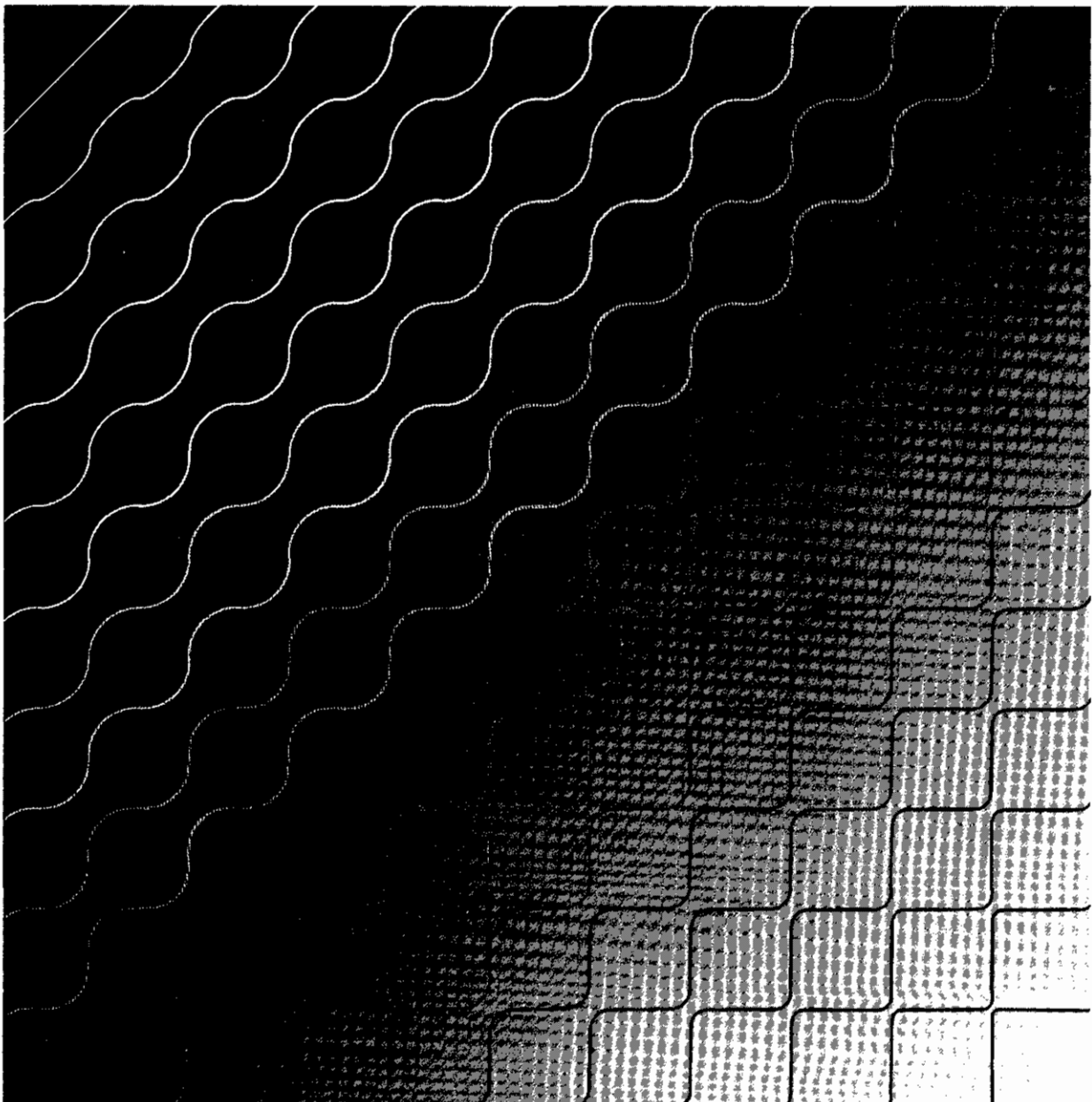


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g e n e r a t i e   r i o o l w a t e r -  
z u i v e r i n g s i n r i c h t i n g e n



R92-01W





**RIZA**

rijkswaterstaat  
rijksinstituut voor integraal zoetwaterbeheer  
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NN 3100/5, 92.06 bij

**BIBLIOTHEEK  
STARINGGEBOUW**

**VERGAANDE NUTRIENTENVERWIJDERING OP EEN ZEER  
LAAGBELASTE AKTIEFSLIBINSTALLATIE (RWZI BERGAMBACHT)  
MEETRESULTATEN FASE 1, 2 EN 3**

**Werkdocument RWZI 2000 92-01W**

**Grontmij**

ZUIVERINGSSCHAP  HOLLANSE EILANDEN EN WAARDEN

06 OKT. 1993

*Handwritten signature*

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**ANALYSE RESULTATEN**

AWZI BERGAMBACHT - BIOLOGISCHE DEFFOSFATERING

INFLUENT																
DATUM	Fase +	debiet m <sup>3</sup> /d	pH	CZV	BZVa	N-kjeldahl	P-totaal	P-ortho	R <sub>ZV</sub> /N	R <sub>ZV</sub> /P	Cl	alkali- fort	vluchtige vetzuren	Ca	Mg	Al
	Periode	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	kg/d	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
	1.1	1385		702	972	295	409	59	82	11.6	16	4.9	7			
				409	730	167	298	38	68	7.6	14	4.1	7			
	1.3	1132		465	526	196	222	51	58	9.7	11	5.4	6			
				334	542	138	224	43	70	6.8	11	3.9	6			
	1.5	2172		471	1023	158	343	36	78	6.9	15	3.0	6			
				440	703	176	281	43	69	7.6	12	3.9	6			
	1.7	1436		427	613	150	215	45	65	7.3	10	3.7	5			

AERATIE-TANK

ACTIEF SLIB																	
DATUM	Fase +	droogrest	gloeï- rest	bezinking factor	verduunings- factor	SVI	R <sub>ZV</sub> -slib- belasting	temperatuur	slib- leeftijd								
	Periode	mg/l	kg	%	ml/l	-/-	ml/g	kg/kg.d	oC	oC	N-totaal	N-NO3-	N-NH4+	M-org.	P-totaal	P-ortho	P-gebonden droog- rest
	1.1	4400	6367				66	0.064	17.0								
		3700	5354				70	0.065	16.0								
	1.3	5200	7524				90	0.031	10.0								
		3700	5354				126	0.047	9.0								
	1.5	3600	5209				132	0.062	11.0								
		3400	4920				152	0.057	11.0								
	1.7	3600	5209				212	0.041	11.0								

EFFLUENT

DATUM	Fase +	debiet m <sup>3</sup> /d	pH	CZV	BZVa	N-kjeldahl	M-org.	N-NH4+	N-NO3-	N-totaal	P-totaal	P-ortho	P-gebonden droog- rest						
	Periode	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d						
	1.1	38	53	3	4.2	9	3.9	4.6	6.4	20.0	27.7	28.5	39.5	3.7	5.1	3.24	4.5	0.46	4
		43	77	4	7.1	4	2.2	2.0	3.6	8.8	15.7	13.0	23.2	2.7	4.8	1.99	3.6	0.71	4
	1.3	46	52	3	3.4	6	4.0	1.7	1.9	17.0	19.2	22.7	25.7	3.1	3.5	2.49	2.8	0.61	4
		52	84	4	6.5	4	1.9	2.3	3.7	4.0	6.5	8.2	13.3	2.4	3.9	1.86	3.0	0.54	5
	1.5	58	126	3	6.5	4	2.1	2.0	4.3	3.0	6.5	7.1	15.4	1.7	3.7	1.16	2.5	0.54	3
		58	93	3	4.8	3	1.7	1.7	2.7	3.5	5.6	6.9	11.0	2.4	3.8	1.87	3.0	0.53	3
	1.7	65	93	9	12.9	5	1.7	3.7	5.3	1.6	2.3	7.0	10.1	2.0	2.9	1.16	1.7	0.84	13

AWZI BERGAMBACHT - BIOLOGISCHE DEFOSFATERING

DATUM	INFLUENT		CZV		BZVa		N-kjeldahl		P-totaa		P-ortho		BZV/N	BZV/P	Cl	alkali-	vluchtige	Fe	Ca	Mg	Al
	debiet	pH	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	-/-	-/-	mg/l	leit	vetzuren	mg/l	mg/l	mg/l	mg/l
=====																					
fase 3.1																					
23-May-91	1846	7.0	445	821	165	305	43	79	7.0	13	2.8	5	3.8	23.6	218						
29-May-91	1949	7.5	275	536	105	205	31	60	4.8	9	2.4	5	3.4	21.9	198	270	20	2	96	13	1
07-Jun-91	1186	7.5	430	510	205	243	57	68	9.1	11	6.4	8	3.6	22.5	234	300	70	1	110	13	1
11-Jun-91	1866	7.4	785	1465	255	476	55	103	8.7	16	2.7	5	4.6	29.3	197	440	30	6	105	12	17
21-Jun-91	1913	7.3	435	832	215	411	40	77	8.8	17	3.1	6	5.4	24.4	172	359	30	6	93	10	16
25-Jun-91	4616	7.4	196	905	52	240	16	74	1.4	6	0.9	4	3.3	37.1	98	217	20	3	73	8	2
28-Jun-91	4881	7.4	215	1049	47	229	22	107	3.6	18	1.0	5	2.1	13.1	91	224	10	3	75	8	2
02-Jul-91	3115	7.0	470	1464	140	436	32	100	6.5	20	2.7	8	4.4	21.5	124	307	20	6	79	9	2
-----																					
gemiddeld																					
rekenkundig	2672	7.3	406	948	148	318	37	83	6.2	14	2.7	6	3.8	24.2	167	302	29	4	90	10	6
gewogen			355		119		31		5.2		2.2										



## AERATIETANK

## |ACTIEF SLIB

DATUM	Fase + Periode	droogrest  mg/l	gloeirest  kg	bezinking  %	bezinkingsfactor  ml/l	verduuningsfactor 	SVI 	RZV-slib  ml/q	temperatuurslib  kg/kg.d	leeftijd  d	
											rest
fase 3.1											
23-May-91		3340	4833	31	190		2	95	0.064		21
29-May-91		3380	4891	30	220		2	109	0.042	15.0	22
07-Jun-91		3760	5441	29	220		2	98	0.045	16.0	16
11-Jun-91		5140	7438	30	260		2	101	0.065	16.0	43
21-Jun-91		5600	8103	30	300		2	107	0.052	16.0	36
25-Jun-91		4660	6743	31	280		2	100	0.036	17.0	24
28-Jun-91		3680	5325	31	210		2	95	0.044	17.0	
02-Jul-91		4340	6280	32	250		2	96	0.070	17.5	12
-----											
gemiddeld		4238	6132	31	241		2	100	0.052	16.4	25
rekenkundig											
gewogen											

DATUM	Fase + Periode	EFFLUENT																					
		debiet m3/d	pH	CZV		BZVa		N-kjeldahl		N-orq.		N-NH4+		N-NO3-		N totaal		P-totaaI		P-ortho		P-gebonden droog- rest	
				mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d
-----																							
fase 3.1																							
23-May-91		1645	7	36	59	2	3.3	4.1	6.7	1.7	2.4	3.9	2.5	4.1	6.6	12.2	0.4	0.7	0.15	0.2	0.25	5	
29-May-91		1758	8	35	62	2	3.5	2.2	3.9	1.0	1.2	2.1	4.2	7.4	6.4	12.5	0.2	0.4	0.08	0.1	0.12	28	
07-Jun-91		953	8	54	51	5	4.8	3.3	3.1	3.3			3.3	3.1	6.6	7.8	0.7	0.7	0.38	0.4	0.32	7	
11-Jun-91		1655	7	39	65	5	8.3	6.9	11.4	1.3	5.6	9.3	0.2	0.3	7.1	13.2	1.6	2.6	1.52	2.5	0.08	5	
21-Jun-91		1717	7	50	86	7	12.0	7.7	13.2	0.7	7.0	12.0	0.3	0.5	8.0	15.3	1.2	2.1	0.69	1.2	0.51	7	
25-Jun-91		4483	7	27	121	2	9.0	1.6	7.2	1.3	0.3	1.3	2.3	10.3	3.9	18.0	0.2	0.9	0.05	0.2	0.15	3	
28-Jun-91		4648	7	32	149	1	4.6	1.5	7.0	1.3	0.2	0.9	4.9	22.8	6.4	31.2	0.2	0.9	0.05	0.2	0.15	2	
02-Jul-91		2880	7	50	144	3	8.6	5.2	15.0	2.0	3.2	9.2	1.1	3.2	6.3	19.6	0.2	0.6	0.07	0.2	0.13	5	
-----																							
gemiddeld																							
rekenkundig		2467	7	40	92	3.4	6.8	4.1	8.4	1.6	2.8	5.5	2.4	6.5	6.4	16.2	0.6	1.1	0.4	0.6	0.2	8	
gewogen				37		2.8		3.4			2.2		2.6		6.6		0.5		0.2		0.3		

## STRIPPERTANK

DATUM	Fase + Periode	TOEVOER					DOSERING					AFVOER										
		debiet		P-totaal		P-ortho	droogrest		P-gehalte		azijnzuur (70 %)		natronloog (25 %)		P totaal		P-ortho		droogrest	inhoud	slibarb.	verblijf
		m3/d	mg/l	mg/l	mg/l	kg/d	% van ds	l/d	mgAc/g ds	mgAc/mgPortho	l/d	pH	voor	na	mg/l	mg/l	mg/l	kg/d	m3	l/d	h	
-----																						
fase 3.1																						
23-May-91		359	110	1.38	4360	1565	2.5	0.0	0.0			0.0			130	5.7	5140	1845	192	0.38	12.8	
29-May-91		358	120	0.22	6190	2216	1.9	0.0	0.0			0.0			140	5.5	5200	1862	197	0.38	12.9	
07-Jun-91		400	140	0.41	4960	1984	2.8	0.0	0.0			0.0			130	3.8	4480	1792	270	0.33	13.2	
11-Jun-91		375	180		8020	3008	2.2	0.0	0.0			0.0			170		7300	2738	220	0.37	14.1	
21-Jun-91		363	230	0.05	11100	4029	2.1	0.0	0.0			0.0			200	5.4	9250	3358	220	0.41	14.6	
25-Jun-91		302	260	0.05	12400	3745	2.1	0.0	0.0			0.0			270	3.4	12100	3654	220	0.54	17.5	
28-Jun-91		393	280	0.05	11800	4637	2.4	0.0	0.0			0.0			300	1.2	12700	4991	220	0.94	13.5	
02-Jul-91		402	260	0.14	12000	4824	2.2	0.0	0.0			0.0			270	5.9	11800	4744	220	0.76	13.2	
-----																						
gemiddeld																						
rekenkundig		369	198	0.33	8854	3251	2.3	0	0			0			201	4.4	8496	3123	213	0.51	14.0	
gewogen					8810												8463					

STRIPPERLIJN-INDIKKER

DATUM	Fase + Periode	OVERLOOPWATER										GESTRIPT SLIB										
		debiet m <sup>3</sup> /d	P-totaal mg/l	P-ortho mg/d	P-gebonden mg/l	droogrest mg/l	P-afgifte snelheid (g ds.h) mgP/g ds	Bruto P-afgifte mgP/g ds	Netto P-afgifte mgP/g ds	Fosfaatcapaciteit mgP/g ds	Fosfaatafgifte m <sup>3</sup> /d	P-totaal mg/l	P-ortho mg/l	droogrest mg/d	P-gehalte slib % van ds							
fase 3.1																						
23-May-91		201	7	1.3	5.6	1.1	1.0	22	4.4	0.09	1.14	0.61	5.0	158	230	36.3	6.2	0.98	10800	1706	2.1	
29-May-91		191		6.2	1.2		10	1.9	0.09	1.10	0.64			167	230	38.4	5.2	0.87	8640	1443	2.6	
07-Jun-91		233	5	1.1	4.3	1.0	0.3	15	3.5	0.08	1.04	0.56	6.3	167	330	55.1	5.2	0.87	12400	2071	2.6	
11-Jun-91		211	12	2.5			17	3.6					2.9	164	330	54.1			15000	2460	2.2	
21-Jun-91		196	7	1.4	5.2	1.0	2.0	28	5.5	0.07	0.95	0.30	2.6	167	360	60.1	13.0	2.17	19800	3307	1.8	
25-Jun-91		133	9	1.2			9.2	11	1.5	0.02	0.42			169	370	62.5	9.0	1.52	18100	3059	2.0	
28-Jun-91		233	4	0.9	2.6	0.6	1.2	16	3.7	0.08	1.02	0.12		160	530	84.8	28.0	4.48	25200	4032	2.0	
02-Jul-91		235	7	1.6	5.1	1.2	1.7	33	7.8	0.10	1.38	0.25	2.6	167	510	85.2	32.0	5.34	22300	3724	2.1	
-----																						
gemiddeld																						
rekenkundig		204	7	1.4	4.8	1.0	2.6	19	4.0	0.07	1.01	0.41	3.9	165	361	59.6	14.1	2.32	16530	2725	2.2	
gewogen			7		4.9			20							361		14.1			16515		

## SPUI-SLIJINDIJKER

DATUM	Fase + Periode	OVERLOOPWATER		INGEDIJKT SLIJR		P ortho droogrest %	P ortho droogrest kg ds/d	SLIJR m <sup>3</sup>	AFGEVOERD P-totaal droogrest mg/kg ds			
		P-totaal mg/l	P-ortho droogrest mg/l	debiet m <sup>3</sup> /d	P-totaal mg/kg ds							
23-May-91		160.0	24.0	6700	8	19333	4.4	38	3.0	278.0	105	3.0
29-May-91		3.2	1.8	44	8	21800	4.8	76	2.9	270.4	105	3.5
07-Jun-91		150.0	0.9	4760	11	22250	7.4	78	2.9	330.6	210	3.0
11-Jun-91		36.0		737	6	19700	3.4	52	3.0	171.0	105	3.0
21-Jun-91		200.0	0.1	8490	8	19160	4.4	22	3.0	278.0		
25-Jun-91		280.0	0.1	11900	10	19480	5.4	30	2.9	275.5		
28-Jun-91		300.0	0.4	12600	0	21290	0.0	35	2.9	0.0		
02-Jul-91		260.0	0.9	10500	17	19440	10.3	35	3.1	530.1	138	2.9
gemiddeld										663		
rekenkundig gewoogen		173.7	4.0	6966	8	20307	5.0	46	3.0	248.0		3.1

DATUM	P-BALANS (kg/d)			UIT				
	Fase + Periode	influent retour stripper	totaal	effluent supernatant	spuislib gemeten	berekend		
	=====							
	fase 3.1							
23-May-91		12.9	1.0	13.9	0.7	1.1	4.4	11.1
29-May-91		9.4	0.9	10.2	0.4	1.2	4.8	7.8
07-Jun-91		10.8	0.9	11.7	0.7	1.0	7.4	9.1
11-Jun-91		16.2	0.0	16.2	2.6	0.0	3.4	13.6
21-Jun-91		16.8	2.2	19.0	2.1	1.0	4.4	13.8
25-Jun-91		6.5	1.5	8.0	0.9	0.0	5.4	5.6
28-Jun-91		17.6	4.5	22.1	0.9	0.6	0.0	16.0
02-Jul-91		20.2	5.3	25.6	0.6	1.2	10.3	18.5
	-----							
gemiddeld		13.8	2.0	15.8	1.1	0.8	5.0	11.9
rekenkundig gewogen								







AERATIE TANK

DATUM	Fase + Periode	ACTIEF SLIB		gloeirest %	bezinking ml/l	verdunnings- factor -/-	SVI ml/g	B.V.-slib- belasting kg/kg d	temperatuur oC	slib- leeftijd d
		droogrest mg/l	kg							
-----										
fase 3.2										
05-Jul-91		4560	6598	31	260	2	95	0.012	18.5	15
08-Jul-91		3800	5499	33	260	1	98	0.062	19.5	11
12-Jul-91		3360	4862	34	240	1	102	0.052	20.0	6
17-Jul-91		2520	3646	32	240	1	95	0.040	19.0	
19-Jul-91		2690	3892	33	260	1	97	0.088	19.5	
24-Jul-91		2960	4283	33	260	1	88	0.073	20.0	
26-Jul-91		3550	5137	33	220	1	89	0.014	21.0	
30-Jul-91		3760	5441	33	250	1	95	0.022	23.0	
01-Aug-91		3640	5267	33	260	1	102	0.022	22.0	
06-Aug-91		3860	5585	34	260	1	96	0.035	21.5	
08-Aug-91		3760	5441	36	240	1	91	0.032	21.5	
14-Aug-91		3420	4949	35	250	1	105	0.034	20.0	29
16-Aug-91		3380	4891	34	260	1	110	0.034	20.5	46
20-Aug-91		2400	3473	32	280	1	167	0.076	20.0	34
22-Aug-91		3780	5470	31	280	2	124	0.032	20.0	48
27-Aug-91		3990	5774	31	240	2	120	0.047	21.0	26
29-Aug-91		3100	4486	31	260	2	168	0.036	20.0	30
03-Sep-91		3960	5730	32	240	2	121	0.055	21.0	30
-----										
gemiddeld										
rekenkundig		3472	5024	33	253	1	109	0.043	20	27
gewoogen								0.043		

DATUM	Fase + Periode	EFFLUENT																				
		debiet m3/d	pH	CZV kg/d	BZVa mg/l	N-kjeldahl kg/d	N-org. mg/l	N-NH4+ mg/l	N-NO3- kg/d	N-totaal mg/l	P totaal kg/d	P-ortho mg/l	P-gebonden kg/d	droog- rest mg/l								
-----																						
fase 3.2																						
05-Jul-91		1563	7	52	81	9	14.1	4.8	7.5	2.0	2.8	4.4	0.1	0.2	4.9	8.9	0.6	0.9	0.34	0.5	0.26	5
08-Jul-91		2290	7	63	144	5	11.5	5.3	12.1	2.2	3.1	7.1	0.1	0.2	5.4	13.5	0.5	1.1	0.27	0.6	0.23	5
12-Jul-91		2125	7	52	111	2	4.3	3.2	6.8	1.5	1.7	3.6	0.6	1.3	3.8	9.0	0.2	0.4	0.08	0.2	0.12	5
17-Jul-91		1234	8	49	60	3	3.7	4.9	6.0	2.0	2.9	3.6	3.2	3.9	8.1	11.9	0.2	0.2	0.05	0.1	0.15	5
19-Jul-91		1883	7	46	87	3	5.6	4.0	7.5	2.2	1.8	3.4	4.7	8.9	8.7	18.4	0.2	0.4	0.05	0.1	0.15	5
24-Jul-91		1302	8	57	74	2	2.6	3.0	3.9	2.0	1.0	1.3	1.9	2.5	4.9	7.6	0.3	0.4	0.07	0.1	0.23	5
26-Jul-91		961	7	44	42	2	1.9	2.4	2.3	1.6	0.8	0.8	1.7	1.6	4.1	4.9	0.2	0.2	0.09	0.1	0.11	4
30-Jul-91		798	8	46	37	2	1.6	3.2	2.6	2.0	1.2	1.0	1.9	1.5	5.1	5.3	0.3	0.2	0.09	0.1	0.21	4
01-Aug-91		721	8	53	38	4	2.9	2.8	2.0	2.1	0.7	0.5	2.3	1.7	5.1	4.9	0.3	0.2	0.05	0.0	0.25	7
06-Aug-91		948	8	70	66	11	10.4	4.4	4.2	3.4	1.0	0.9	1.8	1.7	6.2	7.4	0.4	0.4	0.08	0.1	0.32	35
08-Aug-91		1068	8	45	48	5	5.3	2.7	2.9	1.8	0.9	1.0	2.1	2.2	4.8	6.3	0.3	0.3	0.12	0.1	0.18	4
14-Aug-91		1182	8	42	50	2	2.4	2.8	3.3	1.6	1.2	1.4	2.6	3.1	5.4	7.7	0.2	0.2	0.09	0.1	0.11	25
16-Aug-91		1163	8	40	47	2	2.3	8.6	10.0	2.0	6.6	7.7	1.6	1.9	10.2	14.4	0.3	0.3	0.17	0.2	0.13	2
20-Aug-91		1324	8	43	57	3	4.0	6.6	8.7	2.7	3.9	5.2	2.0	2.6	8.6	13.5	0.3	0.4	0.17	0.2	0.13	1
22-Aug-91		1144	8	39	45	2	2.3	3.2	3.7	1.7	1.5	1.7	2.3	2.6	5.5	7.6	0.2	0.2	0.14	0.2	0.06	2
27-Aug-91		1158	8	43	50	3	3.5	5.8	6.7	2.0	3.8	4.4	1.1	1.3	6.9	9.4	0.5	0.6	0.42	0.5	0.08	17
29-Aug-91		1046	8	35	37	2	2.1	3.9	4.1	1.3	2.6	2.7	1.6	1.7	5.5	7.1	0.3	0.3	0.21	0.2	0.09	1
03-Sep-91		1355	8	50	68	3	4.1	4.6	6.2	1.7	2.9	3.9	1.4	1.9	6.0	9.5	0.5	0.7	0.29	0.4	0.21	2
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gemiddeld																						
rekenkundig		1293	8	48	63	3.6	4.7	4.2	5.6	2.0	2.2	3.0	1.8	2.3	6.1	9.3	0.3	0.4	0.15	0.2	0.17	7
gewogen				49		3.6		4.3		2.0	2.3		1.8		7.2		0.3		0.15		0.15	

## STRIPPERTANK

DATUM	Fase + Periode	TOEVOER				DOSERING				AFVOER								
		debiet m <sup>3</sup> /d	P-gehalte slib van ds %	P-gehalte azijnzuur (70 %) 1/d	specifieke dosering mgAc/mgPortho 1/d	debiet voor pH slib	natronloog (2,5 %) voor na	P-totaal mg/l	P-ortho mg/l	droogrest kg/d	inhoud m <sup>3</sup>	slibarb. verblijftijd factor 1/d	h					
05-Jul-91		405	220	0.05	10400	4212	2.1	40.8	8.1	5.1	57.6	200	6.7	8590	3479	220	0.53	13.1
08-Jul-91		389	200	0.05	8710	3388	2.3	40.8	7.6	4.9	57.6	220	0.8	9560	3719	130	0.68	8.0
12-Jul-91		400	214	0.12	9220	3688	2.3	40.8	7.9	4.9	57.6	183	12.0	8860	3544	130	0.73	7.8
17-Jul-91		400	110	0.05	5100	2040	2.2	40.8	16.5	7.4	57.6	100	8.0	4260	1704	130	0.47	7.8
19-Jul-91		400	120	0.08	5550	2220	2.2	40.8	13.8	6.0	57.6	110	11.0	5110	2044	130	0.53	7.8
24-Jul-91		408	140	0.06	5740	2342	2.4	40.8	9.7	5.7	57.6	160	2	7140	2913	130	0.68	7.6
26-Jul-91		405	150	0.72	6020	2438	2.5	40.8	12.5	5.2	57.6	130	12.0	5540	2244	130	0.44	7.7
30-Jul-91		413	130	0.25	6040	2495	2.1	40.8	12.2	5.2	57.6	130	13.0	5580	2305	130	0.42	7.6
01-Aug-91		416	140	0.23	6350	2642	2.2	40.8	12.0	5.0	57.6	130	13.0	5620	2338	130	0.44	7.5
06-Aug-91		418	150	0.50	6270	2621	2.4	40.8	11.1	4.2	57.6	140	15.0	6070	2537	130	0.45	7.5
08-Aug-91		416	160	0.11	6650	2766	2.4	40.8	12.0	4.1	57.6	140	16.0	5660	2355	130	0.43	7.5
14-Aug-91		407	150	0.05	6760	2751	2.2	36.0	10.3	3.6	78.0	130	14.0	5940	2418	130	0.49	7.7
16-Aug-91		411	140	0.05	6770	2782	2.1	39.6	11.4	4.4	56.4	120	14.0	5840	2400	140	0.49	8.2
20-Aug-91		414	160	0.05	7340	3039	2.2	38.6	10.0	3.7	54.7	150	15.0	6450	2670	139	0.77	8.1
22-Aug-91		412	140	0.12	6590	2715	2.1	35.5	9.8	3.2	54.7	130	16.0	6040	2488	141	0.45	8.2
27-Aug-91		376	170	0.39	7310	2749	2.3	35.5	10.2	3.3	54.7	140	19.0	6400	2406	141	0.42	9.0
29-Aug-91		406	140	0.17	6560	2663	2.1	35.5	9.9	3.1	54.7	130	17.0	6080	2468	139	0.55	8.2
03-Sep-91		393	180	0.05	8020	3152	2.2	35.5	9.0	3.5	54.7	170	17.0	6920	2720	154	0.47	9.4
gemiddeld																		
rekenkundig		405	156	0.17	6967	2817	2.2	39.2	10.8	4.6	57.9	145	12.3	6426	2597	139	0.52	8.3
gewogen					6956									6412				

fase 3.2

## STRIPPERLIJN-INDIKKER

## |OVERLOOPWATER

## |GESTRIPT SLIB

DATUM	Fase +	OVERLOOPWATER			GESTRIPT SLIB			P-ortho	P-ortho	droogrest	P-gehalte slib										
		debiet P-totaal	P-gebonden	P-afgifte	Bruto	Netto	Fosfaatafgifte					debiet P-totaal	P-ortho	droogrest	P-gehalte						
Periode	ms/d	mg/l	kg/d	mg/l	mgP/g ds	mgP/g ds	mgP/g ds	ms/d	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	% van ds					
=====																					
fase 3.2																					
05-Jul-91		246	11	2.7	8	2.0	2.9	44	10.8	0.12	1.58	0.57	159	490	77.9	22.0	3.50	22600	3593	2.1	
08-Jul-91		216	16	3.5	13	2.8	3.0	42	9.1	0.19	1.55	0.76	173	340	58.8	17.0	2.94	17300	2993	1.9	
12-Jul-91		233	15	3.5	13	3.0	2.0	15	3.5	0.21	1.61	0.85	167	405	67.6	16.0	2.67	20800	3474	1.9	
17-Jul-91		234	11	2.6	9	2.2	1.7	21	4.9	0.29	2.23	1.28	166	210	34.9	9.8	1.63	10100	1677	2.0	
19-Jul-91		233	11	2.6	10	2.3	1.0	20	4.7	0.29	2.28	1.14	167	230	38.4	14.0	2.34	11200	1870	1.9	
24-Jul-91		240	12	2.9	10	2.3	2.5	29	7.0	0.22	1.71	0.78	168	260	43.7	16.0	2.69	12200	2050	2.0	
26-Jul-91		238	15	3.6	13	3.1	2.0	30	7.1	0.31	2.42	1.38	167	250	41.8	14.0	2.34	11700	1954	2.0	
30-Jul-91		246	15	3.7	12	3.0	3.0	58	14.3	0.31	2.37	1.28	167	270	45.1	15.0	2.51	12700	2121	2.0	
01-Aug-91		249	15	3.7	13	3.2	2.0	19	4.7	0.32	2.38	1.38	167	270	45.1	14.0	2.34	12300	2054	2.1	
06-Aug-91		251	16	4.0	15	3.8	1.0	21	5.3	0.36	2.67	1.48	167	300	50.1	18.0	3.01	14100	2355	2.0	
08-Aug-91		250	18	4.5	16	4.0	2.0	20	5.0	0.39	2.90	1.70	166	280	46.5	17.0	2.82	13000	2158	2.0	
14-Aug-91		241	17	4.1	16	3.9	1.0	52	12.5	0.37	2.83	1.59	166	250	41.5	18.0	2.99	12600	2092	1.8	
16-Aug-91		244	15	3.7	14	3.4	1.0	17	4.1	0.32	2.61	1.42	167	250	41.8	17.0	2.84	14000	2338	1.7	
20-Aug-91		247	18	4.4	16	4.0	2.0	16	4.0	0.34	2.73	1.48	167	280	46.8	20.0	3.34	14000	2338	1.9	
22-Aug-91		245	17	4.2	17	4.2	0.0	10	2.5	0.37	3.08	1.67	167	270	45.1	21.0	3.51	14500	2422	1.7	
27-Aug-91		209	19	4.0	19	4.0	0.0	41	8.6	0.34	3.11	1.65	167	270	45.1	21.0	3.51	14200	2371	1.8	
29-Aug-91		238	19	4.5	19	4.5	0.0	17	4.0	0.39	3.19	1.83	168	250	42.0	20.0	3.36	13800	2318	1.7	
03-Sep-91		225	20	4.5	17	3.8	3.0	39	8.8	0.27	2.58	1.41	168	290	48.7	19.0	3.19	14100	2369	1.9	
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gemiddeld																					
rekenkundig		238	16	3.7	14	3.3	1.7	28	6.7	0.30	2.43	1.31	167	287	47.8	17.2	2.86	14178	2364	1.9	
gewogen		16			14			28						286							

SPUI-SLIBINDIKKER

DATUM	Fase + Periode	OVERLOOPWATER			INGEDIKT SLIB					SLIB AFGEVOERD		
		P-totaal	P-ortho	droog- rest	debiet	P-totaal	P-ortho	droogrest	P-totaal	droog- rest		
		mq/l	mq/l	mq/l	m3/d	mq/kg ds	kg/d	mq/l	%	kg ds/d	m3	mq/kg ds
fase 3.2												
05-Jul-91		10.0	1.9	71	13	23280	10.5	33	3.4	457.7		
08-Jul-91		190.0	0.1	8260	17	20570	10.6	30	3.0	513.0	101	3.0
12-Jul-91		2.7	0.3	105	27	18220	15.0	28	3.1	824.6	34	2.5
17-Jul-91		1.9	0.4	49		20450	0.0	23	1.5	0.0		
19-Jul-91		250.0	11.0	12600		18830	0.0	26	3.4	0.0		
24-Jul-91		130.0	13.0	5790		21630	0.0	14	2.0	0.0		
26-Jul-91		41.0	20.0	254			0.0			0.0		
30-Jul-91		30.0	16.0	438	8		0.0			0.0	195	21910 3.0
01-Aug-91		38.0	19.0	610			0.0			0.0		
06-Aug-91					11		0.0			0.0		
08-Aug-91		1.0	0.6	28	6	21610	0.0	49		0.0	105	5.6
14-Aug-91		21.0	3.8	645	6	19990	3.4	32	3.0	171.0		
16-Aug-91		23.0	4.1	840	4	17260	1.8	28	2.8	106.4		
20-Aug-91		120.0	2.7	5660	4	19140	2.0	31	2.7	102.6	70	3.2
22-Aug-91		28.0	3.2	980	4	16090	1.8	24	3.0	114.0		
27-Aug-91					8	17170	3.8	26	2.9	220.4		
29-Aug-91		160.0	4.6	7820	6	18800	2.8	32	2.6	148.2		
03-Sep-91		19.0	5.7	574	8	19020	3.6	28	2.5	190.0	61	3.1
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gemiddeld											567	
rekenkundig		66.6	6.7	2795	9	19433	3.1	29	2.8	157.9		21910 3.4
gewogen												

DATUM	P-BALANS (kg/d)		UIT			
	IN	OUT	effluent	supernatant	spuislib	
Fase + Periode	influx	retour	totaal	deelstroom	gemeten	berekend
	stripper					
fase 3.2						
05-Jul-91	9.4	3.5	12.9	0.9	2.0	10.5 6.5
08-Jul-91	16.0	2.9	19.0	1.1	2.8	10.6 12.1
12-Jul-91	13.4	2.7	16.1	0.4	3.0	15.0 10.0
17-Jul-91	7.6	1.6	9.3	0.2	2.2	0.0 5.2
19-Jul-91	13.1	2.3	15.5	0.4	2.3	0.0 10.4
24-Jul-91	12.8	2.7	15.5	0.4	2.3	0.0 10.1
26-Jul-91	6.0	2.3	8.3	0.2	3.1	0.0 2.7
30-Jul-91	6.3	2.5	8.8	0.2	3.0	0.0 3.1
01-Aug-91	5.8	2.3	8.2	0.2	3.2	0.0 2.4
06-Aug-91	7.8	3.0	10.8	0.4	3.8	0.0 3.6
08-Aug-91	7.0	2.8	9.8	0.3	4.0	0.0 2.7
14-Aug-91	7.0	3.0	10.0	0.2	3.9	3.4 2.9
16-Aug-91	7.7	2.8	10.6	0.3	3.4	1.8 4.0
20-Aug-91	9.6	3.3	12.9	0.4	4.0	2.0 5.2
22-Aug-91	7.2	3.5	10.7	0.2	4.2	1.8 2.8
27-Aug-91	9.4	3.5	12.9	0.6	4.0	3.8 4.9
29-Aug-91	7.3	3.4	10.7	0.3	4.5	2.8 2.5
03-Sep-91	12.5	3.2	15.7	0.7	3.8	3.6 8.0
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gemiddeld						
rekenkundig	9.2	2.9	12.1	0.4	3.3	3.1 5.5
gewogen						



AWZI BERGAMBACHT - BIOLOGISCHE DEFOSFATERING

DATUM	Fase + Periode	INFLUENT																				
		debiet m3/d	pH	CZV mg/l	kg/d	BZVa mg/l	kg/d	N-kjeldahl mg/l	kg/d	P-totaal mg/l	kg/d	P-ortho mg/l	kg/d	BZV/N -/-	BZV/P -/-	Cl mg/l	alkali- teit mg/l	vluchtige vetzuren mg/l	Fe mg/l	Ca mg/l	Mg mg/l	Al mg/l
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fase 3.3																						
05-Sep-91		1516	7.3	465	705	170	258	44	67	6.6	10	3.6	5	3.9	25.8	202	270	20				
10-Sep-91		1360	7.4	495	673	230	313	49	67	6.8	9	4.0	5	4.7	33.8	245	199	40	2	115	15	2
13-Sep-91		615	7.2	1320	812	450	277	73	45	23.0	14	4.0	2	6.2	19.6	174	204	80				
18-Sep-91		1420	7.3	310	440	110	156	37	53	4.6	7	2.9	4	3.0	23.9	192	208	30		99	13	
20-Sep-91		1417	7.3	300	425	130	184	38	54	5.2	7	3.4	5	3.4	25.0	202	305	50				
24-Sep-91		1649	7.3	405	668	150	247	44	73	5.8	10	2.9	5	3.4	25.9	204	226	40				
27-Sep-91		1496	7.3	270	404	105	157	37	55	4.9	7	3.4	5	2.8	21.4	191	438	30				
01-Oct-91		4615	6.8	235	1085	79	365	21	97	3.7	17	1.5	7	3.8	21.4	80	195	30				
03-Oct-91		2052	7.2	380	780	140	287	34	70	5.6	11	2.5	5	4.1	25.0	148	341	60				
09-Oct-91		1389	7.5	480	667	215	299	63	88	7.9	11	5.3	7	3.4	27.2	179		40				
11-Oct-91		1401	7.1	340	476	160	224	44	62	5.7	8	0.8	1	3.6	28.1	234		20				
15-Oct-91		1432	7.1	355	508	150	215	44	63	5.8	8	3.2	5	3.4	25.9	199		180				
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gemiddeld																						
rekenkundig		1697	7.2	446	637	174	248	44	66	7.1	10	3.1	5	3.8	25.2	188	265	52	2	107	14	2
gewogen				375		146		39		5.9		2.9										



## AERATIETANK

DATUM	Fase + Periode	ACTIEF SLIB		droogrest mg/l	kq	gloeï- rest %	bezink. ml/l	factor -/-	m <sup>3</sup> /q	SVI ml/q	R.V.-slib- belasting kq/kq.d	temperatuur oC	slib leeftijd d
		gloeï- rest %	bezink. ml/l										
fase 3.3													
05-Sep-91		4340	6280	32	250	?	115	0.042	21.0				
10-Sep-91		2850	4124	31	220	?	129	0.077	21.0	14			
13-Sep-91		3010	4355	33	240	1	114	0.064	20.0				
18-Sep-91		4010	5802	34	260	2	108	0.027	20.0	20			
20-Sep-91		3950	5716	33	240	2	101	0.033	19.0	21			
24-Sep-91		3810	5513	31	290	1	109	0.046	18.0	28			
27-Sep-91		4130	5976	31	290	1	100	0.027	17.0	25			
01-Oct-91		4620	6685	32	280	1	87	0.055	16.0	26			
03-Oct-91		4480	6483	34	290	1	93	0.045	16.0	17			
09-Oct-91		4250	6150	31	300	1	101	0.049	16.0	21			
11-Oct-91		3620	5238	32	280	1	111	0.043	17.0	43			
15-Oct-91		3720	5383	32	260	2	117	0.040	16.0	18			
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gemiddeld													
rekenkundig		3899	5642	32	267	2	107	0.046	18.1	23			
gewogen													

DATUM	Fase + Periode	EFFLUENT																				
		debiet m <sup>3</sup> /d	pH	CZV		BZVa		N-kjeldahl		N-org. N-NH4+		N-NO3-		N-totaal		P-totaal		P ortho		P-gehonden droog- rest		
		mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	
-----																						
fase 3.3																						
05-Sep-91		1353	7	35	47	2	2.7	4	5.7	1.2	3.0	4.1	0.6	0.8	4.8	7.3	0.8	1.1	0.39	0.5	0.41	2
10-Sep-91		1135	8	34	39	4	4.5	4	4.2	1.4	2.3	2.6	4.6	5.2	8.3	11.3	0.2	0.2	0.05	0.1	0.15	2
13-Sep-91		389	8	37	14	2	0.8	3	1.0	1.7	0.8	0.3	2.0	0.8	4.5	2.8	0.3	0.1	0.10	0.0	0.20	7
18-Sep-91		1188	7	35	42	2	2.4	3	3.4	0.9	2.0	2.4	1.5	1.8	4.4	6.2	0.2	0.2	0.05	0.1	0.15	1
20-Sep-91		1190	7	36	43	3	3.6	5	5.6	1.1	3.6	4.3	1.3	1.5	6.0	8.5	0.3	0.4	0.09	0.1	0.21	3
24-Sep-91		1424	8	38	54	2	2.8	8	11.0	1.5	6.2	8.8	1.3	1.9	9.0	14.8	0.3	0.4	0.16	0.2	0.14	1
27-Sep-91		1272	7	32	41	2	2.5	4	4.5	2.3	1.2	1.5	1.2	1.5	4.7	7.0	0.2	0.3	0.05	0.1	0.15	70
01-Oct-91		4393	7	24	105	2	8.8	1	5.3	1.0	0.2	0.9	5.8	25.5	7.0	32.3	0.2	0.9	0.06	0.3	0.14	4
03-Oct-91		1827	7	32	58	2	3.7	2	3.7	1.0	1.0	1.8	4.4	8.0	6.4	13.1	0.1	0.2	0.05	0.1	0.05	1
09-Oct-91		1165	8	45	52	3	3.5	4	5.1	1.3	3.1	3.6	3.1	3.6	7.5	10.4	0.1	0.1	0.07	0.1	0.03	2
11-Oct-91		1178	7	44	52	2	2.4	5	5.4	1.8	2.8	3.3	2.6	3.1	7.2	10.1	0.2	0.2	0.05	0.1	0.15	3
15-Oct-91		1212	7	38	46	1	1.2	4	5.1	1.6	2.6	3.2	2.1	2.5	6.3	9.0	0.1	0.1	0.08	0.1	0.02	9
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gemi ddeld																						
rekenkundig		1477	7	36	49	2.3	3.2	3.8	5.0	1.4	2.4	3.1	2.5	4.7	6.3	11.1	0.3	0.4	0.10	0.1	0.15	9
gewogen				33		2.2		3.4		1.3	2.1		3.2		7.5		0.3		0.07		0.21	

STRIPPERTANK

DATUM	Fase + Periode	TOEVOER					DOSEERING					AFVOER							
		debiet	P-totaal	P-ortho	droogrest	P-gehalte	azijnzuur (70 %)	natronloog (25 %)	P-totaal	P-ortho	droogrest	inhoud	slibarb.	verblijf					
		m3/d	mg/l	mg/l	mg/l	kg/d % van ds	l/d mgAc/g ds	l/d mgAc/mgPortho	l/d	mg/l	mg/l	kg/d	m3	l/d	h				
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	fase 3.3																		
05-Sep-91		331	160	0.07	7630	2526	2.1	35.5		4.4	0.0						72		5.2
10-Sep-91		360	120	0.17	5690	2048	2.1	35.5	15.3	4.3	0.0		99	14.0	4440	1598	72	0.39	4.8
13-Sep-91		360	77	0.16	3170	1141	2.4	35.5	19.1	6.1	0.0		89	8.7	3560	1282	68	0.29	4.6
18-Sep-91		358	150	0.32	7830	2803	1.9	35.5	9.5	4.9	0.0		150	8.9	7200	2578	72	0.44	4.8
20-Sep-91		363	140	0.35	6880	2497	2.0	35.5	9.0	5.6	0.0		150	9.8	7510	2726	69	0.48	4.5
24-Sep-91		362	160	0.05	8040	2910	2.0	35.5	10.6	5.0	0.0		120	10.0	6410	2320	60	0.42	4.0
27-Sep-91		359	150	0.05	7900	2836	1.9	35.5	8.9	4.7	0.0	7.19 7.15	150	10.0	7660	2750	60	0.46	4.0
01-Oct-91		360	187	0.37	10500	3780	1.8	35.5	6.0	5.2	0.0		200	12.0	11300	4068	62	0.61	4.2
03-Oct-91		360	150	0.17	8470	3049	1.8	38.6	10.8	6.4	0.0		170	9.0	6870	2473	58	0.38	3.9
09-Oct-91		361	60	0.09	6860	2476	0.9	37.7	11.7	5.8	0.0		59	10.0	6160	2224	58	0.36	3.9
11-Oct-91		361	130	0.05	6480	2339	2.0	37.7	10.6	5.6	0.0		130	9.0	6780	2448	60	0.47	4.0
15-Oct-91		360	140	0.09	6910	2488	2.0	19.4	5.2	2.6	0.0	7.22 7.00	140	9.9	7225	2601	59	0.48	3.9
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gemiddeld																			
rekenkundig		358	135	0.16	7197	2575	1.9	34.8	10.6	5.0	0.0	7.21 7.08	128	10.1	6829	2461	64	0.44	4.3
gewogen					7193										6874				

## STRIPPERLIJN-INDIKKER

## OVERLOOPWATER

## GFSTRIPT SLIB

DATUM	Fase + Periode	P-gebonden droogrest		P-afgifte snellheid mgP/(α ds.h)	Bruto P-afgifte mgP/g ds	Netto P-afgifte mgP/g ds	Fosfaatafgifte capaciteit mgP/g ds	debiet P-totaal		P-ortho		droogrest		P-gehalte slib % van ds
		mg/l	kg/d					m <sup>3</sup> /d	kg/d	mg/l	kg/d	mg/l	kg/d	
fase 3.3														
05-Sep-91		163	19 3.1	18 2.9	1.0	26 4.2		168	220 37.0	16.0	2.69	10500	1764	1.9
10-Sep-91		225	16 3.6	15 3.4	1.0	16 3.6	0.74	135	210 28.4	17.0	2.30	10500	1418	1.8
13-Sep-91		226	11 2.5	10 2.1	1.5	16 3.6	0.69	134	210 28.1	14.0	1.88	10500	1407	1.9
18-Sep-91		232	16 3.7	13 3.0	3.0	42 9.7	0.41	126	390 49.1	16.0	2.02	20700	2608	1.8
20-Sep-91		227	12 2.7	11 2.5	1.0	32 7.3	0.36	136	340 46.2	14.0	1.90	19200	2611	1.7
24-Sep-91		225	14 3.2	12 2.7	2.0	38 8.6	0.53	137	360 49.3	16.0	2.19	19900	2726	1.7
27-Sep-91		224	14 3.1	13 2.9	1.0	22 4.9	0.47	135	350 47.3	17.0	2.30	19100	2579	1.7
01-Oct-91		222	12 2.7	12 2.7	0.0	24 5.3	0.28	138	390 53.8	15.0	2.07	22700	3133	1.7
03-Oct-91		225	11 2.5	10 2.3	1.0	19 4.3	0.43	135	340 45.9	14.0	1.89	19800	2673	1.6
09-Oct-91		224	0.0	11 2.5		16 3.6	0.53	137	310 42.5	15.0	2.06	15700	2151	1.9
11-Oct-91		223	12 2.7	11 2.5	1.0	7 1.6	0.48	138	320 44.2	16.0	2.21	15400	2125	2.0
15-Oct-91		220	15 3.3	13 2.9	2.0	28 6.2	0.52	140	290 40.6	17.0	2.38	16405	2297	1.7

gemiddeld															
rekenkundig	220	14 2.8	12 2.7	1.3	24 5.2	0.49	2.09	1.17	2.7	138	311 42.7	15.6	2.16	16700 2291	1.8
gewogen	13	12	24	24						309	15.7		16601		

SPUI-SLIBINDIKKER												
DATUM	Fase +	[OVRLOOPWATER			[INGEDIKT SLIB			[AFGEVOLRD			rest	
		P-totaal P-ortho droog-	debet P-totaal]	P-ortho droogrest	P-ortho droogrest	rest	P-totaal droog-	rest				
Periode	mg/l	mg/l	mg/d	mg/d	mg/d	kg/d	kg/d	kg/d	ds	ds	ds	%
=====												
fase 3.3												
05-Sep-91		290.0	9.9	5500	4	0.0	0.0	0.0	0.0	0.0	0.0	
10-Sep-91		12.0	5.7	236	11	20298	6.0	33	296.4	2.6	296.4	
13-Sep-91		5.1	1.1	152		20460	0.0	26	0.0	2.6	0.0	
18-Sep-91		42.0	14.4	2020	11	17410	5.2	28	296.4	2.6	296.4	
20-Sep-91		140.0	1.3	7020	10	17310	4.6	24	266.0	2.8	266.0	
24-Sep-91					8	17560	3.5	27	197.6	2.6	197.6	
27-Sep-91		180.0	0.6	8830	10	18960	4.5	23	237.5	2.5	237.5	
01-Oct-91		180.0	1.2	9660	97	17588	46.0	25	261.3	2.7	261.3	
03-Oct-91		1.2	0.2	185	19	15700	8.7	26	551.0	2.9	551.0	
09-Oct-91		73.0	0.1	3920	11	18260	5.4	30	296.4	2.6	296.4	
11-Oct-91		75.0	0.1	3380	42	16785	20.3	26	121.2	2.9	121.2	
15-Oct-91		4.5	0.6	161	11	17583	5.2	35	296.4	2.6	296.4	
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gemi ddeId	rekenkundig	91.2	3.2	3733	21	17992	9.1	28	235.0	2.7	235.0	
gewogen								187				3.0

DATUM	P-BALANS (kg/d)		UIT			berkend		
	Fase + Periode	inluent stripper	retour stripper	totaal effluent	supernatant deelstroom gemeten		spuislib berkend	
fase 3.3								
05-Sep-91		10.0	2.7	12.7	1.1	2.9	0.0	6.0
10-Sep-91		9.2	2.3	11.5	0.2	3.4	6.0	5.6
13-Sep-91		14.1	1.9	16.0	0.1	2.1	0.0	11.9
18-Sep-91		6.5	2.0	8.5	0.2	3.0	5.2	3.3
20-Sep-91		7.4	1.9	9.3	0.4	2.5	4.6	4.5
24-Sep-91		9.6	2.2	11.8	0.4	2.7	3.5	6.4
27-Sep-91		7.3	2.3	9.6	0.3	2.9	4.5	4.2
01-Oct-91		17.1	2.1	19.1	0.9	2.7	46.0	13.5
03-Oct-91		11.5	1.9	13.4	0.2	2.3	8.7	9.1
09-Oct-91		11.0	2.1	13.0	0.1	2.5	5.4	8.4
11-Oct-91		8.0	2.2	10.2	0.2	2.5	20.3	5.3
15-Oct-91		8.3	2.4	10.7	0.1	2.9	5.2	5.3
gemiddeld								
rekenkundig gewogen		10.0	2.2	12.2	0.4	2.7	9.1	7.0



AWZI BERGAMBACHT - BIOLOGISCHE DEFFOSFATERING

DATUM	Fase + Periode	INFLUENT		CZV		BZVa		N-kjeldahl		P-totaal		P-ortho		BZV/N	BZV/P	Cl	alkali-	vluchtige	Fe	Ca	Mg	Al	
		debiet m3/d	pH	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	-/-	-/-	mg/l	teit	vetzuren	mg/l	mg/l	mg/l
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Fase 3.4																							
17-Oct-91		1532	7.2	425	651	185	283	43	66	6.2	9	3.6	6	4.3	29.8	203			50				
23-Oct-91		1385	7.3	315	436	145	201	45	62	4.9	7	3.6	5	3.2	29.6	219			20				
25-Oct-91		1432	7.3	305	437	135	193	46	66	5.2	7	3.8	5	2.9	26.0	181			40				
29-Oct-91		1399	7.4	635	888	235	329	57	80	36.0	50	3.8	5	4.1	6.5	196			40				
31-Oct-91		1414	7.3	1220	1725	250	354	67	95	16.0	23	2.1	3	3.7	15.6	256			30				
06-Nov-91		3220	7.3	345	1111	135	435	29	93	5.0	16	1.7	5	4.7	27.0	125			10				
08-Nov-91		4209	5.7	250	1052	93	391	20	84	3.0	13	1.4	6	4.7	31.0	94			10				
13-Nov-91		2701	7.5	220	594	86	232	23	62	3.4	9	1.6	4	3.7	25.3	122			10				
15-Nov-91		2233	7.4	255	569	96	214	30	67	3.8	8	2.3	5	3.2	25.3	143			40				
19-Nov-91		2233	7.3	495	1105	155	346	36	80	5.5	12	3.4	8	4.3	28.2	163			20				
22-Nov-91		1806	7.2	570	1029	240	433	50	90	8.0	14	2.2	4	4.8	30.0	178			30				
26-Nov-91		1515	7.3	420	636	190	288	49	74	6.0	9	4.0	6	3.9	31.7	200			52				
29-Nov-91		1340	7.3	400	536	205	275	45	60	5.7	8	4.2	6	4.6	36.0	217			110				
03-Dec-91		1352	7.3	300	406	220	297	49	66	6.5	9	4.1	6	4.5	33.8	198			20				
05-Dec-91		1264	7.3	405	512	170	215	51	64	6.4	8	4.8	6	3.3	26.6	183			30				
09-Dec-91		1090	7.3	405	441	190	207	60	65	7.1	8	5.2	6	3.2	26.8	160			30				
13-Dec-91		1174	7.3	410	481	210	247	56	66	7.4	9	5.1	6	3.8	28.4	235			40				
18-Dec-91		2894	7.0	1360	3936	490	1418	66	191	15.0	43	3.1	9	7.4	32.7	115			20				
19-Dec-91		2521	7.2	495	1248	200	504	36	91	5.6	14	2.3	6	5.6	35.7	120			30				
23-Dec-91		2406																					
27-Dec-91		1511																					
31-Dec-91		1235																					
03-Jan-92		1197	7.5	375	449	185	221	27	32	7.0	8	4.6	6	6.9	26.4	154			30				
07-Jan-92		1725	7.1	290	500	110	190	34	59	4.7	8	2.4	4	3.2	23.4	168			20				
09-Jan-92		1589	7.5	310	493	110	175	42	67	4.7	7	3.1	5	2.6	23.4	195			40				
14-Jan-92		1435	7.4	420	603	165	237	54	77	5.8	8	3.2	5	3.1	28.4	86			50				
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gemiddeld																							
rekenkundig		1839	7.2	462	863	183	334	44	76	7.8	13	3.3	5	4.2	27.3	170			34				
gewogen				469		182		41		7.1		2.7											



## AERATIETANK

DATUM	Fase + Periode	ACTIEF SLIB		gloeirest %	gloeibezinking ml/l	verduunningsfactor -/-	SVI ml/g	BZV-slib belasting kg/kg.d	temperatuur oC	slib-leeftijd d	
		droogrest mg/l	kg								
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Fase 3.4											
17-Oct-91		3900	5643	30	300	2	128	0.051	16.0	15	
23-Oct-91		3570	5166	31	260	2	122	0.039	15.0	17	
25-Oct-91		3190	4616	31	230	2	120	0.042	17.0	18	
29-Oct-91		3430	4963	30	240	2	117	0.067	14.0	14	
31-Oct-91		3520	5093	33	260	1	106	0.070	13.0	9	
06-Nov-91		3820	5528	31	280	1	105	0.080	12.0	17	
08-Nov-91		3820	5528	34	270	1	101	0.072	12.0	17	
13-Nov-91		3650	5282	33	270	1	106	0.045	11.0	23	
15-Nov-91		3580	5180	34	220	2	103	0.042	11.0	24	
19-Nov-91		3870	5600	29	250	2	108	0.063	12.0	19	
22-Nov-91		4520	6540	33	240	2	106	0.067	10.0	29	
26-Nov-91		3760	5441	32	280	2	124	0.054	11.0	15	
29-Nov-91		3570	5166	31	270	2	126	0.054	11.0	18	
03-Dec-91		3470	5021	30	260	2	125	0.060	11.0	15	
05-Dec-91		3050	4413	29	250	2	137	0.049	11.0	12	
09-Dec-91		3320	4804	28	270	2	136	0.044	11.0	12	
13-Dec-91		3330	4819	29	260	2	130	0.052	10.0	22	
18-Dec-91		3470	5021	28	260	2	125	0.287	10.0	24	
19-Dec-91		3900	5643	29	230	2	118	0.091	10.0	17	
23-Dec-91									9.0		
27-Dec-91											
31-Dec-91											
03-Jan-92		4040	5846	28	260	2	129	0.038	11.0	21	
07-Jan-92		3680	5325	27	240	2	130	0.036	11.0	17	
09-Jan-92		4510	6526	26	230	2	102	0.027	11.0	22	
14-Jan-92		3490	5050	29	220	2	126	0.048	11.0	17	
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gemiddeld											
rekenkundig		3672	5314	30	254	2	119	0.064	11.7	18	
gewogen								0.064			

DATUM	Fase + Periode	EFFLUENT											P-gebonden droog- rest mg/l									
		debit pH	CZV mg/l	BZVa kg/d	N-kjeldahl mg/l	N-org. mg/l	N-NH4+ mg/l	N-NO3- mg/l	N-totaal kg/d	P-ortho mg/l	P-totaal kg/d	P-ortho kg/d										
fase 3.4																						
17-Oct-91		1532	7	44	67	3	4.6	5.2	8.0	1.6	3.6	5.5	2.0	3.1	7.2	11.0	0.2	0.3	0.10	0.2	0.10	1
23-Oct-91		1283	7	44	56	3	3.8	4	4.5	1.9	1.6	2.1	3.0	3.8	6.5	9.0	0.2	0.3	0.05	0.1	0.15	20
25-Oct-91		1340	7	45	60	1	1.3	4	5.6	1.6	2.6	3.5	3.3	4.4	7.5	10.7	0.2	0.3	0.06	0.1	0.14	2
29-Oct-91		1303	8	62	81	6	7.8	7	8.9	3.5	3.3	4.3	4.3	5.6	11.1	15.5	0.4	0.5	0.15	0.2	0.25	17
31-Oct-91		1317	7	50	66	4	5.3	5	6.6	2.0	3.0	4.0	3.7	4.9	8.7	12.3	0.3	0.4	0.07	0.1	0.23	5
06-Nov-91		3220	7	24	77	3	9.7	2	6.8	1.3	0.8	2.6	7.0	22.5	9.1	29.3	0.1	0.3	0.05	0.2	0.05	2
08-Nov-91		4209	7	35	147	3	12.6	2	6.3	1.1	0.4	1.7	8.0	33.7	9.5	40.0	0.2	0.8	0.16	0.7	0.04	2
13-Nov-91		2701	8	48	130	2	5.4	4	10.0	1.5	2.2	5.9	3.1	8.4	6.8	18.4	0.2	0.5	0.12	0.3	0.08	1
15-Nov-91		2233	7	40	89	1	2.2	4	8.0	1.7	1.9	4.2	4.3	9.6	7.9	17.6	0.2	0.4	0.12	0.3	0.08	2
19-Nov-91		2122	7	48	102	11	23.3	9	19.5	2.2	7.0	14.9	1.6	3.4	10.8	24.1	0.7	1.5	0.47	1.0	0.23	1
22-Nov-91		1693	7	50	85	3	5.1	5	9.0	2.2	3.1	5.2	2.1	3.6	7.4	13.4	0.3	0.5	0.20	0.3	0.10	1
26-Nov-91		1406	7	56	79	4	5.6	15	21.4	2.2	13.0	18.3	0.8	1.1	16.0	24.2	1.0	1.4	0.65	0.9	0.35	8
29-Nov-91		1226	7	52	64	3	3.7	10	11.8	1.9	7.7	9.4	2.1	2.6	11.7	15.7	0.3	0.4	0.14	0.2	0.16	1
03-Dec-91		1237	7	20	25	4	4.9	10	12.9	6.6	3.8	4.7	1.9	2.4	12.3	16.6	0.4	0.5	0.17	0.2	0.23	1
05-Dec-91		1150	7	51	59	14	16.1	7	8.1	1.8	5.2	6.0	2.7	3.1	9.7	12.3	0.2	0.2	0.05	0.1	0.15	1
09-Dec-91		988	7	56	55	4	4.0	9	9.3	1.6	7.8	7.7	2.1	2.1	11.5	12.5	0.4	0.4	0.15	0.1	0.25	4
13-Dec-91		1060	7	42	45	3	3.2	7	7.2	1.7	5.1	5.4	3.2	3.4	10.0	11.7	0.3	0.3	0.05	0.1	0.25	6
18-Dec-91		2781	7	61	170	8	22.2	12	32.0	1.5	10.0	27.8	1.8	5.0	13.3	38.5	0.4	1.1	0.15	0.4	0.25	8
19-Dec-91		2409	7	54	130	9	21.7	8	20.2	2.6	5.8	14.0	1.8	4.3	10.2	25.7	0.5	1.2	0.17	0.4	0.33	9
23-Dec-91		2406	7	37	89	4	9.6	3	7.5	1.4	1.7	4.1	3.2	7.7	6.3	15.2	0.2	0.5	0.05	0.1	0.15	4
27-Dec-91		1511	7	49	74	4	6.0	7	10.3	1.0	5.8	8.8	1.5	2.3	8.3	12.5	0.2	0.3	0.05	0.1	0.15	6
31-Dec-91		1235	7	55	68	3	3.7	10	12.4	1.0	9.0	11.1	1.4	1.7	11.4	14.1	0.4	0.5	0.05	0.1	0.35	18
03-Jan-92		1085	8	59	64	3	3.3	17	18.4	0.5	16.5	17.9	0.8	0.9	17.8	21.3	0.5	0.5	0.27	0.3	0.23	6
07-Jan-92		1612	7	32	52	3	4.8	8	13.4	1.6	6.7	10.8	1.3	2.1	9.6	16.6	0.3	0.5	0.08	0.1	0.22	5
09-Jan-92		1482	8	50	74	2	3.0	10	15.4	1.4	9.0	13.3	1.3	1.9	11.7	18.6	0.1	0.1	0.07	0.1	0.03	7
14-Jan-92		1322	7	55	73	4	5.3	14	18.5	1.5	12.5	16.5	1.4	1.9	15.4	22.1	0.3	0.4	0.07	0.1	0.23	3
gemiddeld																						
rekenkundig		1764	7	47	80	4.3	7.6	7.6	12.0	1.9	5.7	8.8	2.7	5.6	10.3	18.4	0.3	0.5	0.14	0.3	0.18	5
gewogen				45		4.3		6.8		1.8	5.0		3.2		10.4		0.3		0.17		0.11	

STRIPPERTANK

DATUM	Fase + Periode	TOEVOER					DOSERING					AFVOER								
		debiet P-totaal		P-ortho droogrest		P-gehalte	azijnzuur (70 %)		natronloog (25 %)			P-totaal		P-ortho droogrest		inhoud	slibarb.	verblijf		
		m3/d	mq/l	mq/l	mq/l	kg/d % van ds	slib	debiet specifieke dosering	debiet	pH	slib	voor na	mq/l	mq/l	mq/l	kg/d	m3	1/d	h	
-----																				
fase 3.4																				
17-Oct-91		180	170	0.09	8100	1458	2.1	0.0						170	16.0	7980	1436	39	0.25	5.1
23-Oct-91		189	110	0.07	7270	1374	1.5	20.2	9.3	5.7	0.0	7.12	7.12	140	12.0	7920	1497	43	0.29	5.4
25-Oct-91		176	130	0.41	6880	1211	1.9	20.2	11.7	4.5	0.0			140	16.0	6770	1192	43	0.26	5.8
29-Oct-91		178	140	0.28	6380	1136	2.2	20.2	11.9	3.7	0.0			140	17.0	6580	1171	46	0.24	6.2
31-Oct-91		179	140	0.22	7480	1339	1.9	20.2	10.6	3.5	0.0			150	15.0	7340	1314	55	0.26	7.4
06-Nov-91			210	0.10	11300		1.9	20.2		8.8	0.0			210	11.0	10700		43		
08-Nov-91			210	0.12	10700		2.0	20.2		8.8	0.0			190	12.0	9810		41		
13-Nov-91			220	0.50	11500		1.9	20.2		10.1	0.0			230	14.0	12300		45		
15-Nov-91			220	0.10	10200		2.2	20.2		10.6	0.0			220	12.0	9970		41		
19-Nov-91		180	210	0.19	9830	1769	2.1	22.1	8.8	4.7	16.1	7.07	6.98	210	16.0	9580	1724	45	0.31	6.1
22-Nov-91		180	220	0.09	10000	1800	2.2	22.1	8.1	4.4	0.0	7.11	6.88	190	14.0	10500	1890	40	0.29	5.3
26-Nov-91		180	210	0.34	9500	1710	2.2	23.5	10.3	4.9	16.8			180	16.0	8730	1571	40	0.29	5.3
29-Nov-91		181	140	0.05	6200	1122	2.3	23.5	14.1	4.5	18.0	7.19	7.09	150	14.0	6360	1151	43	0.22	5.7
03-Dec-91		182	150	0.05	6300	1147	2.4	23.5	14.5	4.2	0.0	7.35	7.10	150	15.0	6140	1117	42	0.22	5.5
05-Dec-91		181	140	0.05	5440	985	2.6	24.0	15.2	4.1	16.3	7.33	7.12	140	16.0	6020	1090	42	0.25	5.6
09-Dec-91		166	130	0.05	5330	885	2.4	24.0	18.6	5.4	0.0			140	14.0	5360	890	43	0.19	6.2
13-Dec-91		181	140	0.11	5620	1017	2.5	23.8	17.1	4.2	18.0	7.30	7.07	140	13.0	5300	959	34	0.20	4.6
18-Dec-91		181	210	0.88	8260	1495	2.5	22.1	7.3	3.3	19.2	7.18	7.04	290	23.0	11500	2082	33	0.41	4.4
19-Dec-91		179	202	0.16	9420	1686	2.1	20.6	7.9	2.9	19.2			191	16.0	10100	1808	34	0.32	4.6
23-Dec-91								20.6												
27-Dec-91								20.6												
31-Dec-91								20.6												
03-Jan-92		179	140	0.05	7060	1264	2.0	20.2	11.7	4.9	18.2	7.21	7.05	140	11.0	6630	1187	34	0.20	4.5
07-Jan-92		180	180	0.05	8140	1465	2.2	26.9	12.9	5.0	0.0	7.06	6.88	170	8.2	7960	1433	34	0.27	4.5
09-Jan-92		174	160	0.05	7100	1235	2.3	24.5	15.4	8.8	19.9			140	0.4	6300	1096	33	0.17	4.6
14-Jan-92		180	190	0.05	7320	1318	2.6	27.8	16.3	5.9	0.0	7.24	6.94	150	12.0	6550	1179	36	0.23	4.8
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gemiddeld																				
rekenkundig		179	173	0.18	8058	1338	2.2	21.2	12.3	5.6	7.4	7.20	7.02	173	13.6	8104	1357	40	0.26	5.3
gewogen					7475											7581				

## STRIPPERLIJN-INDIKKER

DATUM	Fase + Periode	OVERLOOPWATER											GESTRIPT SLIB											
		debiet		P-totaal		P-ortho		P-gebonden		droogrest	P-afgifte		Bruto	Netto	Fosfaatafgifte	debiet	P-totaal		P-ortho		droogrest	P-gehalte		
		m3/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/d	kg/d	mgP/(g ds.h)	mgP/g ds	mgP/g ds	mgP/g ds	m3/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	% van ds
=====																								
fase 3.4																								
17-Oct-91		0	16	0.0	11	0.0	5.0	73	0.0	0.22						96	240	23.0	17.0	1.63	11600	1114	1.9	
23-Oct-91		102	12	1.2	11	1.1	1.0	11	1.1	0.30	1.62	0.75				87	300	26.1	15.0	1.31	15400	1340	1.9	
25-Oct-91		92	16	1.5	16	1.5	0.0	17	1.6	0.44	2.57	1.24				84	250	21.0	19.0	1.60	13700	1151	1.7	
29-Oct-91		96	20	1.9	19	1.8	1.0	14	1.3	0.51	3.17	1.56				82	210	17.2	23.0	1.89	6580	540	2.8	
31-Oct-91		97	18	1.7	18	1.7	0.0	22	2.1	0.41	3.01	1.33	2.7			82	260	31.2	21	2.21	12600	1837	1.6	
06-Nov-91	}		21		17		4.0	32								82	380	27.4	27.0	1.58	22400	1594	1.6	
08-Nov-91	}		16		15		1.0	59								83	330	27.4	19.0	1.58	19200	1594	1.6	
13-Nov-91	}		13		12		1.0	60								86	250	21.5	16.0	1.38	13800	1187	1.7	
15-Nov-91	}		19		14		5.0	52								82	280	23.0	16.0	1.31	13700	1123	1.9	
19-Nov-91	}	111	40	4.4	16	1.8	24.0	58	6.4	0.31	1.87	1.03				69	390	26.9	21.0	1.45	19300	1332	1.9	
22-Nov-91	}	113	22	2.5	19	2.1	3.0	54	6.1	0.35	1.84	1.14				67	340	22.8	20.0	1.34	18100	1213	1.8	
26-Nov-91	}	109	21	2.3	18	2.0	3.0	88	9.6	0.40	2.11	1.25				71	270	19.2	19.0	1.35	14200	1008	1.8	
29-Nov-91	}	114	20	2.3	18	2.1	2.0	28	3.2	0.55	3.12	1.78	3.2			67		0.0	23.0	1.54				
03-Dec-91	}	115	21	2.4	18	2.1	3.0	22	2.5	0.63	3.47	1.85				67	320	21.4	27.0	1.81	18200	1219	1.6	
05-Dec-91	}	114	20	2.3	19	2.2	1.0	11	1.3	0.66	3.71	1.99	4.2			67	330	22.1	28.0	1.88	18500	1240	1.6	
09-Dec-91	}	102	22	2.2	19	1.9	3.0	31	3.2	0.56	3.47	2.18				64	350	22.4	18.0	1.15	17100	1094	1.9	
13-Dec-91	}	114	20	2.3	17	1.9	3.0	9	1.0	0.89	4.05	2.02	5.5			67	320	21.4	29.0	1.94	14900	998	2.0	
18-Dec-91	}	113	25	2.8	21	2.4	4.0	19	2.1	0.51	2.22	1.14				68	530	36.0	33.0	2.24	16900	1149	2.9	
19-Dec-91	}	112	27	3.0	23	2.6	4.0	44	4.9	0.61	2.76	1.42	5.6			67	370	24.8	36.0	2.41	19600	1313	1.7	
23-Dec-91	}																							
27-Dec-91	}																							
31-Dec-91	}																							
03-Jan-92	}	112	17	1.9	14	1.6	3.0	41	4.6	0.53	2.39	1.32				67	360	24.1	19.0	1.27	20400	1367	1.7	
07-Jan-92	}	113	22	2.5	18	2.0	4.0	66	7.5	0.58	2.59	1.42	2.6			67	410	27.5	25.0	1.68	21800	1461	1.8	
09-Jan-92	}	107	5	0.6	4	0.4	1.1	20	2.1	0.38	1.74	0.40				67	450	30.2	22.0	1.47	22700	1521	1.9	
14-Jan-92	}	113	19	2.1	15	1.7	4.0	58	6.6	0.57	2.74	1.44	2.8			67	380	25.5	23.0	1.54	20400	1367	1.8	
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gemiddeld																								
rekenkundig		103	20	2.1	16	1.7	3.5	39	3.5	0.49	2.69	1.40	3.8			74	333	23.6	22.4	1.63	16867	1262	1.9	
gewogen			20		17		3.0	34									319		22.0		17054			



DATUM	Fase + influent retour	total	effluent	superatant	spuisib	P-BALANS (kg/d)			
						IN	UIT	gemiddeld	rekenkundig
Periode	strippere					gemiddeld			
=====						rekenkundig			
=====						gewogen			
17-Oct-91	9.5	1.6	11.1	0.3	0.0	7.1	9.2	5.4	9.2
23-Oct-91	6.8	1.3	8.1	0.3	1.1	5.5	5.4	5.4	5.4
25-Oct-91	7.4	1.6	9.0	0.3	1.5	4.3	5.7	48.0	5.7
29-Oct-91	50.4	1.9	52.3	0.5	1.8	6.5	48.0		
31-Oct-91	22.6	2.2	24.8	0.4	1.7	9.5	20.5		
06-Nov-91	16.1	1.6	17.7	0.3		5.5	15.8		
08-Nov-91	12.6	1.6	14.2	0.8		5.5	11.8		
13-Nov-91	9.2	1.4	10.6	0.5		3.7	8.6		
15-Nov-91	8.5	1.3	9.8	0.4		3.7	8.0		
19-Nov-91	12.3	1.4	13.7	1.5	1.8	5.4	9.0		
22-Nov-91	14.4	1.3	15.8	0.5		4.0	11.8		
26-Nov-91	9.1	1.3	10.4	1.4	2.0	6.5	5.7		
29-Nov-91	7.6	1.5	9.2	0.4	2.1	5.2	5.2		
03-Dec-91	8.8	1.8	10.6	0.5	2.1	6.0	6.2		
05-Dec-91	8.1	1.9	10.0	0.2	2.2	6.8	5.7		
09-Dec-91	7.7	1.2	8.9	0.4	1.9	0.0	5.4		
13-Dec-91	8.7	1.9	10.6	0.3	1.9	4.1	6.4		
18-Dec-91	43.4	2.2	45.7	1.1	2.4	4.8	39.9		
19-Dec-91	14.1	2.4	16.5	1.2	2.6	0.0	10.3		
23-Dec-91				0.5					
27-Dec-91				0.3					
31-Dec-91				0.5					
03-Jan-92	8.4	1.3	9.7	0.5	1.6	5.5	6.3		
07-Jan-92	8.1	1.7	9.8	0.5	2.0	5.5	5.6		
09-Jan-92	7.5	1.5	8.9	0.1	0.4	5.3	6.9		
14-Jan-92	8.3	1.5	9.9	0.4	1.7	4.9	6.2		
-----						5.0	11.5		
-----						1.7			
-----						0.5			



AWZI BERGAMBACHT - BIOLOGISCHE DEFOSFATERING

DATUM	Fase + Periode	INFLUENT																			
		debiet m3/d	pH	CZV mg/l	BZVa kg/d		N-kjeidahl mg/l		P-totaal kg/d		P-ortho mg/l		BZV/N -/-	BZV/P -/-	Cl mg/l	alkali- teit mg/l	vluchtige vetzuren mg/l	Fe mg/l	Ca mg/l	Mg mg/l	Al mg/l
-----																					
fase 3.5																					
21-Jan-92		1337	7.5	410	548	185	247	51	68	5.8	8	3.7	5	3.6	31.9	190					50
24-Jan-92		1170	7.8	395	462	180	211	55	64	5.9	7	4.6	5	3.3	30.5	206					50
28-Jan-92		1440	7.6	2210	3182	490	706	80	115	12.0	17	4.8	7	6.1	40.8	238					50
30-Jan-92		1147	7.7	410	470	175	201	53	61	6.6	8	4.3	5	3.3	26.5	216					60
05-Feb-92		2169	7.2	590	1280	245	531	43	93	6.8	15	4.4	10	5.7	36.0	805					80
06-Feb-92		1340	7.6	360	482	140	188	47	63	5.9	8	3.9	5	3.0	23.7	170					80
10-Feb-92		3475	7.4	495	1720	220	765	54	188	6.8	24	4.4	15	4.1	32.4	151					80
13-Feb-92		1650	7.4	430	710	200	330	46	76	6.6	11	3.7	6	4.3	30.3	190					30
19-Feb-92		1302	7.5	395	514	165	215	49	64	5.9	8	4.1	5	3.4	28.0	196					40
21-Feb-92		1238	7.2	390	483	195	241	50	62	6.2	8	3.5	4	3.9	31.5	210					50
26-Feb-92		1461	7.5	660	964	370	541	56	82	11.0	16	3.2	5	6.6	33.6	218					50
28-Feb-92		1537	7.2	1040	1598	390	599	36	55	9.8	15	3.9	6	10.8	39.8	206					60
04-Mar-92		1248	7.3	475	593	190	237	56	70	6.3	8	3.4	4	3.4	30.2	230					60
06-Mar-92		1863	7.2	950	1770	435	810	58	108	12.0	22	4.0	7	7.5	36.3	197					30
11-Mar-92		1687	7.4	1000	1687	325	548	57	96	9.0	15	3.7	6	5.7	36.1	112					50
13-Mar-92		3474	7.3	690	2397	195	677	39	135	6.7	23	2.5	9	5.0	29.1	85					60
17-Mar-92		1695	7.3	360	610	135	229	44	75	4.7	8	3.0	5	3.1	28.7	195					60
19-Mar-92		1518	7.3	375	569	150	228	46	70	5.8	9	3.7	6	3.3	25.9	209					50
24-Mar-92		2560	7.1	380	973	250	640	36	92	6.3	16	2.3	6	6.9	39.7	113					50
02-Apr-92		1658	7.3	340	564	155	257	41	68	5.4	9	3.3	5	3.8	28.7	163					30
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gemiddeld																					
rekenkundig		1748	7.4	618	1079	240	420	50	85	7.3	13	3.7	6	4.8	32.0	215					54
gewogen				617		240		49		7.4		3.4									



## AERATIETANK

DATUM	Fase + Periode	ACTIEF SLUR		gloeï- rest	bezinking rest	verdunning- factor	SVI ml/g	BZV-slib- belasting kg/kg.d	temperatuur oC	slib- leeftijd d	
		droogrest mg/l	kg								
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fase 3.5											
21-Jan-92		2680	3878	30	220	2	164	0.065	9.0	9	
24-Jan-92		2240	3741	28	200	1	128	0.066	8.0	22	
28-Jan-92		2690	3892	23	230	1	122	0.184	9.0		
30-Jan-92		2940	4254	26	250	1	122	0.048	10.0	80	
05-Feb-92		3800	5499	25	240	2	105	0.098	10.0	41	
06-Feb-92		4220	6106	26	260	2	123	0.031	10.0	18	
10-Feb-92		3590	5195	26	260	2	145	0.149	10.0	20	
13-Feb-92		3590	5195	27	250	2	116	0.064	11.0	34	
19-Feb-92		3900	5643	32	260	2	133	0.039	9.0	28	
21-Feb-92		4180	6048	27	260	2	124	0.041	10.0	39	
26-Feb-92		4220	6106	27	280	2	133	0.090	11.0	30	
28-Feb-92		4250	6150	27	300	2	141	0.099	11.5	30	
04-Mar-92		4440	6425	28	320	3	180	0.037	11.5	30	
06-Mar-92		3940	5701	27	260	2	132	0.144	12.0	36	
11-Mar-92											
13-Mar-92		3750	5426	28	240	2	128	0.127	10.5	18	
17-Mar-92		4480	6483	29	300	2	134	0.036	11.5	12	
19-Mar-92		4100	5933	30	280	2	137	0.039	11.5	14	
24-Mar-92		4510	6526	29	290	2	129	0.100	11.0	18	
02-Apr-92		3680	5325	28	270	2	147	0.049	11.5	19	
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gemiddeld											
rekenkundig		3747	5422	28	262	2	134	0.079	10.4	28	
gewogen								0.079			

DATUM	Fase + Periode	EFFLUENT																						
		debiet	pH	CZV		BZVa		N-kjeldahl		N-org.		N-NH4+		N-NO3-		N-totaal		P-totaal		P-ortho		P-gebonden		droog- rest
		m3/d		mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l
-----																								
fase 3.5																								
21-Jan-92		1281	8	59	76	4	5.1	25	32.0	4.0	21.0	26.9	1.5	1.9	26.5	35.4	0.3	0.4	0.05	0.1	0.25	6		
24-Jan-92		1114	8	54	60	3	3.3	22	24.5	2.5	19.5	21.7	1.7	1.9	23.7	27.7	0.2	0.2	0.20	0.2	0.00	4		
28-Jan-92		1388	8	92	128	15	20.8	37	51.4	2.0	35.0	48.6	0.7	1.0	37.7	54.3	2.2	3.1	1.74	2.4	0.46	21		
30-Jan-92		1091	8	56	61	4	4.4	22	24.0	1.0	21.0	22.9	1.5	1.6	23.5	27.0	0.3	0.3	0.11	0.1	0.19	4		
05-Feb-92		2114	7	56	118	4	8.5	14	29.8	0.1	14.0	29.6	2.0	4.2	16.1	34.9	0.5	1.1	0.26	0.5	0.24	7		
06-Feb-92		1286	8	42	54	3	3.9	12	15.6	1.6	10.5	13.5	2.2	2.8	14.3	19.2	0.2	0.3	0.08	0.1	0.12	4		
10-Feb-92		3420	7	50	171	3	10.3	6	20.9	2.5	3.6	12.3	5.0	17.1	11.1	38.6	0.2	0.7	0.05	0.2	0.15	5		
13-Feb-92		1595	8	55	88	4	6.4	5	7.7	0.9	3.9	6.2	3.6	5.7	8.4	13.9	0.2	0.3	0.09	0.1	0.11	4		
19-Feb-92		1247	7	54	67	3	3.7	4	5.0	2.1	1.9	2.4	5.9	7.4	9.9	12.9	0.2	0.2	0.06	0.1	0.14	4		
21-Feb-92		1183	7	56	66	4	4.7	6	7.2	2.1	4.0	4.7	5.1	6.0	11.2	13.9	0.3	0.4	0.09	0.1	0.21	6		
26-Feb-92		1410	8	56	79	5	7.1	5	6.9	1.8	3.1	4.4	2.7	3.8	7.6	11.1	0.4	0.6	0.11	0.2	0.29	5		
28-Feb-92		1483	7	53	79	4	5.9	2	3.0	0.5	1.5	2.2	3.0	4.4	5.0	7.7	0.5	0.7	0.19	0.3	0.31	5		
04-Mar-92		1195	7	54	65	3	3.6	3	3.7	2.3	0.8	1.0	5.6	6.7	8.7	10.9	0.3	0.4	0.06	0.1	0.24	4		
06-Mar-92		1809	7	52	94	6	10.9	10	17.4	2.4	7.2	13.0	1.3	2.4	10.9	20.3	2.5	4.5	1.99	3.6	0.51	7		
11-Mar-92		1633	8	84	137	8	13.1	7	12.1	2.6	4.8	7.8	1.7	2.8	9.1	15.4	0.5	0.8	0.18	0.3	0.32	10		
13-Mar-92		3427	7	54	185	8	27.4	7	24.0	2.4	4.6	4.4	4.4	0.4	11.4	39.6	0.4	1.4	0.10	0.3	0.30	13		
17-Mar-92		1642	7	49	80	5	8.2	6	9.7	5.7	0.2	0.3	2.0	3.3	7.9	13.4	0.3	0.5	0.21	0.3	0.09	3		
19-Mar-92		1467	7	59	87	4	5.9	5	7.6	2.0	3.2	4.7	2.8	4.1	8.0	12.1	0.3	0.4	0.10	0.1	0.20	4		
24-Mar-92		2501	7	52	130	5	12.5	5	11.8	1.5	3.2	8.0	3.1	7.8	7.8	20.0	0.4	1.0	0.15	0.4	0.25	4		
02-Apr-92		1605	7	53	85	4	6.4	4	6.1	1.5	2.3	3.7	4.6	7.4	8.4	13.9	0.3	0.5	0.08	0.1	0.22	5		
-----																								
gemiddeld		1695	7	57	95	5	8.6	10	16.0	2.1	8.3	11.9	3.0	4.6	13.4	22.1	0.5	0.9	0.30	0.5	0.23	6		
rekenkundig				56		5		9		2.4	7.0		2.7	13.1			0.5		0.29		0.24			
gewogen																								



## STRIPPERLIJN-INDIKKER

## |OVERLOOPWATER

## |GESTRIPT SLIB

DATUM	Fase +	debiet P-totaal	P-ortho	P-gebonden	droogrest	P-afgifte snelheid	Bruto P-afgifte	Netto P-afgifte	Fosfaatafgifte capaciteit	debiet	P-totaal	P-ortho	droogrest	P-gehalte slib				
	Periode	mg/l	kg/d	mg/l	kg/d	mgP/(q ds.h)	mgP/q ds	mgP/g ds	mgP/g ds	m3/d	kg/d	kg/d	kg/d	% van ds				
fase 3.5																		
21-Jan-92		56	15	0.8	0.0	34	1.9	0.86	3.10	1.51	34	330	11.2	26.0	0.88	16200	551	1.9
24-Jan-92		56	13	0.7	1.0	32	1.8	1.10	3.86	2.13	34	220	7.5	16.0	0.54	8540	290	2.4
28-Jan-92		52	13	0.7	1.0	34	1.8	0.78	2.77	1.32	36	290	10.4	19.0	0.68	13600	490	2.0
30-Jan-92		56	15	0.8	1.0	35	2.0	0.90	3.14	1.61	34	260	8.8	22.0	0.75	10400	354	2.3
05-Feb-92		55	26	1.4	2.3	1.3	3.0	1.40	4.79	2.37	35	390	13.7	37.0	1.30	16700	585	2.1
06-Feb-92		54	26	1.4	2.4	1.3	2.0	1.16	4.02	1.86	35	530	18.6	43.0	1.51	18100	634	2.7
10-Feb-92		55	32	1.8	2.7	1.5	5.0	1.18	4.04	1.99	35	590	20.7	44.0	1.54	19800	693	2.8
13-Feb-92		55	33	1.8	2.8	1.5	5.0	1.00	3.38	1.75	35	440	15.4	41.0	1.44	19200	672	2.1
19-Feb-92		55	29	1.6	2.9	1.6	0.0	1.14	3.99	2.03	35	410	14.4	44.0	1.54	8740	306	4.2
21-Feb-92		55	32	1.8	2.5	1.4	7.0	1.31	4.56	2.18	35	500	17.5	43.0	1.51	23300	816	2.0
26-Feb-92		51	33	1.7	3.0	1.5	3.0	1.11	4.16	2.04	34	430	14.6	47.0	1.60	18200	619	2.1
28-Feb-92		54	34	1.8	3.2	1.7	2.0	1.00	3.83	2.05	35	570	20.0	43.0	1.51	22500	788	2.3
04-Mar-92		53	31	1.6	2.4	1.3	7.0	0.99	3.55	1.65	35	480	16.8	42.0	1.47	19400	679	2.3
06-Mar-92		54	31	1.7	2.9	1.6	2.0	0.83	2.97	1.59	35	500	17.5	39.0	1.37	22000	770	2.1
11-Mar-92		54	32	1.7	2.9	1.6	3.0	0.97	3.45	1.84	35	470	16.5	39.0	1.37	22100	774	2.0
13-Mar-92		47	33	1.6	2.6	1.2	7.0	0.45	1.78	0.94	33	450	14.9	33.0	1.09	22300	736	1.9
17-Mar-92		53	26	1.4	2.1	1.1	5.0	0.70	2.61	1.35	35	470	16.4	30.0	1.04	25800	898	1.7
19-Mar-92		51	25	1.3	2.0	1.0	5.0	0.72	2.70	1.49	35	500	17.4	24.0	0.83	27000	937	1.8
24-Mar-92		59	26	1.5	2.0	1.2	6.0	0.53	1.88	1.11	30	500	15.2	27.0	0.82	26900	818	1.8
02-Apr-92		53	22	1.2	1.9	1.0	3.0	0.58	2.01	1.34	36	480	17.4	14.0	0.51	24300	882	1.9

gemiddeld

rekenkundig

gewogen

54	26	1.4	23	1.2	3.4	82	4.4	0.94	3.33	1.71	4.6	35	441	15.2	33.7	1.16	19254	664	2.2
26	22	3.7	81									434	33.1				18971		



SPUI-SLIBINDIKKER

DATUM	Fase + Periode	OVERLOOPWATER			INGEDIKT SLIB						SLIB AFGEVOERD		
		P-totaal		droog- rest	debiet	P-totaal		P-ortho droogrest		P-totaal droog- rest			
		mg/l	mg/l	mg/l	m3/d	mg/kg ds	kg/d	mq/l	%	kg ds/d	m3	mg/kg ds	%
=====													
fase 3.5													
21-Jan-92		8.4	0.1	32	27	19510	8.3	36	1.6	425.6			
24-Jan-92		22.0	0.3	856	6	21295	3.2	93	2.6	148.2			
28-Jan-92		7.6	5.3	44	10	17870	4.9	95	2.9	275.5	130	20150	2.4
30-Jan-92		5.4	4.0	23	2	19250	1.0	81	2.8	53.2			
05-Feb-92					4	19330	2.6	74	3.5	133.0	105	18010	2.9
06-Feb-92					9	19270	6.6	71	3.7	340.4			
10-Feb-92		230.0	3.1	7650	10	21150	5.4	77	2.7	256.5			
13-Feb-92		200.0	2.2	6560	6	23120	3.6	99	2.7	153.9			
19-Feb-92		260.0	3.7	10400	8	23120	4.7	101	2.7	205.2			
21-Feb-92		160.0	2.0	5440	6	23030	3.5	87	2.7	153.9			
26-Feb-92		230.0	8.5	9390	8	21200	4.4	90	2.7	205.2			
28-Feb-92		210.0	1.0	8080	8	21220	4.4	86	2.7	205.2			
04-Mar-92		180.0	0.5	6760	8	19460	4.1	75	2.8	212.8			
06-Mar-92		280.0	6.2	11200	6	20630	3.3	67	2.8	159.6			
11-Mar-92		150.0	0.5	5740	11	18295	5.8	28	2.8	319.2			
13-Mar-92		240.0	3.6	9010	11	19550	5.8	58	2.6	296.4	75	17245	3.5
17-Mar-92		170.0	0.3	6820	21	17945	9.4	42	2.5	522.5			
19-Mar-92		120.0	0.2	4930	21	20670	9.1	41	2.1	438.9			
24-Mar-92		180.0	0.3	8820	15	18770	6.8	44	2.4	364.8	190	20960	2.0
02-Apr-92		160.0	0.3	6930	11	19230	5.5	47	2.5	285.0	105	20800	2.0
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gemiddeld											605		
rekenkundig		156.3	2.3	6038	10	20196	5.1	70	2.7	257.8		19433	2.6
gewogen													

DATUM	P-BALANS (kg/d)			UIT		
	IN	OUT	DIFFERENTIAAL	effluent	supernatant	spuislib
Periode	influx	retour	totaal	deelstroom	gemeten	berekend
fase 3.5						
21-Jan-92	7.8	0.9	8.6	0.4	0.8	8.3
24-Jan-92	6.9	0.5	7.4	0.2	0.7	3.2
28-Jan-92	17.3	0.7	18.0	3.1	0.6	4.9
30-Jan-92	7.6	0.7	8.3	0.3	0.8	1.0
05-Feb-92	14.7	1.3	16.0	1.1	1.3	2.6
06-Feb-92	7.9	1.5	9.4	0.3	1.3	6.6
10-Feb-92	23.6	1.5	25.2	0.7	1.5	5.4
13-Feb-92	10.9	1.4	12.3	0.3	1.5	3.6
19-Feb-92	7.7	1.5	9.2	0.2	1.6	4.7
21-Feb-92	7.7	1.5	9.2	0.4	1.4	3.5
26-Feb-92	16.1	1.6	17.7	0.6	1.5	4.4
28-Feb-92	15.1	1.5	16.6	0.7	1.7	4.4
04-Mar-92	7.9	1.5	9.3	0.4	1.3	4.1
06-Mar-92	22.4	1.4	23.7	4.5	1.6	3.3
11-Mar-92	15.2	1.4	16.5	0.8	1.6	5.8
13-Mar-92	23.3	1.1	24.4	1.4	1.2	5.8
17-Mar-92	8.0	1.0	9.0	0.5	1.1	9.4
19-Mar-92	8.8	0.8	9.6	0.4	1.0	9.1
24-Mar-92	16.1	0.8	16.9	1.0	1.2	6.8
07-Apr-92	9.0	0.5	9.5	0.5	1.0	5.5
gemiddeld						
rekenkundig	12.7	1.2	13.8	0.9	1.2	5.1
gewogen						10.6





AWZI BERGAMBACHT - BIOLOGISCHE DEFOSSIFERIE

INFLUENT																				
DATUM	Fase + Periode	debiet m <sup>3</sup> /d	pH	CZV mg/l	BZVa kg/d	kg/d	mg/l	N-kjeidahl kg/d	P-totaal kg/d	P-ortho mg/d	BZV/N -/-	BZV/P -/-	C1 mg/d	alkali- teit mg/l	vluchtige vetzuren mg/l	Fe mg/l	Ca mg/l	Mg mg/l	A1 mg/l	
fase 3.6																				
07-Apr-92		1494	7.1	480	717	180	269	51	76	7.0	10	4.5	7	3.5	25.7	177				60
10-Apr-92		1355	7.7	375	508	175	237	49	66	6.1	8	4.5	6	3.6	28.7	181				40
13-Apr-92		1227	7.5	380	466	165	202	58	71	7.1	9	5.2	6	2.8	23.2	151				40
15-Apr-92		1680	7.5	440	739	165	277	49	80	6.6	11	3.8	6	3.4	25.0	158				40
22-Apr-92		1480	7.3	460	681	185	274	47	70	6.7	10	4.4	7	3.9	27.6	175				50
24-Apr-92		1323	7.4	495	655	165	218	50	66	6.2	8	4.3	6	3.3	26.6	176				70
28-Apr-92		1605	7.4	530	851	210	337	45	72	6.3	10	4.2	7	4.7	33.3	162				

gemiddeld																				
rekenkundig		1452	7.4	451	660	178	259	50	72	6.6	10	4.4	6	3.6	27.2	169				50
gewogen				455		178		50		6.8		4.1								

AERATIETANK

DATUM	Fase + Periode	ACTIEF SLIB		gloeirest	- bezink. ml/l	- bezinking ml/l	verduunnings- factor -/-	SVI ml/g	BZV-slib belasting kg/kg.d	temperatuur oC	slib- leeftijd d
		droogrest mg/l	kg								
=====											
fase 3.6											
07-Apr-92		3290	4761	29	260	2	158	0.057	12	19	
10-Apr-92		3580	5180	29	290	2	162	0.046	13	16	
13-Apr-92		3670	5310	28	300	2	163	0.039	13		
15-Apr-92		3440	4978	28	250	2	145	0.057	13	15	
22-Apr-92		3630	5253	27	300	2	165	0.053	14	33	
24-Apr-92		3370	4876	29	280	2	139	0.045	14	16	
28-Apr-92		3580	5180	29	240	2	134	0.066	14	33	
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gemiddeld											
rekenkundig		3509	5077	28	274	2	152	0.052	13	22	
gewogen								0.052			

EFFLUENT																						
debiet pH	CZV	BZVa	N-kjel[dah]	N-org.	N NH4+	N-NO3	N totaal	P-totaal	P-ortho	P-gebonden	droog-	rest										
mg/l	kg/d	kg/d	kg/d	kg/d	kg/d	kg/d	kg/d	kg/d	kg/d	kg/d	mg/l	mg/l										
Periode	+																					
DATUM	Fase +																					
Periode	3/d	1	2	3	4	5	6	7	8	9	10	11	12									
fase 3 6																						
07-Apr-92		1421	7	49	70	3	4.3	5	6.7	2.1	2.6	3.7	5.9	8.4	10.6	15.8	0.5	0.7	0.31	0.4	0.19	4
10-Apr-92		1296	8	56	73	4	5.2	9	11.0	2.4	6.1	7.9	4.0	5.2	1.5	16.9	0.5	0.6	0.30	0.4	0.20	4
13-Apr-92		1156	8	50	58	4	4.6	4	4.5	2.0	1.9	2.2	3.7	4.3	7.6	9.3	0.8	0.9	0.57	0.7	0.23	5
15-Apr-92		1607	8	60	96	5	8.0	4	6.1	2.1	1.7	2.7	4.0	6.4	7.8	13.1	0.6	1.0	0.36	0.6	0.24	4
22-Apr-92		1418	7	54	77	5	7.1	5	6.8	2.0	2.8	4.0	2.6	3.7	7.4	11.0	1.0	1.4	0.67	1.0	0.33	10
24-Apr-92		1258	7	59	74	4	5.0	4	4.5	1.8	1.8	2.3	2.0	2.5	5.6	7.4	0.8	1.0	0.56	0.7	0.24	3
28-Apr-92		1542	8	52	80	5	7.7	6	9.6	1.0	5.2	8.0	0.8	1.2	7.0	11.2	1.5	2.3	1.33	2.1	0.17	5

gemiddeld	rekenkundig	gewogen
1385	7	54
75	4	6.0
5	5	7.0
1.9	3.2	4.4
3.3	4.5	8.4
12.1	0.8	1.1
0.59	0.8	0.23
0.57	0.8	0.22

## STRIPPERTANK

DATUM	Fase + Periode	TOEVOER				DOSERING				AFVOER									
		debiet m <sup>3</sup> /d	P-totaal mg/l	P-ortho mg/l	P-gehalte slib % van ds	debiet l/d	specifieke dosering mgAc/q ds	natronloog debiet l/d	pH slib voor	P totaal mg/l	P-ortho mg/l	droogrest kg/d	inhoud m <sup>3</sup>	slibarb. factor l/d	verblijf tijd h				
fase 3.6																			
07-Apr-92		89	220	0.31	7570	674	2.9	19.2	20.9	6.7	0.0	190	16.0	7110	633	13	0.07	3.5	
10-Apr-92		89	200	0.28	7850	699	2.5	20.6	20.2	7.9	27.8	190	18.0	7940	707	13	0.14	3.5	
13-Apr-92		87	200	0.47	7230	629	2.8	21.1	24.2	6.5	0.0	190	19.0	6920	602	13	0.06	3.5	
15-Apr-92		88	220	1.63	8810	775	2.5	21.1	18.4	6.1	0.0	240	32.0	8990	791	13	0.07	3.5	
22-Apr-92		86	220	0.24	7750	667	2.8	21.6	23.5	6.5	28.8	210	20.0	7360	633	13	0.09	3.7	
24-Apr-92		90	200	0.19	7160	644	2.8	20.2	23.8	5.4	0.0	190	20.0	6500	585	13	0.11	3.5	
28-Apr-92		88	240	1.13	8540	752	2.8	20.2	18.8	5.0	26.4	230	27.0	8400	739	13	0.08	3.7	
gemiddeld																			
rekenkundig		88	214	0.61	7844	691	2.7	20.6	21.4	6.3	11.9	206	21.7	7603	670	13	0.09	3.6	
gewogen					7852									7614					

STRIPPERLIJN-INDIKKER

OVERLOOPWATER

DATUM	Fase + Periode	GELIIPPT SLIB										
		debiet P-totaal mg/l	P-ortho mg/d	P-gebonden mg/l	droogrest mg/l	P-afgifte mg/d	snelheid mgP/(a ds h)	Bruto P-afgifte mgP/q ds	Netto P-afgifte mgP/q ds	Fosfaatcapaciteit mgP/q ds	debiet P-totaal m <sup>3</sup> /d	P-ortho kg/d

fase 3.6

07-Apr-92		74	26	1.9	22	1.6	4.0	54	4.0	0.88	3.12	2.56	5.3	16	480	7.4	23.0	0.36	22700	352	2.0
10-Apr-92		59	52	3.1	23	1.4	29.0	42	2.5	0.73	2.56	1.92		30	470	14.1	15.0	0.45	23700	711	1.9
13-Apr-92		71	29	2.1	25	1.8	4.0	72	5.1	1.06	3.74	2.96		16	440	7.0	30.0	0.47	20700	327	2.0
15-Apr-92		73	30	2.2	27	2.0	3.0	61	4.5	0.86	3.02	2.50	4.6	15	490	7.3	28.0	0.41	24200	358	1.9
22-Apr-92		62	30	1.8	24	1.5	6.0	92	5.7	1.00	3.65	2.34		24	450	11.0	34.0	0.83	19900	486	2.1
24-Apr-92		65	31	2.0	27	1.8	4.0	77	5.0	1.26	4.41	3.00		25	460	11.5	33.0	0.83	21800	545	2.0
28-Apr-92		63	32	2.0	29	1.8	3.0	97	6.1	1.03	3.76	2.47	4.8	25	390	9.8	38.0	0.95	17400	435	2.0

gemiddeld

rekenkundig		67	33	2.2	25	1.7	8	71	4.7	0.97	3.47	2.53	4.9	22	454	9.7	28.7	0.61	21486	459	2.0
gewogen		33			25		70							441		27.7			20864		

SPIJT-SLIBINDIKKER

DATUM	Fase + Periode	OVERLOOPWATER		INGEDIJKT SLIB		P-ortho droog- rest mg/l	P-ortho droogrest %	P-ortho droogrest mg/l	SI LB m3	AFGEVOERD P-totaal droog- rest mg/kg ds		
		P-totaal mg/l	rest mg/l	debiet m3/d	P-totaal kg/d							
fase 3.6												
07-Apr-92				11	21145	7.4	23	2.3	249.7	105	19710	2.4
10-Apr-92				14	19831	14.1	15	2.4	331.8			
13-Apr-92				14	20248	7.0	30	2.1	289.8			
15-Apr-92				14	22613	7.3	28	2.4	338.8	105	23460	1.5
22-Apr-92				8	22613	11.0	34	2.0	159.2			
24-Apr-92				14	21101	11.5	33	2.2	305.2			
28-Apr-92				9	22414	9.8	38	1.7	156.6			
-----												
gemiddeld				12	21424	9.7	29	2.1	261.6	210	21585	2.0
rekenkundig												
gewogen												

DATUM	Fase + Periode	P-BALANS (kg/d)			UIT		
		influx	retour	totaal	effluent	supernatant	spuislib
		stripper	deelstroom	gemeten	berekend		
-----							
fase 3.6							
07-Apr-92		10.5	0.4	10.8	0.7	1.6	7.4
10-Apr-92		8.3	0.5	8.7	0.6	1.4	14.1
13-Apr-92		8.7	0.5	9.2	0.9	1.8	6.0
15-Apr-92		11.1	0.4	11.5	1.0	2.0	7.3
22-Apr-92		9.9	0.8	10.7	1.4	1.5	11.0
24-Apr-92		8.2	0.8	9.0	1.0	1.8	11.5
28-Apr-92		10.1	1.0	11.1	2.3	1.8	9.8
-----							
gemiddeld							
rekenkundig		9.5	0.6	10.2	1.1	1.7	10.2
gewogen							6.7





AWZI BERGAMBACHT - BIOLOGISCHE DEFOSFATERING

DATUM	Fase + Periode	INFLUENT															
		debiet m <sup>3</sup> /d	pH	CZV mg/l	BZVa kg/d	mg/l	BZVb kg/d	N-kjeldahl mg/l	P-totaal kg/d	P-ortho mg/l	BZV/N kg/d	BZV/P kg/d	alkali- teit mg/l	vluchtige vetzuren mg/l	Ca mg/l	Mg mg/l	Al mg/l
fase 3.7																	
06-May-92		1424	7.4	350	498	160	228	48	68	5.9	8	3.5	5	3.3	27.1	150	60
08-May-92		1442	7.4	390	562	170	245	45	65	6.4	9	4.0	6	3.8	26.6	177	40
11-May-92		1595	7.6	315	502	115	183	36	57	5.0	8	3.3	5	3.2	23.0	183	40
14-May-92		1430	7.6	350	501	150	215	44	63	3.9	6	3.5	5	3.4	38.5	181	70
19-May-92		1503	7.6	885	1330	280	421	57	86	9.4	14	4.6	7	4.9	29.8	224	80
22-May-92		1510	7.4	410	619	170	257	44	66	6.3	10	3.9	6	3.9	27.0	194	30
25-May-92		1396	7.4	335	468	125	175	48	67	6.6	9	4.4	6	2.6	18.9	155	80
03-Jun-92		2051	7.4	810	1661	285	585	53	109	11.0	23	3.5	7	5.4	25.9	185	100
12-Jun-92		1864	7.4	245	457	105	196	31	58	5.1	10	3.0	5	3.4	20.6	197	80
19-Jun-92		1761	7.3	570	1004	215	379	55	97	9.7	17	4.4	8	3.9	22.2	202	90
23-Jun-92		1454	7.5	425	618	160	233	47	68	6.8	10	3.7	5	3.4	23.5	175	60

gemiddeld	rekenkundig	gewogen													
1585	7.5	462	747	176	283	46	73	6.9	11	3.8	6	3.7	25.7	184	66
		471		179		46	6.9	3.8							

## AERATIETANK

DATUM	Fase + Periode	ACTIEF SLIB		gloeirest %	bezinking ml/l	verduunningsfactor -/-	SVI ml/q	RZV-slibbelasting kg/kg.d	temperatuur oC	slibleeftijd d	
		droogrest mg/l	kg								
fase 3.7											
06-May-92		4340	6280	26	300	2	138	0.037	15	36	
08-May-92		4070	5889	28	280	2	138	0.042	16	22	
11-May-92		4420	6396	28	300	2	136	0.029	15	25	
14-May-92		3960	5730	28	280	2	141	0.038	16	19	
19-May-92		4140	5991	28	270	2	130	0.071	18	23	
22-May-92		3970	5745	29	260	2	131	0.045	19	25	
25-May-92		3700	5354	30	240	2	130	0.033	20	24	
03-Jun-92		4080	5904	29	230	2	113	0.100	19	25	
12-Jun-92		4480	6483	31	260	2	97	0.031	19	24	
19-Jun-92		3920	5672	31	270	2	115	0.068	19	18	
23-Jun-92		3800	5499	40	210	2	92	0.043	20	26	
-----											
gemiddeld rekenkundig gewogen		4080	5904	30	264	2	124	0.049	18	24	
								0.049			

DATUM	Fase + Periode	EFFLUENT																				
		debiet m <sup>3</sup> /d	pH	CZV		BZVa		N-kjeldahl		N-org. N NH <sub>4</sub> <sup>+</sup>		N-NO <sub>3</sub> <sup>-</sup>		N-totaal		P-totaal		P ortho		P-gebonden	droog- rest	
		mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	mg/l	kg/d	
-----																						
	fase 3.7																					
06-May-92		1370	7	38	52	4	5.5	5	6.2	1.8	2.7	3.7	0.6	0.8	5.1	7.3	0.7	1.0	0.49	0.7	0.21	3
08-May-92		1379	8	56	77	3	4.1	3	4.7	1.5	1.9	2.6	0.8	1.1	4.2	6.1	0.5	0.7	0.22	0.3	0.28	0
11-May-92		1559	8	43	67	4	6.2	2	3.7	1.1	1.3	2.0	0.7	1.1	3.1	4.9	0.4	0.6	0.16	0.2	0.24	2
14-May-92		1368	8	47	64	3	4.1	3	3.4	1.3	1.2	1.6	1.4	1.9	3.9	5.6	0.2	0.3	0.09	0.1	0.11	2
19-May-92		1440	8	64	92	3	4.3	6	8.9	1.5	4.7	6.8	0.8	1.2	7.0	10.5	1.5	2.2	1.10	1.6	0.40	1
22-May-92		1448	8	43	62	3	4.3	3	4.8	2.0	1.3	1.9	0.7	1.0	4.0	6.0	0.6	0.9	0.20	0.3	0.40	2
25-May-92		1335	8	43	57	2	2.7	3	3.3	1.2	1.3	1.7	0.6	0.8	3.1	4.3	0.5	0.7	0.30	0.4	0.20	1
03-Jun-92		1990	8	51	101	4	8.0	5	10.0	1.4	3.6	7.2	0.3	0.6	5.3	10.9	1.2	2.4	0.80	1.6	0.40	2
12-Jun-92		1801	8	34	61	2	3.6	4	6.3	1.2	2.3	4.1	0.4	0.7	3.9	7.3	0.8	1.4	0.50	0.9	0.30	2
19-Jun-92		1696	8	43	73	2	3.4	4	7.3	1.6	2.7	4.6	1.2	2.0	5.5	9.7	0.4	0.7	0.20	0.3	0.20	2
23-Jun-92		1390	8	49	68	3	4.2	4	4.9	1.4	2.1	2.9	1.3	1.8	4.8	7.0	0.4	0.6	0.20	0.3	0.20	3
-----																						
gemiddeld																						
rekenkundig		1525	8	46	71	3	4.6	4	5.8	1.5	2.3	3.6	0.8	1.2	4.5	7.2	0.7	1.0	0.39	0.6	0.27	2
gewoogen				47		3		4		1.4	2.4		0.8		4.7		0.7		0.39		0.26	

STRIPPERTANK																			
DATUM	Fase + Periode	TOEVOER					DOSERING					AFVOER							
		m3/d	mg/l	mg/l	kg/d	% van ds	slib	debiet	azijnzuur (70 %)	debiet	natronloog (25 %)	pH slib	P-totaal	P-ortho droogrest	inhoud	slibarb. verblijf			
							l/d	mgAc/q ds	mgAc/mgPortho	l/d	voor	na	mg/l	mg/l	kg/d	m3	factor	tijd	
=====																			
fase 3.7																			
06-May-92		80	220	0.26	9700	776	2.3	16.3	17.4	5.1	28.8		190	21.0	8090	647	13	0.08	3.9
08-May-92		88	240	0.17	8940	787	2.7	17.3	15.7	4.9	0.0		230	25.0	8640	760	13	0.08	3.5
11-May-92		61	260	0.19	10200	622	2.5	20.6	23.1	7.7	30.7		250	27.0	10100	616	13	0.08	5.0
14-May-92		87	210	0.14	8260	719	2.5	20.6	9.4	5.5	0.0		200	11.0	17500	1523	13	0.08	3.7
19-May-92		88	240	0.44	8820	776	2.7	17.3	14.7	5.5	25.4		240	24.0	9220	811	13	0.08	3.6
22-May-92		87	270	0.17	9430	820	2.9	20.6	21.3	5.0	30.2		210	26.0	7700	670	13	0.07	3.7
25-May-92		86	230	0.23	8230	708	2.8	17.3	19.0	4.1	25.4		210	31.0	7280	626	13	0.08	3.6
03-Jun-92		86	290	0.97	9970	857	2.9	17.3	13.5	3.4	0.0		290	35.0	10300	886	13	0.07	3.7
12-Jun-92		88	260	0.58	11800	1038	2.2	23.0	18.2	5.9	31.2		250	22.0	9950	876	13	0.08	3.6
19-Jun-92		90	260	0.18	9410	847	2.8	23.0	14.0	6.1	31.2		340	28.0	12600	1134	13	0.08	3.5
23-Jun-92		88	240	0.12	8360	736	2.9	23.0	12.7	6.1	31.2		370	34.0	14200	1250	13	0.05	3.5
=====																			
gemiddeld																			
rekenkundig		84	247	0.31	9375	790	2.6	19.7	16.3	5.4	21.3		253	25.8	10507	891	13	0.07	3.8
gewogen															10607				

STRIPPERLIJN-INDIKKER

OVFRLIOPWATER

GESTRIPT SLIB

DATUM	Fase +		P-ortho kg/d	P-gebonden mg/l	droogrest mg/l	snelheid mgP/(a ds h)	Bruto P-afgifte mgP/a ds	Netto P-afgifte mgP/a ds	Fosfaatlaafgift- Capaciteit mgP/q ds	debiet m <sup>3</sup> /d	P-totaa kg/d	P-ortho mg/l	P-totaa kg/d	droogrest kg/d	P-gehalte slib % van ds		
	mg/d	kg/d															
06-May-92	54	38 2.1 31	1.7	7.0	73 3.9	0.87	3.43	2.59		26	390	10.1	21.0	0.55	18300	476	2.0
08-May-92	63	35 2.2 29	1.8	6.0	69 4.3	0.92	3.22	2.40		25	420	10.5	25.0	0.63	19700	493	2.0
11-May-92	36	44 1.6 33	1.2	11.0	78 2.8	0.59	2.98	1.93	3.9	25	450	11.3	26.0	0.65	19500	488	2.2
14-May-92	62	31 1.9 29	1.8	2.0	125 7.8	0.46	1.69	1.18		25	350	8.8	31.0	0.78	17500	438	1.8
19-May-92	63	27 1.7 22	1.4	5.0	37 2.3	0.75	2.69	1.71	4.4	25	430	10.8	32.0	0.80	18800	470	2.1
22-May-92	62	33 2.0 31	1.9	2.0	60 3.7	1.17	4.29	2.87		25	390	9.8	38.0	0.95	17100	428	2.1
25-May-92	61	38 2.3 31	1.9	7.0	73 4.5	1.29	4.66	3.02	5.5	25	450	11.3	41.0	1.03	16100	403	2.5
03-Jun-92	61	47 2.9 39	2.4	8.0	68 4.1	1.08	3.96	2.69	6.8	25	370	9.3	45.0	1.13	17100	428	1.9
12-Jun-92	63	38 2.4 31	2.0	7.0	52 3.3	0.85	3.06	2.23	3.2	25	440	11.0	29.0	0.73	19700	493	2.1
19-Jun-92	65	33 2.1 28	1.8	5.0	87 5.7	0.65	2.31	1.60	4.3	25	450	11.3	32.0	0.80	18200	455	2.3
23-Jun-92	64	33 2.1 29	1.9	4.0	97 6.2	0.59	2.10	1.49		24	340	8.2	32.0	0.77	12500	300	2.5

gemiddeld

rekenkundig

gewoogen

4.7

2.15

25

407

10.2

32.0

0.80

17682

443

32.0

17720

SUIJ-SLIBINDIKKER													
		OVERLOOPWATER				INGEDIKT SLIB				SLIB		AFGFVOERD	
DATUM	Fase + Periode	P-ortho droog-		P-totaal		P-ortho droog-		P-ortho droog-		m <sup>3</sup>	mg/kg ds	P-totaal	droog- rest
		mg/l	rest mg/l	m <sup>3</sup> /d	mg/kg ds	kg/d	mg/l	%	kg ds/d				
fase 3.7													
06-May-92				10	21311	10.1	21	1.8	173.9	105	25310	2.0	
08-May-92				13	21320	10.5	25	2.0	262.0				
11-May-92				13	23077	11.3	26	2.0	259.4	105	21770	1.3	
14-May-92				17	20000	8.8	31	1.8	284.0				
19-May-92				14	22872	10.8	32	1.9	255.7				
22-May-92				14	22807	9.8	38	1.7	232.6				
25-May-92				14	27950	11.3	41	1.6	219.0	176	24690	2.0	
03-Jun-92				14	21637	9.3	45	1.7	232.6	105	22040	1.9	
12-Jun-92				14	22335	11.0	29	2.0	275.8				
19-Jun-92				18	24725	7.9	32	1.8	318.5				
23-Jun-92				17	27200	5.8	32	1.3	212.5	105	23650	2.0	
gemiddeld													
rekenkundig		14	23203	9.7	32	1.8	248.7			596	23492	1.8	
gewogen													

P-BALANS (kg/d)		UIT			
DATUM	Fase + Periode	influent retour stripper	totaa	effluent	supernatant sponslib
				deelstroom	opmeten berekend
-----					
fase 3.7					
06-May-92		8.4	0.5	8.9	1.0 1.7 10.1 5.8
08-May-92		9.2	0.6	9.9	0.7 1.8 10.5 6.7
11-May-92		8.0	0.7	8.6	0.6 1.2 11.3 6.2
14-May-92		5.6	0.8	6.4	0.3 1.8 8.8 3.5
19-May-92		14.1	0.8	14.9	2.2 1.4 10.8 10.6
22-May-92		9.5	1.0	10.5	0.9 1.9 9.8 6.7
25-May-92		9.2	1.0	10.2	0.7 1.9 11.3 6.7
03-Jun-92		22.6	1.1	23.7	2.4 2.4 9.3 17.8
12-Jun-92		9.5	0.7	10.2	1.4 2.0 11.0 6.1
19-Jun-92		17.1	0.8	17.9	0.7 1.8 7.9 14.6
23-Jun-92		9.9	0.8	10.7	0.6 1.9 5.8 7.5
-----					
gemiddeld					
rekenkundig		11.2	0.8	12.0	1.0 1.8 9.7 8.4
gewogen					





**FOSFAAT-RELEASE**

INVLOED ACETAATDOSERING FASE 3.4

datum: 06-01-1992

monster: 5 liter retour slib

droge stof: 6 g/l

=====

spec. acetaat-dosering

(mg Ac/g DS)

tijd (minuten)	0		14		24		
	nitraat-N (mg/l)	ortho-P (mg/l)	mg P/g DS	ortho-P (mg/l)	mg P/gDS	ortho-P (mg/l)	mg P/g DS
0	0.3	0.30	0.05	0.30	0.05	0.30	0.05
30		0.7	0.11	13.5	2.21	13.2	2.16
60		1.1	0.18	21.4	3.51	21.8	3.57
120		3.2	0.52	28.6	4.69	33.8	5.54
180		3.6	0.59	28.0	4.59	39.0	6.39
240		5.8	0.95	28.2	4.62	39.4	6.46
300		7.8	1.28	30.2	4.95	41.4	6.79

datum: 07-01-1992

monster: 5 liter retour slib

droge stof: 8 g/l

=====

spec. acetaat-dosering

(mg Ac/g DS)

tijd (minuten)	0		11		18		
	nitraat-N (mg/l)	ortho-P (mg/l)	mg P/g DS	ortho-P (mg/l)	mg P/gDS	ortho-P (mg/l)	mg P/g DS
0	0.2	0.05	0.01	0.05	0.01	0.05	0.01
30		0.1	0.02	9.3	1.16	9.9	1.24
60		2.1	0.26	16.3	2.04	16.8	2.10
120		2.7	0.34	23.0	2.88	23.0	2.88
180		3.2	0.40	26.4	3.30	27.4	3.43
240		4.4	0.55	25.6	3.20	28.4	3.55
300		5.4	0.68	25.9	3.24	28.8	3.60

datum: 08-01-1992  
 monster: 5 liter retour slib  
 droge stof: 7.7 g/l

=====							
spec. acetaat-dosering							
(mg Ac/g DS)		0		20		40	
nitraat-N (mg/l)	ortho-P (mg/l)	mg P/g DS	ortho-P (mg/l)	mg P/gDS	ortho-P (mg/l)	mg P/g DS	
tijd (minuten)							
0	0.3	0.05	0.01	0.05	0.01	0.05	0.01
30		0.4	0.05	9.3	1.21	8.1	1.05
60		0.3	0.03	16.4	2.13	16.1	2.09
120		1.5	0.19	23.2	3.01	23.8	3.09
180		4.0	0.52	27.6	3.58	27.0	3.51
240		4.2	0.55	28.2	3.66	28.0	3.64
300		5.8	0.75	29.4	3.82	29.0	3.77

datum: 09-01-1992  
 monster: 5 liter retour slib  
 droge stof: 8.4 g/l

=====							
spec. acetaat-dosering							
(mg Ac/g DS)		5		9		15	
nitraat-N (mg/l)	ortho-P (mg/l)	mg P/g DS	ortho-P (mg/l)	mg P/gDS	ortho-P (mg/l)	mg P/g DS	
tijd (minuten)							
0	0.3	0.07	0.01	0.07	0.01	0.07	0.01
30		6.1	0.73	14.0	1.67	13.9	1.65
60		18.0	2.14	20.8	2.48	21.0	2.50
120		16.0	1.90	25.2	3.00	25.4	3.02
180		16.6	1.96	27.8	3.31	28.2	3.36
240		18.2	2.17	30.4	3.62	30.2	3.60
300		17.6	2.10	29.8	3.55	29.8	3.55

SAMENVATTING          FASE    3.4

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acetaat-dosering:    0 mg Ac/g DS          5 mg Ac/g DS          10 mg Ac/g DS          15 mg Ac/g DS          20 mg Ac/g DS          40 mg Ac/g DS

t (min)	P-afgifte (mg P/g ds)					
0	0.02	0.01	0.01	0.03	0.01	0.01
30	0.06	0.73	1.41	1.93	1.21	1.05
60	0.16	2.14	2.26	3.00	2.13	2.09
120	0.35	1.90	2.94	3.86	3.01	3.09
180	0.50	1.98	3.30	3.97	3.58	3.51
240	0.68	2.17	3.41	4.11	3.66	3.64
300	0.90	2.10	3.39	4.25	3.82	3.77

FOSFAAT-RELEASE

INVLOED ACETAATDOSERING FASE 3.5

datum: 11-03-1992

droge stof: 8.0 g/l

spec. acetaat-dosering		0		14		28	
(mg Ac/g DS)							
	nitraat-N (mg/l)	ortho-P (mg/l)	mg P/g DS	ortho-P (mg/l)	mg P/gDS	ortho-P (mg/l)	mg P/g DS
tijd (minuten)							
0	1.3	0.07	0.01	0.07	0.01	0.07	0.01
30		0.2	0.03	10.7	1.34	10.9	1.36
60		0.4	0.06	19.2	2.40	19.0	2.38
120		1.1	0.13	30.0	3.75	30.3	3.79
180		1.5	0.18	34.4	4.30	35.2	4.40
240		2.4	0.30	38.5	4.81	38.5	4.81
300		3.0	0.36	37.5	4.69	39.5	4.94

datum: 12-03-1992

droge stof: 9.2 g/l

spec. acetaat-dosering		0		12		24	
(mg Ac/g DS)							
	nitraat-N (mg/l)	ortho-P (mg/l)	mg P/g DS	ortho-P (mg/l)	mg P/gDS	ortho-P (mg/l)	mg P/g DS
tijd (minuten)							
0	1.2	0.47	0.05	0.47	0.05	0.47	0.05
30		3.0	0.33	11.9	1.29	13.2	1.43
60		3.6	0.39	21.4	2.33	22.6	2.46
120		5.1	0.55	34.5	3.75	34.5	3.75
180		6.6	0.72	42.0	4.57	42.4	4.61
240		8.4	0.91	44.5	4.84	44.5	4.84
300		10.9	1.18	46.0	5.00	45.5	4.95

datum: 13-03-1992

droge stof: 13.1 g/l

=====  
spec. acetaat-dosering  
(mg Ac/g DS)

0

17

34

tijd (minuten)	nitraat-N	ortho-P	mg P/g DS	ortho-P	mg P/gDS	ortho-P	mg P/g DS
	(mg/l)	(mg/l)		(mg/l)		(mg/l)	
0	0.4	2.10	0.16	2.10	0.16	2.10	0.16
30		3.3	0.25	14.0	1.07	13.5	1.03
60		4.1	0.31	23.4	1.79	22.6	1.73
120		6.7	0.51	36.9	2.82	35.1	2.66
180		11.6	0.89	45.2	3.45	46.4	3.54
240		13.0	0.99	49.0	3.74	47.0	3.59
300		17.3	1.32	49.5	3.76	48.9	3.70

datum: 16-03-1992

droge stof: 11.9 g/l

=====  
spec. acetaat-dosering  
(mg Ac/g DS)

0

19

38

tijd (minuten)	nitraat-N	ortho-P	mg P/g DS	ortho-P	mg P/gDS	ortho-P	mg P/g DS
	(mg/l)	(mg/l)		(mg/l)		(mg/l)	
0	0.4	0.09	0.01	0.09	0.01	0.09	0.01
30		0.4	0.03	7.9	0.66	7.5	0.63
60		0.6	0.05	15.0	1.26	14.1	1.18
120		1.2	0.10	24.4	2.05	24.4	2.05
180		1.9	0.16	28.5	2.39	28.0	2.35
240		2.5	0.21	30.0	2.52	29.0	2.44
300		3.6	0.30	30.5	2.56	30.5	2.56

datum: 18-03-1992

droge stof: 10.0 g/l

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spec. acetaat-dosering		0				23				46			
(mg Ac/g DS)													
tijd (minuten)	nitraat-N	ortho-P		mg P/g DS		ortho-P		mg P/g DS		ortho-P		mg P/g DS	
	(mg/l)	(mg/l)				(mg/l)				(mg/l)			
0	0.8	0.05	0.01	0.05	0.01	0.05	0.01	0.05	0.01	0.05	0.01	0.05	0.01
30		0.3	0.03	0.3	0.03	8.6	0.86	8.6	0.86	8.4	0.84	8.4	0.84
60		0.6	0.06	0.6	0.06	17.0	1.70	17.0	1.70	16.4	1.64	16.4	1.64
120		1.2	0.12	1.2	0.12	21.6	2.16	21.6	2.16	21.3	2.13	21.3	2.13
180		2.2	0.22	2.2	0.22	28.4	2.84	28.4	2.84	28.4	2.84	28.4	2.84
240		3.4	0.34	3.4	0.34	29.5	2.95	29.5	2.95	29.0	2.90	29.0	2.90
300		4.9	0.49	4.9	0.49	30.4	3.04	30.4	3.04	29.7	2.97	29.7	2.97



## SAMENVATTING FASE 3.5

=====

datum:	11/12-03-1992			18-03-1992	
spec. acetaat-dosering	0	15	25	25	45
t (min)	P-afgifte (mg P/g ds)				
0	0.03	0.03	0.03	0.01	0.01
30	0.19	1.32	1.40	0.86	0.84
60	0.25	2.36	2.42	1.70	1.64
120	0.39	3.75	3.77	2.16	2.13
180	0.53	4.43	4.50	2.84	2.84
240	0.71	4.82	4.82	2.95	2.90
300	0.93	4.84	4.94	3.04	2.97

FOSFAAT-RELEASE

EFFECT NEUTRALISATIE AZIJNZUUR

EFFECT NEUTRALISATIE AZIJNZUUR OP FOSFAAT-RELEASEproefverloop:

monster retourlib:	5	liter
droge stof:	7,5	kg/m <sup>3</sup>
specifieke acetaatdosering:	30	mg Ac/g ds
reactietijd:	5	uur

neutralisatie azijnzuur: stoichiometrisch met natronloog  
0 - 10 - 20 - 30 - 40 - 50 - 60 - 70 - 75 - 100%

azijnzuur toegevoegd als 70% HAc-opl.  
natronloog toegevoegd als 25% NaOH-opl.

berekening:

percentage remming ten opzichte van de fosfaat-release bij 100% neutralisatie

resultaten:

% neutralisatie	% remming	gemiddeld	pH-sprong
0	31.6 31.4	31.5	-1
10	28.0	28.0	-0.95
20	21.0	21.0	-0.8
30	18.0	18.0	-0.7
40	15.0	15.0	-0.65
50	5.1 5.1 9.5 4.9	5.9	-0.6
60	3.1	3.1	-0.5
70	2.0	2.0	-0.3
75	1.8	0.9	-0.3
100	0.0	0.0	+0.2

datum: 27-1-1992  
 droge stof: 8.0 g/l  
 pH retour slib: 7.41  
 nitraat-N (mg/l): 0.5  
 spec. acetaat-dosering: 27 mg Ac/g DS

=====							
% geneutraliseerd		0	50		100		
tijd (minuten)	temp ( C)	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH
0	9	2.0	6.36	2.0	6.81	2.0	7.55
30		2.5	6.50	2.8	6.80	3.2	7.41
60		3.2	6.55	3.7	6.90	4.3	7.40
120		21.6	6.62	27.0	6.95	31.6	7.34
180		23.6	6.67	32.8	6.99	37.8	7.38
240	12	27.6	6.74	37.4	7.02	39.4	7.34
P-release:							
mg P/g DS		3.20		4.43		4.68	
% remming:		31.6		5.1		0	

datum: 29-1-1992  
 droge stof: 5.6 g/l  
 pH retour slib: 7.32  
 nitraat-N (mg/l): 1  
 spec. acetaat-dosering: 37 mg Ac/g DS

=====							
% geneutraliseerd		0	50		100		
tijd (minuten)	temp ( C)	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH
0	9	0.1	6.26	0.1	6.74	0.1	7.58
30		6.2	6.38	8.0	6.80	10.1	7.41
60		9.7	6.42	13.6	6.83	16.8	7.45
120		14.8	6.52	21.0	6.90	25.2	7.42
180		18.8	6.56	26.6	6.98	29.2	7.43
240	12	21.0	6.63	29.0	7.01	30.6	7.44
P-release:							
mg P/g DS		3.61		4.99		5.26	
% remming:		31.4		5.1		0	

datum: 30-1-1992

droge stof: 4.6 g/l

pH retour slib: 7.35

nitraat-N (mg/l): 0.8

spec. acetaat-dosering: 49 mg Ac/g DS

=====

% geneutraliseerd		50		75		100	
tijd (minuten)	temp (C)	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH
0	10	0.1	6.71	0.1	7.03	0.1	7.51
30		5.6	6.77	6.7	7.05	8.2	7.44
60		15.6	6.78	12.4	7.05	13.4	7.38
120		16.8	6.84	19.2	7.08	19.6	7.37
180		20.2	6.88	21.6	7.10	22.0	7.36
240	15	21.0	6.92	22.8	7.11	23.2	7.35

P-release:

mg P/g DS 4.55 4.94 5.03

% remming: 9.5 1.8 0

datum: 31-1-1992

droge stof: 6.8 g/l

pH retour slib: 7.35

nitraat-N (mg/l): 0.4

spec. acetaat-dosering: 33 mg Ac/g DS

=====

% geneutraliseerd		50		75		100	
tijd (minuten)	temp (C)	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH
0	10	0.2	6.77	0.2	7.07	0.2	7.70
30		7.7	6.83	9.1	7.10	10.4	7.56
60		13.9	6.85	16.5	7.11	19.4	7.49
120		22.8	6.91	26.2	7.12	26.8	7.46
180		27.6	6.97	30.0	7.16	30.2	7.43
240	14	30.2	6.99	32.0	7.17	31.8	7.43

P-release:

mg P/g DS 4.42 4.68 4.65

% remming: 4.9 0 0

datum: 03-2-1992

droge stof: 7.9 g/l

pH retour slib: 7.24

nitraat-N (mg/l): 0.8

spec. acetaat-dosering: 28 mg Ac/g DS

=====							
% geneutraliseerd		60		70		100	
tijd (minuten)	temp (C)	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH
0	10	0.1	6.77	0.1	6.99	0.1	7.44
30		13.0	6.81	13.3	6.91	15.7	7.30
60		22.5	6.86	23.1	6.93	26.9	7.25
120		37.2	6.90	37.4	6.96	41.6	7.20
180		46.0	6.93	46.8	6.98	49.2	7.20
240	13	43.6	6.96	50.1	7.00	51.2	7.21
P-release:							
mg P/g DS		6.27		6.34		6.47	
% remming:		3.1		2		0	

datum: 12-2-1992

droge stof: 9.5 g/l

pH retour slib: 7.1

nitraat-N (mg/l): 1.8

spec. acetaat-dosering: 24 mg Ac/g DS

=====							
% geneutraliseerd		10		20		100	
tijd (minuten)	temp (C)	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH
0	12	0.1	6.15	0.1	6.28	0.1	7.29
30		7.4	6.32	8.2	6.41	14.1	7.21
60		13.1	6.39	14.8	6.47	25.2	7.15
120		22.6	6.46	25.6	6.54	39.4	7.13
180		29.4	6.56	33.6	6.62	45.3	7.09
240	16	34.5	6.61	37.8	6.66	48.0	7.09
P-release:							
mg P/g DS		3.62		3.97		5.04	
% remming:		28		21		0	

datum: 13-2-1992

droge stof: 8.1 g/l

pH retour slib: 7.16

nitraat-N (mg/l): 2.0

spec. acetaat-dosering: 28 mg Ac/g DS

 =====  
 % geneutraliseerd      30                              40                              100

tijd (minuten)	temp ( C)	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH	ortho-P (mg/l)	pH
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0	11	0.3	6.44	0.3	6.52	0.3	7.32
---	----	-----	------	-----	------	-----	------

30		7.7	6.47	8.0	6.55	12.3	7.29
----	--	-----	------	-----	------	------	------

60		14.4	6.53	15.3	6.60	23.6	7.27
----	--	------	------	------	------	------	------

120		25.2	6.65	27.4	6.69	37.2	7.23
-----	--	------	------	------	------	------	------

180		32.4	6.72	34.6	6.76	43.2	7.19
-----	--	------	------	------	------	------	------

240	16	37.0	6.75	38.7	6.79	45.3	7.16
-----	----	------	------	------	------	------	------

P-release:

mg P/g DS	4.54	4.75	5.56
-----------	------	------	------

% remming:	18	15	100
------------	----	----	-----

FOSFAAT-RELEASE

EFFECT NITRAATDOSERING



EFFECT NITRAAT-STIKSTOF OP FOSFAATAFGIFTEproefverloop:

monster retourslib	5	liter
droge stof:	7,5	kg/m <sup>3</sup>
specifieke acetaatdosering:	30	mg Ac/g ds
nitraatdosering:	0 - 10 - 20	mg NO <sub>3</sub> -N/l
reactietijd:	4	uur

acetaat toegevoegd als 10% NaAc.3 H<sub>2</sub>O-opl

nitraat-N toegevoegd als 10% NaNO<sub>3</sub>.3 H<sub>2</sub>O-opl

berekening:

fosfaatafgifte over: - anoxische fase  
 - anaërobe fase  
 - anoxische + anaërobe fase

resultaten:

nitraat-N toegevoegd (mg nitraat-N/l)	% remming		
	anoxische fase	anaërobe fase	anoxische + anaërobe fase
0	0	0	0
10	10	0	3,5
20	25	0	9

datum: 26-02-1992

droge stof: 7.83 g/l

nitraat-N: 3.5 mg/l

=====										
spec. acetaat-dosering		29			29			29		
(mg Ac/g DS)										
toegevoegd nitraat-N		0			10			20		
(mg NO <sub>3</sub> -N/l)										
tijd (uur)	nitraat-N	ortho-P	P-afgifte	nitraat-N	ortho-P	P-afgifte	nitraat-N	ortho-P	P-afgifte	
	(mg/l)	(mg/l)	(mg P/gDS)	(mg/l)	(mg/l)	(mgP/gDS)	(mg/l)	(mg/l)	(mg P/gDS)	
0.0	3.50	0.06	0.01	13.50	0.06	0.01	23.5	0.06	0.01	
0.5		10.0	1.28		8.0	1.02	10.0	7.8	1.00	
1.0		21.8	2.80		19.8	2.53	0.5	16.8	2.15	
2.0		35.2	4.50		34.0	4.34	0.5	30.0	3.83	
3.0		40.0	5.11		39.0	4.98		36.0	4.60	
4.0		43.5	5.56		41.5	5.30		39.0	4.98	
24.0		39.0	4.98		38.0	4.85		38.5	4.92	
% remming (t.o.v. t = 4h)			0.0				4.7	10.4		

datum: 25-02-1992

droge stof: 9.60 g/l

nitraat-N: 1.2 mg/l

=====										
spec. acetaat-dosering		23			23			23		
(mg Ac/g DS)										
toegevoegd nitraat-N		0			10			20		
(mg NO <sub>3</sub> -N/l)										
tijd (uur)	nitraat-N	ortho-P	P-afgifte	nitraat-N	ortho-P	P-afgifte	nitraat-N	ortho-P	P-release	
	(mg/l)	(mg/l)	(mg P/gDS)	(mg/l)	(mg/l)	(mgP/gDS)	(mg/l)	(mg/l)	(mg P/gDS)	
0.0	1.20	0.10	0.01	11.20	0.10	0.01	21.2	0.10	0.01	
0.5		11.8	1.23		10.5	1.09		8.5	0.89	
1.0		23.7	2.47		23.1	2.41		20.1	2.09	
2.0		40.8	4.25		40.0	4.17		37.6	3.92	
3.0		47.5	4.95		46.0	4.79		43.5	4.53	
4.0		49.5	5.16		48.3	5.03		46.0	4.79	
24.0		47.0	4.90		45.5	4.74		45.5	4.74	
% remming (t.o.v. t = 4h)			0.0				2.5	7.2		



CONCENTRATIEVERLOOP BELUCHTINGSBASSIN

MET INFLUENT

## CONCENTRATIEVERLOOP BELUCHTINGSBASSIN

beluchting uit: 9.10 uur  
 beluchting aan: 12.00 uur  
 beluchting uit: 14.30 uur

datum: 28-11-1991  
 droge stof: 3,3 g/l

tijd	t=	O2-conc.	redox	debiet	ammonium-N	nitraat-N	fosfaat-P
	(min)	(mg/l)	(mV)	(M3)	mg/l	g	g
9.10	0	1.97	55		2.9	7.5	0.05
9.40	30	0.04	0		3.8	6.3	0.1
10.10	60	0.04	-31		4.8	4.9	0.47
10.40	90	0.04	-53		5.7	3.4	0.57
11.10	120	0.04	-64		6.8	2.1	0.1
11.40	150	0.04	-150		8.2	0.5	0.16
12.00	170	0.04	-173		8.5	0.2	0.42
12.10	180	0.83	-95		8.4	0.3	0.3
12.40	210	1.4	-20		8.2	1.2	0.05
13.10	240	1.09	12		7.9	2.3	0.06
13.40	270	1.34	27		7.4	2.7	0.06
14.10	300	1.43	37		6.7	3.8	0.05
14.40	330	0.05	8		7	3.3	0.07
15.10	360	0.04	-40		7.4	2.3	0.11

## CONCENTRATIEVERLOOP BELUCHTINGSBASSIN

beluchting uit: 9.10 uur  
 beluchting aan: 12.00 uur  
 beluchting uit: 14.50 uur

datum: 02-12-1991  
 droge stof: 3,3 g/l

tijd	t=	O2-conc.	redox	debiet	ammonium-N	nitraat-N	fosfaat-P
	(min)	(mg/l)	(mV)	(M3)	mg/l	g	g
9.10	0	1.3	70		3	7.6	0.05
9.40	30	0.04	24		3.9	6.2	0.05
10.10	60	0.04	-25		5.2	4.5	0.05
10.40	90	0.03	-48		6.5	2.8	0.13
11.10	120	0.03	-68		7.5	1.4	0.07
11.40	150	0.03	-43		9.1	0.3	0.57
12.00	170	0.03	-203		9.3	0.3	1.67
12.10	180	0.67	-113		9.6	0.4	1.14
12.40	210	0.91	-37		9.8	0.7	0.23
13.10	240	1.3	-11		10	1.2	0.05
13.40	270	1.38	8		9.7	2.3	0.05
14.10	300	1.29	26		8.9	3.1	0.07
14.40	330	1.49	33		8.8	3.6	0.05
14.50	340	1.59	34		8.7	3.8	0.05

CONCENTRATIEVERLOOP BELUCHTINGSBASSIN

beluchting start: 9.10 uur  
 beluchting eind: 12.00 uur  
 beluchting uit: 14.50 uur

datum: 06-12-1991  
 droge stof: 3,3 g/l

tijd	t=	O2-cond.		debiet	ammonium-N		nitraat-N		fosfaat-P	
		(min.)	(mg/l)		(mV)	(M3)	mg/l	g	mg/l	g
9.10	0	2.96	70	30	1	30	7.9	237	0.05	1.5
9.40	30	0.05	24	50	1.5	75	6.8	340	0.13	6.5
10.10	60	0.04	-25	30	2.6	78	5.4	162	0.07	2.1
10.40	90	0.04	-48	36	3.8	136.8	4	144	0.13	4.68
11.10	120	0.04	-68	23	4.9	112.7	2.6	59.8	0.15	3.45
11.40	150	0.04	-43	37	6.1	225.7	1.3	48.1	0.16	5.92
12.00	170	0.04	-203	23	6.6	151.8	0.4	9.2	0.29	6.67
12.10	180	0.91	-113	10	6.9	69	0.5	5	0.08	0.8
12.40	210	1.41	-37	37	6.6	244.2	1.5	55.5	0.1	3.7
13.10	240	1.17	-11	55	7	385	2.4	132	0.05	2.75
13.40	270	1.51	8	75	6.3	472.5	3.8	285	0.05	3.75
14.10	300	1.57	26	31	5.7	176.7	4.5	139.5	0.09	2.79
14.50	340	1.7	34	35	5.3	185.5	5.3	185.5	0.05	1.75

CONCENTRATIEVERLOOP BELUCHTINGSBASSIN

beluchting start: 9.10 uur  
 beluchting eind: 12.00 uur  
 beluchting uit: 14.50 uur

datum: 10-12-1991  
 droge stof: 3,0 g/l

tijd	t=	O2-cond.		debiet	ammonium-N		nitraat-N		fosfaat-P	
		(min.)	(mg/l)		(mV)	(M3)	mg/l	g	mg/l	g
9.10	0	2.58	76	30	4.6	138	6.4	192	0.09	2.7
9.40	30	0.05	18	45	5.2	234	5.4	243	0.05	2.25
10.10	60	0.04	-18	32	5.9	188.8	4	128	0.05	1.6
10.40	90	0.04	-45	34	6.8	231.2	2.4	81.6	0.38	12.92
11.10	120	0.04	-59	36	7.7	277.2	1.1	39.6	0.12	4.32
11.40	150	0.04	-139	31	9.1	282.1	0.3	9.3	0.25	7.75
12.00	170	0.04	-184	22	9.7	213.4	0.2	4.4	0.82	18.04
12.10	180	0.9	-100	8	9.7	77.6	0.5	4	0.59	4.72
12.40	210	1.45	-15	33	9.5	313.5	1.3	42.9	0.05	1.65
13.10	240	1.18	-2	55	9.8	539	2	110	0.05	2.75
13.40	270	1.57	17	30	8.9	267	2.8	84	0.05	1.5
14.10	300	1.73	32	32	8	256	4.2	134.4	0.05	1.6
14.40	330	1.85	45	25	7.6	190	4.9	122.5	0.05	1.25
14.50	340	1.55	51	35	7.2	252	5.8	203	0.05	1.75



CONCENTRATIEVERLOOP BELUCHTINGSBASSIN

ZONDER INFLUENT



## CONCENTRATIEVERLOOP BELUCHTINGSBASSIN

beluchting uit: 8.50 uur

beluchting aan: 11.40 uur

beluchting uit: 14.20 uur

GEEN INFLUENT

datum: 21-02-1992

droge stof: 3.4 g/l

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tijd	t=	O2-conc.	redox	debiet	ammonium-N	nitraat-N	fosfaat-P
	(min)	(mg/l)	(mV)	(M3)	mg/l	g	g mg/l
					g	mg/l	g mg/l
8.50	0	3.2	83		0.05	10.5	0.05
9.20	30	0.05	20		0.05	10.1	0.07
9.50	60	0.05	-17		0.05	9.3	0.08
10.20	90	0.05	-35		0.05	8.4	0.09
10.50	120	0.04	-45		0.05	7.5	0.07
11.20	150	0.04	-52		0.05	6.8	0.09
11.40	170	0.04	-62		0.05	6.4	0.14
11.50	180	1.7	-16		0.05	6.6	0.09
12.20	210	4.4	42		0.05	7.4	0.05
12.50	240	5.9	81		0.05	7.5	0.05
13.20	270	6.5	88		0.05	7.3	0.05
13.50	300	6.8	81		0.05	7.4	0.05
14.20	330	6.8	99		0.05	7.5	0.05

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BIJLAGE 8

BELUCHTINGSREGIME

FASE 3

vastgesteld door continue meting van de redox-potentiaal in de beluchtingstank

## REDOX-POTENTIALMETING AWZI BERGAMBACHT FASE 3.1

aerob	anoxisch	anaerob		aerob	anoxisch	anaerob
5.7	5.3	0.9		6	5.9	0.1
6.1	5.9	0		5.8	4.2	1.8
5.9	5.6	0.6		5.7	5.5	1
6	5.9	0.3		6	5.9	0.3
6	5.8	0.3		5.9	4	2
6.1	5.5	0.6		5.7	5	1.3
5.8	5.7	0.5		5.9	4.4	1.9
6.1	5.5	0.4		5.8	4.2	2.1
6	5.9	0.3		5.9	5.2	1.5
6	6	0.1		6	4.8	1.3
6.1	6	0.2		5.8	4	2.3
5.9	5.7	0.3		6	5.5	0.5
6	5.8	0.1		5.5	5.3	1.2
6.1	5.8	0.1		6	4.8	0.7
6.1	6	0		5.7	3.8	3
6.1	5.8	0.2		5.8	5.4	0.5
6	5.7	0.3		6	5	1.1
6	5.7	0.5				
5.6	5.1	1.3	GEMIDDELD	6.0	5.3	0.8
6.1	5.9	0.2				
5.9	5.8	0.3	PERCENTAGE	49	44	7
6	5.7	0.5				
5.9	5.8	0.2				
5.8	5.6	1.1				
10	2.5	0				
5.8	5.4	1				
5.9	5.5	0.7				
5.8	5.4	0.9				
5.8	5.5	0.8				
5.9	5.2	1.3				
5.7	5.5	0.7				
5.9	5.5	0.7				
9.5	3.2	0				
5.6	4.5	1.9				
5.9	5.3	0.7				
6	5.7	0.3				
5.9	5	1.6				
6	5.8	0.6				
5.9	4.6	1.8				
5.9	4.5	1.7				
5.9	5.2	0.8				
5.8	5.5	1				
6	5.8	0.4				
5.9	5.5	0.5				
5.8	5.5	0.7				
5.7	5.6	0.5				
5.9	5.4	0.7				

REDOX-POTENTIALMETING AWZ: BERGAMBACHT FASE 3.2

aeroot	anoxisch	anaeroot	aeroot	anoxisch	anaeroot	
6	4.2	1.9	6	5.1	0	
6.2	4.7	1.1	5.8	6	0	
6.3	5.2	0.6	6	5.4	0.5	
6.2	3.2	2.2	6.1	5.2	1	
6.3	4.6	1.2	6	5.4	0.6	
6	4.9	1.1	6.2	2.7	3.1	
6.2	5.3	0.9	6	3.4	2.6	
6.6	3.9	1.2	6	3.5	2.6	
6.2	5.1	0.8	6	3.4	3	
6.4	5.2	0.3	6.1	5.4	0.5	
6.2	5.1	0.5	6.1	5.9	0	
6.3	4.4	1	6	5.4	0.6	
6.1	5.2	0.4	6	5.4	0.9	
6	5.6	0.5	6	5.5	0.3	
6	5.5	0.3	6.1	2.1	3.6	
6.5	5.4	0	6	2.7	3.2	
6.1	4.9	0.6	6	2.4	3.9	
6.1	4.7	0.6	5.9	5	1.3	
6.3	4.8	0.7	6	3.9	1.5	
6	4.6	1.5	6.1	2.5	3.6	
6.1	5.4	0.6	6	2.4	3.8	
6	4.6	1.7	6	4.9	1	
6.1	5	1.3	6.2	2.8	3.3	
6.2	4.9	1	6	3.4	2.9	
6.1	4.1	1.6	6.1	2.8	3.3	
6.2	4	1.6	6.4	2.9	2.6	
6.1	4.1	1.7	6.1	1.5	4.5	
6.1	3.7	2	6	2.9	3.2	
6	5.4	1	6	5.3	1	
6.3	3	2.7	6	4.5	1.5	
6	3.8	2.3	5.5	5.4	1	
6.1	1.9	3.8	6	4.8	1.5	
5.9	2	4	6.1	5.2	0.8	
6.2	1	4.9	6	5	1	
6.1	4.5	1.5	6	1.9	4.2	
6.1	5.4	0.6	6.3	2.5	3.5	
6.3	2.1	3.5	6	3	3.3	
6	2.2	3.8	6	4.6	1.8	
6.2	5.6	0.4	6	4.4	2	
6.1	5.2	0.8	6.1	6.3	1.5	
6	4.1	1.9	6	4.3	2.5	
6.1	3.9	2	6.1	4.9	1	
6.3	5.4	0.4	6	5.9	0	
6.1	3.4	2.7	6.2	2.5	3.4	
6	5.4	1	6	2.7	3.4	
6.2	2.4	3.4	6	4.6	1.4	
6.2	5.1	1	6	3.9	2.5	
6.1	5.4	0.5				
6	5.4	0.7				
6.1	4.7	1.2	GEMIDDELD	6.1	4.2	1.9
6.2	3	4.9	PERCENTAGE	50	34	16
6	5.4	0.7				
6.1	2.8	2.5				

## REDOX-POTENTIALMETING AWZI BERGAMBACHT FASE 3.3

	aeroob	anoxisch	anaeroob
	5	2	5
	6.5	1	4.5
	7	4.5	0.5
	5.5	4	2.5
	6.5	4	1.5
	7	5	0
	6.5	4.5	1
	6.5	4	1
	6.5	4	1.5
	6.5	3	2.5
	6.5	2.5	4.5
	6.5	3.5	2
	6.5	5	0
	7	5	0
	7	3.5	2
	6.5	4	1.5
	6.5	3	2
	5.2	3.5	3.2
	6.5	4.2	1
	5.4	2.5	4
SOM	127.1	72.7	40.2
GEMIDDELD	6.4	3.6	2.0
PERCENTAGE	53	30	17

## REDOX-POTENTIALMETING AWZI BERGAMBACHT FASE 3.4

aerob	anoxisch	anaerob	aerob	anoxisch	anaerob
5.4	3.9	2.7	6	3.5	2.5
5.4	3.1	3.1	6	6	0
7	3.6	1.4	5.5	4	2
6	5.7	0	6	5	1
5.3	3	3.5	6	3	3
6	4.5	1.5	6	3.5	2.5
5.6	4	2.5	6	5	1
5.4	4.5	2	6	4	2
6.6	4.5	0.5	6	2	4
6.5	3.2	2	6	2.5	3.5
5.5	6	1	6	2	3
5.5	6	1	6	3	3
5.5	5.2	1.3	6	2.5	3.5
5.3	4	2.7	6	3	3
6.5	3.8	1.8	6	0	0
6.4	2	3.6	6	1.5	4.5
6	5	1	6	6	0
4.5	1.2	6	6	1.5	4.5
6	2.5	3.5	6	2	4
5.3	4	2	6	4	2
6	4	2	6	3	3
6	5.5	0.5	6	3	3
6	5.5	0.5	6	3	3
6	4	2	6	4	2
6	3.5	1.5	6	2.5	3.5
6	6	0	6	2	4
6	3.5	1.5	6	3	3
6	5.5	0.5	6	4	2
6	5.5	0.5	6	1.5	4.5
6	1.5	4.5	6	1	5
6	3.5	2.5	6	3	3
6	5.5	0.5	6	1.5	4.5
6	3.5	2.5	6	1	5
6	3.5	2.5	6	1.5	4.5
6	5.5	0.5	6	0	6
6	5	1	6	2	4
6	3	3	6	2	4
6	4	2	6	0	6
6	4	2	6	0	6
6	3.5	1.5	6	0	6
6	6	0	6	0	6
6	5	1	6	0	6
6	3.5	2.5	6	0	6
6	6	0	6	1	5
6	6	0	6	1.5	4.5
6	4	2	6	0.5	5.5
6	4.5	1.5	6	0	6
6	6	0	6	0	6
6	5	1	6	2	4
5.5	3	3.5	6	3	3
6	3	3	6	0	6
5.5	5	1.5	6	1	5
5.5	5	1.5	6	2	4
5.5	2.5	3.5	6.0	3.0	3.5
5.5	2.5	3.5	6.5	3.0	2.5
6	2	4	6.5	3.0	2.5

## REDOX-POTENTIALMETING AWZI BERGAMBACHT FASE 3.4

	aerob	anoxisch	anaerob
	6	2	4
	6.5	3.5	1.5
	6	2	3.5
	6.5	1.5	3.5
	6.5	1.5	3.5
	6	3.5	2.5
	6.5	2	4
	6.5	4	1.5
	6	2.5	3
	6.5	2.5	3
	6.5	3.5	2
	6.5	3.5	1.5
	6	2	3.5
	6	2.5	3.5
	6	4	2
SOM	760.3	396.7	352.1
GEMIDDELD	6.0	3.1	2.8
PERCENTAGE	50	27	23

## REDOX-POTENTIALMETING AWZI BERGAMBACHT FASE 3.5

aerob	anoxisch	anaerob	aerob	anoxisch	anaerob
6	3	3	8	2.5	0.5
7.5	1	3.5	7.5	3.5	0
7.5	1.5	3	8	2.5	1.5
6	2.5	3	8	2.5	0.5
7.5	1.5	2	9	2	2
6.5	3.5	2.5	8.5	3.5	0
6.5	3.5	1.5	8	3.5	0
7.5	2.5	2.5	8	3.5	0
7.5	1.5	3	9	3	0
6.5	0	5	8.5	3	0.5
6.5	0	5	8.5	2.5	1
6.5	2.5	2.5	8.5	3.5	0
8	1	3	9	3.5	0
6.5	2.5	0.5	9	3.5	0
6.5	4	1.5	9	3	0
6.5	2.5	1	8.5	3.5	0
6.5	4	1.5	8.5	3.5	0
7	3	2	8.5	3.5	0
7	3	2	8.5	3.5	0
6	4	0	8.5	3.5	0
7.5	5	0	8.5	3.5	0
7	5	0	8.5	3.5	0
7	3	2	8	3.5	0
6	1.5	2	9	4	0
7	1.5	3	8	1.5	2
6	2.5	1.5	8.5	3.5	0
6.5	2	1	8.5	3.5	0
6	2	2	9	3.5	0
7	5	0	9	3.5	0
7	4	1	8.5	3.5	0
7	5	0	8	3.5	0
7	5	0	9	4	0
7	4	2	8.5	3.5	0
8	2.5	1.5	9	3.5	0
7	5	0	8	3.5	0
9	1	2	8	3.5	0
8.5	2	1.5	9	3	1.5
8.5	2	1.5	8.5	3.5	0
8	3	1	9	3.5	0
7	3.5	1.5	8.5	3.5	0
8	2	2	9	3.5	0
7	3	2	8	3.5	0
8	2.5	1	9	3.5	0
8	2	2	9	3.5	0
8	2	2	9	3.5	0
7.5	2.5	1	8	3.5	0
8	3	1	9	4	0
8	1.5	2	8.5	3.5	0
8	2.5	1	6.5	5.5	0
6.5	3	0.5	7.5	4	0
6.5	3.5	0.5	9	4	0
7	3	2	9	3.5	0
6	2	2	6.5	5.5	0
7	3	2	8	3.5	0
8	2.5	1.5	9	3.5	0
8.5	2	1	9	3.5	0



## REDGX-POTENTIALMETING AWZI BERGAMBACHT FASE 3.5

aerob	anoxisch	anaerob	aerob	anoxisch	anaerob	
6.5	5.5	0	8	3.5	0	
8	3.5	0.5	9	3	0	
8	3.5	0	8	3.5	0	
8	3.5	0	7.5	4	0.5	
7	4.5	0.5	8	4	0	
8	4	0	9	3.5	0	
9	3.5	0	6.5	5.5	0.5	
9	3.5	0	9	2.5	1	
6.5	4.5	1	8.5	3.5	0	
8	3.5	0.5	8.5	3.5	0	
9	3.5	0	8	3.5	0	
8.5	1.5	2	7.5	4.5	0	
9	3.5	0	8.7	2.5	1.5	
9	3.5	0	8.5	3.5	1.5	
9	3.5	0	7	5	0	
7.5	4.5	1.5				
8	2	2	GEMIDDELD	8.0	3.2	0.7
9	2	2				
9	3.5	0	PERCENTAGE	67	27	6
8	2.5	1.5				
8	3	1				
9	4	0				
9	3.5	0				
7	2.5	2				
8	3	0.5				
9	2.5	1				
8.5	3.5	0				
7.5	3	0.5				
8	3	1				
9	2	1.5				
9	2.5	0.5				
6.5	5.5	0				
8	3.5	0				
9	2.5	1				
8.5	4	0				
9.5	3.5	0				
9	3.5	0				
8	3	0.5				
8	3.5	0				
8	3.5	0				
9	3.5	0				
7	3	2				
8	3	1				
9	1.5	2				
8.5	3.5	0				
7.5	4	1				
8	3.5	0				
9	3.5	0				
9	3.5	0				
7.5	3.5	1				
8	3.5	0				
9	2	1				
8.5	3.5	0				
6.5	5.5	0				

## REDOX-POTENTIALMETING AWZI BERGAMBACHT FASE 3.6

aerob	anoxisch	anaerob	aerob	anoxisch	anaerob	
8	3.5	0	9	4	0	
8.5	3.5	0	8.5	3.5	0	
8.5	3.5	0	8.5	3	0	
6.5	5	0.5	8	2.5	1.5	
8	3.5	0	8	2.5	1	
9	2.5	1	8.5	3.5	0	
8.5	3.5	0	6	4	2	
6	5.5	0	8	2.5	1.5	
8	3.5	0	9	2.5	1.5	
9	3.5	0	8	2	2	
8	4	0	6.5	5.5	0	
6.5	5.5	0	8	4	0	
8	3.5	0	9	1	2	
9	4	0	8.5	3.5	0	
9	7	0	6	6	0	
7	5.5	0	7.5	4	0	
8	4	0	9	4	0	
9	4	0	8	4	0	
9	3.5	0	6.5	5.5	0	
6.5	5.5	0	8	4	0	
8	3.5	0	7	5	0	
9	3.5	0	7	4	0	
9	3	0	7	5	0	
6.5	5.5	0	6	6	0	
8	2.5	1	6	6	0	
9	2.5	1	8	4	0	
8.5	3.5	0	8.5	4	0	
6.5	5	0.5	8.5	2	2	
8	3	0	8	1.5	2	
9	3.5	0	9	2.5	1.5	
9	3.5	0	8.5	3.5	0	
6.5	5.5	0	8	4	0	
8	3.5	0	8.5	3.5	0	
9	3	0	10	3	0	
8	3.5	0	8.5	3.5	0	
6.5	5	0.5	6.5	5.5	0	
8	2.5	1	8.5	3.5	0	
9	2.5	1	9	3.5	0	
8.5	3.5	0	9	3	0	
6	4.5	1.5	6.5	3	0	
8	3.5	0	9.5	2	0	
9	3.5	0	8	3.5	0	
9	3	0	7.5	4	0.5	
6.5	5.5	0	7	4.5	0	
8	1	3	5.5	1.5	4	
9	3.5	0	8	4	0	
8	3.5	0	10	2	0	
6.5	4.5	1	8.5	2	1.5	
8	3.5	0	8	1.5	2	
9	3.5	0	8	3.5	0	
6.5	3.5	0				
6	4	2	GEMIDDELD	7.7	3.4	0.4
8	4	0				
9	3.5	0	PERCENTAGE	67	30	3
9	3.5	0				
8	1.5	2				
8	3.5	0				

## REDOX-POTENTIALMETING AWZI BERGAMBACHT FASE 3.7

aerob	anoxisch	anaerob	aerob	anoxisch	anaerob
9	1.5	2	8	2	2
8	2	2	8	1	3
8.5	1.5	2.5	8	1.5	2.5
8	2	2	8.5	1.5	1.5
8.5	2	2	8	2	2
8	2	2	8	0.5	3
6.5	2.5	2.5	10	0.5	1
9	1	2	8.5	2	1.5
9	1	2.5	8	1.5	2
8	2	2	8	3.5	0
8.5	1	2	9	3.5	0
8	1.5	2	8.5	1	2.5
8	1	3	9	2	1
9	1	2	8	1	2.5
8.5	2.5	1	9	1	2.5
7	2	3	8.5	2	1.5
8.5	1	2	7.5	1.5	2
9	1	2	8	3.5	0
9	2	1	8.5	3.5	0
7	2	3	8.5	1	2.5
8.5	1	2	8	2	2
9	1.5	1.5	7.5	0.5	3
9	2.5	0.5	8.5	0.5	3
7	2	3	8.5	1.5	2
8	2	2	7	1.5	2.5
9	3	0	8	3.5	0
7	2	3	8.5	3.5	0
9	1	2	8	1	2.5
9	2	1	8	1.5	2.5
9	3	0	8	1	3
9	3	0	8.5	1	2.5
6.5	3	2.5	8.5	1.5	2
8	3	1	8	2	2
9	2	1.5	8	0.5	3.5
9	3	0.5	9	3.5	0
9	2	1	8	1	2.5
9	3	0	8	1.5	2.5
7	2.5	2.5	8	3.5	0
9	3	0	8	1	2.5
9	3.5	0	8	1.5	2
6.5	5.5	0	8	1	2.5
8	3.5	0	8.5	1	2.5
9	2	1	8	2	1.5
9	3	0	8	1.5	2
6.5	2.5	2.5	8	3.5	0
8.5	3	0	8.5	3.5	0
9	3.5	0	8	1	3
9	1	2	8	1	3
8	1.5	2	9	3	0
8	1	2.5	8.5	3.5	0
9	0.5	2.5	8	3.5	0
9	1.5	1.5	7.5	1	3
8.5	2.5	1	8	3.5	0
8.5	1	2.5	8.5	3.5	0
9	1	2	8.5	3.5	0
9	1.5	1.5	8	4	0

## REDOX-POTENTIALMETING AWZI BERGAMBACHT FASE 3.7

	aerob	anoxisch	anaerob
	8	1	3
	9	3	0
	8.5	3.5	0
	8	3.5	0
	7.5	1	3
	8	3.5	0
	8.5	3.5	0
	8.5	3.5	0
	8	4	0
	9	4	0
	7.5	4	0
	8	4	0
	8	4	0
GEMIDDELD	8.1	2.3	1.2
PERCENTAGE	70	20	10



**BIJLAGE 9**

**DENITRIFICATIE-SNELHEID**

**INVLOED ACETAATDOSERING**

INVLOED ACETAAT-CONCENTRATIE OP DENITRIFICATIE-SNELHEIDproefverloop:

monster retourslib	5	liter
droge stof:	7,5	kg/m <sup>3</sup>
specifieke acetaatdosering:	0 - 15 - 30	mg Ac/g ds
nitraatdosering:	10	mg NO <sub>3</sub> -N/l
reactietijd:	1	uur

acetaat toegevoegd als 10% NaAc.3 H<sub>2</sub>O-opl

nitraat-N toegevoegd als 10% NaNO<sub>3</sub>.3 H<sub>2</sub>O-opl

resultaten:

datum: 24-03-1992			
droge stof retourslib: 10,5 g/l			
nitraat-N retourslib: 0,3 mg/l			
specifieke acetaatdosering (mg Ac/g ds)	0	11	22
	nitraat-N (mg/l)		
t (min)			
0	10,3	10,3	10,3
10	9,0	4,8	5,0
20	7,5	0,7	1,1
30	6,5	0,3	0,4
60	3,4	0,4	0,4