Table S1. Plasma hormone concentrations and biochemical measurements of Kemp's ridley turtles (*Lepidochelys kempii*) affected by the Deepwater Horizon oil spill. Each turtle had two matched samples, one taken on the first day of hospitalization (initial; day 0) and a convalescent sample obtained over the rehabilitation period (convalescence; >30 d later). Day = day of hospitalization, Aldo = aldosterone, Cort = corticosterone, fT4 = free thyroxine, Na = sodium, K = potassium, Cl = chloride, iCa = ionized calcium, iMg = ionized magnesium, BUN = blood urea nitrogen, QNS = quantity not sufficient for analysis, ND = non-detectable hormone value below the limit of assay detection. [a] Panel used for unpaired correlation analysis of hormone data vs biochemical data.

Turtle identification	Sample date	Day	Oiling category	Aldo pg ml^{-1}	Cort ng ml^{-1}	fT4 pg ml^{-1}	Na mmol l^{-1}	K mmol l^{-1}	Cl mmol l^{-1}	iCa mmol l^{-1}	iMg mmol l^{-1}	Glucose mg dl^{-1}	Lactate mmol l^{-1}	BUN mg dl^{-1}
Initial data														
NMFS10-00917[a]	15-Jul-10	0	Light	384.13	38.46	1.44	143.7	4.83	122.8	1.02	1.66	73	8.6	35
NMFS10-00943[a]	1-Aug-10	0	Light	179.49	25.05	2.68	148.1	3.79	118.5	0.95	0.7	127	4.3	85
NMFS10-01075	13-Jun-10	0	Light	1264.38	51.68	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01076[a]	13-Jun-10	0	Light	293.76	37.64	3.68	146.8	4.83	117.6	1.06	1.54	98	9.8	54
NMFS10-01077[a]	13-Jun-10	0	Light	481.98	51.32	2.03	141.8	5.34	118.9	0.80	1.07	36	3.7	68
NMFS10-01080[a]	13-Jun-10	0	Light	552.18	21.25	3.14	150.0	3.99	128.2	0.68	1.30	182	3.2	90
NMFS10-01092	14-Jun-10	0	Light	4.02	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01093	14-Jun-10	0	Light	1095.03	48.92	2.26	144.4	5.99	124.9	0.97	1.49	53	2.7	114
NMFS10-01094[a]	14-Jun-10	0	Light	603.90	49.96	3.96	152.3	6.01	124.8	1.13	1.86	101	7.2	96
NMFS10-01098	15-Jun-10	0	Light	519.12	53.32	1.92	139.6	3.62	116.7	0.93	1.51	34	2	31
NMFS10-01100	15-Jun-10	0	Light	908.76	51.23	2.29	143.6	5.12	120.8	0.71	1.39	51	2.5	48
NMFS10-01125	16-Jun-10	0	Light	780.57	38.05	2.13	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01126[a]	16-Jun-10	0	Light	515.55	33.09	3.18	143.1	3.70	120.6	1.09	1.95	87	6.5	92
NMFS10-01129[a]	24-Jun-10	0	Light	1206.78	29.67	2.22	147.8	5.99	129.7	1.20	2.17	178	5.6	155
NMFS10-01159	9-Jul-10	0	Light	374.37	50.27	2.10	144.2	4.36	122.8	0.84	2.00	95	4.7	33
NMFS10-00922	19-Jul-10	0	Heavy	117.55	17.45	1.58	150.6	5.08	127.8	0.81	2.21	115	4	95
NMFS10-00928[a]	20-Jul-10	0	Heavy	310.25	24.93	1.94	144.7	4.41	122.0	0.69	0.99	43	0.6	106
NMFS10-00934[a]	27-Jul-10	0	Heavy	151.12	15.83	3.83	153.6	5.29	134.7	0.81	2.17	178	5.2	142
NMFS10-01045[a]	1-Jun-10	0	Heavy	240.03	16.88	1.46	146.4	5.85	118.1	0.77	0.86	70	3.5	159
NMFS10-01053	31-May-10	0	Heavy	459.99	44.96	2.71	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01056	1-Jun-10	0	Heavy	206.04	27.70	1.69	138.5	6.98	112.3	0.94	1.10	186	8.4	90
NMFS10-01063	6-Jun-10	0	Heavy	177.37	28.86	2.91	142.1	4.23	109.8	0.56	0.80	50	2.4	160
NMFS10-01065	6-Jun-10	0	Heavy	330.83	39.75	2.76	143.8	4.25	113.9	0.61	0.96	55	2.2	180
NMFS10-01069	10-Jun-10	0	Heavy	961.73	59.18	1.96	146.7	4.50	122.1	0.77	1.31	83	3.5	141
NMFS10-01070a	12-Jun-10	0	Heavy	759.41	64.18	2.18	147.3	4.08	119.5	0.58	1.13	197	6.1	204
NMFS10-01072	12-Jun-10	0	Heavy	982.51	35.61	2.53	149.3	4.48	128.3	1.07	1.35	79	2.3	89
NMFS10-01086	14-Jun-10	0	Heavy	594.52	42.50	1.75	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01130	24-Jun-10	0	Heavy	1196.13	20.80	1.48	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01134[a]	26-Jun-10	0	Heavy	342.39	20.29	1.86	145.7	4.64	121.7	0.65	1.81	219	4.3	119
NMFS10-01135[a]	26-Jun-10	0	Heavy	485.95	23.18	2.08	144.1	4.11	122.8	0.73	1.38	92	6.1	46

Turtle identification	Sample date	Day	Oiling category	Aldo pg ml^{-1}	Cort ng ml^{-1}	fT4 pg ml^{-1}	Na mmol l^{-1}	K mmol l^{-1}	Cl mmol l^{-1}	iCa mmol l^{-1}	iMg mmol l^{-1}	Glucose mg dl^{-1}	Lactate mmol l^{-1}	BUN mg dl^{-1}
Convalescent data														
NMFS10-00917	1-Sep-10	48	Light	5.55	2.41	0.10	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-00943	31-Aug-10	30	Light	4.65	0.98	ND	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01075[a]	14-Jul-10	31	Light	3.38	2.95	2.69	144.8	3.63	116.6	0.78	1.52	143	1.6	78
NMFS10-01076	14-Jul-10	31	Light	ND	2.47	4.83	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01077	11-Aug-10	59	Light	17.49	5.09	2.28	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01080	11-Aug-10	59	Light	37.37	6.72	QNS	144.1	3.95	122.3	0.69	1.18	153	1.1	58
NMFS10-01092	12-Aug-10	59	Light	1.23	0.34	1.32	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01093[a]	12-Aug-10	59	Light	6.63	1.69	1.36	147.7	2.78	120.3	0.35	1.00	147	1.1	39
NMFS10-01094	12-Aug-10	59	Light	8.65	1.77	1.47	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01098[a]	20-Jul-10	35	Light	6.25	1.34	5.60	144.2	3.59	116.6	0.73	1.38	139	1.6	59
NMFS10-01100[a]	20-Jul-10	35	Light	2.53	2.14	4.77	144.8	3.49	114.9	0.68	1.20	164	0.7	72
NMFS10-01125[a]	21-Jul-10	35	Light	4.05	3.02	4.17	150.6	3.00	121.0	0.74	1.52	101	1	101
NMFS10-01126	2-Aug-10	47	Light	ND	1.30	6.22	146.3	3.03	111.6	0.50	1.09	131	1	74
NMFS10-01129	25-Jul-10	31	Light	8.86	3.36	5.26	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01159[a]	8-Aug-10	30	Light	6.40	0.86	QNS	145.1	3.41	112.5	0.68	1.28	76	3.3	75
NMFS10-00922[a]	18-Aug-10	30	Heavy	9.74	2.59	3.89	148.8	3.31	119.0	0.57	0.97	125	1.2	134
NMFS10-00928	15-Sep-10	57	Heavy	3.14	3.23	2.35	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-00934	5-Sep-10	40	Heavy	28.70	5.34	ND	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01045	14-Jul-10	43	Heavy	4.29	0.91	2.96	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01053[a]	13-Jul-10	43	Heavy	3.32	2.82	1.54	145.4	3.04	115.4	0.70	1.26	118	0.6	70
NMFS10-01056[a]	14-Jul-10	43	Heavy	15.88	6.11	4.02	145.9	3.73	120.0	0.69	1.49	139	2	48
NMFS10-01063[a]	27-Jul-10	51	Heavy	11.83	2.05	4.94	145.7	4.12	122.0	0.90	1.21	137	1.7	115
NMFS10-01065[a]	13-Jul-10	37	Heavy	15.13	1.65	4.76	141.7	3.35	113.0	0.76	0.94	144	1.7	44
NMFS10-01069[a]	13-Jul-10	33	Heavy	2.13	1.94	6.59	144.7	3.54	114.9	0.57	1.08	138	1.9	53
NMFS10-01070	14-Jul-10	32	Heavy	ND	1.17	3.72	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01072[a]	14-Jul-10	32	Heavy	3.09	3.16	4.63	139.9	3.18	112.0	0.77	0.88	147	1.2	63
NMFS10-01086[a]	12-Aug-10	59	Heavy	13.51	2.66	1.29	148.1	3.34	118.6	0.53	1.10	150	2.1	85
NMFS10-01130	25-Jul-10	31	Heavy	20.17	3.69	4.25	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS
NMFS10-01134	26-Jul-10	30	Heavy	4.53	1.82	5.30	142.9	3.91	114.6	0.81	1.06	138	1.8	87
NMFS10-01135	26-Jul-10	30	Heavy	4.58	4.86	5.48	QNS	QNS	QNS	QNS	QNS	QNS	QNS	QNS