		0.0	0.0	0.0						
8	1.2	0.0		0.0	0.0	0.0						
ğ	0.0	6.4		0.0	0.0	5. 0					ļ	
10	12.3	1.7		0.0	0.0	69. 2			-:	·		
11	16. 9	0.0		0.0	0.0	12.8						
12	3.0	12.0		0.0	0.0	2.9						
13	0.0	1.9		18. 0	0.0	2. 2						·
14	0.0	21.6		0.0	48.0	0.4						
15	0.0	1.0		0.0	19.0	0. 2					ļ	ļ. <u>.                                   </u>
16	11.3	0.0		0.0	0.0	0.0					ļ	ļ
17	46.8	0.0	0.0	0. 2	0.0	0.0		<u> </u>				ļ
18	10.5	0.0	0.0	0.6	0.0	1.4						<u> </u>
19	14.0	0.0	0.0	0.0	0.1	0.7		·				·
20	4.9	0.0	1.4	0.2	0.0	0.0						ļ———
21 22	65. 0	24.3	0.0	0.1	0.0	0.0	<u>-</u>					
23	18. 9 6. 0	3.0 44.0	0. 0 0. 0	0.5 5.1	0. 0 0. 4	0.3					<u> </u>	
24	3.0	6.0	2.0	10.8	0.0	0.0					<del> </del>	<u> </u>
95	0.0	82.9	1.4	0.2	0.0	0.0					<del> </del>	
25 26	0.0	110.7	0.0	1.0	0.0	0.0				<del>'</del>		<del> </del>
27	0.0	19. 9	0.0	5. 1	0.0	0.0						
28	2.5	1 5	0.0	0.0	90.0	0.0						
29	0.0	1.0	0.0	0.0	0.0	0.0						
30	0.0		6.6	0.0	0.0	0.0						
31	0.0		0.2		11.6	<u>v-</u> v-						
Total	226. 4	371. 4	66.6	43.0	185.1	129.7	0.0	0.0	0.0	0.0	0.0	0.0
rora II	C C U . 4 ]	011.41	υυ. <b>υ</b> ;	40.0	105-1	140.11	<u> </u>	V V	V. U	y. U	U. V. V	U. U

RESULTS OF RIVER WATER ANALYSIS BY FEEMA (1980-1991)

Table APP. 8-1 Annual Change of River Water Quality (800) (1980-1993)

		·		_						·				•															ı	1
00 - 00	00 70	***************************************	(8)	26.0	74.8	80	613.8	58.3	11.6	e. %	2.8	~	55.2	28.0	2.3	6.2	ς. Ω	15.1	2.6	9, 7	9.2	25.9	24.7	35. 7	50.0	49.4	50.1	44.4		
00 .			(4~1)	24.6	93.8		149.0		11.0	8.2	2.3	2.0	44.0	34.5	2.6			o. %	හ භ	8.3	15.0	36.0	35.0	,	42.0	35.0	68.0	56.0		
87 - 80	3		(4~11)	20.0	105.0		20.0		10.0	7.2	3.2	2.0	36.0	6.0	3,2			10.0	2.4	4.0	10.0	24.0	40.0		20.0	34.0	30.0	48.0		
98 1	3		(27~44)	32.0	170.0		760.0		6.0	5.4	2.4	2.0	8.6	8.0	4.0			0.6	4.0	4.0	10.0	26.0	38.0		34.0	20.0	0.09	80.0		
out pue	Type			Urb/S. T	Urban	Urban	Urban	Urban	Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Urban	Urban	Urban	Urban		Urban	Urb/S. T		
س نامالا	Density	(p/km2)		5.64	6.9	4.50	3.25	3. 25	3. 25	0.40	0.08	0.07	0.14	0.46	0.33	0.38	0. 19	0.88	0.61	1.04	1.35	6.12	9.07	7.57	14.01		12.82	11.70		
Son Tation		(persons)		41, 745	183, 099	138, 636	470, 420			336, 193	69, 853	18.577	17. 911	8. 458	36, 370	10.684	12.910	302, 495	84. 106	194, 173	758, 010	1.012.275	1, 492, 458	438, 076	500, 276		815, 389	500,876	6, 690, 147	
Basin Area Domilation Domilation and 1150		(Ka2)		7.40	28.20	30.80	144.60			846.70	1253. 10	256.00	132. 40	18.30	111.40	27.80	68.80	342.50	139.00	186.00	562.80	165.50	164.50	57.90	35. 70	,	63.60	42.80	3912.50	
	Ö			~	w	ç,	8	∞	œ	တ	10	10-3	10-6	11	12	13	14	16	16-2	16-3	17-175	17-6	19	19-2	20	20	21	23		
Covered	Basin Area	(Km2)		7. 40	3.40	11.60	58.50	5.50	11.80	758.40	1233.70	256.00	45.20	4.60	107.00	8.40	53.20	342. 50	139.00	186.00	544. 20	159.80	163.50	57.90	27.30	,	60.50	42.80	3604. 10	
	Name			CANAL CANTO DO R10	RIO BOMBA	RIO IMBOASSU	RIO ALCANTARA	RIO MUTONDO	RIO GUAXINDIBA	RIO CACEREBU	RIO GUAPIMIRIM	RIO MACACU	RIO SOBERBO	CANAL DE MAGE	RIO RONCADOR	RIO IRIRI	RIO SURUI	RIO ESTRELA	RIO INHOMIRIM	RIO SARACURUNA	RIO IGUACU	RIO SARAPUI	RIO S. J. DE MERITI	RIO ACARI	RIO IRAJA	CANAL DO PENHA	CANAL DO CUNHA	CANAL DO MANGUE	TOTAL	) : Number of Data
	2			1 CI780	2 BM760	3 18810	4 AN740	5 MT820	6 GX720	7 CC622	8 GP600	*9 MC967	*10 SB998	11 MG580	12 RN560	13 IR540	14 SR500	15 ES400	*16 IN460	*17 SC420	18 IA260	19 SP300	20 \$1220	*21 AC241	22 11200	23 PN180	24 CN100	25 MN000	•	W: ( )*
														-			-													

Table APP. 8-1 Annual Change of River Water Quality (COD(Cr)) (1980-1993)

				رب ا		<u></u>		<u></u> 65		٥	-01	-	-4	~	···	LC)	2	9	~			<u></u>	∞	<del></del>	<u>ф</u>	٠	<u></u>	F	ļ
92 - 93			6	74.	191.0	1440.0	337.8	125.9	44.	35	20.	10.	114.4		14.	45.	23	33	15.	24.	37.	89	144.8	71.	104	121.6	85	115.	
16 - 06			(3 ~ €)	16.0	188.3		460.0		37.5	34.2	13.3	10.8	140.0	145.0	11.7			26.7	13.3	36.7	75.0	98.0	135.0		160.0	180.0	160.0	130.0	
82 - 89		-																											
98 - 08													-									:							
Land use	37.50	:		Urb/S. T	Urban	Urban	Urban	Urban	Urban	Y/N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Urban	Urban	Urban	Urban		Urban	Urb/S. T	
Population		(p/km2)		5.64		4.50			3. 25	0.40	0.0	0.07	0.14	0.46	0.33	0.38	0.19	0.88	0.61	1.04	1.35	6. 12	9.07	7.57	14.01		12. 82	11. 70	
Sasin AreaPopulationPopulationLand use	(persons) Density			41, 745	183, 099	138, 636	470, 420			336, 193	69.853	18.577	17.911	8, 458	36, 370	10,684	12,910	302, 495	84.106	194, 173	758, 010	1. 012. 275	1, 492, 458	438, 076	500.276		815, 389	500, 876	5 690 147
Basin Area		(Km2)		7. 40	26. 20	30.80	144.60	•		846. 70	1253, 10	256.00	132, 40	18.30	111.40	27.80	68.80	342.50	139.00	186.00	562.80	165.50	164.50	57.90	35.70	•	63.60	42.80	3912 50 6
	2.			<b>c</b> ;1	w	9	••	<b>%</b>	8	6	91	10-3	10-6	=======================================	77	13	14	16	16-2	16-3	17-1_5	9-21	13	19-2	70	20	23	23	
Covered	Basin Area	(Km2)		7.40	3.40	11.60	58.50	5.50	11.80	758. 40	1233. 70	256.00	45.20	4.60	107.00	8.40	53.20	342.50	139.00	186.00	544. 20	159.80	163.50	57.90	27.30		60. 50	42.80	3604, 10
	Nane			CANAL CANTO DO RIO	RIO BOMBA	RIO IMBOASSU	RIO ALCANTARA	RIO MUTONDO	RIO GUAXINDIBA	RIO CACEREBU	RIO GUAPINIRIN	RIO MACACU	RIO SOBERBO	CANAL DE MAGE	RIO RONCADOR	RIO IRIRI	RIO SURUI	RIO ESTRELA	RIO INHOMIRIM	RIO SARACURUNA	RIO IGUACU	RIO SARAPUI	RIO S. J. DE MERITI	RIO ACARI	RIO IRAJA	CANAL DO PENHA	CANAL DO CUNHA	CANAL DO MANGUE	TOTAL
	No.			1 CI780	2 BM760	3 18810	4 AN740	5. MT820			8 GP600	*9 MC967	*10 SB998		12 RN560	13 1RS40	14 SR500	15 ES400	*16 IN460	*17 SC420	18 IA260	19 SP300	20 SJ220	*21 AC241	22 11200	23 PN180	24 CN100	25 NN000	-

Table APP. 8-1 Annual Change of River Water Quality

·(K-N) (1980-1993)

NO. 22 88 88 88 88 88 88 88 88 88 88 88 88	(Km2) (persons) 7.40 41.745 26.20 133.699 30.80 138.636 144.60 470.420 846.70 338.193 1253.10 69.853 256.00 18.577	Basin AreaPopulationPopulation and use Density Type  7.40 41.745 5.64 Urb/S.T 26.20 183.099 6.99 Urban 36.80 138.636 4.50 Urban 144.60 470.420 3.25 Urban 3.45.70 336.193 0.40 N/A 1253.10 69.853 0.06 N/A	98 - 08	87 - 89 (2 ~ 9) 21.00 34.00	16 - 06	92 - 93
Name   Basin Area   No. (Km2)   (Km2	7. 40 41, 745 26. 20 183, 099 30. 80 138. 636 144. 60 470, 420 446. 70 336, 193 253. 10 69, 853 256. 00 18, 577	Density Type (p/km2) 5.64 Urb/S.T 6.99 Urban 4.50 Urban 3.25 Urban 3.25 Urban 3.25 Urban 0.40 N/A 0.06 N/A		₹	- 1	}
CANAL CANTO DO RIO 7.40 2 RIO BOMBA 3.40 5 RIO BOMBA 3.40 5 RIO IMBOASSU 11.60 6 RIO ALCANTARA 58.50 8 RIO ALCANTARA 5.50 8 RIO ALCANTARA 11.80 8 RIO GUAZINDIBA 11.80 8 RIO GUAZINDIBA 1233.70 10 RIO GUAZINDIRA 1233.70 10-6 RIO GUAZINERI 1233.70 10-6 RIO GUAZINERI 1233.70 10-6 RIO SOBERBO 45.20 10-6 CANAL DE MAGE 4.60 11 RIO SOBERBO 45.20 16 RIO IRIRI 8.40 13 RIO SURUI 53.20 14 RIO SURUI 53.20 14 RIO SURUI 139.00 16-2 RIO SARACURUNA 186.00 16-3 RIO INDOMIRIM 139.00 16-3 RIO INDOMIRIM 186.00 17-1-5	(persons) 40 41,745 20 183,099 80 138,636 60 470,420 70 336,193 10 69,853			₹		
CAMAL CANTO DO RIO 7. 40 2 RIO BOMBA 3. 40 5 RIO IMBOASSU 11. 60 6 RIO ALCANTARA 58. 50 8 RIO ALCANTARA 58. 50 8 RIO GUAZINDIBA 11. 80 8 RIO GUAZINDIBA 1233. 70 10 RIO GUAPINIRIW 1233. 70 10-6 CANAL DE MAGE 4. 60 11 RIO SOBERBO 45. 20 10-6 CANAL DE MAGE 107. 00 12 RIO RONCADOR 107. 00 12 RIO RIRI 8. 40 13 RIO SURUI 53. 20 14 RIO SURUI 139. 00 16-2 RIO SARACURUNA 186. 00 16-3 RIO INDOMIRIW 139. 00 16-2 RIO INDOMIRIW 186. 00 16-3				1	-	
CANAL CANTO DO RIO 7.40 2 RIO BOMBA 3.40 5 RIO INBOASSU 11.60 6 RIO ALCANTARA 58.50 8 RIO MUTONDO 5.50 8 RIO GLAZINDIBA 11.80 8 RIO GLACEREBU 758.40 9 RIO GLACEREBU 758.40 9 RIO GLACEREBU 758.40 10-8 RIO GLACULMININ 1233.70 10-6 RIO GLACULMININ 1233.70 10-6 CANAL DE MAGE 4.60 11-7 RIO SOBERBO 45.20 10-6 CANAL DE MAGE 107.00 12 RIO RIRI 53.20 14 RIO SURUI 53.20 14 RIO SURUI 139.00 16-2 RIO INDOMIRIM 139.00 16-2 RIO INDOMIRIM 186.00 16-3 RIO INDOMIRIM 186.00 16-3				21.00	$(4 \sim 7)$	(6)
RIO BOMBA 3.40 5 RIO IMBOASSU 11.60 6 RIO ALCANTARA 58.50 8 RIO MUTONDO 5.50 8 RIO GLAXINDIBA 11.80 8 RIO CACENEBU 758.40 9 RIO GLAPINIRIM 1233.70 10 RIO GLAPINIRIM 1233.70 10-6 RIO GLAPINIRIM 1233.70 10-6 CANAL DE MAGE 4.60 11 RIO SOBERBO 45.20 10-6 CANAL DE MAGE 107.00 12 RIO RIRII 8.40 13 RIO SURUI 53.20 14 RIO SURUI 139.00 16-2 RIO INDOMIRIM 139.00 16-2 RIO INDOMIRIM 186.00 16-3 RIO INDOMIRIM 186.00 16-3				34. 00	17.90	14.00
RIO IMBOASSU 11.60 6 RIO ALCANTARA 58.50 8 RIO MUTONDO 5.50 8 RIO GUAZINDIBA 11.80 8 RIO CACENEBU 758.40 9 RIO GUAPINIRIM 1233.70 10 RIO SACACU 256.00 10-6 CANAL DE MAGE 4.60 11 RIO RONCADOR 107.00 12 RIO RIRII 8.40 13 RIO SURUI 53.20 14 RIO SURUI 53.00 16-2 RIO SURUIRIM 139.00 16-2 RIO SARACURUNA 186.00 16-3 RIO INDARIRIM 189.00 16-2 RIO INDARIRIM 186.00 16-3					28. 25	23, 22
RIO ALCANTARA   S.B. 50 8     RIO MUTONDO   5.50 8     RIO GUAXINDIBA   11.80 8     RIO GUAZINRINA   1233.70 10     RIO GUAPINIRINA   1233.70 10-8     RIO GUAPINIRINA   1233.70 10-6     RIO GUAPINIRINA   1233.70 10-6     RIO GUAPINIRINA   107.00 12     RIO RONCADOR   107.00 12     RIO RIRII   8.40 13     RIO SIRGII   53.20 14     RIO SIRGII   342.50 16     RIO INDOMIRINA   186.00 16-2     RIO SARACURUNA   186.00 16-3     RIO IGUACU   544.20 17-1-5						3.49
RIO MUTONDO   5.50 8   RIO GUAXINDIBA   11.80 8   RIO CACEREBU   758.40 9   RIO CACEREBU   758.40 9   RIO GUAPINIRIM   1233.70 10 10   RIO GUAPINIRIM   1233.70 10-6   RIO SOBERBO   45.20 10-6   CANAL DE MAGE   4.60 11   RIO RONCADOR   107.00 12   RIO RIVIRI   8.40 13   RIO SURUI   53.20 14   RIO ESTRELA   342.50 16   RIO INDOMIRIM   139.00 16-2   RIO SARACURUNA   186.00 16-3   RIO IGUACU   544.20 17-1-5				30.00	20.50	26. 17
RIO GUAXINDIBA   11.80   8   RIO CACEREBU   758.40   9   RIO GUAPINIRIM   1233.70   10   1   RIO SACACU   256.00   10-3   RIO SOBERBO   45.20   10-6   CANAL DE MAGE   4.60   11   RIO RONCADOR   107.00   12   RIO RIVIRI   8.40   13   RIO SURUI   53.20   14   RIO ESTRELA   342.50   16   RIO INDOMIRIM   139.00   16-2   RIO SARACURUNA   186.00   16-3   RIO IGUACU   544.20   17-15						19. 56
RIO CACEREBU   758, 40 9   RIO GUAPINIRIM   1233, 70 10   1   1   1   1   1   1   1   1   1		ļ		3.00	11. 20	8.30
RIO GUAPINIRIM   1233.70   10   10   RIO MACACU   256.00   10-3   RIO SOBERBO   45.20   10-6   CANAL DE MAGE   4.60   11   RIO RONCADOR   107.00   12   RIO RIVIRI   8.40   13   RIO SURUI   53.20   14   RIO ESTRELA   342.50   16   RIO INBOMIRIM   139.00   16-2   RIO SARACURUNA   186.00   16-3   RIO IGUACU   544.20   17-15	69. 18.			1.00	1.97	1.31
RIO MACACU   256.00   10-3   RIO SOBERBO   45.20   10-6   CANAL DE MAGE   4.60   11   RIO RIO RIORI   197.00   12   RIO RIORI   53.20   14   RIO SURUI   53.20   14   RIO ESTRELA   342.50   16-2   RIO SARACURUNA   186.00   16-2   RIO IGUACU   544.20   17-1 <sup>-5</sup>	18,			0.50	0.80	0.65
RIO SOBERBO   45. 20   10-6     CANAL DE MAGE   4. 60   11     RIO RONCADOR   107. 00   12     RIO RINI   8. 40   13     RIO SURUI   53. 20   14     RIO ESTRELA   342. 50   16-2     RIO INKOMIRIM   139. 00   16-2     RIO SARACURUNA   186. 00   16-3     RIO IGUACU   544. 20   17-1 <sup>-5</sup>		0.07 N/A		0.80	1. 29	0.46
CANAL DE MAGE 4.60 11 RIO RONCADOR 107.00 12 RIO IRIRI 8.40 13 RIO SURUI 53.20 14 RIO ESTRELA 342.50 16 RIO INKOMIRIM 139.00 16-2 RIO SARACURUA 186.00 16-3 RIO IGUACU 544.20 17-1-5				1.40	1.75	0.96
RIO RONCADOR         107.00         12           RIO IRIRI         8.40         13           RIO SURUI         53.20         14           RIO ESTRELA         342.50         16           RIO INBORIRIR         139.00         16-2           RIO SARACURUNA         186.00         16-3           RIO IGUACU         544.20         17-1-5		0. 46 N/A		2 60	15.88	10.00
RIO IRIRI     8, 40     13       RIO SURUI     53, 20     14       RIO ESTRELA     342, 50     16       RIO INNOMIRIM     139, 00     16-2       RIO SARACURUNA     186, 00     16-3       RIO IGUACU     544, 20     17-1-5				0.80	0.76	0.50
RIO SURUI         53.20         14           RIO ESTRELA         342.50         16           RIO INKOMIRIM         139.00         16-2           RIO SARACURUNA         186.00         16-3           RIO IGUACU         544.20         17-1-5		0.38 N/A				1.34
RIO ESTRELA 342.50 16 RIO INNOMIRIM 139.00 16-2 RIO SARACURUNA 186.00 16-3 RIO IGUACU 544.20 17-1-5		0. 19 N/A				0.66
RIO INNOMIRIM 139.00 16-2 RIO SARACURUNA 186.00 16-3 RIO IGUACU 544.20 17-1-5		0.88 N/A		3.00	3.50	2.23
RIO SARACURUNA 186.00 16-3 RIO IGUACU 544.20 17-1-5				0.80	1.20	1.41
RIO IGUACU 544. 20 17-1-5		1.04 N/A		2. 40	1.38	1.89
		1.35 N/A		6.50	8.40	4.16
17-6	,	6. 12 Urban		15.00	16.60	13.98
RIO S. J. DE MERITI 163.50 19	164. 50 1, 492, 458	9. 07   Urban		16.00	15. 25	12.17
19-2		7.57 Urban				10.64
RIO IRAJA 27.30 20	500.	14.01 Urban		17.00	14.60	13.67
CANAL DO PENHA -				18.00	26.50	14.33
24 CN100   CANAL DO CUNHA   60.50 21	63. 60 815. 389	12.82 Urban		23.00	13.80	12.67
DO MANGUE 42.80	42. 80 500, 876	11. 70 Urb/S. T		19.00	17.40	12. 44
TOTAL 3604.10 3	3912. 50 6. 690. 147					

Table APP. 8-1 Annual Change of River Water Quality

·(NH4-N) (1980-1993)

															<u>.</u>															
m17:m8/1	92 - 93	-	(6)		7. 13	9. 40	1.49	5. 13	8.61	4.94	0.32	0.08	0.01	0.11	. 12, 60	0.0	0.69	0.16	1.28	0.31	0. 69	2, 76	4.81	5.36	5.54	5. 78	89 9	5.54	5. 53	
	90 - 91		£ ≥	-	8:11	17.40		7.17		8.08	0.55	0.07	0.56	0.22	9.60	0.19			2.03	0.28	0.51	5.82	13.60	12. 25		9.60	17.00	10.10	10.60	
	87 - 89		(I ~ Z)	١	13.00	19.00		3.00		1.30	0.40	0.08	0.04	0.04	1.60	0.20			1. 20	0. 20	0.50	3.00	8.00	9.00		8.00	8.00	7.00	8.00	
	80 - 86		(96~42)	Ŀ	15.00	23.00		4. 20		1.40	0.45	0.07	0.60	0.30	1.00	0.25			1.10	0. 10	0.35	3.00	11.00	10.00		9.00	8.00	11.00	11.00	
	and use	Type			Urb/S. T.	Urban	Urban	Urban	Urban	Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Urban	Urban	Urban	Urban		Urban	Urb/S. T	
	Population	Dens ity	(p/km2)		5.64	6.99	4.50	3.25	3.25	3.25	0.40	90.0	0.07	0.14	0.46	0.33	0.38	0. 19	0.88	0.61	1.04	1.35	6. 12	9.07	7.57	14.01		12. 82	11. 70	
	Sasin AreaPopulationPopulationLand use		(persons) (p/km2)		41.745	183, 099	138, 636	470, 420			336. 193	69, 853	18.577	17.911	8, 458	36. 370	10.684	12.910	302, 495	84. 106	194, 173	758,010	1.012.275	1, 492, 458	438, 076	500. 276		815, 389	500.876	6, 690, 147
	Basin Area		(Km2)		7.40	26. 20	30.80	144.60			846. 70	1253. 10	256.00	132. 40	18.30	111.40	27.80	68.80	342.50	139.00	186.00	562.80	165.50	164.50	57.90	35. 70	•	63. 60	42.80	3912. 50
		Ñ.			2	ιΩ	မ	œ	œ	∞	တ	10	10-3	10-6	11	12	13	14	16	16-2	16-3	17-1 5	17-6	19	19-2	20	20	21	23	
	Covered	Basın Area	(Kn2)		7.40	3.40	11.60	58.50	5.50	11.80	758. 40	1233, 70	256.00	45.20	4.60	107.00	8.40	53.20	342. 50	139, 00	186.00	544.20	159.80	163.50	57.90	27.30	1	90.50	42.80	3604.10
		Name			CANAL CANTO DO R10	RIO BOMBA	RIO IMBOASSU	RIO ALCANTARA	RIO MUTONDO	RIO GUAXINDIBA	RIO CACEREBU	RIO GUAPINIRIN	RIO MACACU	RIO SOBERBO	CANAL DE MAGE	RIO RONCADOR	RIO IRIRI	RIO SURUI	RIO ESTRELA	RIO INHOMIRIM	RIO SARACURUNA	RIO IGUACU	RIO SARAPUI	RIO S. J. DE MERITI	RIO ACARI	RIO IRAJA	CANAL DO PENHA	CANAL DO CUNHA	CANAL DO MANGUE	TOTAL
		Q.			1 C1780	2 BM760	3 18810	4 AN740	5 MT820			8 GP600	*9 #C967	*10 \$8998	11 46580	12 RN560	13 IRS40	14 SR500		*16 IN460	*17 SC420	18 14260	19 SP300	20 SJ220	#21 AC241	22 17200	23 PN180	24 CN100	25 MN000	

\* ( ): Number of Data

Table APP. 8-1 Annual Change of River Water Quality

/(ТР) (1980-1993)

unit:mg/l	92 - 93		***************************************	(8)	1.17	3.39	0.61	16.39	3.10	1.56	0.28	0.08	0.09	0.19	1.63	0.11	0.28	0.16	0.43	0.14	0. 12	0. 77	2. 16	1.67	2.00	2.07	2.29	1.82	1.94		
-	90 - 91			(4~7)	1.10	3.47	•	6. 72		1.01	0.22	0.09	0.08	0.34	2.06	0.10			0.30	0.21	0.07	0.82	3.08	2. 13		I. 78	2.50	1.76	1. 52		
	84 - 78			(4~11)	1.50	2.10	-	2.30		0.50		0.09	0.06	0.20	0.15	0.10			0.25	0. 10	0.20	0.50	2.00	1.50		1.50	1.00	1.00	1.00		
	80 - 86			$(27 \sim 44)$	1.50	5.50		7.50		0.54	0.15	0.10	0.09	0.10	0. 20	0.15			0.35	0.20	0.15	0.50	2.00	2.00		1.50	1.50	2.50	2.00		
	and use	Туре			Urb/S. T	Urban	Urban	Urban	Urban	Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	. Y/W	N/A	Urban	Urban	Urban	Urban		Urban	Urb/S. T		
	Population	Density	(p/km2)		5.64	6. 33	4.50	3.25	3.25	3.25	0.40	0.06	0.07	0.14	0.46	0.33	0.38	0.19	0.88	0.61	1.04	1.35	6.12	9.07	7.57	14.01		12.82	11.70		
	Sasin AreaPopulationPopulationLand use		(persons)		41, 745	183, 099	138, 636	470, 420			336, 193	69, 853	18, 577	17. 911	8, 458	36, 370	10, 684	12, 910	302, 495	84, 106	194, 173	758,010	1. 012, 275	1, 492, 458	438, 076	500, 276		815, 389	500,876	6, 690, 147	
	Basin Area		(Km2)		7.40	26. 20	30.80	144.60			846.70	1253.10	256.00	132.40	18.30	111.40	27.80	68.80	342.50	139.00	186.00	562.80	165.50	164.50	57.90	35. 70	,	63.60	42.80		
		Ŏ.			2	'n	မ	80	∞	80	Ġ.	10	10-3	10-6	11	13	23	14	16	16-2	16-3	17-1-5	17-6	19	19-2	20	20	21	23		
	Covered	Basin Area	(Km2)		7.40	3.40	11.60	58.50	5.50	, 11.80	758. 40	1233.70	256.00	45.20	4. 60	107.00	8.40	53.20	342.50	139.00	185.00	544. 20	159.80	163.50	57.90	27.30	1	60.50	42.80	3604.10	
		Name			CANAL CANTO DO RIO	RIO BOMBA	RIO IMBOASSU	RIO ALCANTARA	RIO MUTONDO	RIO GUAXINDIBA	RIO CACEREBU	RIO GUAPINIRIM	RIO MACACU	RIO SOBERBO	CANAL DE MAGE	RIO RONCADOR	RIO IRIRI	RIO SURUI	RIO ESTRELA	RIO INHOMIRIM	RIO SARACURUNA	RIO IGUACU	RIO SARAPUI	RIO S. J. DE MERITI	RIO ACARI	RIO IRAJA	CANAL DO PENHA	CANAL DO CUNHA	CANAL DO MANGUE	TOTAL	) · Simbor Of Data
		Ş			1 C1780	2 BM760	3 IB810	4 AN740	5 MT820	6 GX720	7 00622	8 GP600	*9 XC967	*10 S8998	11 ¥6580	12 RN560	13 18540	14 SR500	15 ES400	*16 IN460	*17 SC420	18 IA260	19 SP300	20 \$1220	*21 AC241	22 17200	23 PN180	24 CN100	25 MN000	• -	7 · / · / · /

Table APP. 8-1 Annual Change of River Water Quality (DO) (1980-1993)

unit:mg/l	92 - 93		(	( <del>S</del> )	2.8	1.7	2.5	တ တ	1.2	1.3	1.8	တ က်	6.9	44.		6.1	8	4.4	1.0	9	(n)	I. 1	0.7	0.5	2.0	0.9	0.4	0.6	0.7		
Ħ	30 - 91			C ~ ₽ )		2.1		တ က		1.6	2.5	5.3	80.4	4.8	0.5	6.7	,			4.2			0.2			0.1	0.5	0.3	0.1		
	87 - 89		•	(4 ~ II)	2.7	<0.1		2.5		i		4.8			3.0				2.1	5.6	5.6	1.2	(0.1	<0.1	<del></del>	<0.1	(0.1	0.8	<0.1		
	98 - 08	-	. (	(21 ~ 44)	4.0	<0.1		22	-	F. 8	2.8	พ พ	8.4	7:0	2.8	6.8			2.0	8.9	6.6	1.0	.0°.	.05 1.05		¢0.1	.00	ć0. 1	(0.1		
:	and use	Type			Urb/S. T	Urban	Urban	Urban	Urban	Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	W/A	N/A	N/A	N/A	Urban	Urban	Urban	Urban		Urban	Urb/S. T		
	Population	Density I	(p/km2)		5.64	6.93	4.50	3.25	3.25															9.07	7. 57	14.03			22		
	Asin AreaPopulationPopulationLand use	_ <del>les</del> l_	(persons)	_	41, 745	183, 099	138, 636	470, 420			336, 193	69.853	18, 577	17.911	8. 458	36, 370	10.684	12, 910	302, 495	84, 106	194, 173	758, 010	1. 012. 275	1, 492, 458	438, 076	500, 276		815, 389	500,876	6. 590, 147	
	Basin Area		(Kn2)		7.40	26.20	30.80	144.60			846. 70	1253. 10	256.00	132. 40	18.30	111.40	27.80	68.80	342.50	139.00	186.00	562.80	165.50	164. 50	57.90	35. 70	,	63.60	42.80	3912.50	
		Š.			2	S	9	90	~	80	6	2	10-3	9-01	11	12	13	14	16	16-2	16-3	17-175	17-6.	61	19-2	28	83	21	23		
	Covered	Basin Area	(Km2)		7.40	3.40	11.60	58.50	5.50	11.80	758.40	1233. 70	256.00	45.20	4.60	107.00	8.40	53.20	342.50	139.00	186.00	544.20	159.80	163.50	57.90	27.30	•	60.50	42.80	3604.10	
		Name			CANAL CANTO DO RIO	RIO BOMBA	RIO IMBOASSU	RIO ALCANTARA	RIO MUTOWDO	RIO GUAXINDIBA	RIO CACEREBU	RIO GUAPINIRIM	RIO MACACU	RIO SOBERBO	CANAL DE MAGE	RIO RONCADOR	RIO IRIRI	RIO SURUI	RIO ESTRELA	RIO INHOMIRIM	RIO SARACURUNA	RTO TGUACU	RIO SARAPUI	RIO S. J. DE MERITI	RIO ACARI	RIO IRAJA	CANAL DO PENHA	CANAL DO CUNHA	KN000 CANAL DO MANGUE	TOTAL	) : Number of Data
		% %			1 C1780	2 BM760	3 IB810	4 AN740	5 MT820	6 GX720	7 00622	8 GP600	±9 ¥C967	*10 SB998	11 MG580	12 RN560	13 IRS40	14 SR500	15 ES400	*16 IN460	*17 SC420	18 1A260			#21 AC241	22 13200	23 PN180	24 CN100	25 XN000	ļ.	*: ( ) *

A 8-6

Table APP. 8-2 Mean Water Quality (1990-1991) by FEEMA's Data

unit:mg/l	Class			⊕	<b>(4)</b>		9		⊕	6	Θ	Θ	•	•	Θ			0	<u>@</u>	<b>⊚</b>	•	€	✐		ⅎ		€	⊕	
uni	Kean Value			24. 60			149.00				2.25							8.90	3.90	6. 75	15.00	36.00	35.00		42.00	35.00	98.00	56.00	
	1		ಭ	16.00	30.00		1			8.00		<2.0										40.00			40.00		60.00	60.00	
	ဖ		AUG		90.00		80.00		10.00	10.00	2.40	2.20	130.00	70, 00	<2· 0			10.00	<2.0	14.00	25.00	40.00	50.00		110.00		100.00	50.00	
	2	199	JUL	40.00	90.00		20.00		20.00	4.00		<2.0									8.00	20.00	30.00		20.00		70,00	40.00	
	4		APR	28.00	210.00		500.00		4.00	10.00	2.40	<2· 0	16.00	8.00	¢2.0				2.00										
	င		AUG		22. 50		45.000		6.00	9.00	2. 20	<2.0	20.00	40.00	2.40				7. 60		-			-					
	2	1990	JUL									<2.0				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						40.00			10.00	40.00	60.00	40.00	
	-		MAR		120.00		100.00		20.00	8.00	(2.0	4.00	10.00	20.00	4.00			12.00	4.00	4.00	14.00	40.00			30.00	30.00	50.00	30.00	
	Land use Type		:	Urb/S. T	Urban	Urban	Urban	Urban	Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Urban	Urban	Urban	Urban		Urban	Urb/S. T	
991)	Population Density	(p/km2)				4, 50																					12.82	11. 70	
(1990 - 1991)	PopulationPopulationLand use Number Density Type			41,745	183, 099	138, 636	470, 420			336, 193	69, 853	18.577	17, 911	8, 458	36, 370	10, 684	12, 910	302, 495	84, 106	194, 173	758.010	1. 012, 275	I. 492. 458	438,076	500, 276		815, 389	500,876	
	Area	(Km2)		7.40	26. 20	30.80	144.60		•	846. 70	1253. 10	256.00	132. 40	18.30	111.40	27.80	68.80	342. 50	139.00	186.00	562.80	165.50	164.50	57.90	35. 70	•	63. 60	42.80	3912.50
(BOD)	NO.			2	rs.	S	∞.	<i>60</i> .	œ	ø	10	10-3	10-6	13	12	133	₽.	16	16-2	16-3	17-175	17-6	61	19-2	50	20	27	23	
	Covered Basin Area	(Km2)		7. 40	3.40	11.60	58.50	5.50	11.80	758.40	1233. 70	256.00	45.20	4.60	107.00	8, 40	53.20	342.50	139.00	186.00	544.20	159.80	163.50	57.90	27. 30	,	60.50	42.80	3604.10
	Name			CANAL CANTO DO R10		RIO IMBOASSU	RIO ALCANTARA	RIO MUTONDO	RIO GUAXINDIBA	RIO CACEREBU	RIO GUAPINIRIM	RIO MACACU	RIO SOBERBO	CANAL DE MAGE		RIO IRIRI	RIO SURUI					RIO SARAPUI	RIO S. J. DE MERITI	RIO ACARI	RIO IRAJA	CANAL DO PENHA	8	CANAL DO MANGUE	TOTAL
	8			1 CI780	2 BM760	3 1B810	4 AN740	5 MT820	6 GX720	7 00622	8 GP600	*8 MC967	*10 SB998	11 MG580	12 RN560	13 IR540	14 SR500	15 55400	*16 IN460	*17 \$5420	18 IA260				22 11200	23 PN180		25 MN000	

Class 1: 3mg/1 or less 2: 5mg/1 or less 3: 10mg/1 or less 4: 10mg/1 more

Table APP. 8-2 Mean Water Quality (1990-1991) by FEEMA's Data

(1990 - 1991)

(COD(Cr)) .

r																<del></del>			<u>.</u>								<del>-</del>
Wean Value		76.00	188.33		460.00								11.67			26. 67	13. 33	36. 67	75.00	98.00	135.00			180.00			
2	ಜ	90.00	80.00		440.00		40.00	30.00		15.00			:							110.00			200.00		150.00	150.00	
<u> </u> i	AUG		250.00	•	400.00		40.00	20.00	10.00	<10	320.00	240.00	10.00			30 00	10.00	15.90		130.00			255.00		140.00		
5	JUL	130.00	240.00		560.00		40.00	20.00		<10										70.00			75.00		180.00	120.00	
-dr	APR	55.00	290.00		740.00		30.00	30.00	20.00	<10	30, 00	50.00	010			20.00	10.00	80.00								<del> ,</del>	
т	AUG	35.00	50.00	•	60.000		35.00	25.00	10.00	01>	70.00		15.00			30.00	20.00	15.000				•				-	
2 1990	Jul									¢10		~							40.00	80.00	120.00		110.00	180.00	170.00	120.00	
	MAR	70.00	220.00		260.00		40.00	80.00									-			100.00			:				
Land use Type		Urb/S.T	Urban	Urban	Urban	Urban	Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Urban	Urban	Urban	Urban		Urban	Urb/S. T	
nPopulation Density (p/km2)		5.64	6.3	4.50	3, 25	3.25	3, 25	0, 40	0.06	0.07	0.14	0.46	0.33	0.38	0.19	0.88	0.61	1.0	1.35	6.12	9 07	7.57	14.01		12. 82	11.70	
Basin AreaPopulationFopulationLand use Number Density Type (KM2) (p/KM2)		41.745	183, 099	138, 636	470. 420			336, 193	69, 853	18, 577	17, 911	8.458	36. 370	10, 684	12, 910	302, 495	84, 106	194, 173	758, 010	. 012. 275	. 492, 458	438. 076	500, 276		815, 389	500, 876	
asin Areaf		7.40	26.20	30.80	144.60			846. 70	1253.10	256.00	132. 40	18.30	111, 40	27.80	68.80	342.50	139.00	186.00	562. 80	185.50	164.50	57. 90	35. 70		63.60	42.80	3912.50
Ŏ,	1	2	Ŋ	မာ	œ	∞	∞	o,	2	10-3	10-6	11	75	13	14	91	16-2	16-3	17-1-5	17-6	5	19-2	83	20	21	23	:
Covered Basin Area (Km2)		7.40	3.40	11.60	58.50	5.50	11.80	758.40	1233.70	256.00	45.20	4.60	107.00	8.40	53, 20	342.50	139.00	186.00	544.20	159.80	163.50	57, 90	27, 30.	1	60.50	42.80	3604. 10
Nabe		CANAL CANTO DO RIO	RIO BOMBA	RIO IMBOASSU	RIO ALCANTARA	RIO MUTONDO	RIO GUAXINDIBA	RIO CACEREBU	RIO GUAPIMIRIM	RIO MACACU	RTO SOBERBO	CANAL DE MAGE	RIO RONCADOR	RIO IRIRI	RIO SURUI	RIO ESTRELA	RIO INHOMIRIM	RIO SARACURUNA	RIO IGUACU	RIO SARAPUI	RIO S. J. DE MERITI	RIO ACARI	RIO IRAJA	CANAL DO PENHA	CANAL DO CUNHA	CANAL DO MANGUE	TOTAL
ž		1 CI780	2 BM760	3 1B810	4 AN740	5 MT820	6 GX720	7 00622	8 GP600	*9 MC967	*10 SB998	11 MG580	12 RN560	13 IR540	14 SR500	15 ES400	*16 1N460	*17 SC420	18 1A260	19 SP300	20 \$1220	*21 AC241	22 13200		24 CN100	25 KN000	

Table APP. 8-2 Mean Water Quality (1990-1991) by FEEMA's Data

(1661 - 0661)

SE

1   2   3   4   5   6   7	Number   Pensity   Type   1990   19	
1990   1990	13.65   13.6	Covered Basin
10. 14. 1745 5.64 Utr\(	18   17   18   18   19   19   19   19   19   19	
10 41.745 5.64 Urb./S.T 17.20 18.77 16.05 24.10 20.50 28.80 28.80 188.696 6.99 Urban 40.30 18.77 27.02 29.02 30.09 25.80 28.80 188.696 6.99 Urban 30.20 18.77 27.02 29.02 30.09 25.80 28.80 18.80 470.420 3.25 Urban 10.20 18.25 1.50 15.05 20.02 30.00 22.00 23.80 11.40 18.577 0.07 N/A 1.20 0.60 1.25 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20	10. 41.745 5. 64 UrbAn 40.30 18.77 16.05 24.10 20.50 18. 30. 99 25.80 28. 30. 99 25.80 28. 30. 99 25.80 28. 30. 99 25.80 28. 30. 99 25.80 28. 30. 99 25.80 28. 30. 99 25.80 28. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 25.80 29. 30. 99 20. 90. 90. 90. 90. 90. 90. 90. 90. 90. 9	
183.099   6.99   Urban   40.30   18.71   27.02   29.02   30.09   25.80   28.81   30.20   470.420   25.00   470.420   3.25   Urban   30.20   13.46   25.06   21.03   29.00   22.00   23.55   Urban   10.20   13.45   1.50   15.05   20.02   9.50   11.0   20.02   20.00   20.	183, 699   6.99   Urban   40.30   18.71   27,02   29.02   30.09   25.80   28.     188, 636   4.50   Urban   30.20   13.46   25.06   21.03   29.00   22.00   23.     188, 636   4.50   Urban   10.20   13.46   25.06   21.03   29.00   22.00   23.     198, 638   3.25   Urban   10.20   13.25   1.50   15.05   20.02   9.50   11.     10.38, 138   0.40   N/A   1.20   0.60   1.20   4.20   1.23   1.20   0.90   1.40   1.40   1.20   1.20   1.20   1.20   1.40   1.20	7.40 2 7.
38. 636         4. 50         Urban         30. 20         13. 46         25. 06         21. 03         29. 00         22. 00         23. 00         22. 00         23. 00 </td <td>30         138.656         4.50 Urban         30.20         13.46         25.06         21.03         29.00         22.00         23.00           30         470.420         3.25 Urban         10.20         13.46         25.06         21.03         29.00         22.00         23.00           386.193         0.40 N/A         4.20         3.05         1.04         3.60         2.02         9.50         11.           10         69.853         0.06 N/A         0.40         1.20         0.60         1.20         4.20         1.40         2.00         1.40</td> <td>ı,</td>	30         138.656         4.50 Urban         30.20         13.46         25.06         21.03         29.00         22.00         23.00           30         470.420         3.25 Urban         10.20         13.46         25.06         21.03         29.00         22.00         23.00           386.193         0.40 N/A         4.20         3.05         1.04         3.60         2.02         9.50         11.           10         69.853         0.06 N/A         0.40         1.20         0.60         1.20         4.20         1.40         2.00         1.40	ı,
10. 470, 420         3.25 Urban         30.20         13.46         25.06         21.03         29.00         22.00         23.           3.25 Urban         10.20         13.25         1.50         15.05         20.02         9.50         11.           69.853         0.06 N/A         4.20         1.20         2.20         1.20         1.40         2.1           10. 69.853         0.06 N/A         1.20         0.60         1.20         4.20         1.20         1.40         2.30           10. 18.577         0.07 N/A         1.20         0.60         1.20         4.20         1.20         0.90         1.1           10. 18.577         0.07 N/A         1.20         0.60         1.20         2.00         2.20         1.20         1.40         2.1           10. 18.577         0.07 N/A         1.20         0.60         1.20         2.20         1.20         1.20         1.20           10. 18.438         0.46 N/A         1.400         2.95         9.02         2.20         1.20         1.20         1.20         1.20         1.20         1.20         1.20         1.20         1.20         1.20         1.20         1.20         1.20         1.20         1.20	10         470,420         3.25         Urban         30.20         13,46         25.06         21.03         29,00         22.00         23.0           336, 193         0.40         N/A         4.20         13,25         1.50         15.05         2.00         2.00         2.00         2.00         2.00         2.00         2.00         1.40         2.10         1.40         1.40         1.40         1.20         1.40         1.40         1.20         1.20         1.20         1.00         1.10	9 09
0. 336, 193         3. 25 (Urban)         10. 20         13. 25         1. 50         15. 05         20. 02         9. 50         11. 40         11. 45         1. 50         15. 05         20. 02         9. 50         11. 40         11. 45         11. 20         11. 40         11. 45         11. 20         11. 45         11. 20         11. 40         11. 45         11. 20         11. 45         11. 20         11. 45         11. 20         11. 45         11. 20         11. 45         11. 20         11. 45         11. 20         11. 45         11. 20         11. 40         11. 45         11. 20         11. 20         11. 20         11. 40         11. 20 <td< td=""><td>10         32.5 Urban         10.20         13.25         1.50         15.05         20.02         9.50         11.40         1.50         1.40         1.50         1.40         1.40         1.50         1.40         1.40         1.50         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.20         1.40         1.20</td><td>58.50 8 144.</td></td<>	10         32.5 Urban         10.20         13.25         1.50         15.05         20.02         9.50         11.40         1.50         1.40         1.50         1.40         1.40         1.50         1.40         1.40         1.50         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.20         1.40         1.20	58.50 8 144.
0. 336, 193         0. 40         N/A         4, 20         13, 25         1, 50         15, 05         20, 02         9, 50         11, 40         2, 30         1, 40         2, 30         1, 40         2, 30         1, 40         2, 30         1, 45         1, 20         4, 20         1, 20         2, 30         1, 40         1, 40         1, 45         1, 20         4, 20         1, 20         2, 30         1, 40	386.193         3.25         Urban         10.20         13.25         1.50         15.05         20.02         9.50         11.0           10         386.193         0.40         N/A         4.20         1.20         1.64         3.65         1.60         2.00         2.00         1.40         2.20         1.40         2.20         1.40         2.20         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.40         1.20         1.20         1.20         1.20         1.40	5.50 8
336, 193         0. 40         N/A         4, 20         3.05         1.04         3.60         2.30         1.40         2.60         2.30         1.40         1.40         1.40         1.45         1.20         1.00         1.00         1.140         1.20         1.00         1.140         1.20	836.193	1.80 8
69, 853	69, 853	8.40 9 846.7
18,577         0,07         N/A         1,20         0,60         1,20         4,20         1,20         2,50         1,20         1,20         1,20         2,20         2,50         1,20 <t< td=""><td>18, 577         0. 07         N/A         1. 20         0. 60         1. 20         4. 20         1. 25         1. 20         0. 90         1. 17. 00         1. 20         0. 90         1. 20</td><td>1253.</td></t<>	18, 577         0. 07         N/A         1. 20         0. 60         1. 20         4. 20         1. 25         1. 20         0. 90         1. 17. 00         1. 20         0. 90         1. 20	1253.
17, 911         0.14         N/A         1.20         2.00         2.20         2.50         1.80         <	17, 911         0. 14         N/A         1. 20         2. 00         2. 20         2. 50         1. 30         1. 20         1. 30         1. 20         1. 30         1. 20         1. 30         1. 20         1. 30         1. 20         1. 30         1. 20         1. 30         1. 20         1. 30         1. 20         1. 30         1. 20         1. 30         1. 20         1. 30         1. 20         1. 30         1. 20         1. 30         1. 20         1. 30         1. 20         1. 20         1. 30         1. 20         1. 20         1. 30         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 30         1. 20 <th< td=""><td>256.</td></th<>	256.
8. 458         0. 46         N/A         14.00         29. 52         9. 62         20. 00         18.           36. 370         0. 33         N/A         0. 25         1. 80         1. 30         1. 20         1. 20           10. 684         0. 38         N/A         0. 25         1. 80         1. 30         1. 20         1. 20           12. 910         0. 19         N/A         1. 60         1. 60         1. 60         1. 60         1. 50         3. 90         3. 90         3. 90         3. 90         3. 90         3. 90         3. 90         3. 90         3. 90         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 50         1. 1. 70 </td <td>8, 458</td> <td>10-6 132.</td>	8, 458	10-6 132.
36, 370         0. 33         N/A         0. 25         1. 80         1. 30         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         1. 20         3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3	36, 370         0. 33         N/A         0. 25         1. 80         1. 30         1. 20 <td< td=""><td>4.60 11 18.30</td></td<>	4.60 11 18.30
10.684         0.38         N/A           12.910         0.19         N/A         5.00         3.10         2.80         3.90	10.684         0.38         N/A         3.10         2.80         3.90 <t< td=""><td>107.00 12 111.40</td></t<>	107.00 12 111.40
12.910 0.19 N/A 5.00 3.10 2.80 3.90 3.90 3.84.106 0.61 N/A 1.60 1.60 1.70 1.50 2.40 1.50 1.70 1.50 1.50 1.4.173 1.04 N/A 14.54 9.01 2.00 1.50 3.60 10.02 21.02 17.00 15.02 14.01 Urban 11.00 17.	12.910 0.19 N/A 5.00 3.10 2.80 3.90 3.90 3.40 1.40 1.50 1.70 1.50 1.70 1.50 1.50 1.70 1.50 1.70 1.50 1.70 1.50 1.70 1.50 1.70 1.50 1.70 1.50 1.70 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.5	40 13   27
302.495 0.88 N/A 5.00 3.10 2.80 3.90 3.90 3.41 3.41 3.41 3.42 3.42 3.43 3.43 3.44 3.44 3.44 3.44	302.495 0.88 N/A 5.00 3.10 2.80 3.90 3.90 3.41 1.00 1.20 1.70 1.50 1.50 1.70 1.50 1.50 1.70 1.50 1.50 1.70 1.50 1.50 1.70 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.5	20 14 68
84, 106 0. 61 N/A 1. 60 1. 60 1. 70 1. 50 2. 40 1. 70 1. 50 1. 40 1. 58. 0. 1. 60 1. 70 1. 50 1.	84, 106 0. 61 N/A 1. 60 1. 60 1. 70 1. 50 1. 40 1. 40 1. 40 1. 50	50 16 342.
194, 173         1. 04         N/A         1. 00         2. 00         1. 50         3. 60         2. 40         5. 51         8           758, 010         1. 35         N/A         14. 54         9. 01         2. 00         1. 50         2. 10. 02         21. 02         17. 00         16. 16           012, 275         6. 12         0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0	194, 173         1. 04         N/A         1. 00         2. 00         1. 50         3. 60         1. 00         5. 51         8           758, 010         1. 35         N/A         14. 54         9. 01         2. 00         1. 50         21. 02         17. 00         16. 01           102, 275         6. 12         0. 02         16. 01         16. 01         16. 01         17. 00         15. 02         17. 00         15. 03         17. 00         15. 03         17. 00         15. 03         17. 00         15. 03         17. 00         15. 10         16. 01         16. 01         16. 01         17. 00         17. 00         18. 04         19. 02         14. 02         18. 04         19. 02         14. 02         14. 02         14. 02         14. 02         14. 02         16. 02         14. 02         14. 02         16. 02         14. 02         14. 02         14. 02         16. 02         14. 02         16. 02         16. 02         14. 02         16. 02         16. 02         11. 00         14. 02         18. 04         19. 02         18. 04         19. 02         16. 02         16. 02         16. 02         11. 00         11. 10. 02         11. 00         11. 10. 02         11. 00         11. 10. 02         11. 00 <td< td=""><td>00 16-2 139.</td></td<>	00 16-2 139.
758.010 1.35 N/A 14.54 9.01 3.60 10.02 5.51 8. 012.275 6.12 Urban 19.02 16.01 15.02 11.00 15.02 11.00 15.02 11.00 15.02 11.00 17.00 15.03 17.00 15.03 17.00 15.03 17.00 15.03 17.00 15.03 17.00 15.03 17.00 15.03 17.00 15.03 17.00 15.03 17.00 15.03 17.00	758.010 1.35 N/A 14.54 9.01 3.60 10.02 5.51 8. 012.275 6.12 Grban 19.02 16.01 10.02 21.02 17.00 16. 16. 17. 00 17. 00 15. 02 11. 00 15. 10 15. 02 17. 00 15. 02 17. 00 15. 02 17. 00 15. 02 17. 00 15. 02 17. 00 15. 02 17. 00 15. 02 17. 00 15. 02 17. 00 15. 10 17. 00 15. 10 17. 00 15. 10 17. 00 15. 10 17. 00 15. 10 17. 00 17.	16-3 186.
012. 275 6. 12 Urban 19. 02 16. 01 10. 02 21. 02 17. 00 16. 01 15. 02 15. 02 17. 00 16. 01 15. 02 14. 02 15. 03 17. 00 15. 02 15. 03 17. 00 15. 02 14. 01 Urban 11. 00 15. 10 17. 00 17. 00 18. 04 12. 82 Urban 11. 00 17. 00 28. 04 12. 03 13. 03 17. 00 14. 01 17. 00 17. 00 17. 01 17. 00 17. 01 17. 00 17. 01 17. 00 17. 01 17. 00 17. 01 17.	012. 275 6. 12 Grban 19. 02 16. 01 10. 02 21. 02 17. 00 16. 14. 02 18. 07 Grban 19. 02 15. 02 17. 00 16. 15. 03 17. 00 15. 02 18. 04 15. 03 17. 00 15. 02 14. 02 15. 03 17. 00 15. 02 14. 02 14. 02 15. 03 17. 00 15. 03 15. 03 17. 00 17	20 17-175 562.
492.458 9.07 Urban 15.02 15.02 14.02 15.03 17.00 15.438.076 7.57 Urban 11.00 15.10 15.10 10.05 18.04 19.02 14.02 15.03 17.00 15.00 15.389 12.82 Urban 11.00 17.00 28.04 12.03 13.03 17.00	492.458 9.07 Urban 15.02 14.02 15.03 17.00 15.05 15.03 17.00 15.05 15.03 17.00 15.05 15.03 17.00 15.05 15.03 17.00 15.05 15.03 17.00	17-6 165.
438. 076 7. 57 Urban 11. 00 15. 10 10. 05 18. 04 19. 02 14. 05 14. 01 Urban 11. 00 15. 10 17. 00 17. 00 18. 04 12. 82 Urban 11. 00 17. 00 28. 04 12. 03 13. 03 17. 00 17.	438. 076 7. 57 Urban 11. 00 15. 10 10. 05 18. 04 19. 02 14. 500. 276 14. 01 Urban 11. 00 17. 00 17. 00 18. 04 12. 82 Urban 11. 00 17. 00 28. 04 12. 03 17. 00 17. 00 17. 00 18. 04 17. 00 17. 00 18. 04 17. 00 17. 00 17. 00 18. 04 18. 03 17. 00 17. 0	50 19 164.
500. 276 14.01 Urban 11.00 15.10 10.05 18.04 19.02 14.02 14.05 18.04 19.02 14.05 15.00 17.00 17.00 14.02 14.	500. 276	19-2 57.
815.389 12.82 Urban 11.00 17.00 16.02 14.02 13.00 14.05 15.00 14.02 17.00 17.0	815, 389	7.30 20 35.70
815, 389 12, 82 Urban 11.00 17.00 16.00 16.02 14.02 13.00 14.05 500.876 11.70 Urb/S. T 17.00 28.04 12.03 13.03 17.00 17.	815. 389 12. 82 Urban 11.00 17. 00 16.02 14.02 13. 00 14.50.876 11. 70 Urb/S. T 17. 00 28. 04 12. 03 13. 03 17. 00 17.	_ 20
500.876 11.70 Urb/S.T 17.00 28.04 12.03 13.03 17.00 17.	500.876 11.70 Urb/S.T 17.00 28.04 12.03 13.03 17.00 17.	60.50 21 63.60
		23
	1920	3604: 10 3912.

Table APP. 8-2 Mean Water Quality (1990-1991) by FEEMA's Data (K-N) (1990 - 1991)

unit:mg/l		Mean value			17.90			20, 50								0.76			3. 20	1. 20	1.38	8.40	16. 60	15.25	******		26.50			
	(~-			ੲ	20.00	25.00		14.00		8.00	1.00		0.60			*						5.50	17.00	17.00	~	19.00		13.00	17.00	
	φ.			AUG		30.00		20.00								08.0		<u> </u>	3.60	1.00	1.80	10.90	21.00	15.00		18.00		14.00	13.00	•
	ıo		199	JUL	24.00	29.00		21.00		15.00	3.00	•	7 00									3.00	10.00	14.00	*********	10.00		16.00	12.00	
	ゼ			APR	16.00	27. 00		25.00		1. 20	1.00	7.00	4 00	2.80	98	1.00		_	2.40	1.00	1.00									•••
	60				12. 50			13.000		13.00	1. 60	1. 20	1.00	1.60	20. 50	1.68			3.00	1. 20	L. 700							•		
	23		1990	JUL.									0.40				•					9.00	16.00	15.00			31.00			
	-			MAR	17.00	40.00		30.00		10.00	4.00	0. 20	30.	1.8	14.00	0.25				1.60							22.00			
	and use	ype			Urb/S. T	Urban	Urban	Urban	Urban	Urban	N/A	N/A	N/A	N/A	N/A	W/W	N/A	N/A	N/A	N/A	N/A	N/A	Urban	Crban	Urban	Urban		Urban	Urb/S. T	
(1661	opulation	ensity i	(p/km2)		64	66	S	33	32	25	40	90	2	14	46	0.33	ထ္က	2	82	5	04	33	2	67	57	5		12.82	11.70	
neel	Basin AreaPopulationPopulationLand use	vonber ,					138, 636				336, 193	69, 853	18, 577	17, 911	8, 458	36, 370	10,684	12,910	302, 495	84, 106	194, 173	758, 010	1, 012, 275	1, 492, 458	438.076	500, 276		815, 389		
	asin Area	·	(Kn2)		7.40	26. 20	30.80	144. 60			846.70	1253 10	256.00	132.40	18.30	111.40	27.80	68.80	342.50	139.00	186.00	562.80	165.50	164.50	57, 90	35. 70	,	63.60	42.80	3912.50
2		Ş			7	w	ço	~	∞	∞.	œ	10	10-3	9-01	=	12	13	14	91	16-2	16-3	17-175	17-6	61	19-2	50	20	23	23	
	Covered	basın Area	(Kn2)		7. 40	3.40	11.60	58.50	5.50	11.80	758. 40	1233.70	256.00	45. 20	4, 60	107.00	8. 40	53, 20	342, 50	139, 00	186.00	544. 20	159.80	163.50	57.90	27.30		60.50	42.80	3604.10
		00000			CANAL CANTO DO R10	RIO BOMBA	RIO IMBOASSU	RIO ALCANTARA	RIO MUTONDO	RIO GUAXINDIBA	RIO CACEREBU	RIO GUAPIMIRIM	RIO MACACU	RIO SOBERBO	CANAL DE MAGE	RIO RONCADOR	RIO IRIRI		RIO ESTRELA	RIO INHOMIRIM		RIO IGUACU	RIO SARAPUI	RIO S. J. DE MERITI	RIO ACARI	RIO JRAJA	CANAL DO PENHA	CANAL DO CUNHA	CANAL DO MANGUE	TOTAL
	ž	2			1 C1780	2 BM760	3 18810	4 AN740	5 KT820	6 GX720	7 00622	8 CP600	#9 MC967	*10 SB998	11 MG580	12 RN560	13 IRS40	14 SR500	15 ES400	*16 1N460	*17 \$5420	18 IA260	19 SP300	20 \$1220		22 13200	23 PN180	24 CN100	25 MN000	

Table APP. 8-2 Mean Water Quality (1990-1991) by FEEMA's Data

(1990 - 1991)

(NH4-N)

unit:mg/i	Mean Value	·		11. 90	17.40		7.17	***************************************				0.56								0.51						17.00			
2	<b>L</b> -a		S	18.00	23.00		8.00			0.07		0.03							•	•			15.00		10.00			7.00	
	ဗာ	l/	YOC		17.00		6.00					0.40								0. 60					9.00	•		8.00	
	m	1991	JUL	15.00	20.00		10.00		10.00	0.20		0.15											13.00		9.00		13.00	11.00	
	47		APR		3.40		1.00					3.8						0.40	0.05	0. 10									
	<b>65</b>		AUG	11.50	11.00		5.000		10.50	0.45	0.10	0.11	0.24	16.00	0.35		•	0. 70	0.25	0.820									
	63	1990	JUL									0.08											11.00			18.00		14.00	
			MAR	11.00	30.00		13.00		9.00	2.00	0.04	0.07	· 01	11.00	0.10			-		0. 20						16.00			_
	and use	<u>!</u>	<u>!</u>	Urb/S. T	Urban	Urban	Urban	Urban	Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Urban	Urban	Urban	Urban		Urban	Urb/S. T	
	opulationL ensity	(p/km2)										0.02	7	45	8	33	19	88	19	04	33	2					23	11. 70	
	n AreaPopulationPopulationLand use			41, 745	183,099	138, 636	470, 420			336, 193	69, 853	18, 577	17, 911	8, 458	36, 370	10.684	12, 910	302, 495	84, 106	194, 173	758, 010	. 012, 275	, 492, 458	438, 076	500, 276			500, 876	
	Basin AreaP	(Km2)		7.40	26. 20	30.80	144. 60			46.		256.00															63.60	42.80	3912.50
ļ				2	2	9	 	~~~	∞	ക	10	10-3	10-6	77	12	13	14	92	16-2	16-3	17-1-5	17-6	61	19-2	20	70	21	23	
	Covered Basin Area	(Кп2)		7. 40	3, 40	11.60	58.50	5.50	11.80	758.40	1233. 70	256.00	45.20	4.60	107.00	8. 40	53, 20	342.50	139.00	186.00	544. 20	159.80	163.50	57.90	27.30	•	60, 50	42.80	3604.10
	Nane			CANAL CANTO DO RIO	RIO BOMBA	RIO IMBOASSU	RIO ALCANTARA	RIO MUTONDO	RIO GUAXINDIBA	RIO CACEREBU	RIO GUAPINIRIM	RIO MACACU	RIO SOBERBO	CANAL DE MAGE	RIO RONCADOR	RIO IRIRI	RIO SURUI	RIO ESTRELA	RIO INHOMIRIM	RIO SARACURUNA	RIO IGUACU	RIO SARAPUI	RIO S. J. DE MERITI	RIO ACARI	RIO IRAJA	CANAL DO PENHA	CANAL DO CUNHA	CANAL DO MANGUE	TOTAL
	Ö			1 C1780	2 BM760	3 1B810	4 AN740	5 MT820	6 GX720	7 00622	8 GP600	*9. NC967	*10 SB998		12 RN560	13 IR540	14 SR500	15 ES400	*16 IN460	*17 SC420	18 14260	19 SP300	20 SJ220		22 11200	23 PN180		25 KN000	

Table APP. 8-2 Mean Water Quality (1990-1991) by FEEMA's Data

	·																					·-							<b>-</b>
ng/1	Mean Value			1. 10	3.47		6.72							2.06					0.21						1. 78	2.50	1.76	1.52	
unit:mg/l	25 25 26 27																												
	4		8	0.65	1.00		1. 10		0. 70			0.10											1.80		6. %		2.0		
	9		AUG		4.00		6.00		2.40	0.15	0.06	0. 10	0.30	3.00	0.08				0.10						3.50		2 20		
	ક	1991	100	2.00	3.40		3.20		0. 70			0.03					- BALLY		-		0.40	2.00	2. 00		1.50		2. 50		
	4		APR		2.00		20.00							0.75			<u> </u>		0. 10										-
	6.		AUG	0.85			4.00							3.50					0.15										
	2	1990	300							•		0.06								•			2.00				2.00		
			MAR	1.00	4.00		6.00							1.00					0.50								0.80		
	and use		4	Urb/S. T	Urban	Urban	Urban	Urban	Urban	K/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Urban	Urban	Urban	Urban		Urban	Urb/S. T	
11)	opulation ensity	(p/km2)			6.99																						12. 82	11. 70	
(1990 - 1991)	AreaPopulationPopulationLand use Number Density Hype			41,745	183, 099	138, 636	470.420			336, 193	69, 853	18, 577	17, 911	8. 458	36, 370	10.684	12, 910	302, 495	84, 106	194, 173	758, 010	1.012.275	1. 492. 458	438.076	500, 276		815, 389		
	Basin Area	(Km2)			26. 20					846.70	1253. 10	256.00	132.40	18.30	111.40	27.80	68.80	342. 50	139.00	186.00	562.80	165, 50	164.50	57.90	35. 70	(	63.60	<i td=""  <=""><td>3912, 50</td></i>	3912, 50
(TP)	NO.			2	rs.	ယ	∞	∞	ဆ	o,	2	10-3	10-6	===	12	55	7	9	16-2	16-3	17-175	17-6	61	19-2	83	23	77	23	
	Covered Basin Area	(Kn2)		7.40	3.40	11.60	58.50	5.50	11.80	758.40	1233. 70	256.00	45.20	4. 60	107.00	8.40	53.20	342.50	139.00	186.00	544.20	159.80	163.50	57.90	27.30		60.50	42.80	3604.10
	Nane			CANAL CANTO DO RIO	RIO BOMBA	RIO IMBOASSU	RIO ALCANTARA			RIO CACEREBU	RIO GUAPINIRI M	RIO MACACU	RIO SOBERBO	CANAL DE MAGE	RIO RONCADOR	RIO IRIRI	RIO SURUI	RIO ESTRELA	RIO INHOMIRIN	RIO SARACURUNA	RIO IGUACU	RIO SARAPUI	RIO S. J. DE MERITI	RIO ACARI	RIO IRAJA	CANAL DO PENRA	CANAL DO CUNHA	CANAL DO MANGUE	TOTAL
	Ŋ			1 C1780		3 18810	4 AN740	5 MT820	6 GX720	7 CC622	8 GP600	*9 MC967	*10 SB998	11 MG580	12 RN560	13 IR540	14 SR500	15 ES400	*16 IN460		18 IA260	19 SP300	20 \$1220		22 13200			25 WN000 (	

Table APP. 8-2 Mean Water Quality (1990-1991) by FEEMA's Data (DO) (1990 - 1991)

		-		_											_							-						
Hoan Valle	מון נפוע			2. 13		3.90		1.63	2.53	5, 33	8.44	4.75	0.54	6.73					4. 43					01.0	0.45	0. 28	0.10	
1		੪	3.40	3.80		4.40			2.80		8.40	•					-			:	·. 01	~		·.1		·.1		
Ф	1	AUG		2.20		5.20					6.00						2. 20	4.20	2.80	7	<. 01	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				7	7	
ıs	199	JUL		1.20	_	5.40		1.00	3.00		8.60			-						3. 80	· 01			717		~	7	
4		APR	2.40	-1-		2. 80					8.00							7.00										
co.		AUG	4.40	5. 40		3.400					9. 10						2.00	3.50	4.300		•			_				
2	1990	JUL			_						8.80									1.00	0.80	· 1			0.80	1.00	·.1	
prod		MAR	2.00	·	_	2. 20		<.1	1.80	5. 60	7. 20	6.80	<. 1	9.00					3.00					ζ. I	·	.1.	``	
and use	3		Urb/S. T	Urban	Urban	Urban	Úrban	Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Urban	Urban	Urban	Urban		Urban	Urb/S. T	
Population	(p/km2)										0.07															12. 82	11.70	)
n AreaPopulationPopulationLand use	4		41, 745	183, 099	138, 636	470, 420			336, 193	69, 853	18, 577	17, 911	8, 458	36, 370	10.684	12, 910	302, 495	84, 106	194, 173	758, 010	1, 012, 275	1, 492, 458	438. 076	500, 276		815, 389	500, 876	
Sasin Area	(Km2)				30.80						256.00														,	63. 60	42.80	3912.50
S	<u>:</u>		2	ເກ	မာ	œ	œ	တ်	ഗ	10	10-3	10-6	=	12	13	14	16	16-2	16-3	17-175	17-6	13	19-2	50	70	21	23	
Covered Rasin Area	(Km2)		7.40	3, 40	11.80	58.50	5.50	11.80	758.40	1233.70	256.00	45.20	4.60	107.00	8.40	53. 20	342, 50	139.00	186.00	544.20	159.80	163.50	57.90	27.30	ı	60.50	42.80	3604, 10
No me			CANAL CANTO DO RIO	RIO BOMBA	RIO IMBOASSU	RIO ALCANTARA	RIO MUTONDO	RIO GUAXINDIBA	RIO CACEREBU	RIO GUAPINIRIM	RIO MACACU	RIO SOBERBO	CANAL DE MAGE	RIO RONCADOR	RIO IRIRI	RIO SURUI	RIO ESTRELA	RIO INHOMIRIM	RIO SARACURUNA	RIO IGUACU	RIO SARAPUI	RIO S. J. DE MERITI	RIO ACARI	RIO IRAJA	CANAL DO PENHA	CANAL DO CUNHA	CANAL DO MANGUE	TOTAL
2	?		1 C1780	2 BM760	3 13810	4 AN740	5 MT820	6 GX720	7 CC622	8 GP600	<b>2963</b> € *	*10 SB998	11 MG580	12 RN560	13 18540	14 SR500	15 ES400	*16 1N460	*17 \$5420	18 IA260	19 SP300	20 \$1220	*21 AC241	22 11200	23 PN180	24 CN100	25 KN000	