

HighStrengthFAST® Data

- **Coonamesset Inn, MA**
 - **99 Restaurant, MA**
- **Paradise Elementary School, PA**

COONAMESSET INN TEST DATA - FALMOUTH, MA (HIGH STRENGTH)

PARAMETER	UNITS	SAMPLE DATES												AVG	% RED	
		8/8/96	9/5/96	10/6/96	11/7/96	1/7/97	2/5/97	3/5/97	6/10/97	9/10/97	10/6/98	1/12/99	4/27/99			
BOD (5-Day @20°C)																
	Influent	mg/L													¹ 622	
	Effluent	mg/L	5.40	3.00	25.50	14.00	10.20	23.70	21.80	18.10	8.10	7.50	33.00	42.60	17.74	97.15
Total Suspended Solids																
	Influent	mg/L													¹ 101	
	Effluent	mg/L	32.00	9.00	8.40	18.80	24.20	20.00	17.00	13.00	8.70	29.40	27.80	22.20	19.21	78.02
Ammonia Nitrogen																
	Effluent	mg/L	2.31	0.42	0.01	0.01	0.42	0.01	0.70	1.09	0.01	0.87	0.20	0.87	0.58	
Nitrate Nitrogen																
	Effluent	mg/L	0.70	0.95	1.41	0.92	2.05	1.70	2.97	0.80	2.40	1.30	1.30	0.52	1.42	
Total Kjeldahl Nitrogen																
	Effluent	mg/L	5.60	3.01	1.47	6.65	2.94	7.91	8.05	4.66	1.60	3.77	9.40	9.64	5.39	
Total Nitrogen																
	Influent	mg/L													¹ 45	
	Effluent	mg/L	6.30	3.96	2.88	7.57	4.99	9.61	11.02	5.46	4.00	5.07	10.70	10.16	6.81	84.87

1 - The system was based on the following design parameters: 14,990 GPD / 622 mg/L BOD / 101 mg/L TSS / 45 mg/L TKN
Therefore, these influent numbers are estimates, and could be higher or lower than the true influent averages.

99 RESTAURANT TEST DATA - MASHPEE, MA (HIGH STRENGTH)

PARAMETER	UNITS	SAMPLE DATES				AVERAGE	% RED.
		2/12/97	3/5/97	1/5/98	10/26/98		
BOD [5]							
INFLUENT	mg/L	8010.0	1500.0	5034.0	2540.0	4271.00	
EFFLUENT	mg/L	41.7	68.3	67.2	123.0	75.05	98.2
TSS							
INFLUENT	mg/L	9450.0	667.0	5470.0	3320.0	4726.75	
EFFLUENT	mg/L	48.0	18.5	104.0	256.0	106.63	97.7
Ammonia N							
INFLUENT	mg/L N	34.9	56.0	33.3	30.6	38.70	
EFFLUENT	mg/L N	10.1	8.3	14.0	18.2	12.65	67.3
Nitrate N							
INFLUENT	mg/L N	0.5	2.7	1.0	0.5	1.18	
EFFLUENT	mg/L N	0.5	11.0	1.0	0.5	3.25	N.A.
TKN							
INFLUENT	mg/L N	128.0	90.0	188.0	92.4	124.60	
EFFLUENT	mg/L N	22.5	20.0	28.0	62.0	33.13	73.4
Total N_(TKN+Nitrates)							
INFLUENT	mg/L N	128.50	92.70	189.00	92.90	125.78	
EFFLUENT	mg/L N	23.00	31.00	29.00	62.50	36.38	71.1

PARADISE ELEMENTARY SCHOOL

CBOD₅								
KITCHEN AT 733 GPD AVG.			SANITARY AT 3,837 GPD AVG.			TOTAL GPD= 4,570	OVERALL PERFORMANCE	
DATE	INF. mg/L	INF. #	INF. mg/L	INF. #	TOTAL INF. #	EFF. mg/L	EFF. #	TOTAL REDUX %
05/16/01	501.00	3.05	78.70	2.52	5.57	4.30	0.16	97.06
04/25/01	329.00	2.00	194.00	6.21	8.21	3.10	0.12	98.56
04/18/01	333.00	2.03	94.60	3.03	5.06	2.00	0.08	98.49
04/11/01	521.00	3.17	268.00	8.58	11.75	4.40	0.17	98.57
04/04/01	531.00	3.23	207.00	6.62	9.85	2.90	0.11	98.88
03/28/01	436.00	2.65	160.00	5.12	7.77	5.20	0.20	97.45
03/21/01	381.00	2.32	197.00	6.30	8.62	1.97	0.08	99.13
03/14/01	451.00	2.74	63.70	2.04	4.78	1.13	0.04	99.10
03/07/01	472.00	2.87	190.00	6.08	8.95	1.61	0.06	99.31
02/14/01	223.00	1.36	193.00	6.18	7.54	4.87	0.19	97.54
02/06/01	477.00	2.90	146.00	4.67	7.57	1.67	0.06	99.16
02/01/01	591.00	3.60	149.00	4.77	8.37	1.98	0.08	99.10
01/24/01	585.00	3.56	122.00	3.90	7.46	4.70	0.18	97.60
01/18/01	321.00	1.95	573.00	18.34	20.29	10.40	0.40	98.05
AVG.	439.43	2.67	188.29	6.03	8.70	3.59	0.14	98.43

TSS								
KITCHEN AT 733 GPD AVG.			SANITARY AT 3,837 GPD AVG.			TOTAL GPD= 4,570	OVERALL PERFORMANCE	
DATE	INF. mg/L	INF. #	INF. mg/L	INF. #	TOTAL INF. #	EFF. mg/L	EFF. #	TOTAL REDUX %
05/16/01	69.30	0.42	46.70	1.49	1.92	5.00	0.19	90.06
04/25/01	51.50	0.31	66.00	2.11	2.43	4.00	0.15	93.72
04/18/01	61.00	0.37	194.00	6.21	6.58	5.30	0.20	96.93
04/11/01	60.00	0.37	38.70	1.24	1.61	3.70	0.14	91.21
04/04/01	48.00	0.29	193.00	6.18	6.47	6.00	0.23	96.47
03/28/01	93.00	0.57	60.00	1.92	2.49	5.00	0.19	92.34
03/21/01	61.00	0.37	42.00	1.34	1.72	7.70	0.29	82.91
03/14/01	62.80	0.38	86.70	2.77	3.16	6.30	0.24	92.40
03/07/01	71.00	0.43	25.00	0.80	1.23	5.00	0.19	84.56
02/14/01	56.10	0.34	98.60	3.16	3.50	4.70	0.18	94.88
02/06/01	50.40	0.31	417.00	13.34	13.65	3.70	0.14	98.97
02/01/01	85.20	0.52	147.00	4.70	5.22	3.00	0.11	97.81
01/24/01	132.00	0.81	111.00	3.55	4.36	2.00	0.08	98.25
01/18/01	139.00	0.85	77.00	2.46	3.31	11.50	0.44	86.77
AVG.	74.31	0.45	114.48	3.66	4.12	5.21	0.20	92.66

TOTAL NITROGEN*								
KITCHEN AT 733 GPD AVG.			SANITARY AT 3,837 GPD AVG.			TOTAL GPD= 4,570	OVERALL PERFORMANCE	
DATE	INF. mg/L	INF. #	INF. mg/L	INF. #	TOTAL INF. #	EFF. mg/L	EFF. #	TOTAL REDUX %
05/16/01	43.99	0.27	191.80	6.14	6.41	105.80	4.03	37.06
04/25/01	50.97	0.31	325.50	10.42	10.73	57.20	2.18	79.68
04/18/01	56.42	0.34	70.90	2.27	2.61	18.00	0.69	73.75
04/11/01	59.61	0.36	416.10	13.32	13.68	25.20	0.96	92.98
04/04/01	48.49	0.30	176.40	5.64	5.94	20.80	0.79	86.66
03/28/01	38.27	0.23	207.70	6.65	6.88	46.50	1.77	74.24
03/21/01	40.87	0.25	432.66	13.85	14.10	20.10	0.77	94.56
03/14/01	40.25	0.25	180.53	5.78	6.02	7.62	0.29	95.18
03/07/01	51.78	0.32	275.81	8.83	9.14	15.85	0.60	93.39
02/14/01	42.72	0.26	179.18	5.73	6.00	40.20	1.53	74.44
02/06/01	36.40	0.22	124.03	3.97	4.19	9.52	0.36	91.34
02/01/01	40.50	0.25	189.18	6.05	6.30	7.59	0.29	95.41
01/24/01	52.45	0.32	178.32	5.71	6.03	45.80	1.75	71.04
01/18/01	203.00	1.24	48.66	1.56	2.80	45.50	1.73	38.02
AVG.	57.55	0.35	214.06	6.85	7.20	33.26	1.27	78.41

* Total Nitrogen = TKN + NO₃ + NO₂