

Table 5-2 Summary of 3/4" Bubble Tubing™ Test Results

DATE: RUN:	30-Jun-11 10	30-Jun-11 11	1-Jul-11 12	5-Jul-11 13	5-Jul-11 14	6-Jul-11 15	7-Jul-11 16	8-Jul-11 17	8-Jul-11 18
Barometric Pres. (PSIA)	14.44	14.43	14.43	14.42	14.40	14.40	14.36	14.33	14.34
Ambient Temperature (°F)	78.4	77.6	77.1	80.9	81.3	79.2	80.7	76.1	82.0
Relative Humidity (%)	0.52	0.50	0.54	0.55	0.53	0.57	0.60	0.60	0.57
Line Pressure (PSIG)	7.82	7.10	6.76	6.38	5.53	5.10	4.70	5.75	3.81
Line Temperature (°F)	110	91	86	111	97	88	92	105	96
Water Temp. (°C)	23.31	23.60	23.84	25.60	25.82	25.86	25.69	25.08	25.66
Number Of Aeration Devices	100	100	100	100	100	100	100	100	100
Air Release Depth (ft)	15.00	15.00	15.00	10.00	10.00	10.00	5.17	5.17	5.17
Blower HPWire	0.60	0.29	0.13	0.48	0.23	0.10	0.20	0.47	0.08
Average Air Flow (SCFM)	10.41	5.56	2.60	10.01	5.48	2.50	5.50	10.64	2.67
Average Air Flow (SCFM/ft)	0.10	0.06	0.03	0.10	0.05	0.03	0.05	0.11	0.03
C*20 Standard Conditions	10.69	10.72	10.69	10.14	10.14	10.13	9.60	9.62	9.59
Tank Volume (Ft³)	5,310	5,310	5,310	3,464	3,464	3,464	1,963	1,963	1,963
TDS (mg/L)	308	382	481	583	685	792	764	764	940
KLa20 (hr⁻¹)	0.91	0.57	0.30	1.03	0.67	0.40	0.80	1.31	0.50
TDS Corrected Results									
KLa20 (hr⁻¹)	0.97	0.61	0.32	1.08	0.69	0.41	0.81	1.34	0.50
SOTR (Lb O₂/Hr)	3.4	2.1	1.1	2.4	1.5	0.9	1.0	1.6	0.6
SOTE OBSERVED (%)	31.8%	37.3%	42.1%	22.7%	26.5%	34.6%	16.8%	14.4%	21.3%
SOTE (%/Ft)	2.12%	2.49%	2.81%	2.27%	2.65%	3.46%	3.26%	2.78%	4.11%
SAE (Lb O₂/Hr/HP)	5.74	7.35	8.67	4.92	6.53	9.19	4.80	3.40	7.39
Metric Results (TDS Corrected)									
Air Flow (Nm³/h)	16.36	8.74	4.08	15.73	8.61	3.93	8.63	16.71	4.20
SOTR (g/Hr)	1555.0	974.6	514.4	1070.0	682.6	407.5	434.7	718.8	267.2
SOTE - %/m	6.95%	8.15%	9.21%	7.46%	8.69%	11.36%	10.69%	9.13%	13.50%

Figure 5-7 is a plot of air flow rate (SCFM/100' of tubing) versus the Mass Transfer Coefficient (K_La₂₀ - hr⁻¹).

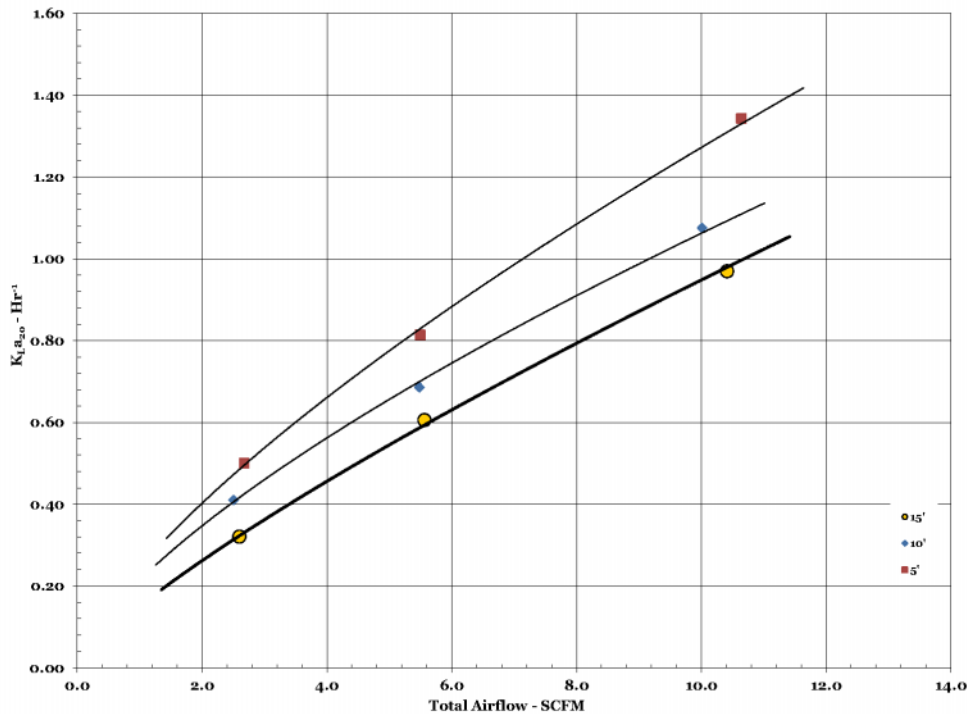


Figure 5-7 SCFM/100' of tubing v. K_La₂₀ - 3/4" Bubble Tubing™

Figure 5-8 is a plot of air flow rate (SCFM/100' of tubing) versus Standard Oxygen Transfer Rate (SOTR – Lb. O₂/Hr./100' of tubing).

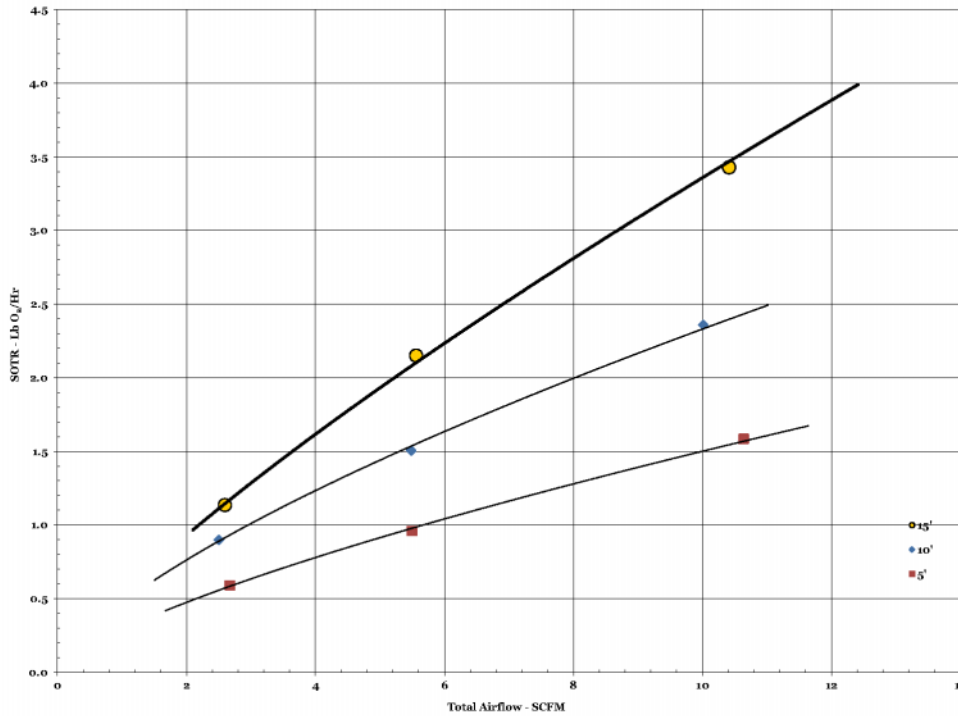


Figure 5-8 SCFM/100' of tubing v. SOTR/100' of tubing - 3/4" Bubble Tubing™

Figure 5-9 is a plot of air flow rate (SCFM/100' of tubing) versus Standard Oxygen Transfer Efficiency (SOTE – %).

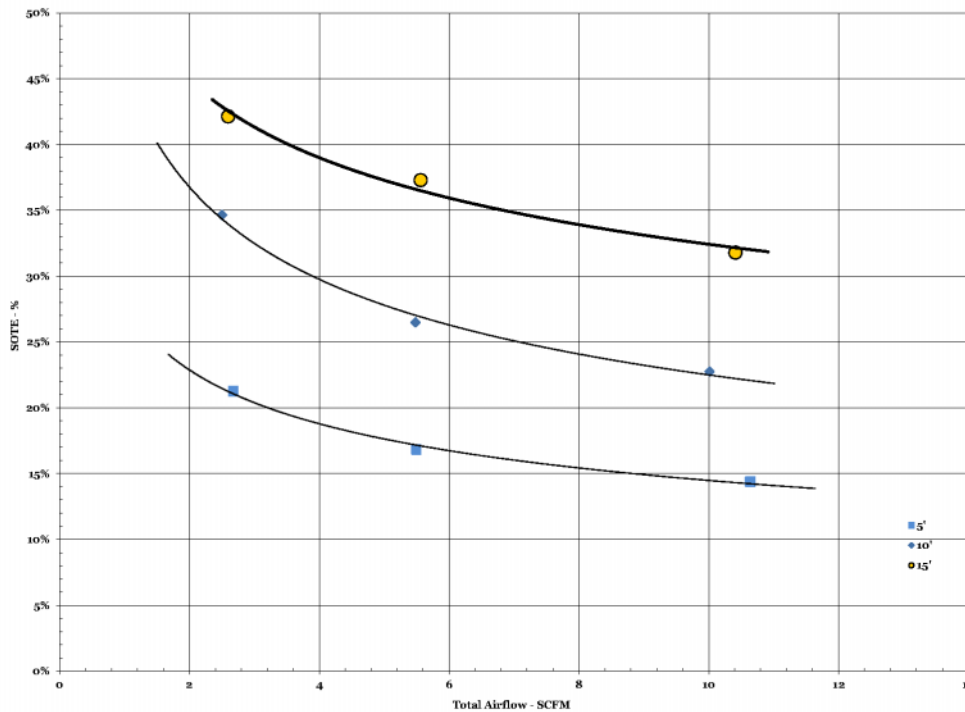


Figure 5-9 SCFM/100' of tubing v. SOTE - 3/4" Bubble Tubing™

Figure 5-10 is a plot of air flow rate (SCFM/100' of tubing) versus Standard Oxygen Transfer Efficiency (SOTE – %/Ft. of Submergence).

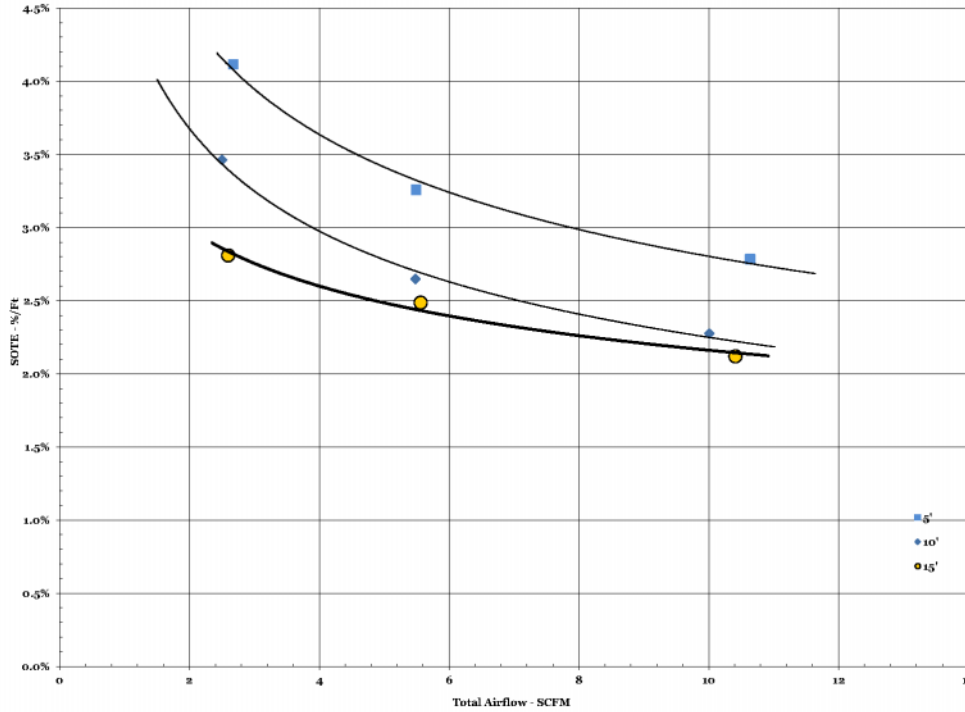


Figure 5-10 SCFM/100' of tubing v. SOTE/Ft. of Submergence - 3/4" Bubble Tubing™

Figure 5-17 is a plot of air flow rate (Nm³/h/100' of tubing) versus Standard Oxygen Transfer Efficiency (SOTE – %/m of Submergence).

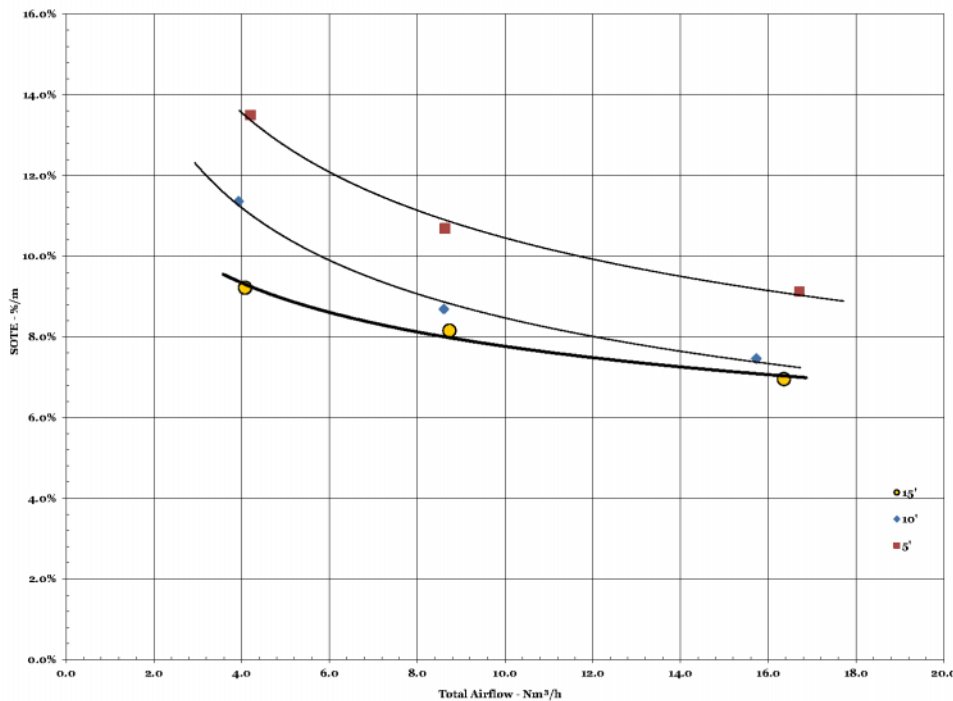


Figure 5-11 SCFM/100' of tubing v. SOTE - 3/4" Bubble Tubing™

