

	Q bio m3 / Tag	Q min l / s	Q max l / s
Mittelwert	14'509		
20%-Wert	8'942	63	262
50%-Wert	11'440	87	307
80%-Wert	18'057	118	480
Q tw ¹⁾	10'191	75	284
2 Q tw			569

1) Mittel aus 20% und 50%-Wert

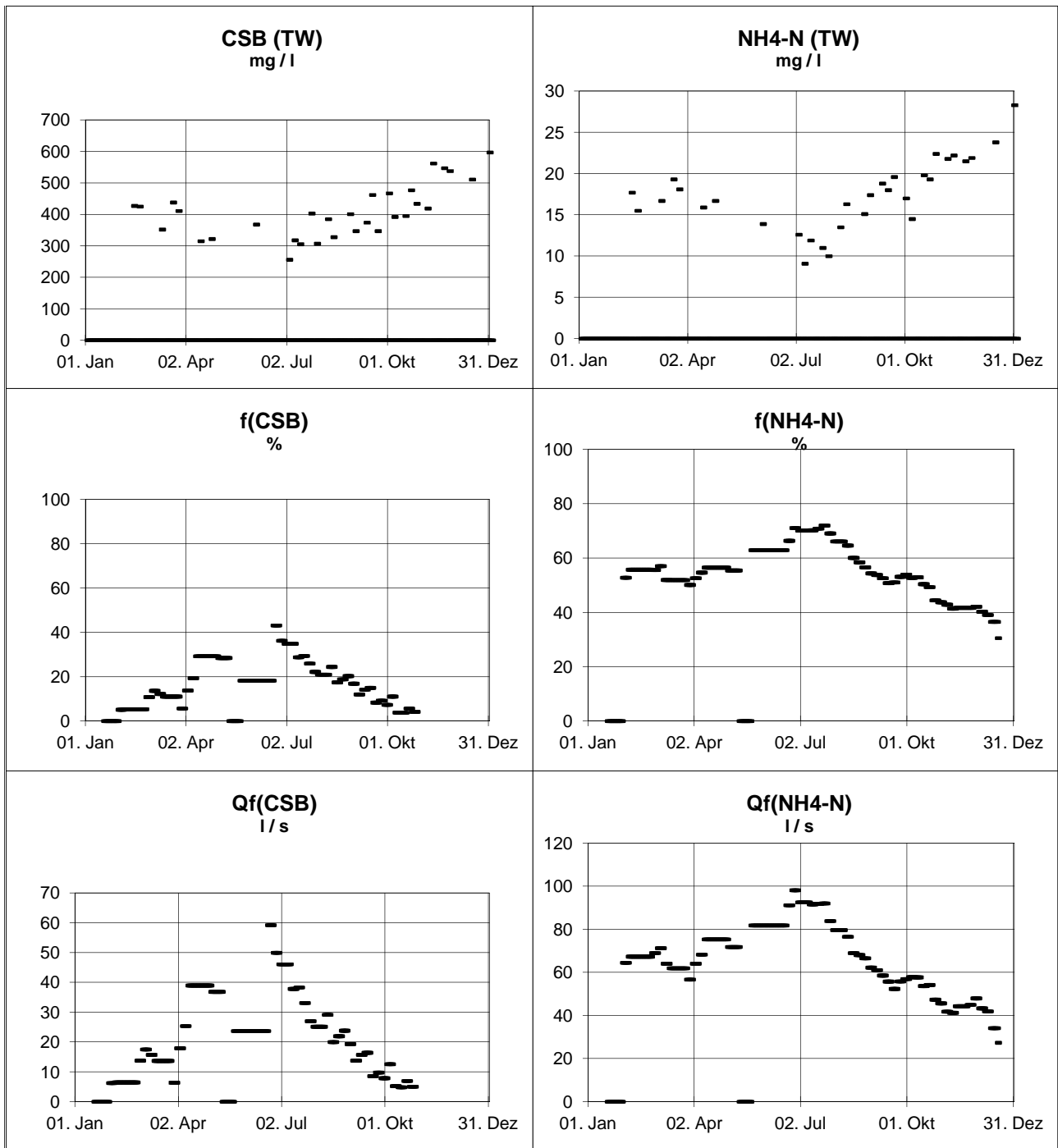
Fremdwasseranteil 28 %

siehe Seite 2

	Tagesmittelwerte	
	m3 / d	l / s
Q tw	10'191	118
Q fremd ²⁾	2'805	32
Q schmutz ³⁾	7'386	85

²⁾ = Q tw * Fremdwasseranteil / 100

³⁾ = Q tw - Q fremd



Vorgaben:

Q schmutz	200	l/EW*Tag
CSB	90	g/EW*Tag
NH4-N	7.5	g/EW*Tag
K soll (CSB)	450	mg / l
K soll (NH4-N)	37.5	mg / l

K soll: erwartete Konzentration im Zulauf, wenn nur Schmutzwasser zuläuft!

Schätzung aus EW biochemisch

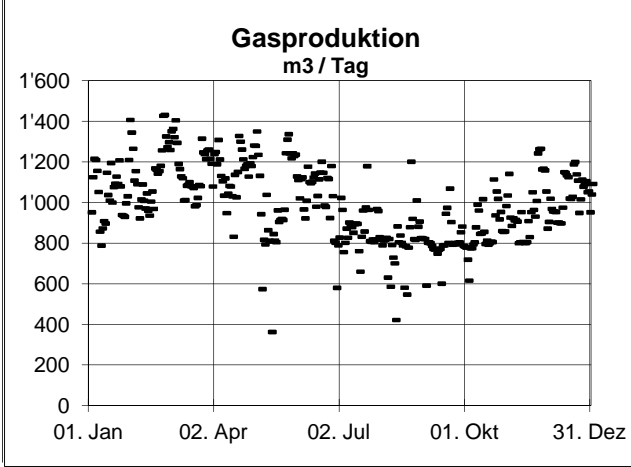
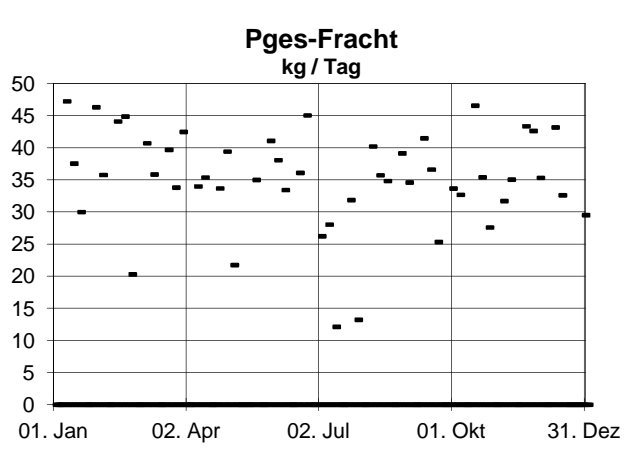
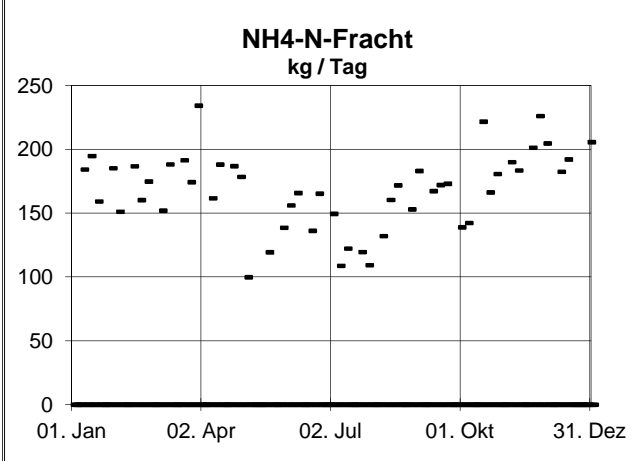
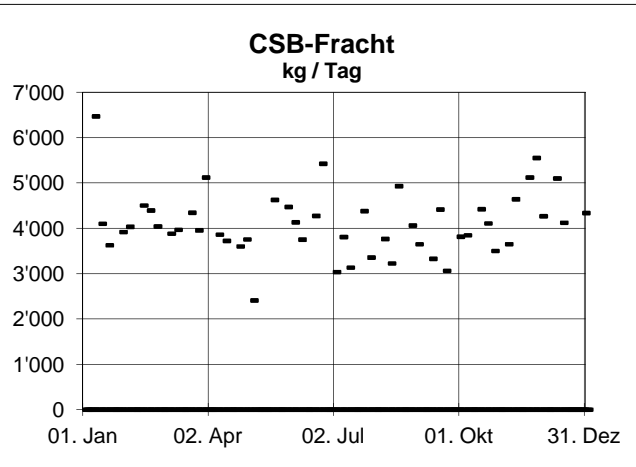
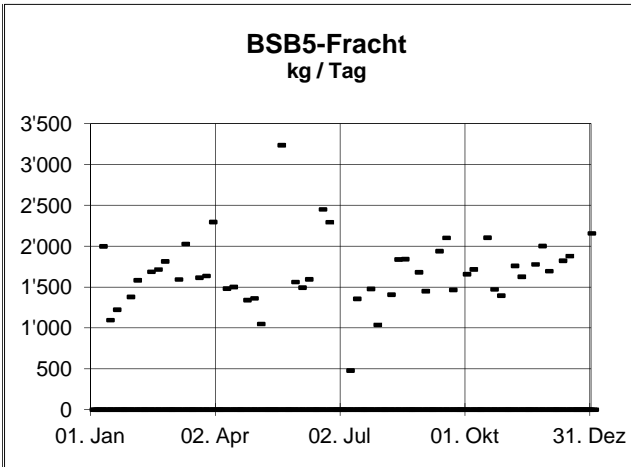
Q tw	10'191	m ³ / Tag
Q schmutz (EW) ¹⁾	8'200	m ³ / Tag
Q fremd (EW)	1'991	m ³ / Tag
f (EW)	20	%

¹⁾ 200 l / EW * Tag

Schätzung aus den Zulaufkonzentrationen:

f(CSB) Jahresmittel	9	%
f(NH4-N) Jahresmittel	54	%

f Mittelwert	28	%
f gewählt	28	%

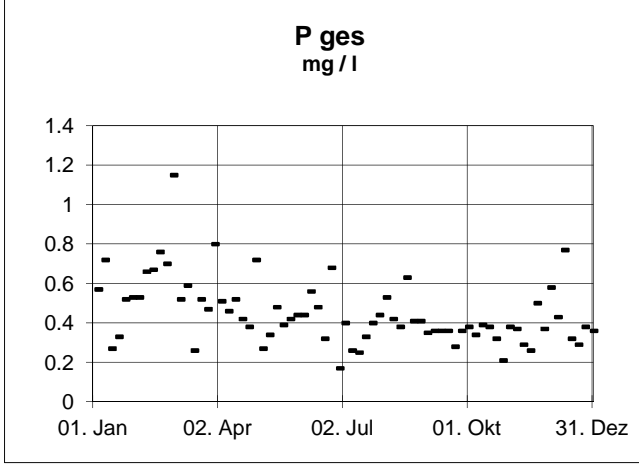
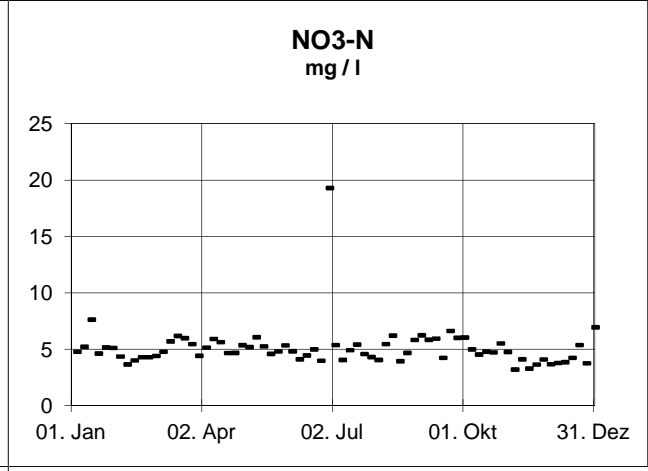
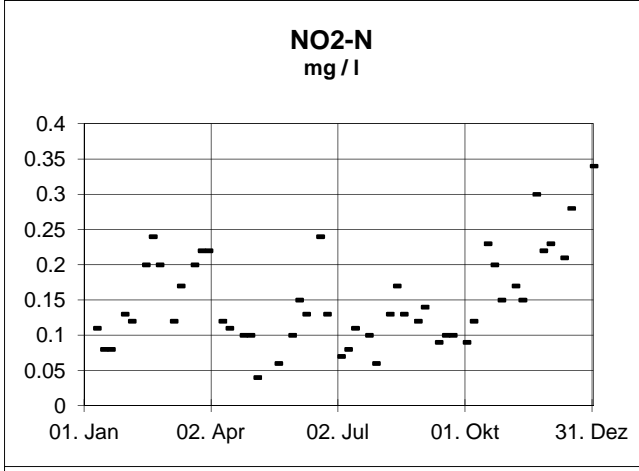
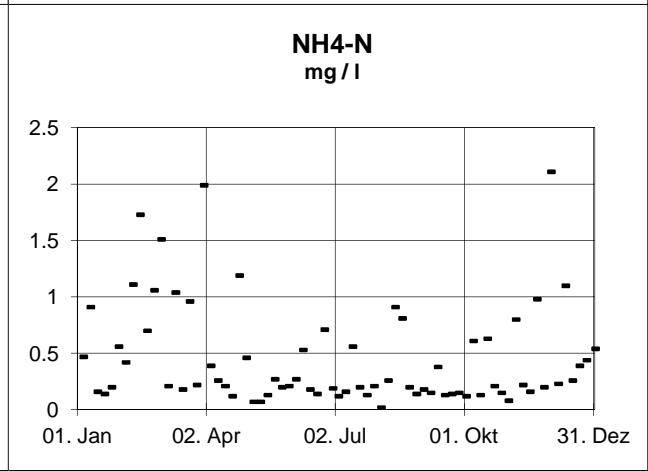
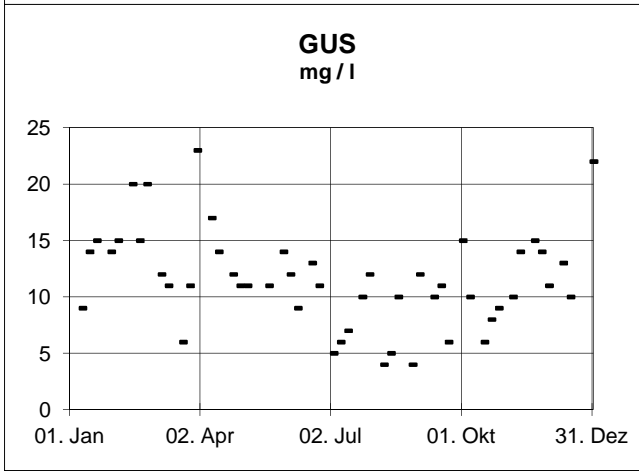
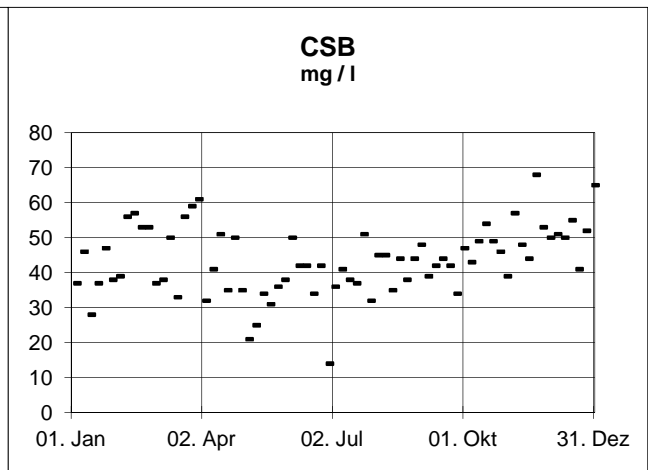
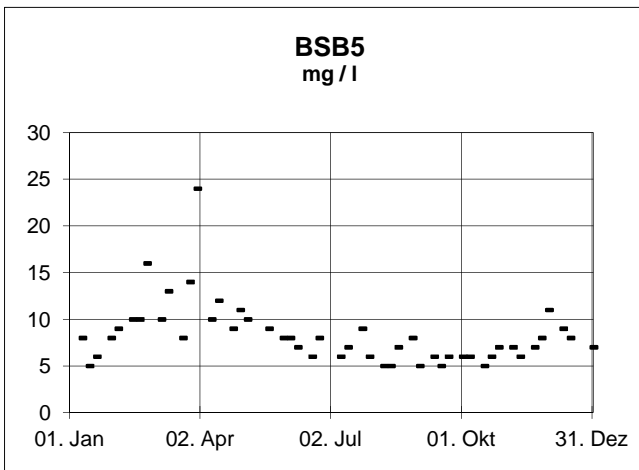


EZ angeschlossen	19'660
EW biochem. gewählt	41'000
EW biochem. 80%-Wert	47'000
EW Stickstoff	22'000
EW Phosphor	22'000

<u>Zulauffrachten</u>	BSB5 kg/Tag	CSB kg/Tag	NH4-N kg/Tag	Pges kg/Tag	Gasp. m3/Tag	FS kg/Tag
Mittelwert	1'678	4'102	168	35	991	2'731
50%-Wert	1'637	4'041	172	35	977	
80%-Wert	1'964	4'481	189	42	1'157	

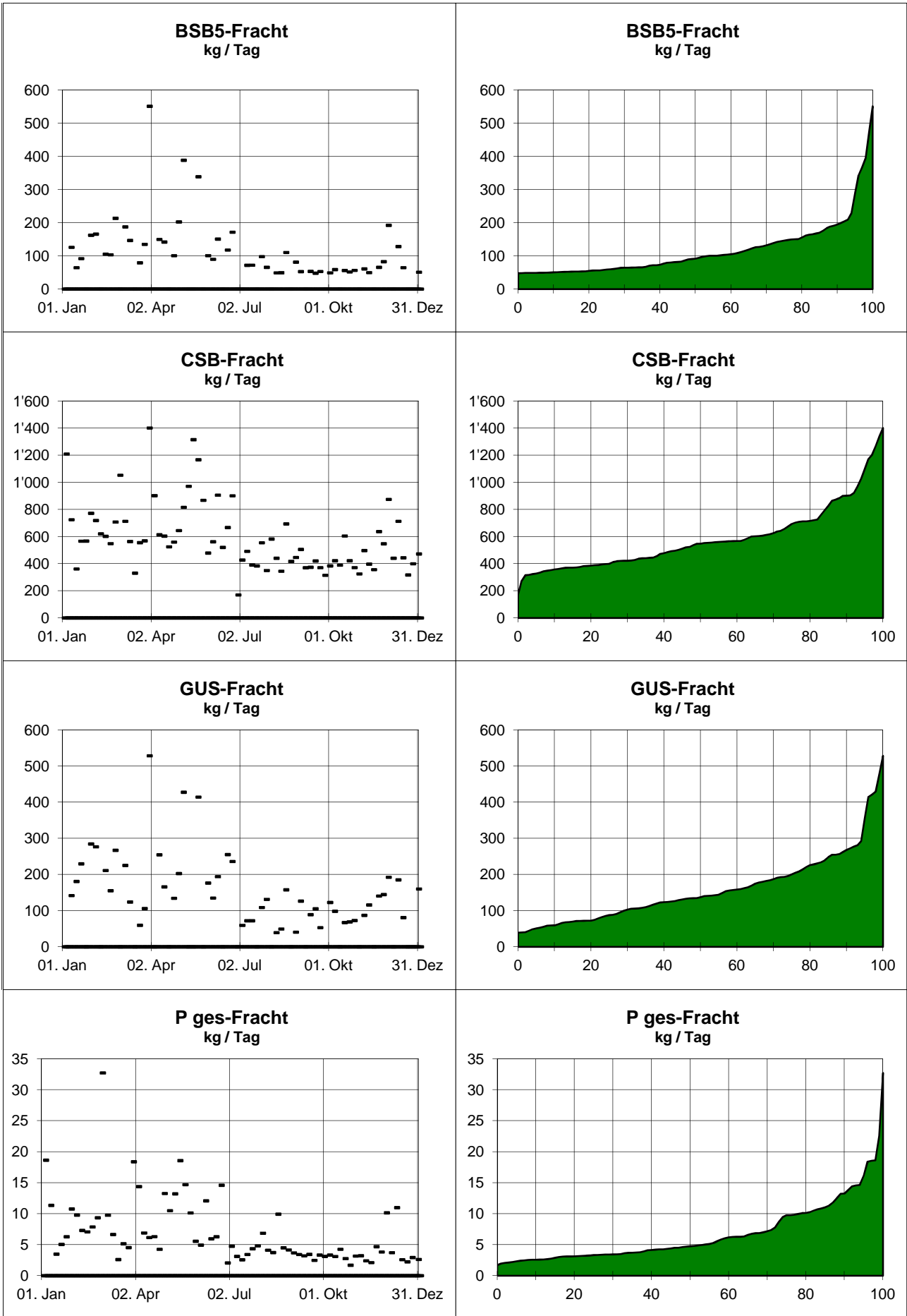
spezifische Belastung pro EW	g / Tag	g / Tag	g / Tag	g / Tag	Probenahmeort: ab VKB	l / Tag	g / Tag
	45	90	7.5	1.6		30	85

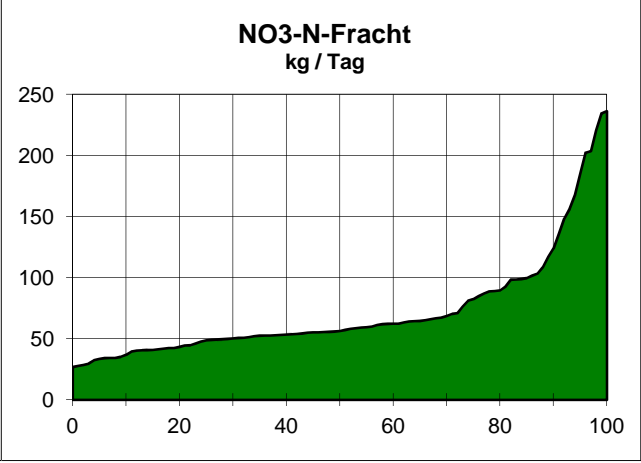
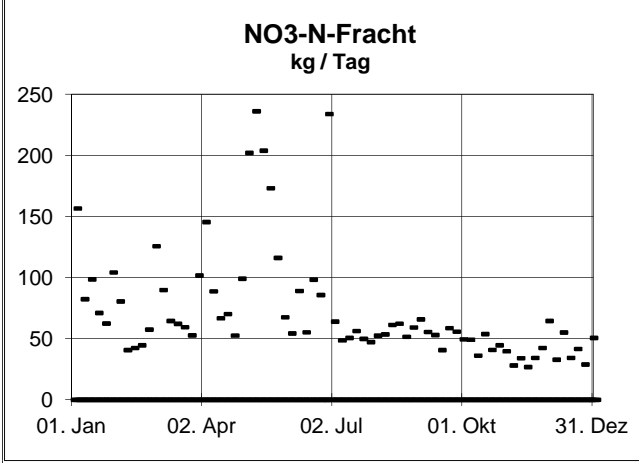
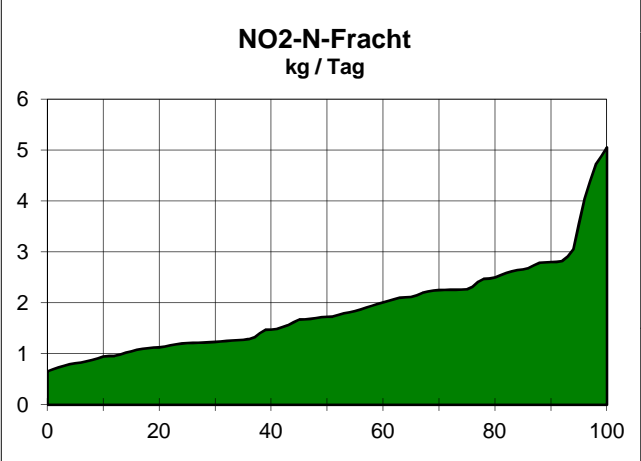
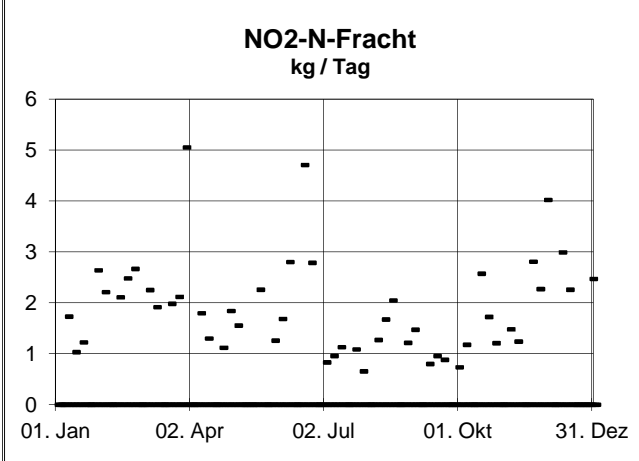
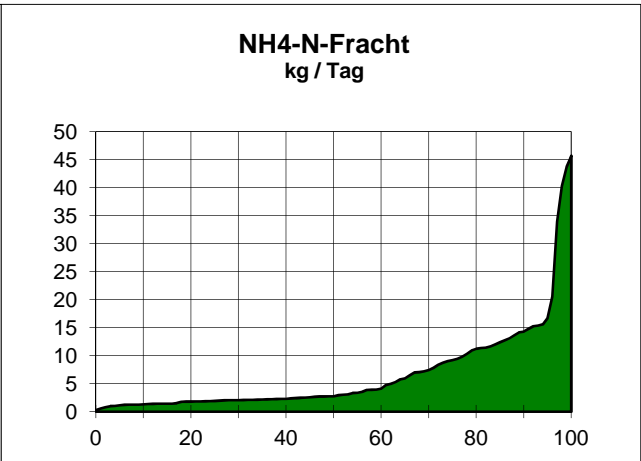
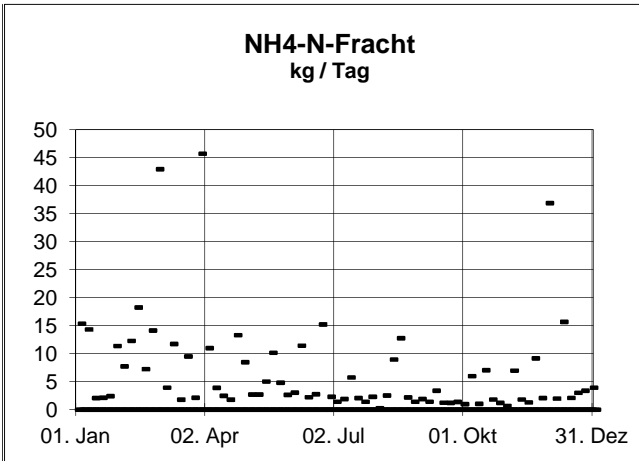
<u>Einwohnerwerte</u>	BSB5 EW	CSB EW	NH4-N EW	Pges EW	Mittelwerte EW	Gasp. EW	FS EW
Mittelwert	37'292	45'579	22'377	22'004	31'813	33'029	32'124
50%-Wert	36'388	44'900	22'924	22'118	31'582	32'567	
80%-Wert	43'643	49'785	25'146	26'048	36'156	38'553	



Angaben in mg/l	Mittelwert	90%-Wert	Grenzwert ¹⁾
BSB5	8.3	11.2	15
CSB	43.5	55.8	
GUS	11.6	15.2	15
NH4-N	0.5	1.1	2
NO2-N	0.1	0.2	0.3
NO3-N	5.1	6.1	
P ges	0.45	0.68	0.8

¹⁾ nach GSchV vom 28. Oktober 1998
CSB: Richtwert





Auslauffrachten:

Angaben in kg/Tag	Mittel- wert	50%- Wert	80%- Wert	Mittel 5 - 95 %
BSB5	120	92	156	105
CSB	584	548	717	562
GUS	160	138	226	149
NH4-N	6.7	2.7	11.2	5.3
NO2-N	1.9	1.7	2.5	1.8
NO3-N	72.7	56.3	89.5	66.8
P ges	6.8	4.7	10.1	6.2

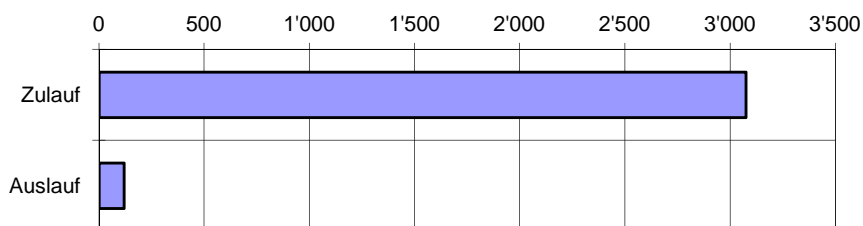
Abbauleistungen:

	EW gewählt	Spez. B. g / EW	Zulauf kg / Tag	Auslauf kg / Tag	Abbau %	Nitrifika- tion %
BSB5	41'000	75	3'075	120	96	
CSB	41'000	140	5'740	584	90	
N ges				100.8	62	
N Kjel	22'000	12	264.0	26.2		90
NH4-N		7	154.0	6.7		
NO2-N				1.9		
NO3-N				72.7		
N org		5	110.0	19.5		
Pges	22'000	2	44.0	6.8	85	

Auslauf: Summe N im Auslauf
Roh-Zulauf / Auslauf (NH4-N + Norg)

CSB / 30

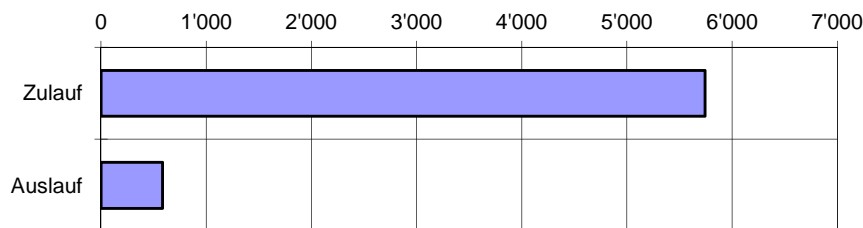
BSB5-Frachten in kg / Tag



BSB5- Abbau

2'955	kg / Tag
96	%
85	%

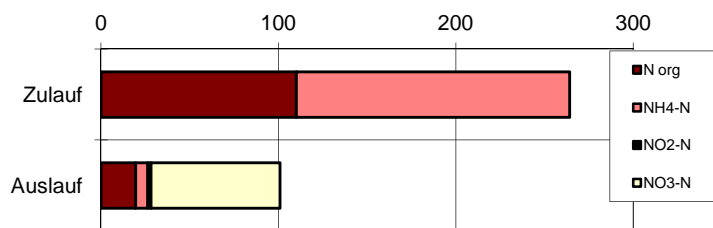
CSB-Frachten in kg / Tag



CSB-Abbau

5'156	kg / Tag
90	%
0	%

Stickstoff-Frachten in kg / Tag



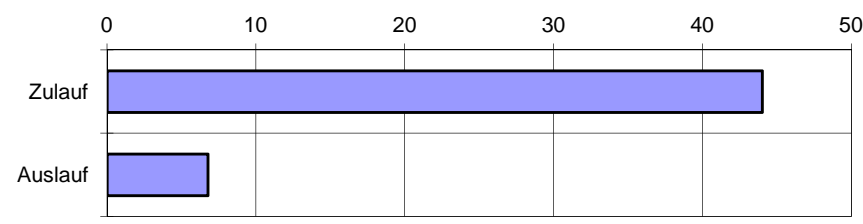
N-Elimination

163	kg / Tag
62	%
30	%

Nitrifikation

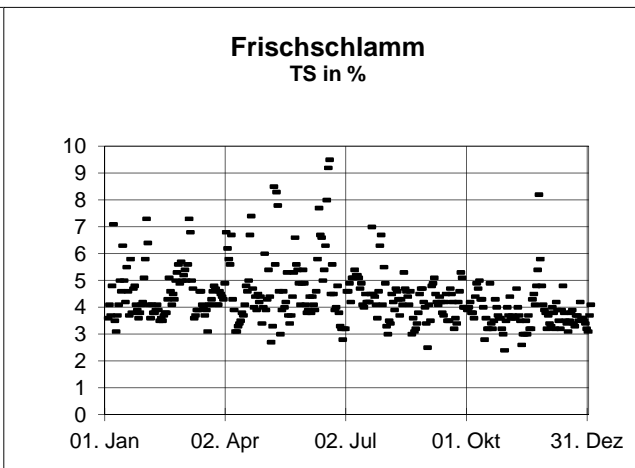
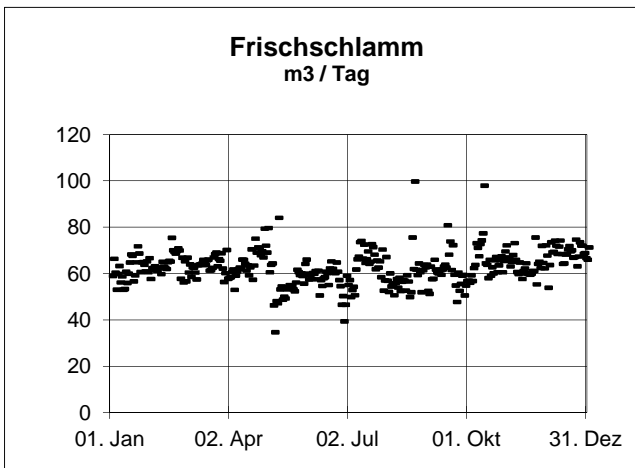
238	kg / Tag
90	%
90	%

Phosphor-Frachten in kg / Tag



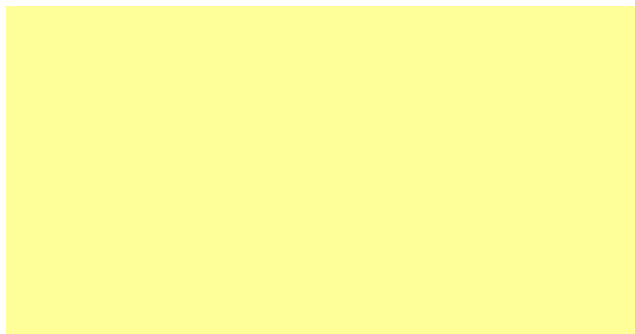
P-Elimination

37	kg / Tag
85	%
80	%



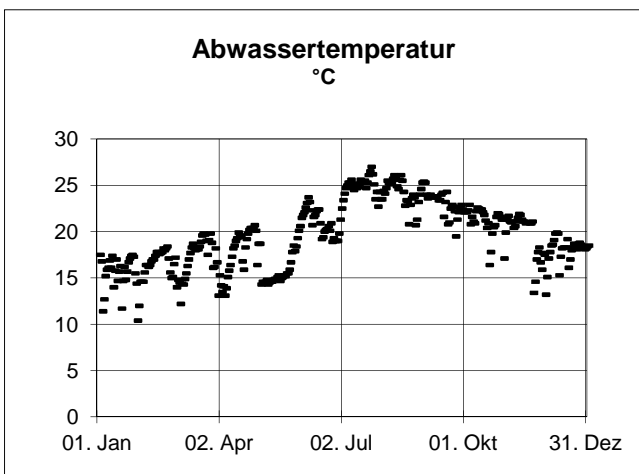
Frishschlammmanfall: Mittelwerte

Frishschl. nass	62.6	m3/Tag
TS-Anteil	4.4	%
Frishschl. in TS	2'731	kg/Tag



Jahresanfall

Frishschl. in TS	997	t / Jahr
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Abwassertemperatur:

Mittelwert	19.6	°C
20%-Wert	16.2	°C
50%-Wert	19.4	°C
80%-Wert	23.1	°C

Bemerkungen zur Datenauswertung:

