

Impact Water Quality Monitoring for Dredging Activities

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2013/02/27	MF	DS1	08:57:53	B	8.2	196.7	0.44	19.33	30.49	118.2	9.09	5.8	8.12	11
2013/02/27	MF	DS1	08:59:13	M	5.1	265.2	0.52	19.34	30.48	120.3	9.25	3.5	8.11	11
2013/02/27	MF	DS1	09:00:11	T	1.2	40.0	0.39	19.35	30.45	121.0	9.30	2.4	8.11	6
2013/02/27	MF	DS1	09:01:49	B	7.8	164.1	0.44	19.33	30.50	119.7	9.21	4.4	8.11	5
2013/02/27	MF	DS1	09:02:35	M	5.0	197.2	1.26	19.35	30.45	120.5	9.27	2.8	8.11	4
2013/02/27	MF	DS1	09:03:18	T	1.2	148.6	0.80	19.39	30.32	120.7	9.28	1.9	8.11	3
2013/02/27	MF	DS2	08:47:46	B	8.4	151.6	0.79	19.35	30.41	119.0	9.15	8.9	8.11	17
2013/02/27	MF	DS2	08:48:36	M	5.3	200.5	0.37	19.39	30.30	119.1	9.16	4.3	8.11	19
2013/02/27	MF	DS2	08:49:30	T	0.9	175.2	1.01	19.42	30.24	119.7	9.21	3.0	8.11	6
2013/02/27	MF	DS2	08:51:00	B	9.1	214.2	0.36	19.35	30.42	118.3	9.10	5.7	8.11	4
2013/02/27	MF	DS2	08:52:03	M	5.5	195.6	0.69	19.35	30.40	119.9	9.22	3.4	8.11	5
2013/02/27	MF	DS2	08:52:50	T	1.0	40.0	0.39	19.40	30.27	119.9	9.22	4.8	8.11	6
2013/02/27	MF	DS3	08:36:44	B	9.2	194.4	0.04	19.34	30.40	115.7	8.90	6.0	8.11	7
2013/02/27	MF	DS3	08:37:28	M	5.5	142.4	0.33	19.37	30.34	116.9	8.99	4.2	8.10	8
2013/02/27	MF	DS3	08:38:17	T	1.0	161.4	0.97	19.39	30.28	117.9	9.07	2.7	8.11	11
2013/02/27	MF	DS3	08:39:47	B	9.2	150.1	0.40	19.36	30.37	115.9	8.91	5.2	8.11	12
2013/02/27	MF	DS3	08:40:44	M	5.4	234.5	0.37	19.38	30.31	117.1	9.00	3.6	8.10	4
2013/02/27	MF	DS3	08:41:36	T	0.9	161.4	0.97	19.40	30.27	118.2	9.09	2.5	8.11	5
2013/02/27	MF	DS4	08:26:46	B	9.2	186.6	0.52	19.37	30.32	115.0	8.85	6.3	8.12	11
2013/02/27	MF	DS4	08:27:31	M	5.7	157.1	0.86	19.41	30.23	116.9	8.99	3.3	8.11	13
2013/02/27	MF	DS4	08:28:16	T	0.8	150.0	0.32	19.52	29.99	119.2	9.16	1.9	8.12	5
2013/02/27	MF	DS4	08:29:55	B	9.2	186.6	0.52	19.38	30.31	116.1	8.93	6.5	8.10	5
2013/02/27	MF	DS4	08:30:46	M	5.4	199.0	0.91	19.40	30.26	116.9	8.99	3.3	8.10	3
2013/02/27	MF	DS4	08:31:33	T	1.1	150.0	0.32	19.54	29.94	119.7	9.20	1.6	8.11	2
2013/02/27	MF	DS5	08:15:09	B	9.0	91.1	1.03	19.58	29.73	118.2	9.09	8.5	8.12	19
2013/02/27	MF	DS5	08:15:58	M	5.6	126.0	0.99	19.58	29.74	118.7	9.12	3.6	8.12	18
2013/02/27	MF	DS5	08:17:05	T	0.9	196.3	0.55	19.58	29.69	119.3	9.17	4.3	8.11	15
2013/02/27	MF	DS5	08:18:37	B	9.3	185.4	0.95	19.57	29.78	118.1	9.08	16.1	8.13	13
2013/02/27	MF	DS5	08:20:04	M	5.4	219.3	0.48	19.52	29.91	118.1	9.08	6.6	8.11	5
2013/02/27	MF	DS5	08:20:54	T	1.0	196.3	0.55	19.56	29.79	119.5	9.19	4.5	8.12	4
2013/02/27	MF	US1	09:08:08	B	8.2	178.8	0.67	19.34	30.49	119.7	9.21	4.9	8.11	7
2013/02/27	MF	US1	09:09:08	M	5.0	187.3	0.51	19.35	30.45	120.7	9.28	2.7	8.10	6
2013/02/27	MF	US1	09:10:08	T	1.1	128.3	0.44	19.37	30.38	121.2	9.32	2.7	8.11	5
2013/02/27	MF	US1	09:11:32	B	8.0	148.4	1.08	19.33	30.50	118.8	9.13	5.2	8.11	6
2013/02/27	MF	US1	09:12:29	M	5.1	197.4	0.61	19.34	30.46	120.9	9.30	3.1	8.11	4
2013/02/27	MF	US1	09:13:32	T	1.0	128.3	0.44	19.39	30.37	121.5	9.34	2.4	8.11	3
2013/02/27	MF	US2	09:18:15	B	7.0	173.3	0.73	19.38	30.37	119.9	9.22	3.6	8.10	6
2013/02/27	MF	US2	09:19:08	M	4.7	219.6	0.15	19.37	30.40	121.0	9.30	3.6	8.10	5
2013/02/27	MF	US2	09:20:07	T	1.0	318.1	0.52	19.40	30.33	121.3	9.33	2.8	8.09	4
2013/02/27	MF	US2	09:21:57	B	7.2	78.1	0.13	19.38	30.39	120.6	9.27	2.3	8.09	4
2013/02/27	MF	US2	09:23:29	M	4.5	224.8	0.40	19.37	30.42	121.5	9.34	3.0	8.10	3
2013/02/27	MF	US2	09:24:29	T	1.0	318.1	0.52	19.40	30.37	122.0	9.37	2.2	8.09	3
2013/02/27	MF	MW1	06:49:33	B	16.9	132.8	0.26	19.01	31.04	110.0	8.48	1.8	8.04	5
2013/02/27	MF	MW1	06:50:55	M	9.5	166.6	0.92	19.06	30.97	112.3	8.65	1.3	8.06	5
2013/02/27	MF	MW1	06:51:57	T	0.9	170.0	0.40	19.09	30.91	113.9	8.78	2.0	8.06	4
2013/02/27	MF	MW1	06:54:04	B	16.9	210.7	0.57	19.01	31.05	109.9	8.47	3.6	8.04	5
2013/02/27	MF	MW1	06:55:01	M	9.6	103.8	0.42	19.06	30.95	112.4	8.66	1.8	8.06	3
2013/02/27	MF	MW1	06:56:01	T	1.0	170.0	0.40	19.06	30.94	113.3	8.73	4.9	8.07	4

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2013/02/27	ME	DS1	12:46:23	B	8.1	217.6	0.57	19.31	30.58	116.2	8.94	6.1	8.24	13
2013/02/27	ME	DS1	12:47:10	M	5.2	173.6	0.81	19.36	30.39	116.3	8.95	3.6	8.23	12
2013/02/27	ME	DS1	12:48:15	T	1.0	153.6	1.13	19.77	30.05	124.6	9.53	9.3	8.27	9
2013/02/27	ME	DS1	12:49:58	B	8.0	232.5	0.19	19.32	30.48	114.8	8.83	8.8	8.24	11
2013/02/27	ME	DS1	12:50:49	M	5.2	170.1	0.48	19.37	30.38	116.9	8.99	4.5	8.24	4
2013/02/27	ME	DS1	12:51:37	T	1.1	153.6	1.13	19.73	30.04	123.7	9.47	14.5	8.28	5
2013/02/27	ME	DS2	12:57:57	B	7.1	199.9	0.33	19.38	30.44	118.1	9.08	4.0	8.28	6
2013/02/27	ME	DS2	12:58:43	M	4.5	97.2	0.62	19.38	30.41	118.5	9.11	2.2	8.26	6
2013/02/27	ME	DS2	12:59:38	T	1.0	152.6	0.88	19.79	30.10	125.5	9.59	1.7	8.29	4
2013/02/27	ME	DS2	13:00:57	B	7.0	149.4	0.24	19.37	30.44	116.8	8.98	4.1	8.26	4
2013/02/27	ME	DS2	13:01:47	M	4.6	120.7	0.41	19.37	30.45	119.0	9.14	2.5	8.26	4
2013/02/27	ME	DS2	13:02:50	T	1.1	203.2	1.22	19.79	30.12	124.4	9.51	1.3	8.28	3
2013/02/27	ME	DS3	13:08:09	B	6.2	231.3	0.30	19.41	30.42	119.2	9.16	3.0	8.29	5
2013/02/27	ME	DS3	13:09:09	M	4.0	169.2	0.84	19.54	30.32	122.1	9.36	2.1	8.28	4
2013/02/27	ME	DS3	13:10:08	T	1.0	336.2	0.59	19.90	30.14	125.4	9.56	1.4	8.28	4
2013/02/27	ME	DS3	13:11:41	B	6.0	210.2	0.48	19.49	30.36	120.9	9.28	3.5	8.27	4
2013/02/27	ME	DS3	13:12:23	M	4.0	162.2	0.77	19.60	30.26	122.8	9.41	2.2	8.27	5
2013/02/27	ME	DS3	13:13:08	T	1.0	336.2	0.59	19.75	30.18	125.0	9.56	1.5	8.28	4
2013/02/27	ME	DS4	13:17:59	B	6.2	124.8	0.38	19.45	30.48	121.0	9.28	4.6	8.29	6
2013/02/27	ME	DS4	13:18:43	M	4.1	192.5	0.88	19.53	30.41	123.1	9.44	1.9	8.27	6
2013/02/27	ME	DS4	13:19:42	T	1.0	246.7	0.51	20.07	30.09	127.1	9.66	1.3	8.29	4
2013/02/27	ME	DS4	13:21:15	B	6.2	201.6	0.45	19.48	30.44	122.0	9.36	2.6	8.27	5
2013/02/27	ME	DS4	13:22:13	M	4.0	204.5	0.24	19.58	30.34	123.9	9.49	3.5	8.27	2
2013/02/27	ME	DS4	13:23:14	T	1.0	152.7	1.05	19.88	30.13	127.1	9.70	1.5	8.28	3
2013/02/27	ME	DS5	13:28:14	B	6.9	183.6	0.59	19.64	30.45	122.5	9.37	3.9	8.28	6
2013/02/27	ME	DS5	13:28:53	M	4.3	172.7	0.81	19.64	30.42	125.4	9.59	2.4	8.28	5
2013/02/27	ME	DS5	13:29:33	T	0.9	152.7	1.05	19.96	30.17	127.3	9.69	1.5	8.29	6
2013/02/27	ME	DS5	13:30:50	B	7.0	85.7	0.59	19.62	30.46	122.8	9.39	2.8	8.27	6
2013/02/27	ME	DS5	13:31:37	M	4.7	114.5	0.63	19.64	30.40	125.9	9.63	2.5	8.27	4
2013/02/27	ME	DS5	13:32:22	T	0.9	354.2	0.17	20.07	30.10	128.4	9.77	1.2	8.27	5
2013/02/27	ME	US1	12:37:25	B	9.0	173.7	0.48	19.14	30.82	110.7	8.53	2.9	8.18	5
2013/02/27	ME	US1	12:38:09	M	5.5	178.5	0.30	19.36	30.39	116.8	8.98	2.3	8.22	4
2013/02/27	ME	US1	12:39:09	T	0.9	134.9	0.58	19.87	29.94	126.9	9.69	1.3	8.26	6
2013/02/27	ME	US1	12:40:32	B	9.1	265.2	1.04	19.15	30.81	111.4	8.58	1.9	8.19	5
2013/02/27	ME	US1	12:41:24	M	5.5	178.3	0.41	19.36	30.40	117.2	9.01	2.8	8.23	1
2013/02/27	ME	US1	12:42:08	T	0.9	134.9	0.58	19.75	29.97	125.3	9.59	1.5	8.27	1
2013/02/27	ME	US2	12:27:26	B	9.2	176.5	0.24	19.32	30.49	114.9	8.84	5.4	8.17	10
2013/02/27	ME	US2	12:28:10	M	5.5	189.6	0.43	19.40	30.29	117.0	9.00	2.8	8.17	10
2013/02/27	ME	US2	12:29:07	T	1.0	231.7	0.18	19.79	29.95	125.6	9.61	1.4	8.21	7
2013/02/27	ME	US2	12:30:30	B	9.1	227.5	0.21	19.32	30.48	115.7	8.90	6.1	8.18	6
2013/02/27	ME	US2	12:31:14	M	5.5	151.0	0.46	19.39	30.32	117.3	9.02	2.9	8.19	3
2013/02/27	ME	US2	12:32:07	T	1.0	231.7	0.18	19.70	29.97	125.9	9.64	1.2	8.24	2
2013/02/27	ME	MW1	14:19:32	B	17.0	51.0	0.49	19.15	31.16	110.0	8.46	1.5	8.06	2
2013/02/27	ME	MW1	14:20:36	M	9.8	135.5	0.80	19.15	31.14	111.0	8.53	1.2	8.05	4
2013/02/27	ME	MW1	14:21:29	T	1.1	180.3	0.45	19.20	31.10	112.7	8.66	1.1	8.06	3
2013/02/27	ME	MW1	14:23:28	B	17.0	148.3	1.01	19.12	31.15	110.0	8.46	1.4	8.04	3
2013/02/27	ME	MW1	14:24:45	M	9.6	216.9	0.49	19.16	31.12	111.4	8.56	1.3	8.04	1
2013/02/27	ME	MW1	14:25:39	T	0.9	186.9	0.69	19.27	31.03	114.5	8.78	0.8	8.07	1