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**Sediment Entrainment Devices
Mound Study 6000-21
Cape Fear, NC
July-Sept, 2001**



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Draft report Prepared for
Evans-Hamilton, Inc
By

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Table 1. Sediment Entrainment Devices Sample Log

Sample ID	Date Rec'd	Sample Location	Date In	Date Out	Picture #	Description
1T	20-Aug-01	Top basin on West Mound Crest bipod				1 3/4" sediment
1B		Bottom basin on West mound Crest bipod				3 1/4" sediment
2T	4-Sep-01	Top basin on West Mound Crest bipod		15-Aug-01		1 5/8" sediment
2B		Bottom basin on West Mound Crest bipod		15-Aug-01	2674	4" sediment
3T	Oct-01	Top basin on West Mound Crest bipod	16-Aug-01	5-Sep-01	3338	1 1/4" well mixed black sediment
3B		Bottom Grab on West Mound Crest		5-Sep-01		Sandy sediment in bag
4T		Top basin on West Mound Crest bipod	5-Sep-01	27-Sep-01	3341	1 1/4" black sediment with black floc on top
4B		Bottom basin on West Mound Crest bipod	5-Sep-01	27-Sep-01	3340	1/4" fine gray sediment on top 4" sand mixed with black sediment 1" black material on bottom



Figure 1. Digital Pictures documenting visible layers. SED samples 2B, 3T, 4T, and 4B are represented by photo 2674, 3338, 3341, and 3340, respectively

Table 2. Grain Size Distributions by Percent Weight and Associated Ratios

Sample ID	% Clay	% Silt	% Sand	% Gravel	% Clay/Silt	% Mud/Sand
1T	24.11	18.42	57.47	0	56.69	42.53
1B	3.53	1.4	94.74	0.32	71.60	4.95
2T	33.49	15.68	50.83	0	68.11	49.17
2B	5.07	2.61	92.32	0	66.02	7.68
3T	25.61	18.71	55.67	0	57.78	44.32
3B	0.9	0.15	93.28	5.67	85.71	1.11
4T	40.26	19.22	40.52	0	67.69	59.48
4B	5.59	2.77	90.78	0.86	66.87	8.43

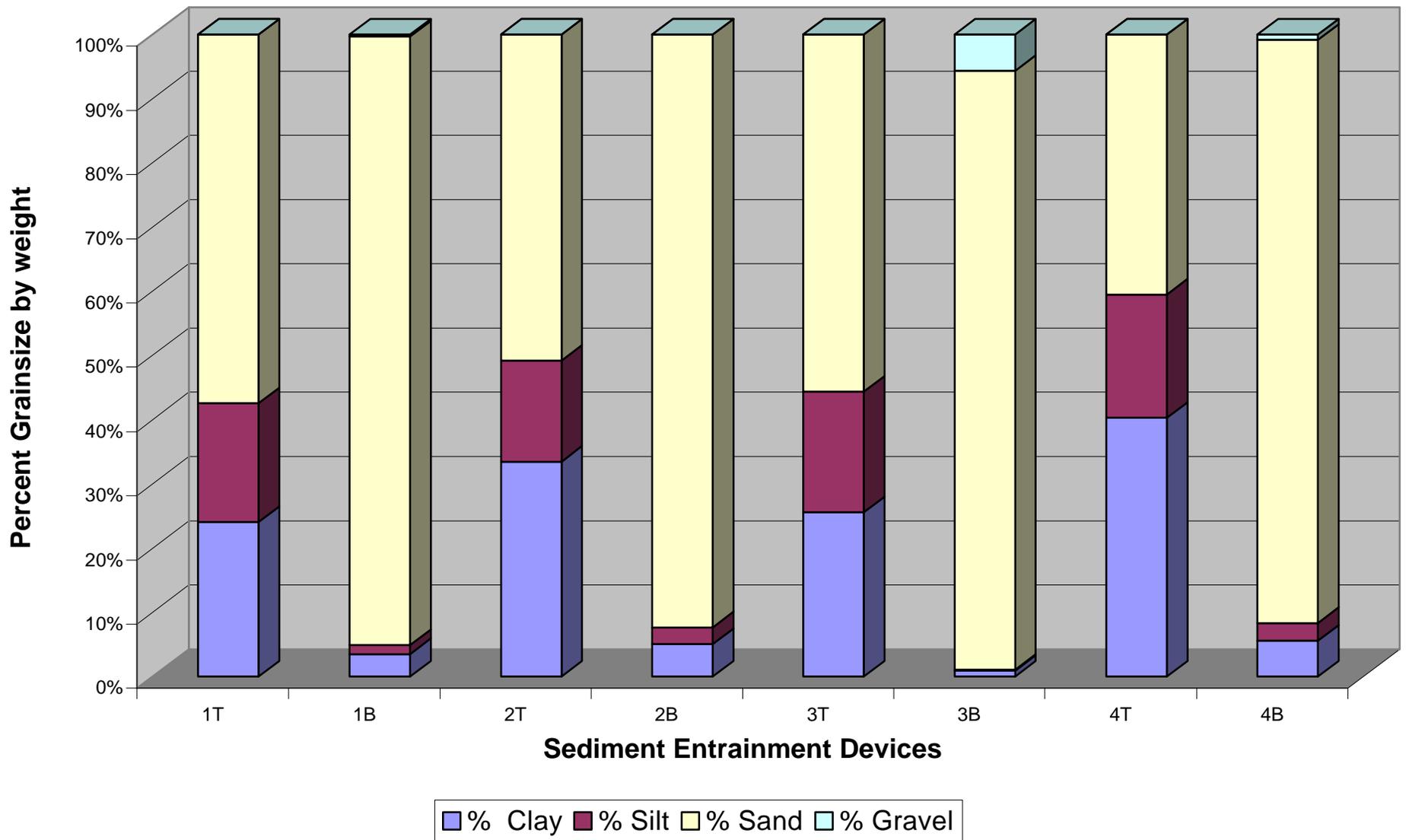


Figure 2. Bar Graph of Percent by Weight Grains size of Sediment Entrainment Devices using wet sieve and pipette analysis

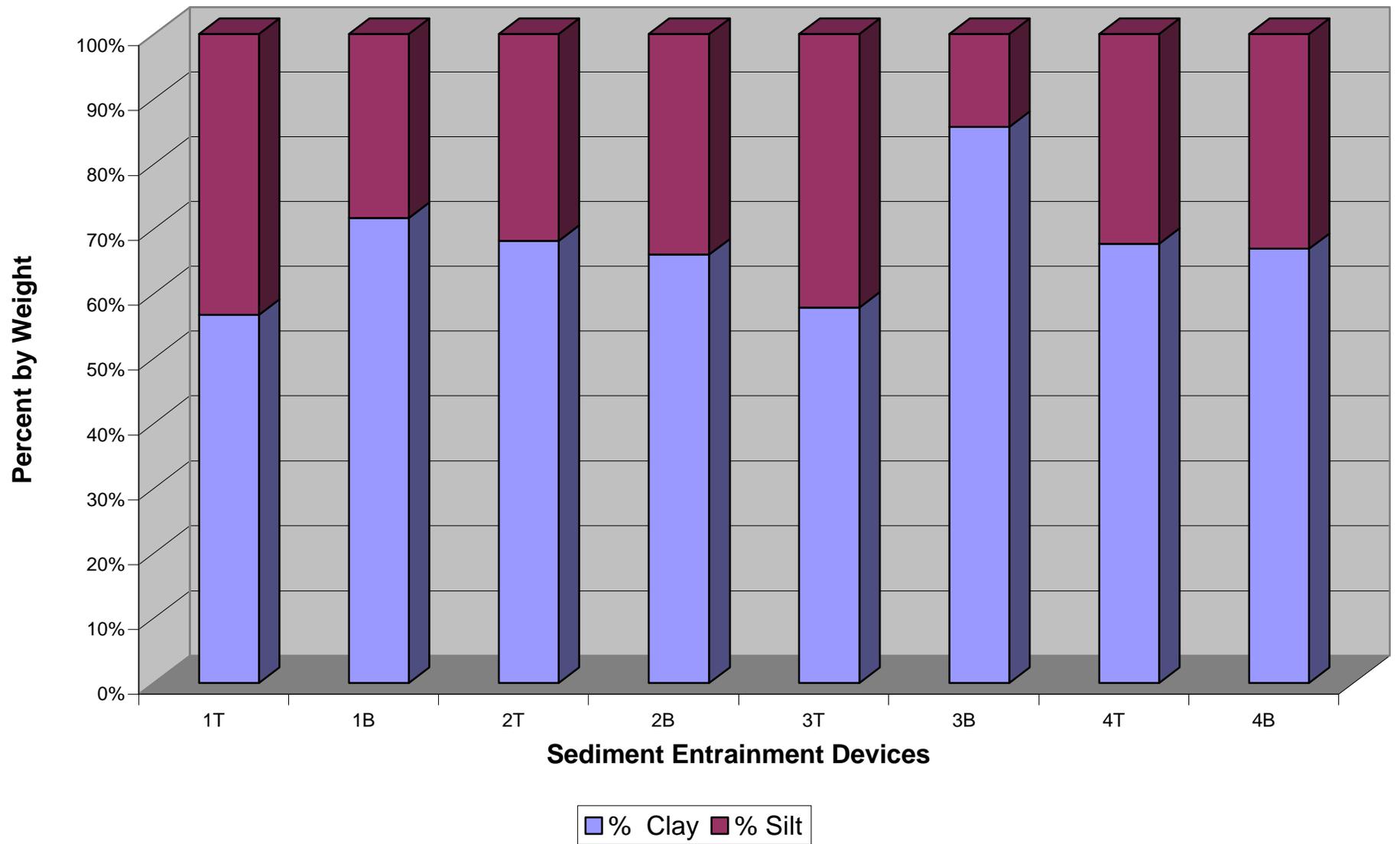


Figure 3. Percent clay and percent silt by weight of the mud fraction of SED samples.

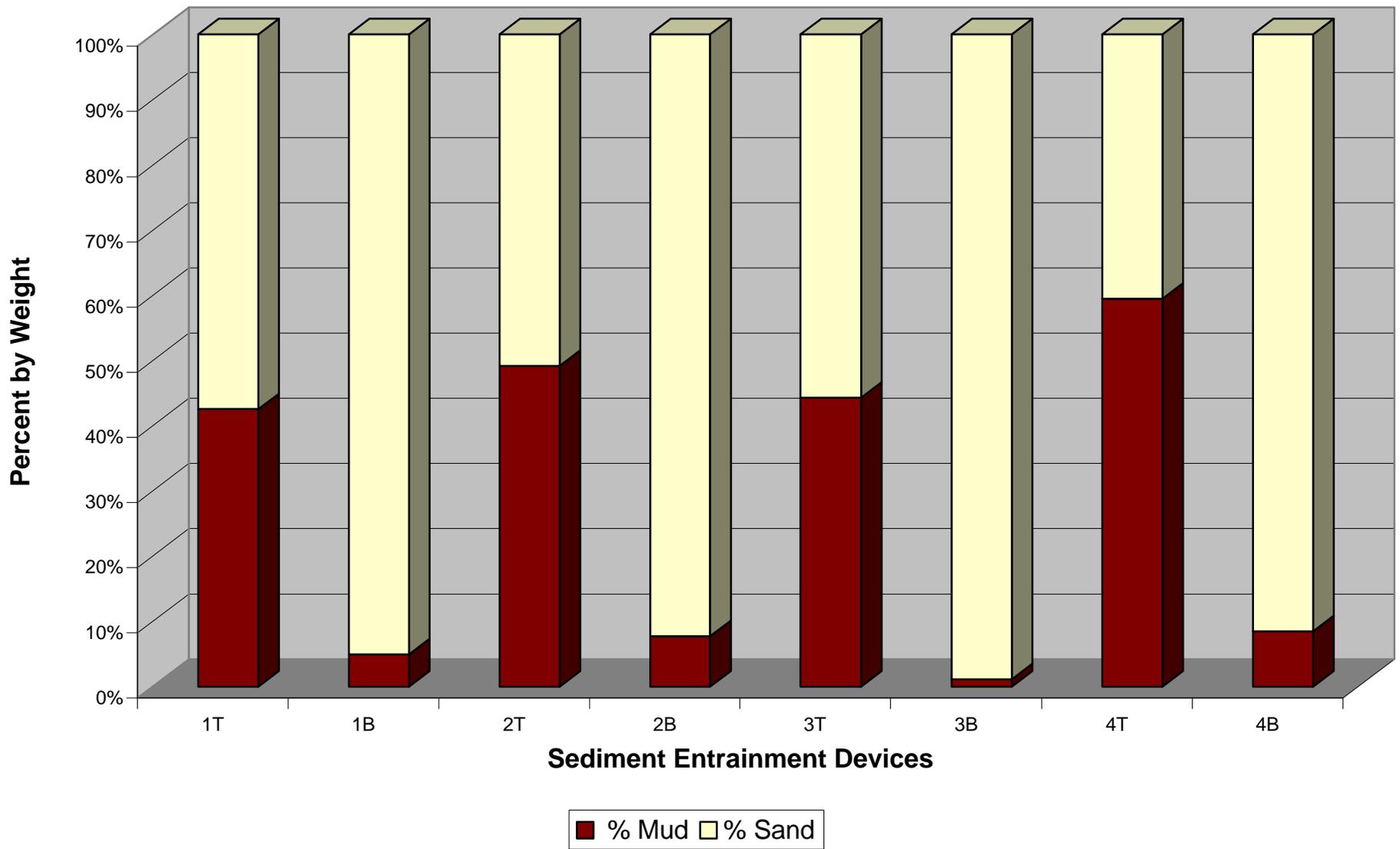


Figure 4. Percent mud and percent sand by weight of the SED samples.