

Table 1a Resuspension experiment of Trepangier bayou sediment (~40g/l)

	sampling time	pH	Eh (mV)	[Fe] (mg/l)	[Mn] (mg/l)	[Ca] (mg/l)	[Pb] (ug/l)	[Zn] (mg/l)	[Cd] (ug/l)	[S] (mg/l)	[As] (ug/l)	[Cu] (ug/l)	[Co] (ug/l)
S1	15 min	7.33	-237	16.21	0.74	23.67	0.12	0.137	< D. L	1.07	5.85	2.5	0.23
S2	1 hr	7.2	-232	9.5	0.62	20.98	1.34	0.0399	0.09	1.65	9.77	11.58	0.92
S3	3 hr	7.15	-187	5.18	0.46	17.43	1.08	0.0684	< D. L	4.45	8.03	5.83	0.81
S4	6hr	7.14	-182	4.1	0.4	40.82	0.97	0.0429	< D. L	9.04	7.37	6.17	0.89
S5	24hr	6.59	-88	7.5	1.84	127.55	0.82	0.0674	< D. L	82.5	4.17	6.44	3.13
S6	2 days	5.22	84	80.01	12.07	181.79	3.27	0.878	0.35	246	6.29	8.5	43.7
S7	3 days	4.23	211.3	104.4	20.84	216.5	31.82	7.541	17.82	331	7.98	13.67	130.6
S8	4 days	3.72	306.8	67.98	22.79	223.8	130.14	13.54	44.26	332	5.02	77.64	263.2
S9	5 days	3.32	433.6	9.1	23.23	223.8	446.94	17.3	76.2	332	13.66	300.87	454.5
S10	1 week	2.89	516.4	34.78	26.15	229.6	1574.07	18.77	88.72	391	9.87	795.6	499.4
S11	2 weeks	2.86	564	30.46	26.67	216.7	2568.37	18.26	99.32	392	4.69	842.01	503.0
S12	4 weeks	1.81	532	3150	27.86	256.3	3908.85	20.24	89.95	167	27.3	1767.27	706.7

Table 1b Resuspension experiment of Trepangier bayou sediment with the addition of calcite(12%)

	sampling time	pH	Eh (mV)	[Fe] (mg/l)	[Mn] (mg/l)	[Mg] (mg/l)	[Ca] (mg/l)	[Pb] (ug/l)	[Zn] (ug/l)	[Cd] (ug/l)	[Cu] (ug/l)	[Al] (ug/l)	[S] (mg/l)
S1	40 min	7.33	-255	11.514	0.63731	14.342	25.755	2.02	< D. L.	< D. L.	< D. L.	5.05	1.1
S2	3 hr	7.21	-282.8	7.0094	0.53833	12.625	22.927	1.01	23.02	0.1	6.01	2.02	2.28
S3	6 hr	7.25	-294.5	4.3531	0.47571	12.12	25.25	8.08	50.07	0.06	6.19	3.03	4.75
S4	24 hr	7.35	-170	0.15554	0.8383	22.22	98.677	5.05	33.68	0.12	6.29	2.02	88.7
S5	48 hr	7.13	-150	0.02323	1.9695	39.592	406.02	1.01	14.96	0.06	5.87	< D. L.	328
S6	72 hr	7.41	-95.5	0.00808	0.3131	40.703	471.67	< D. L	48.59	0.14	5.21	< D. L.	372
S7	5 days	7.47	-65.6	0.01111	0.0101	38.784	482.78	< D. L	84.3	0.09	6.92	< D. L.	388.1
S8	7 days	7.5	-85.8	0.018	0.004	38.3	497.9	< D. L	63.94	0.15	8.5	< D. L.	394.1
S9	8 days	7.54	-97	0.011	0.004	37.4	492	6	71.67	0.193	9.08	< D. L.	N.A.