

Colorite vs Off-shore competitors

DATE:	Colorite - Aerotube	Colorite - Aerotube	Competitor #1 Off shore Aeration	Competitor #1 Off shore Aeration	Competitor #2 Off shore Aeration
DATE: RUN:	15-Feb-07 1.00	15-Feb-07 2.00	15-Feb-07 5.00	15-Feb-07 6.00	15-Feb-07 7.00
Barometric Pres. (PSIA)	14.39	14.39	14.37	14.37	14.37
Ambient Temperature (°F)	46.20	48.27	46.60	47.60	46.93
Relative Humidity (%)	0.37	0.37	0.36	0.36	0.36
Line Pressure (PSIG)	2.41	2.33	12.01	7.22	13.94
Line Temperature (°F)	77.33	74.00	87.67	82.67	69.67
Rotometer (SCFH)	360.00	179.00	160.00	110.33	39.33
C_{sm}T (Standard Methods, mg/l at 0 TDS)	12.07	12.05	11.98	11.95	11.92
C*₂₀ (mg/L at 0 TDS)	9.57	9.61	9.71	9.70	9.92
Water Temp. (°C)	7.23	7.28	7.54	7.63	7.74
Number Of Aeration Devices	16.00	16.00	16.00	16.00	16.00
Side Water Depth (ft)	5.17	5.17	5.17	5.17	5.17
Air Release Depth (ft)	5.00	5.00	5.00	5.00	5.00
Tank Length (ft)	6.58	6.58	6.58	6.58	6.58
Tank Width (ft)	1.94	1.94	1.94	1.94	1.94
Gear Reducer or Belt Efficiency	1.00	1.00	1.00	1.00	1.00
Motor Efficiency	0.85	0.85	0.85	0.85	0.85
Blower HPwire	0.13	0.06	0.38	0.14	0.12
Air Flow Device 1 (SCFM)	6.76	3.37	4.63	2.64	1.26
TDS Water Density @ 20°C (kg/m ³)	998.55	998.65	998.99	999.10	999.21
Standard Density @ 20°C (kg/m ³)	998.23	998.23	998.23	998.23	998.23
Temp. Correction Factor (τ)	1.33	1.33	1.32	1.31	1.31
Pressure Correction Factor (Ω)	0.98	0.98	0.98	0.98	0.98
Average Air Flow (SCFM)	6.76	3.37	4.63	2.64	1.26
Average Air Flow (Nm ³ /h)	10.87	5.42	7.45	4.24	2.03
Effective Depth Correction (f)	0.36	0.39	0.46	0.45	0.62
Headloss (In. H ₂ O)	6.62	4.58	272.44	139.87	325.92
C* (mg/l)	12.42	12.44	12.43	12.38	12.62
C _{sm} T (Standard Methods, mg/l)	12.03	12.01	11.89	11.86	11.81
C* ₂₀ Standard Conditions	9.54	9.57	9.64	9.62	9.83
Tank Volume (Ft ³)	65.90	65.90	65.90	65.90	65.90
(Gallons)	492.99	492.99	492.99	492.99	492.99
(m ³)	1.87	1.87	1.87	1.87	1.87
(Million Pounds)	0.00	0.00	0.00	0.00	0.00
#Na ₂ SO ₃	0.58	0.59	0.59	0.58	0.59
Cobalt Concen. (mg/l)	0.10	0.10	0.10	0.10	0.10
Grams Cobalt Chloride	0.77	0.77	0.77	0.77	0.77
Blower HP _{motor}	0.11	0.05	0.33	0.12	0.10
Total HP _{water av.}	0.11	0.05	0.33	0.12	0.10
TDS (mg/L)	411.00	544.00	992.00	1,131.00	1,275.00
KLa-NLR 1	NA	NA	NA	NA	NA
KLa-NLR 2	11.17	6.51	6.71	5.27	2.40
KLa-NLR 3	11.42	6.70	6.68	5.63	2.40
KLa-NLR 4	11.24	6.60	6.81	5.34	2.41
KLa-NLR 5	11.28	6.62	6.78	5.31	2.40
KLa-NLR 6	11.25	6.65	6.84	5.34	2.39
AVG KLa-NLR	11.27	6.62	6.76	5.38	2.40
KLa %var 1					
KLa %var 2	-0.90%	-1.58%	-0.85%	-2.09%	0.03%
KLa %var 3	1.28%	1.28%	-1.19%	4.69%	0.08%
KLa %var 4	-0.29%	-0.22%	0.67%	-0.70%	0.27%
KLa %var 5	0.10%	0.07%	0.26%	-1.23%	0.00%
KLa %var 6	-0.20%	0.44%	1.10%	-0.67%	-0.38%
AVG KLa (within ± 10%)	11.27	6.62	6.76	5.38	2.40

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DATE:	15-Feb-07	15-Feb-07	15-Feb-07	15-Feb-07	15-Feb-07
RUN:	1.00	2.00	5.00	6.00	7.00
KLa20 NLR	15.26	8.95	9.09	7.21	3.21
KLa-LRA 1	NA	NA	NA	NA	NA
KLa-LRA 2	11.11	6.77	6.69	5.45	2.58
KLa-LRA 3	11.35	6.59	6.69	5.62	2.60
KLa-LRA 4	11.33	6.58	6.84	5.38	2.60
KLa-LRA 5	11.22	6.55	6.80	5.29	2.57
KLa-LRA 6	11.31	6.59	6.79	5.30	2.56
AVG KLa-LRA	11.26	6.61	6.76	5.41	2.58
KLa %var 1					
KLa %var 2	-1.39%	2.29%	-1.08%	0.83%	-0.10%
KLa %var 3	0.75%	-0.42%	-1.04%	3.89%	0.73%
KLa %var 4	0.59%	-0.55%	1.14%	-0.45%	0.52%
KLa %var 5	-0.37%	-0.92%	0.58%	-2.21%	-0.38%
KLa %var 6	0.42%	-0.40%	0.39%	-2.05%	-0.77%
AVG KLa (within ± 10%)	11.26	6.61	6.76	5.41	2.58
KLa20 LRA	15.25	8.94	9.09	7.25	3.46
KLa20 LRA-NLR AVG	15.25	8.95	9.09	7.23	3.33
SOTR Observed	0.6	0.4	0.4	0.3	0.1
SOTE Observed	8.6%	10.1%	7.6%	10.6%	10.4%
SOTE Observed - %/Ft	1.7%	2.0%	1.5%	2.1%	2.1%
SAE Observed	4.66	5.67	0.94	2.06	1.14
KLa20 (TDS Corrected)	16.15	9.35	9.10	7.14	3.24
SOTR (TDS Corrected)	0.6	0.4	0.4	0.3	0.1
SOTE (TDS Corrected)	9.1%	10.6%	7.6%	10.4%	10.1%
SOTE/Ft (TDS Corrected)	1.8%	2.1%	1.5%	2.1%	2.0%
SAE (TDS Corrected)	4.93	5.93	0.95	2.03	1.11
	1.71%	2.03%	1.51%	2.11%	2.08%
SOTR/Disk	0.04	0.02	0.02	0.02	0.01
SCFM/Ft	0.423	0.211	0.289	0.165	0.079