

Table 20. Toxicity of Newport Bay sediments to *Rhepoxynius*, *Eohaustorius* and *Ampelisca* (n = 5).

Station Number	IDOrg	Amphipod	Amphipod Mean	Amphipod SD	Sig.	Tox.	Ampelisca Mean	Ampelisca SD	Sig.	Tox.
85013.0	1424	RA	60.00	21.00	*	T	4	5	*	T
85013.0	1633	EE	49.00	19.00	*	T				
85014.0	1425	RA	56.00	15.00	*	T	26	20	*	T
85015.0	1426	RA	93.00	6.00	NS	NT	77	16	NS	NT
85006.0	1392	RA	79.00	10.00	*	NT				
85017.0	1428	RA	81.00	4.00	*	NT	93	6	NS	NT
85005.0	1391	RA	63.00	19.00	*	T				
85002.0	1388	RA	58.00	16.00	*	T				
85010.0	1421	RA	74.00	14.00	*	T	76	13	*	NT
85012.0	1423	RA	59.00	16.00	*	T	67	39	NS	NT
85011.0	1422	RA	80.00	17.00	*	NT	95	5	NS	NT
85011.0	1634	EE	93.00	8.00	NS	NT				
85004.0	1390	RA	70.00	10.00	*	NT				
85001.0	1387	RA	29.00	15.00	*	T				
85001.0	1788	EE	93.00	7.00	NS	NT				
85008.0	1419	RA	57.00	14.00	*	T	0	0	*	T
85016.0	1427	RA	85.00	8.00	*	NT	89	11	NS	NT
85003.0	1389	RA	72.00	10.00	*	NT				
85009.0	1420	RA	93.00	6.00	*	NT	87	10	NS	NT
85018.0	1429	RA	89.00	11.00	*	NT	86	13	NS	NT
85007.0	1418	RA	93.00	6.00	*	NT	87	13	NS	NT
86001.0	1789	HA	96.00	5.00	NS	NT				
86002.0	1790	EE	97.00	4.00	NS	NT				
86003.0	1791	EE	91.00	7.00	NS	NT				
86004.0	1792	EE	95.00	4.00	NS	NT				

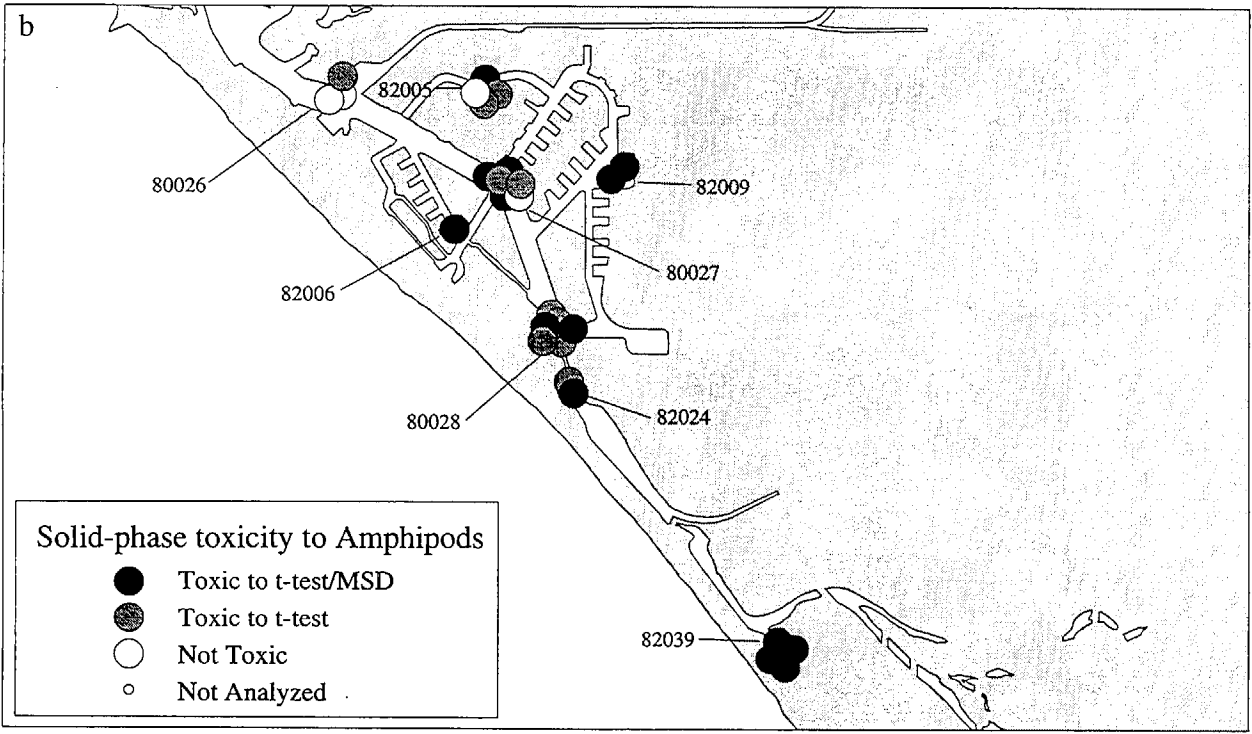
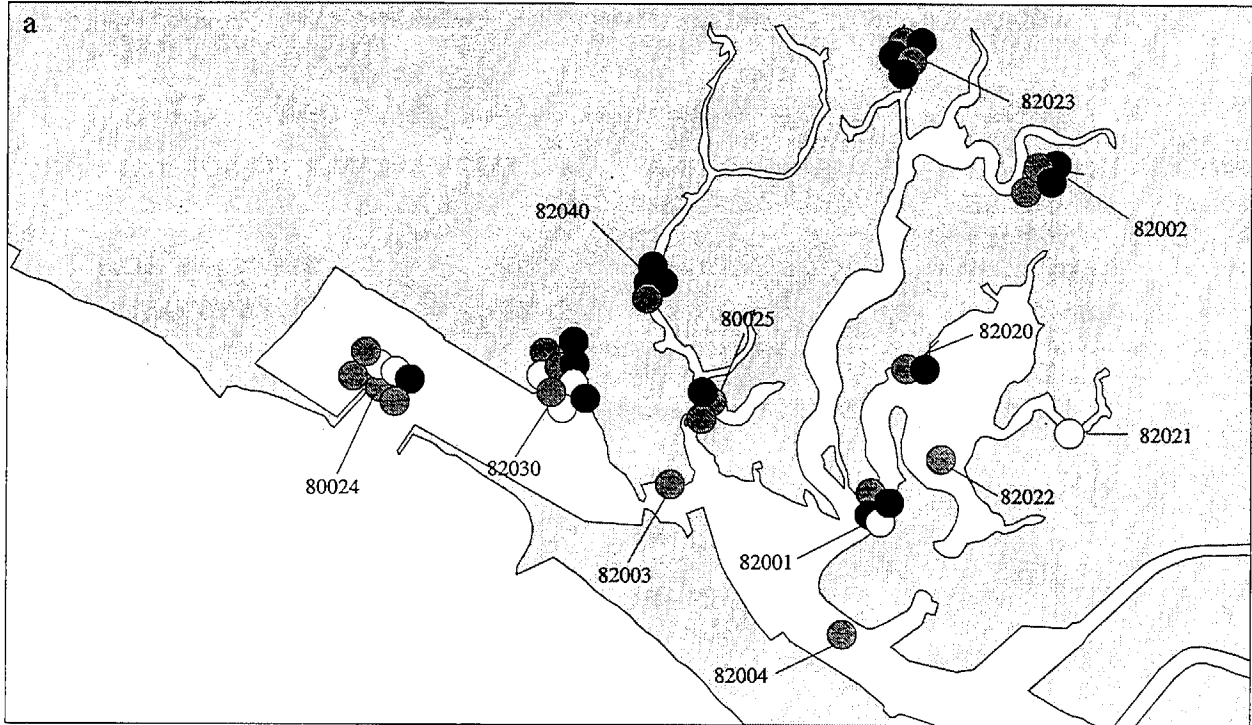


Figure 9a and 9b. Solid-phase toxicity to amphipods in Anaheim Bay and Huntington Harbor.

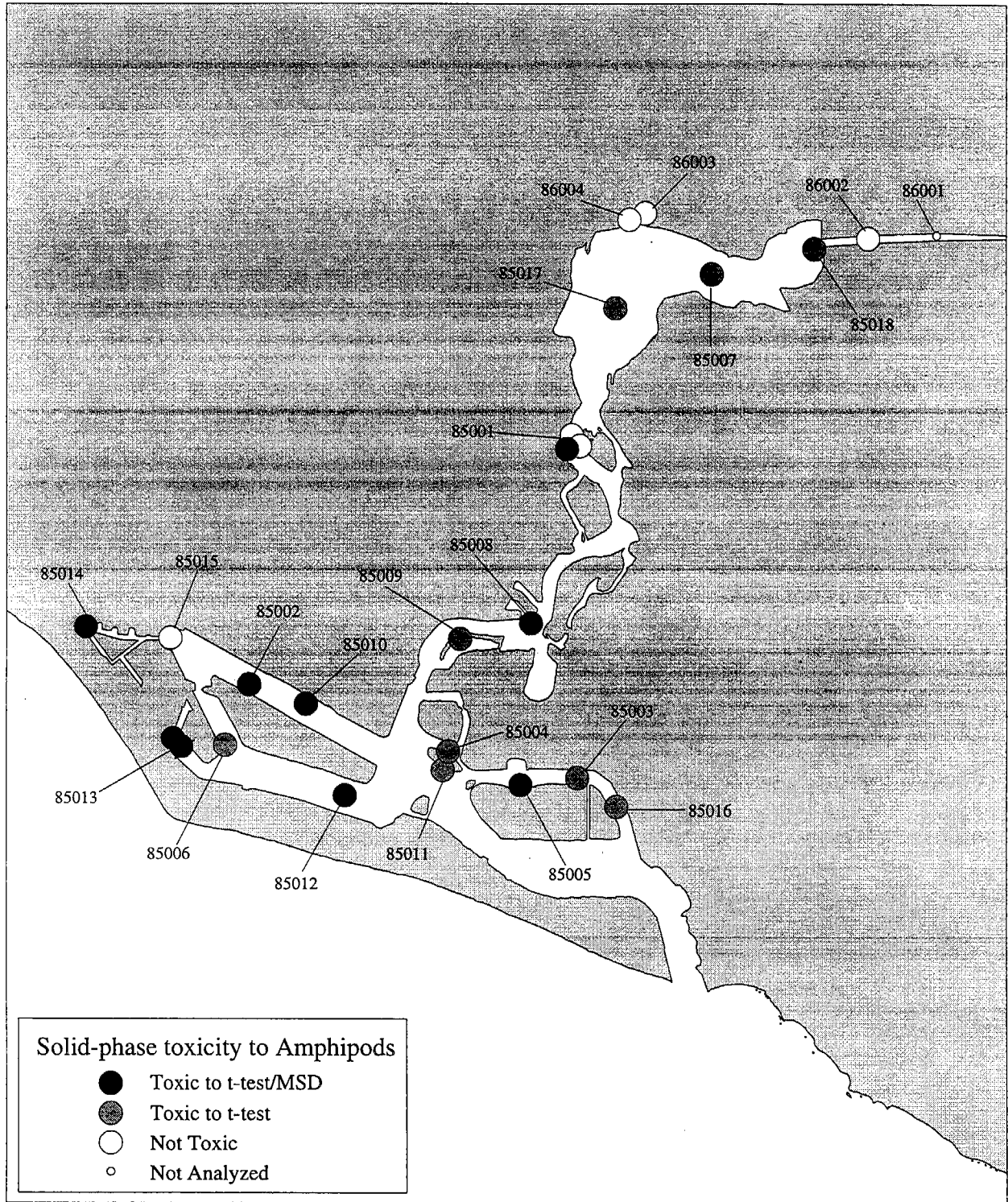


Figure 9c. Solid-phase toxicity to amphipods in Newport Bay.

Porewater Toxicity Testing Results

Results from larval development tests using abalone and purple urchins are shown for each station in Anaheim Bay and Huntington Harbor (Tables 21 and 22). Table 23 outlines the results of larval development and fertilization tests in porewater and the sediment-water interface exposure system with purple urchins in Newport Bay. Ninety-five percent of porewater samples from Region 8 were toxic at the 100% concentration. Eighty percent of samples tested at the 50% concentration, and 47 percent of samples tested at 25% were toxic to larval organisms (Figures 10a through 10c). All porewater samples tested with abalone were toxic at full strength. Only three 100% porewater samples were not toxic to purple urchins; two sites in Anaheim Bay (82023.0 and 82001.0), and one site in Newport Bay (85016.0). Porewater from site 82023.0 was toxic to purple urchins at a later visit.

Three stations were analyzed for porewater metals chemistry and one station was analyzed for SEM/AVS. Middle and Upper Huntington Harbor (80027.2 and 80028.2) and Newport Bay's Rhine Channel (85013.0) all had concentrations of trace metals high enough to cause toxicity in the 100% porewater sample. The Huntington Harbor stations were toxic at all three concentrations of porewater and the Rhine Channel station was toxic at 100% porewater (the only concentration tested). SEM/AVS analysis was also conducted at the Rhine Channel station. The ratio of SEM to AVS was 4.65, indicating that some of the extracted metals were bioavailable and might have contributed to toxicity at this station. Care should be taken in interpreting these data because the SEM/AVS ratio works best in anoxic sediments.

Results of purple urchin fertilization tests prior to Leg 31 were not used in categorizing toxic stations. Porewater samples were stored frozen prior to this leg, and although recent studies suggest that freezing has no effect on fertilization results, frozen seawater controls were consistently toxic. For this reason the results of these fertilization tests were suspect. Porewater samples extracted after Leg 31 were stored at 4°C. Fertilization test results were all from Newport Bay. The fertilization test detected less toxicity than the larval development test. Five of eighteen porewater samples from Newport Bay were significantly toxic to purple urchin sperm (Table 23). All fertilization results are listed in Appendix E.

The sediment-water interface exposure system was used as a solid-phase exposure for embryo-larval tests. Two of six samples from Newport Bay were significantly toxic when tested with the purple urchin larval development test at the sediment-water interface (Table 23).

Table 21. Toxicity of Anaheim Bay porewater to abalone and purple urchin larval development.

Station No.	IDOrg	Test	100% Porewater				50% Porewater				25% Porewater			
			Mean	SD	Sig.	Tox.	Mean	SD	Sig.	Tox.	Mean	SD	Sig.	Tox.
82030.0	1046	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82030.0	1045	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82030.0	1044	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82030.0	430	SP	0.00	0.00	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82030.0	772	SP	0.00	0.00	*	T	0.00	0.00	*	T	n/a	n/a	n/a	
82030.0	1195	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82030.0	1196	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82030.0	1197	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82030.0	1335	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
80024.3	1171	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
80024.3	1172	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
80024.3	1173	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
80024.3	87	HR	17.50	20.00	*	T	99.30	0.60	NS	NT	99.30	1.20	NS	NT
80024.3	807	SP	0.00	0.00	*	T	0.00	0.00	*	T	n/a	n/a	n/a	n/a
82023.0	1094	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82023.0	1093	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82023.0	1092	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82023.0	423	SP	92.00	6.00	*	NT	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82023.0	771	SP	0.00	0.00	*	T	0.00	0.00	*	T	n/a	n/a	n/a	n/a
82002.0	1089	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82002.0	1091	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82002.0	1090	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82002.0	402	SP	0.00	0.00	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82002.0	809	SP	0.00	0.00	*	T	0.00	0.00	*	T	n/a	n/a	n/a	n/a
80024.1	85	HR	12.10	10.70	*	T	97.90	1.30	NS	NT	66.30	53.70	NS	NT
82001.0	1088	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82001.0	1086	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82001.0	1087	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82001.0	401	SP	69.00	32.80	NS	NT	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82040.0	1096	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82040.0	1097	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82040.0	1095	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82040.0	440	SP	49.70	22.70	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
80024.2	86	HR	0.00	0.00	*	T	97.60	2.30	NS	NT	97.20	2.00	NS	NT
80025.1	88	HR	12.40	8.70	*	T	91.10	3.60	NS	NT	97.00	3.80	NS	NT
80025.2	89	HR	32.20	13.10	*	T	97.40	0.80	*	NT	96.60	1.60	NS	NT
80025.3	90	HR	29.10	24.20	*	T	73.80	9.70	*	T	96.40	1.30	NS	NT
82003.0	403	SP	0.00	0.00	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82004.0	404	SP	0.00	0.00	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82020.0	420	SP	0.00	0.00	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82020.0	769	SP	0.00	0.00	*	T	0.00	0.00	*	T	n/a	n/a	n/a	
82021.0	421	SP	0.00	0.00	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
82022.0	422	SP	0.00	0.00	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	

Table 22. Toxicity of Huntington Harbor porewater to abalone and purple urchin larval development.

Station No.	IDOrg	Test	100% Porewater				50% Porewater				25% Porewater			
			Mean	SD	Sig.	Tox.	Mean	SD	Sig.	Tox.	Mean	SD	Sig.	Tox.
80028.3	1174	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
80028.3	1175	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
80028.3	1176	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
80028.3	99	HR	0.00	0.00	*	T	3.70	6.40	*	T	82.40	7.00	*	T
80028.2	98	HR	0.00	0.00	*	T	0.40	0.60	*	T	5.30	5.20	*	T
80027.3	1179	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
80027.3	1177	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
80027.3	1178	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
80027.3	96	HR	0.00	0.00	*	T	0.00	0.00	*	T	0.00	0.00	*	T
82006.0	406	SP	0.00	0.00	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
80027.2	95	HR	0.00	0.00	*	T	0.00	0.00	*	T	13.60	10.70	*	T
82005.0	405	SP	0.00	0.00	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
82005.0	1201	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
82005.0	1202	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
82005.0	1203	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
82039.0	439	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
82039.0	1204	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
82039.0	1205	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
82039.0	1206	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
80026.1	91	HR	0.00	0.00	*	T	0.00	0.00	*	T	0.00	0.00	*	T
80026.2	92	HR	0.00	0.00	*	T	0.00	0.00	*	T	0.00	0.00	*	T
80026.3	93	HR	0.00	0.00	*	T	0.00	0.00	*	T	61.20	27.60	NS	NT
80027.1	94	HR	0.00	0.00	*	T	0.00	0.00	*	T	0.00	0.00	*	T
80028.1	97	HR	0.00	0.00	*	T	0.00	0.00	*	T	64.70	22.00	NS	NT
82009.0	409	SP	0.00	0.00	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
82024.0	424	SP	0.00	0.00	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
82024.0	770	SP	0.00	0.00	*	T	0.00	0.00	*	T	n/a	n/a	n/a	n/a
82009.0	808	SP	0.00	0.00	*	T	0.00	0.00	*	T	n/a	n/a	n/a	n/a

Table 23. Toxicity of Newport Bay Porewater to purple urchin larval development and fertilization. Italics indicate the toxicity of Sediment-Water Interface exposures to purple urchin larval development.

Station No.	IDOrg	100% Porewater				50% Porewater				25% Porewater				Fertilization or SWI			
		Mean	SD	Sig.	Tox	Mean	SD	Sig.	Tox	Mean	SD	Sig.	Tox	Mean	SD	Sig.	Tox
85013.0	1424	0.00	0.00	*	T	70.00	9.00	*	NT	86.00	15.0	NS	NT	93.00	5.00	NS	NT
85013.0	1633	0.00	0.00	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	20.00	18.00	*	T
85014.0	1425	0.00	0.00	*	T	0.00	0.00	*	T	62.00	21.0	*	NT	96.00	2.00	NS	NT
85015.0	1426	0.00	1.00	*	T	87.00	10.0	NS	NT	95.00	3.00	NS	NT	92.00	4.00	NS	NT
85006.0	1392	0.00	0.00	*	T	0.00	0.00	*	T	23.00	21.0	*	T	94.00	0.00	NS	NT
85017.0	1428	0.00	0.00	*	T	1.00	2.00	*	T	80.00	6.00	*	NT	96.00	1.00	NS	NT
85005.0	1391	0.00	0.00	*	T	0.00	0.00	*	T	22.00	37.0	*	T	96.00	3.00	NS	NT
85002.0	1388	0.00	0.00	*	T	0.00	0.00	*	T	58.00	48.0	NS	NT	93.00	3.00	NS	NT
85010.0	1421	0.00	0.00	*	T	0.00	0.00	*	T	50.00	47.0	NS	NT	72.00	5.00	*	NT
85012.0	1423	2.00	3.00	*	T	43.00	16.0	*	T	23.00	4.00	*	T	86.00	6.00	NS	NT
85011.0	1422	0.00	0.00	*	T	0.00	0.00	*	T	3.00	4.00	*	T	95.00	5.00	NS	NT
85011.0	1634	1.00	2.00	*	T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	46.00	41.00	*	T
85004.0	1390	0.00	0.00	*	T	0.00	0.00	*	T	34.00	31.0	*	T	92.00	2.00	NS	NT
85001.0	1387	0.00	0.00	*	T	0.00	0.00	*	T	0.00	0.00	*	T	47.00	12.00	*	T
85001.0	1788	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	57.00	40.00	*	NT
85008.0	1419	0.00	0.00	*	T	0.00	0.00	*	T	0.00	0.00	*	T	0.00	0.00	*	T
85016.0	1427	81.00	8.00	*	NT	97.00	1.00	NS	NT	97.00	0.00	NS	NT	86.00	4.00	NS	NT
85003.0	1389	0.00	0.00	*	T	0.00	0.00	*	T	2.00	3.00	*	T	91.00	2.00	NS	NT
85009.0	1420	0.00	0.00	*	T	1.00	1.00	*	T	51.00	15.0	*	T	0.00	0.00	*	T
85018.0	1429	0.00	0.00	*	T	0.00	0.00	*	T	2.00	0.00	*	T	29.00	15.00	*	T
85007.0	1418	0.00	0.00	*	T	0.00	0.00	*	T	0.00	0.00	*	T	0.00	0.00	*	T
86001.0	1789	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
86002.0	1790	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	89.00	3.00	*	NT
86003.0	1791	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	65.00	42.00	NS	NT
86004.0	1792	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	78.00	43.00	NS	NT

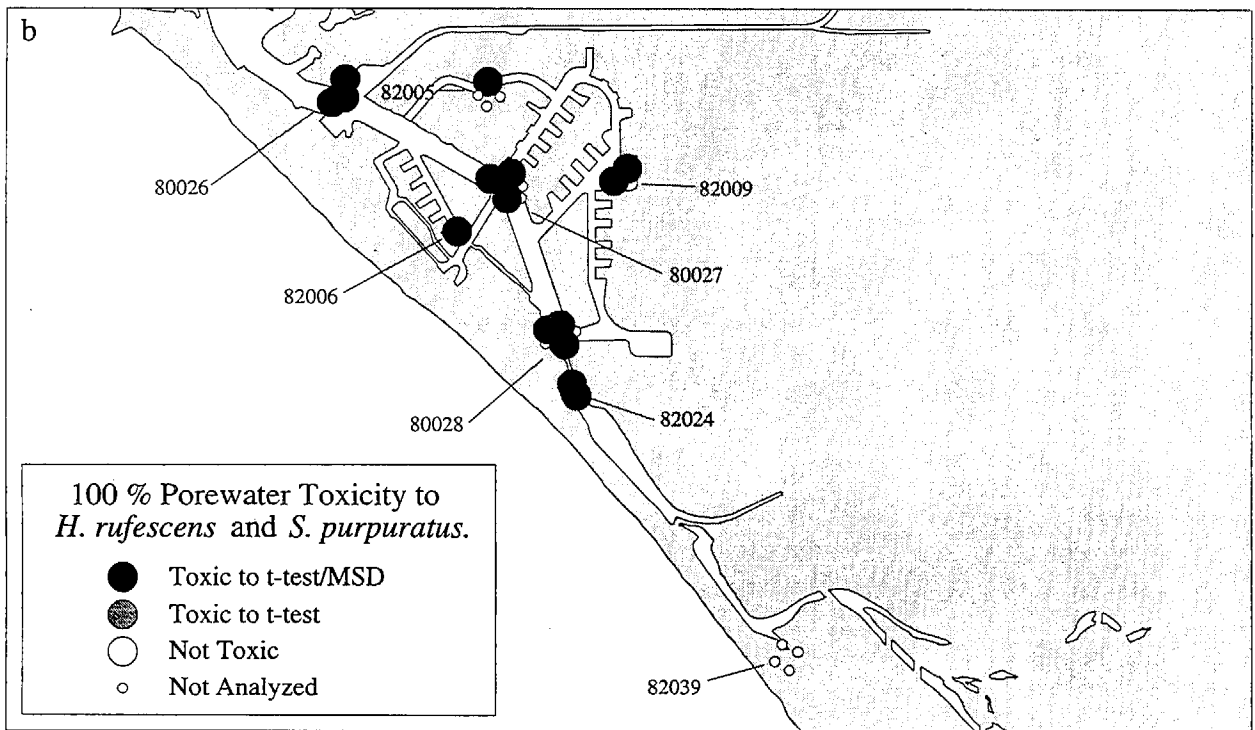
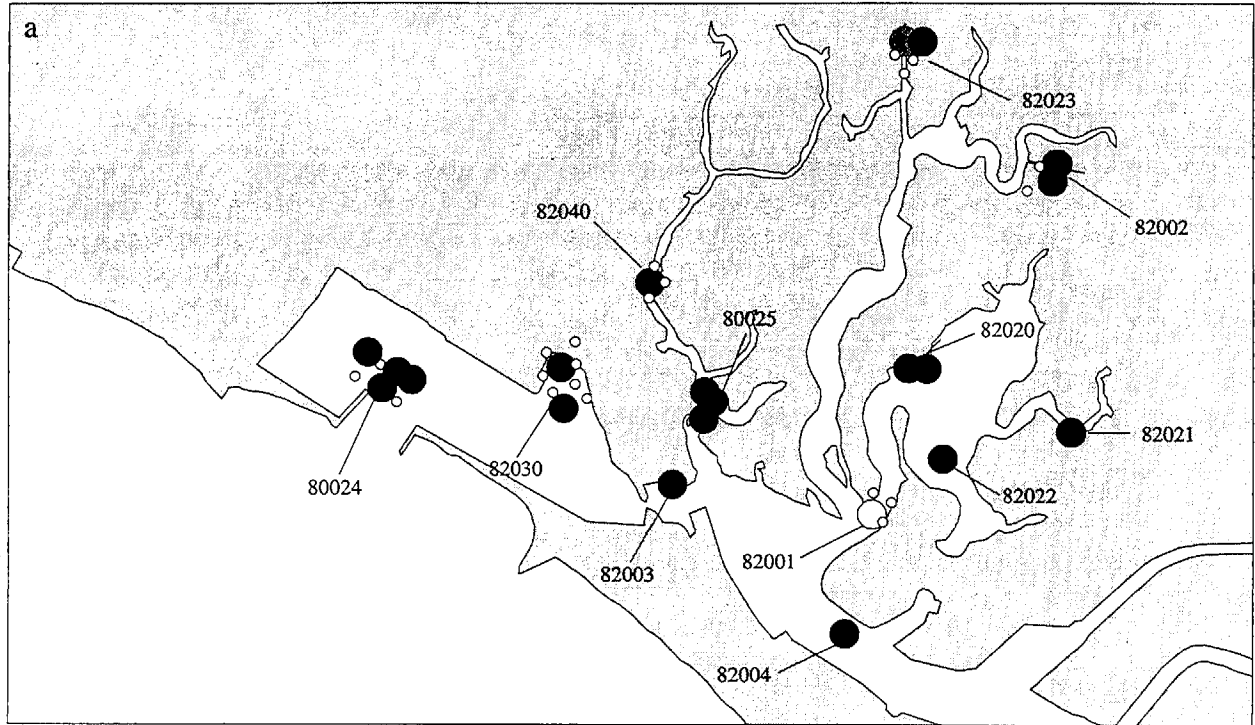


Figure 10a and 10b. Porewater toxicity to larval development in Anaheim Bay and Huntington Harbor.

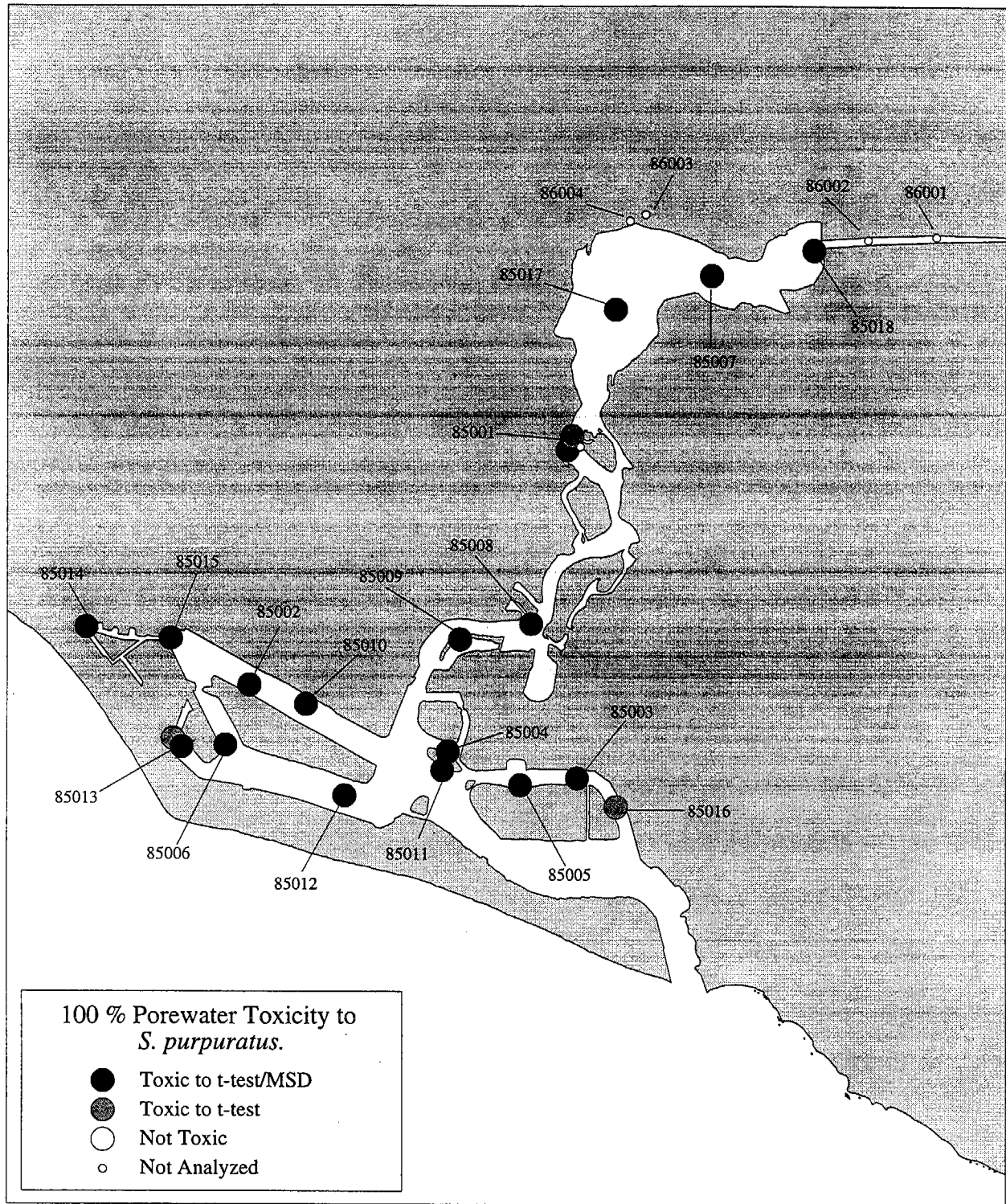


Figure 10c. Porewater toxicity to larval development in Newport Bay.

Interpretation of Pore Water Testing Results

The results indicated that this test was sensitive to pollutants and/or other pore water constituents in the study areas, particularly at the 100 percent pore water concentration. The increased sensitivity of the pore water test relative to the amphipod bedded sediment test was not unexpected. In pore water tests a more sensitive life stage, i.e., embryo-larval development was used, whereas in the amphipod test the adult organisms were used. Also, any toxicants present in the pore water are likely to be in a dissolved phase, not in a particulate bound phase, and therefore should be more readily bioavailable to the test organism. This sensitivity has been observed in other studies which have assessed pore water toxicity using sensitive life stages (Burgess et al., 1993; Carr and Chapman 1992; Long et al., 1990).

An important issue with regard to the interpretation of porewater testing results is the need to determine what effect the method of extracting porewater from sediment has on the observed toxicity. Concern over the squeezing method led BPTCP to use centrifugation from leg 24 on. Many scientists are now using centrifugation to obtain pore water from sediment for toxicity testing, since this method may be subject to fewer toxicity artifacts (Lange et al., 1992; Giesy et al., 1990).

Because there was decreasing response with increasing dilution of pore water observed in the study, clearly some factor in the pore water was influencing the organism response. However, the increased sensitivity at the 100 percent pore water concentration limits the ability of this test and/or the method of pore water extraction, to discriminate more severely impacted sediments from less severely impacted sediments (a primary goal of the BPTCP). Pore water toxicity data by themselves can be difficult to interpret. However, pore water toxicity test dilutions, if used in conjunction with other toxicity tests and chemical measurements, provide a good estimate of the relative exposure of organisms to pollutants.

Polychaete Toxicity Testing Results

Results of the polychaete sediment test using *Neanthes arenaceodentata* are summarized in Appendix E. Only one station, Bolsa Chica Ecological Reserve (82039.0), was found to be significantly toxic to *Neanthes* survival. There were no sediment samples that significantly impacted *Neanthes* growth. Sediment from Bolsa Chica Ecological Reserve was also significantly toxic to the amphipod *Rhepoxynius*.

Relationship Between Toxicity and Sediment Constituents

Statistical associations between amphipod and larval development toxicity and bulk phase chemical concentrations were determined using Spearman Rank Correlations. Correlations were performed between amphipod toxicity (*Eohaustorius* and *Rhepoxynius*) and chemistry data within each water body, and between purple urchin toxicity and *Ampelisca* toxicity and chemistry data in Newport Bay. Correlations between amphipod toxicity, purple urchin development toxicity and chemistry were also performed using data from all three water bodies. Additional correlations were performed between toxicity and ammonia, hydrogen sulfide, percent fine grain size, total organic carbon and ERMQs within the entire region.

Analyses revealed significant negative correlations between chemicals of concern and amphipod toxicity in specific water bodies (Table 24). Eighty percent of the samples from Huntington Harbor had lead concentrations above the ERL, and demonstrate increasing toxicity with increasing lead concentration. Several of Newport Bay stations had copper, lead, mercury and zinc concentrations above ERL and ERM guideline values. All of these trace metals had significant negative correlations with amphipod survival from Newport Bay. *Ampelisca* tests conducted in Newport Bay had a significant negative correlation with unionized ammonia in the overlying water ($p < 0.005$). Three *Ampelisca* samples exceeded the NOEC of 0.4 mg/L (Figure 11), and were significantly toxic. Amphipod toxicity was significantly correlated with percent fines and total organic carbon ($p < 0.0005$ and $p < 0.005$, respectively). There was a weak correlation between *Ampelisca* toxicity and copper ($p < 0.05$), and no correlations between purple urchin toxicity and chemical contaminants in Newport Bay.

In addition to correlations between toxicity results and single chemical concentrations, the toxicity data were correlated with the ERMQ by water body and the entire region. Toxicity data were plotted against the quotients to determine whether there was a threshold quotient value above which significant toxicity occurred. Newport Bay amphipod toxicity results were significantly correlated with ERMQ ($p < 0.025$, $r^2 = -0.478$, Figure 13a), but amphipod toxicity for the region did not correlate with ERMQ (Figure 13b). Samples with ERMQs above 1 were toxic to both amphipods and larval organisms. Larval organisms were more sensitive than amphipods and demonstrated toxicity when ERMQ were greater than 0.200 (Figure 13c).

Table 24. Spearman Rank Correlation results for selected toxicants significantly correlated with amphipod toxicity (*Eohaustorius* and *Rhepoxynius*) results from specific water bodies.

Water Body	Chemical	N	Spearman Rho	Significance
Anaheim Bay	Selenium	22	-0.453	0.025
Huntington Harbor	Antimony	15	-0.757	0.001
Huntington Harbor	Lead	15	-0.629	0.01
Huntington Harbor	Tin	15	-0.842	0.0005
Newport Bay	Percent Fines	20	-0.649	0.0025
Newport Bay	TOC	20	-0.422	0.05
Newport Bay	Antimony	20	-0.458	0.025
Newport Bay	Chromium	20	-0.598	0.005
Newport Bay	Copper	20	-0.542	0.01
Newport Bay	Lead	20	-0.392	0.05
Newport Bay	Mercury	20	-0.444	0.05
Newport Bay	Nickel	20	-0.633	0.0025
Newport Bay	Tin	20	-0.495	0.025
Newport Bay	Zinc	20	-0.497	0.025
Newport Bay	Total Chlordane	20	-0.380	0.05
Newport Bay	Total PCB	20	-0.408	0.05

Regionally amphipod survival was significantly correlated with several contaminants and percent fines (Table 25). The Newport Bay data were probably driving the regional correlations because

all but one of the sediment constituents correlated with the regional data was also correlated with the amphipod data from Newport Bay. Regional toxicity to purple urchin larval development was significantly correlated with unionized ammonia concentrations in interstitial water ($p < 0.025$, Figure 12). Although unionized ammonia concentrations in porewater tests using larval abalone and purple urchins exceeded the Lowest Observed Effect Concentrations for those species (LOEC ≈ 0.05 mg/L un-ionized ammonia; MPSL unpublished data and Bay et al. 1993), there was no correlation between ammonia and abalone larval development. Purple urchin ammonia concentrations could account for 72% of the observed toxicity in 100% porewater samples. Purple urchin development data were also correlated with several contaminants including copper, zinc, total chlordane, p,p'DDE and total PCBs, which had concentrations above ERM guideline values at some stations.

Table 25. Spearman Rank Correlation results for selected toxicants significantly correlated with amphipod (*Eohaustorius* and *Rhepoxynius*) and urchin development toxicity results from the entire region.

Test Protocol	Chemical	N	Spearman Rho	Significance
Amphipod Survival	Percent Fines	95	-0.271	0.005
Amphipod Survival	Antimony	57	-0.354	0.005
Amphipod Survival	Chromium	57	-0.333	0.01
Amphipod Survival	Copper	57	-0.329	0.01
Amphipod Survival	Iron	57	-0.350	0.005
Amphipod Survival	Tin	57	-0.372	0.0025
Amphipod Survival	Zinc	57	-0.231	0.025
Urchin Development	TOC	24	-0.438	0.025
Urchin Development	Copper	24	-0.442	0.025
Urchin Development	Silver	24	-0.419	0.025
Urchin Development	Zinc	24	-0.485	0.01
Urchin Development	Cchlor	24	-0.464	0.025
Urchin Development	Total Chlordane	24	-0.398	0.05
Urchin Development	p,p'DDD	24	-0.377	0.05
Urchin Development	p,p'DDE	24	-0.430	0.025
Urchin Development	p,p'DDT	24	-0.449	0.025
Urchin Development	Total DDT	24	-0.485	0.01
Urchin Development	T-Nonachlor	24	-0.440	0.025
Urchin Development	Tributyltin	24	-0.426	0.025
Urchin Development	Total PCB	24	-0.459	0.025

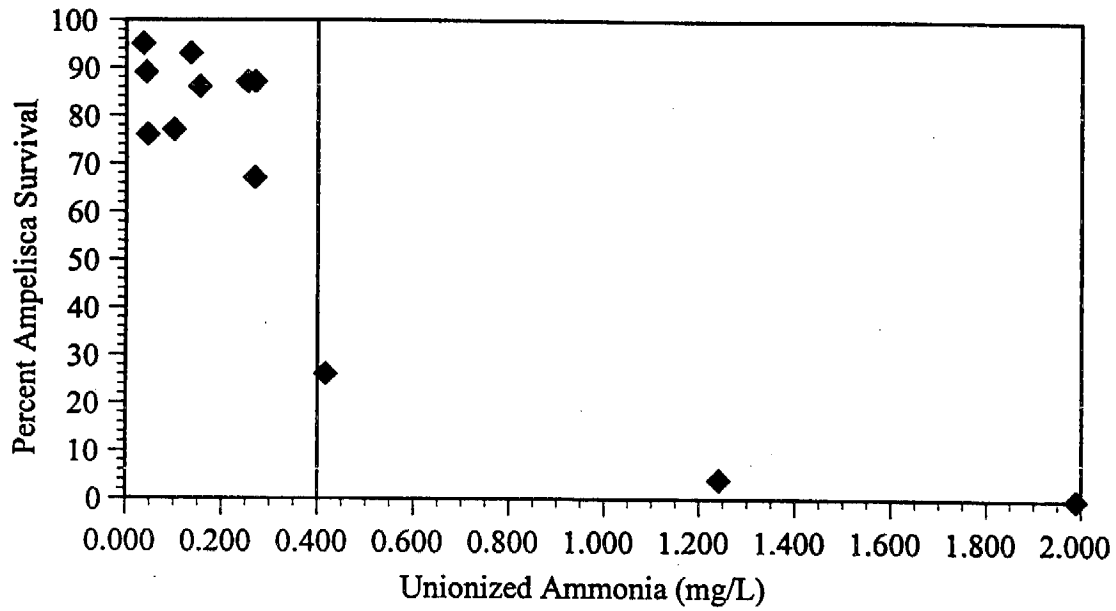


Figure 11. Relationship between *Ampelisca* survival and unionized ammonia concentrations. Line indicates Lowest Observed Effect Concentration.

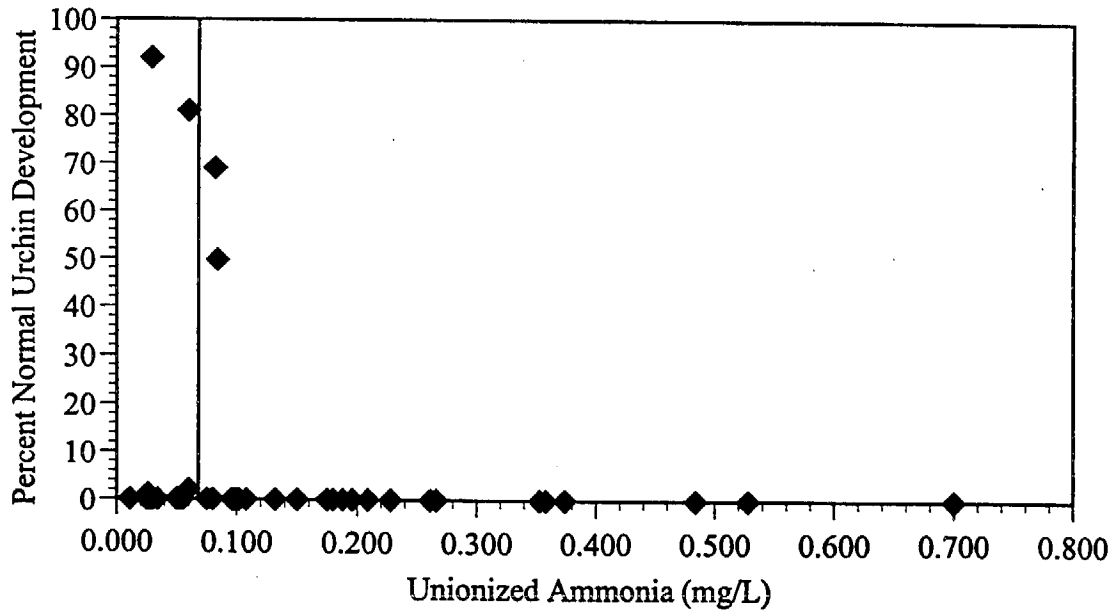


Figure 12. Relationship between purple urchin larval development and unionized ammonia concentrations. Line indicates No Observed Effect Concentration.

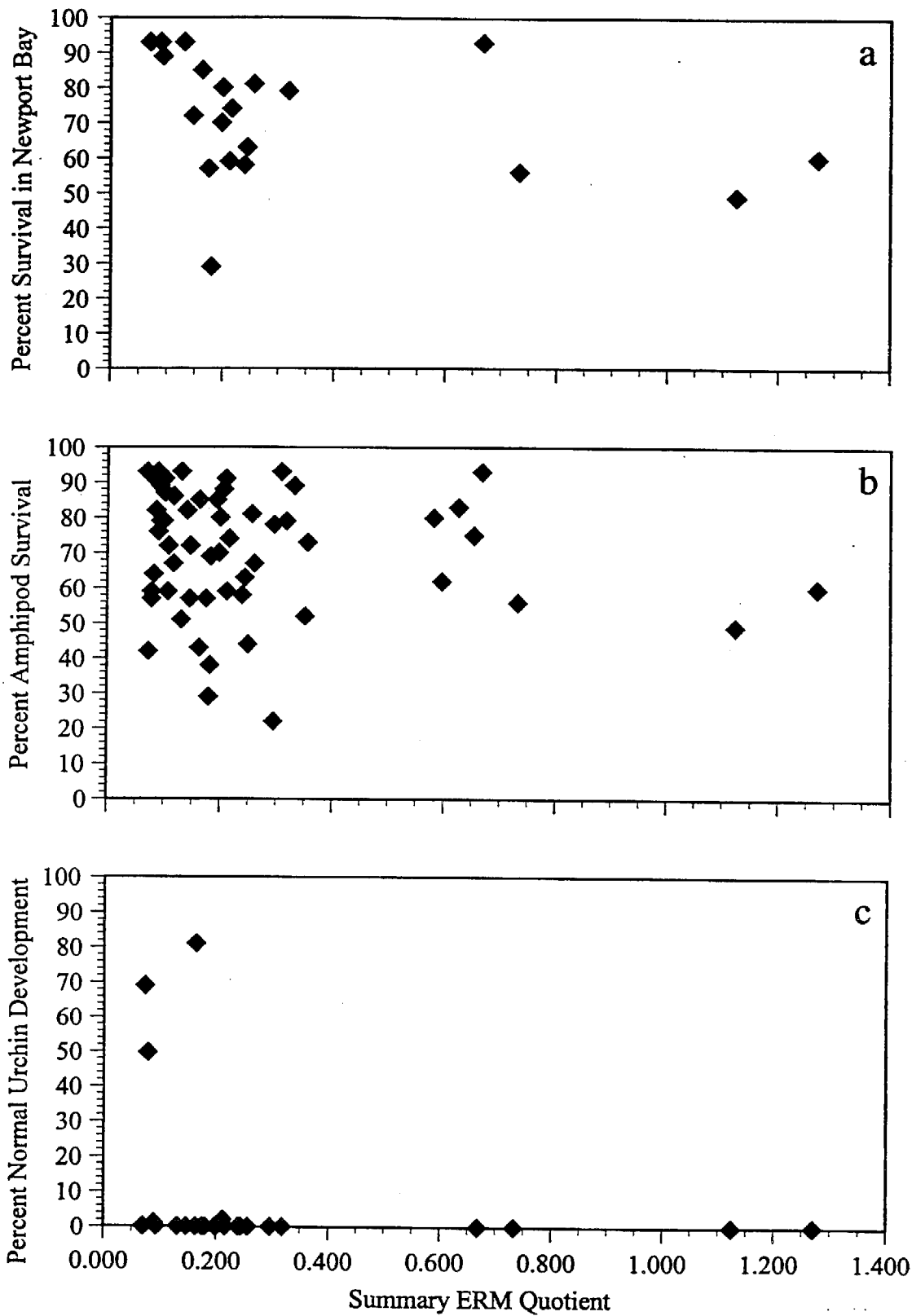


Figure 13a-c. Toxicity response versus summary ERM quotient for amphipods in Newport Bay only, amphipods (*Eohaustorius* and *Rhepoxynius*) in all water bodies, and purple urchin larval development in all water bodies.

Benthic Community Analysis

Discussion of Data Relative to QA Criteria

Benthic data were evaluated for acceptability using the Quality Assurance guidelines presented in the BPTCP Quality Assurance Project Plan (Stephenson et al., 1994). Departures from acceptability standards are summarized in Appendix F. Degraded benthos was defined by a Relative Benthic Index (RBI) ≤ 0.30 , transitional benthos have an RBI between 0.31 and 0.60, and undegraded benthos have an RBI > 0.60 .

Benthic analysis was conducted on six of 43 stations in Anaheim Bay. These analyses were performed at the three stations within sites 80024 (Outer Anaheim Bay) and 80025 (Anaheim Bay – Oil Island). Both sites had a combination of undegraded and transitional benthos (Table 26, Figure 14a). Nine of 28 stations underwent benthic analysis in Huntington Harbor. Analyses were performed at the three stations within sites 80026, 80027 and 80028 (Lower, Middle and Upper Huntington Harbor, respectively). Upper Huntington Harbor had transitional benthos while Middle and Lower Huntington Harbor had undegraded benthos (Table 27, Figure 14b). Benthic analysis was performed on all but four stations in Newport Bay (Table 28). Benthos at four stations was considered degraded (85005, 85010, 85011 and 85012). The remaining stations had combinations of transitional and undegraded benthos (Figure 14c).

Table 26. Summary of Anaheim Bay benthic community indices.

Station Number	IDOrg	Station Name	Benthic Index	Status
80024.3	87	Outer Anaheim Bay	0.56	Transitional
80024.1	85	Outer Anaheim Bay	0.80	Undegraded
80024.2	86	Outer Anaheim Bay	0.55	Transitional
80025.1	88	Anaheim Bay - Oil Island	0.43	Transitional
80025.2	89	Anaheim Bay - Oil Island	0.60	Transitional
80025.3	90	Anaheim Bay - Oil Island	0.76	Undegraded

Table 27. Summary of Huntington Harbor benthic community indices.

Station Number	IDOrg	Station Name	Benthic Index	Status
80028.3	99	Upper Huntington Harbor	0.47	Transitional
80028.2	98	Upper Huntington Harbor	0.33	Transitional
80027.3	96	Middle Huntington Harbor	0.84	Undegraded
80027.2	95	Middle Huntington Harbor	0.75	Undegraded
80026.1	91	Lower Huntington Harbor	0.75	Undegraded
80026.2	92	Lower Huntington Harbor	0.65	Undegraded
80026.3	93	Lower Huntington Harbor	0.66	Undegraded
80027.1	94	Middle Huntington Harbor	0.79	Undegraded
80028.1	97	Upper Huntington Harbor	0.53	Transitional

Table 28. Summary of Newport Bay benthic community indices.

Station Number	IDOrg	Station Name	Benthic Index	Status
85013.0	1424	Newport Bay (Rhine Channel)	0.52	Transitional
85013.0	1633	Newport Bay (Rhine Channel)	0.48	Transitional
85014.0	1425	Newport Bay (Newport Island)	0.59	Transitional
85015.0	1426	Newport Bay (Arches Storm Drains)	0.88	Undegraded
85006.0	1392	Newport Bay (1009)	0.34	Transitional
85017.0	1428	Newport Bay (Unit II Basin)	0.69	Undegraded
85005.0	1391	Newport Bay (949)	0.27	Degraded
85002.0	1388	Newport Bay (616)	0.74	Undegraded
85010.0	1421	Newport Bay (819)	0.16	Degraded
85012.0	1423	Newport Bay (1064)	0.22	Degraded
85011.0	1422	Newport Bay (905)	0.17	Degraded
85011.0	1634	Newport Bay (523)	0.62	Undegraded
85004.0	1390	Newport Bay (877)	0.32	Transitional
85001.0	1387	Newport Bay (523)	0.82	Undegraded
85001.0	1788	Newport Bay (523)	0.47	Transitional
85008.0	1419	Newport Bay (670)	0.49	Transitional
85016.0	1427	Newport Bay (Yachtmans Cove)	0.85	Undegraded
85003.0	1389	Newport Bay (791)	0.50	Transitional
85009.0	1420	Newport Bay (705)	0.61	Undegraded
85018.0	1429	Newport Bay (Unit I Basin)	0.51	Transitional
85007.0	1418	Newport Bay (431)	1.00	Undegraded
86001.0	1789	San Diego Creek - Campus	n/a	n/a
86002.0	1790	San Diego Creek - Macarthur	n/a	n/a
86003.0	1791	Santa Ana/Delhi Channel - Bridge	n/a	n/a
86004.0	1792	Santa Ana/Delhi Channel - Outer	n/a	n/a

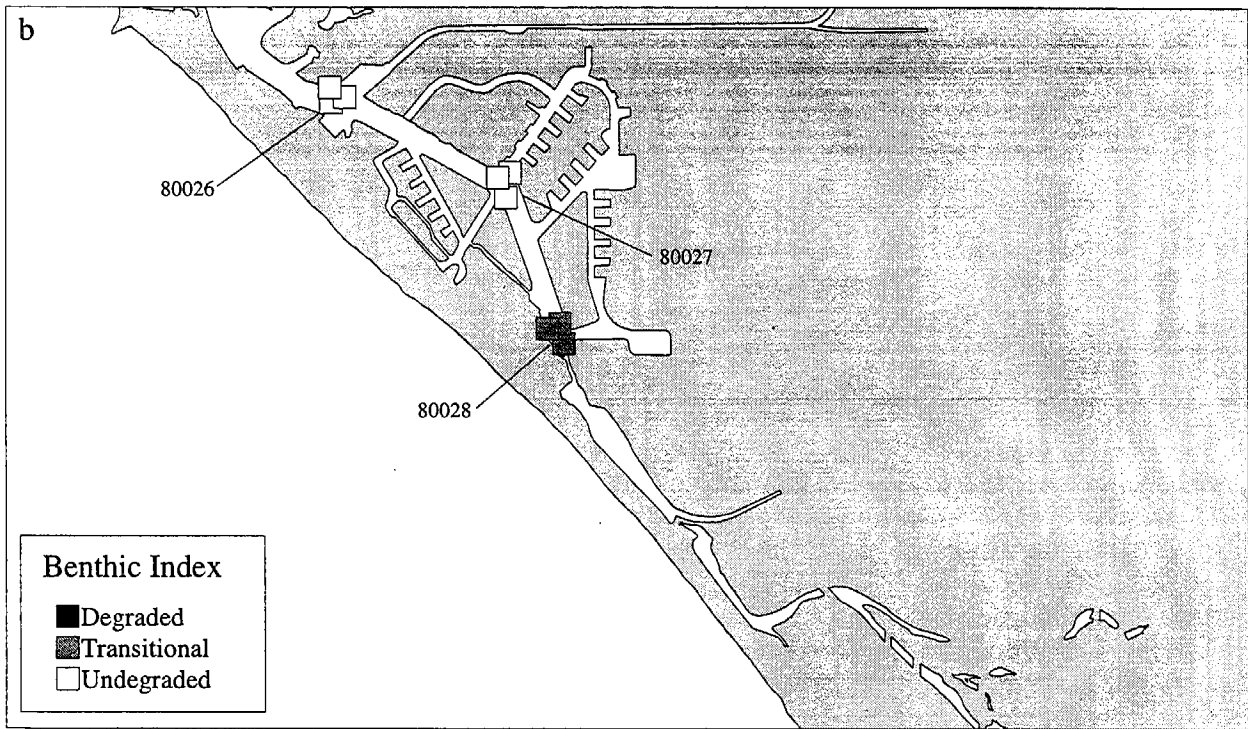
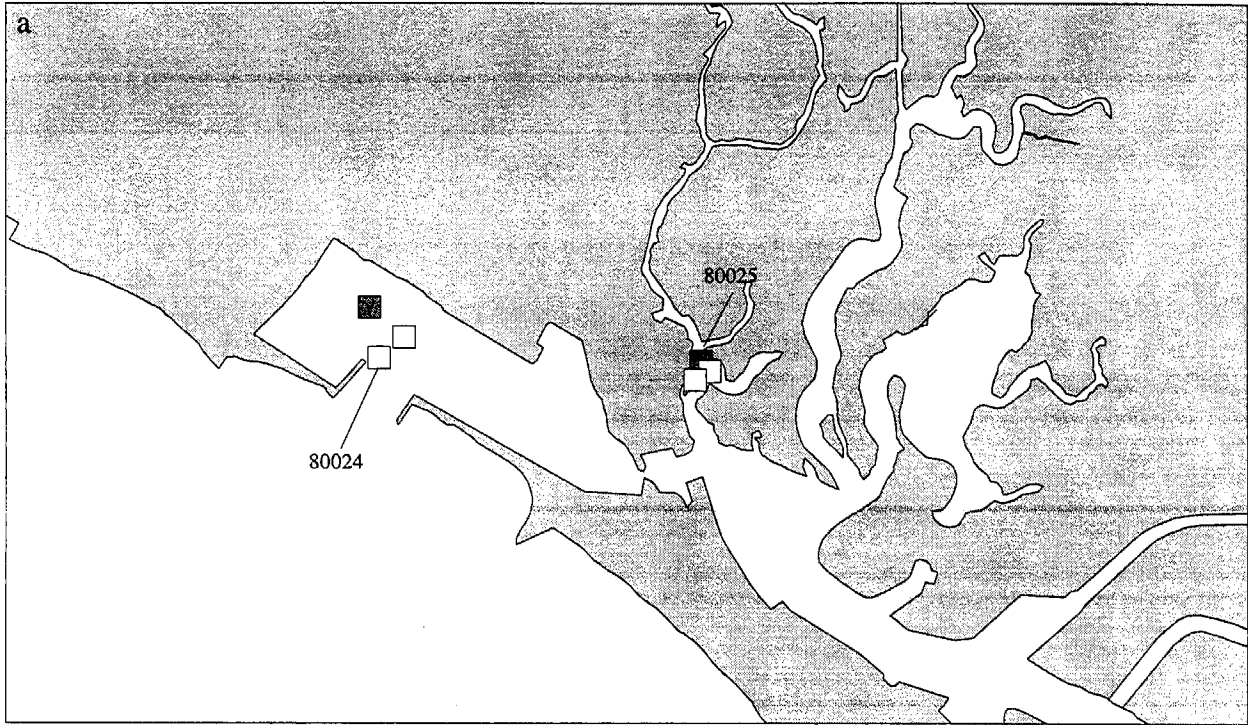


Figure 14a and 14b. Benthic index for stations in Anaheim Bay and Huntington Harbor. Degraded, transitional, and undegraded sites correspond to benthic indices from 0 to 0.3, 0.31 to 0.6, and 0.61 to 1.0, respectively.

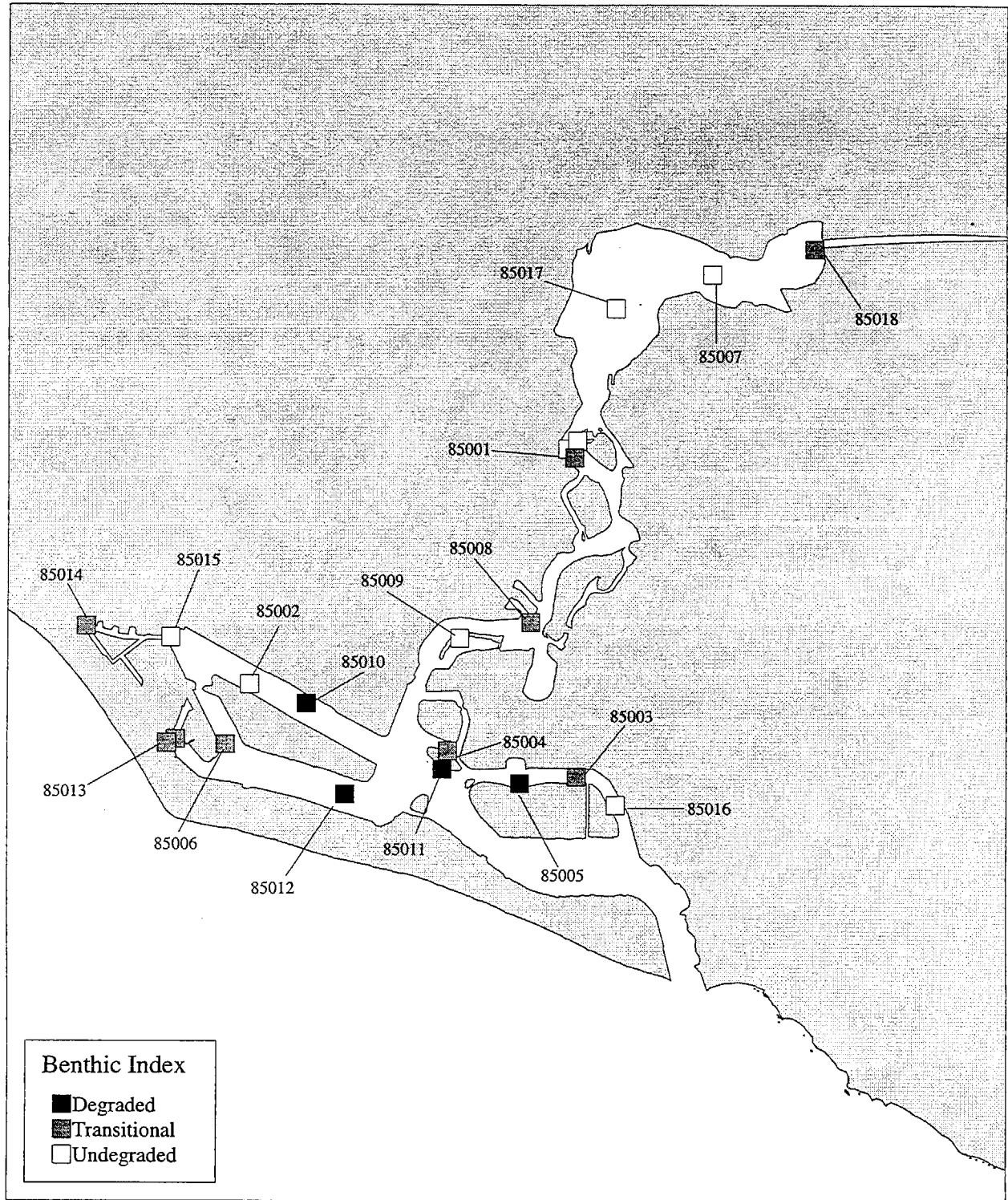


Figure 14c. Benthic index for stations in Newport Bay. Degraded, transitional, and undegraded sites correspond to benthic indices from 0 to 0.3, 0.31 to 0.6, and 0.61 to 1.0, respectively.

Correlation Between Benthic Index and Chemistry

Correlation analyses was performed between bulk sediment contaminants and benthic index for all water bodies combined. Because there were sufficient benthic samples from Newport Bay, additional analyses were conducted with Newport Bay only. Benthic index for both data sets was also correlated with interstitial and overlying unionized ammonia, interstitial hydrogen sulfide, and grain size. The index was also correlated with the results of each of the toxicity test protocols.

Results revealed seventeen significant negative correlations (Table 29). There were significant correlations with several metals in both data sets. Metabolites of DDT also correlated with benthic indices in both data sets. The strongest correlation was between benthic indices in Newport Bay and percent fine grain size. Benthic indices did not correlate with mean ERM quotients.

Table 29. Spearman Rank Correlation results for selected toxicants significantly correlated with benthic indices.

Water Body	Chemical	N	Rho	Significance
All	Cadmium	28	-0.329	0.05
All	Chromium	28	-0.392	0.025
All	Copper	28	-0.369	0.05
All	Iron	28	-0.431	0.025
All	Nickel	28	-0.383	0.025
All	p,p'-DDD	28	-0.332	0.05
All	p,p'DDE	28	-0.409	0.025
All	Total DDT	28	-0.322	0.05
All	Fines	36	-0.392	0.01
All	TOC	36	-0.362	0.025
Newport Bay	Chromium	20	-0.480	0.025
Newport Bay	Copper	20	-0.380	0.05
Newport Bay	Iron	20	-0.570	0.005
Newport Bay	Nickel	20	-0.459	0.025
Newport Bay	o,p'DDE	20	-0.407	0.05
Newport Bay	p,p'DDE	20	-0.481	0.025
Newport Bay	Fines	21	-0.638	0.0025

Additional correlations were performed between separate components of the benthic index and different toxicity test results. Analyses demonstrated significant relationships between normal urchin development at 25 and 50% porewater and total crustacean species ($p < 0.0025$ and $p < 0.01$, respectively).

Principal Components Analysis Results

Principal Components Analysis (PCA) was performed on toxicity, chemistry and benthic data from the region. PCA was conducted on several subsets of data depending on what toxicity tests

co-occurred and what chemical compounds were analyzed. Analysis revealed a significant relationship between benthic index and amphipod toxicity. These two biological indicators had significant relationships with several metals, percent fines, total organic carbon and DDT metabolites (Table 30). Of the factors associated with benthic index and amphipod toxicity, Zn and p,p'DDE exceeded ERM guideline values. When amphipod toxicity was analyzed alone, similar metals and percent fines were also associated with toxicity. The benthic indices and amphipod toxicity were also related to fine grain size in individual linear correlations.

Principle Components Analysis demonstrated that percent fine grain size was consistently associated with several metals, o,p'DDE, p,p'DDE, and total DDT. Individual linear correlations revealed that fine grain size was significantly correlated with all metals but aluminum and silver, all pesticides but dieldrin, total PCBs, total PAHs, and the mean ERM quotient. These analyses demonstrate the relationship between fine grain size and chemical contaminants in general. Contaminants are more likely to accumulate in sediments with fine grain size. The strongest relationships with metals and DDT metabolites were to be expected because the metals were greater in Newport Bay, and DDT metabolites were consistently elevated throughout the region.

Ampelisca toxicity was associated with metal contaminants, dieldrin, tributyltin, and total PCBs and PAHs. Metals and total PCBs associated with *Ampelisca* toxicity exceeded ERM guideline values. Urchin development toxicity in 100% porewater was significantly associated with several metals, total chlordane, several DDT metabolites (of which p,p'DDE concentrations exceeded the ERM guideline value), total DDT, total PAH and TOC. Urchin fertilization results, along with urchin development in 25 and 50% porewater were associated with aluminum.

Table 30. Results of Principle Components Analysis. PCA factors are listed in three categories: factors correlated with biological indicator(s), factors exceeding ERM guideline values, and other factors.

Biological Indicator	PCA Factor(s) Associated with Biological Indicator		
	Factors Correlated with Biological Indicator	Factors Exceeding ERM Guideline Value	Other Factors
Amphipod Toxicity/ Benthic Index	Cr, Fe, Ni, Sb, Zn, % Fines, o,p'DDE, p,p'DDE, TDDT, TOC	Zn, p,p'DDE	Mn
Amphipod Toxicity Ampelisca Toxicity	Cr, Fe, Sb, % Fines Cu, Hg, Zn, TPCB	Cu, Hg, Zn, TPCB	As, Mn, Ni As, Pb, Sb, Se, Sn, Dieldrin, TBT, TPAH
Urchin Development (100% porewater)	Ag, Zn, Total Chlordane, p,p,DDD, p,p'DDE, p,p,DDT, TDDT	Zn, p,p'DDE, Total Chlordane	Cd, Cr, Pb, Sb, Sn, TPAH, TOC
Urchin Fertilization (100% porewater)	Ag, Unionized Ammonia		Al

Station Categorization

A goal of the BPTCP is to identify sites considered to be of primary concern in terms of chemical contamination and potential impacts on beneficial uses identified through biological measures. By comparing the relative degree of chemical contamination with different measures of toxic effect, and combining these data with information on benthic community degradation, a weight-of-evidence approach may be employed to categorize sites for future study and action.

While this was an effective way to focus attention on the most polluted sites sampled, the large scope of the surveys limited opportunities to intensively investigate each site. For example, our characterization of organic chemical contamination is constrained by the limited number of contaminants measured. Samples often contained un-identified organic compounds that were not further characterized due to the limited scope of the program; these might have contributed to the toxicity of the samples. In addition, few measures of interstitial water chemical concentrations were conducted for substances other than ammonia and hydrogen sulfide. Therefore, our ability to characterize bioavailability of the bulk-phase chemicals is limited to TOC normalization. In addition, only one measure of Acid Volatile Sulfide and associated metals (AVS-SEM) was made, which limits the ability to predict bioavailability and toxicity of metals. Conclusions regarding benthic community degradation was limited by the lack of *in situ* sediment dissolved oxygen levels.

Because of these limitations, characterization of the most impacted stations must rely on the availability of a triad of measures (Chapman et al., 1987): chemical contamination, benthic community structure and toxicity to amphipods and larval invertebrates. These endpoints were used to establish a weight-of-evidence assessment of sediment quality.

The stations were categorized (Table 31) in order of decreasing chemical impact and biological toxicity and disturbance. Categorized stations range from those with elevated chemistry and mixed biological effects (Category 4 and 5) to those that have no elevated chemistry or biological effects (Category 7). Samples from sites given the highest priority ranking in this study also demonstrated a response to PAHs and PCBs. There were no stations that fell into Categories 1 through 3 as described in the methods.

Category 4 and 5 – Elevated chemistry and one measure of biological impact

Placement in Categories 4 or 5 requires elevated chemistry, but the categories differ in terms of biological impact. Stations in Category 4 only have measurements for one biological indicator, whereas Category 5 has both biological indicators, but only one is significant. Anaheim Bay Naval Reserve (82030.0) had elevated chemistry and recurrent toxicity to amphipods. Because 50% porewater was significantly toxic, larval development toxicity at this station was only partially explained by high ammonia concentrations.

Four stations were grouped into Category 5: Upper Huntington Harbor (900283), Rhine Channel (85013.0), Newport Island (85014.0) and Arches Storm Drain (85015.0). None of these stations had degraded benthos, but all had elevated chemistry and sufficient toxicity to be placed in this

category. Sediment from Upper Huntington Harbor repeatedly contained high concentrations of total chlordane, p,p'DDE and chlorpyrifos. Total chlordane concentrations were up to seven times the ERM guideline and p,p'DDE was over five times the ERM. Recurrent toxicity to amphipods and larval development tests contribute to the categorization of this station.

The three stations from Newport Bay are all in close proximity, and share similar chemical loadings. Rhine Channel sediments had the highest mean ERM quotients in the region and contained high concentrations of copper, mercury, p,p'DDE, total PCBs and tributyltin. Although some of the toxicity from this station might be attributed to high concentrations of ammonia and sulfide, the recurrent nature of the toxicity places it in Category 5. Newport Island and Arches Storm Drain had similar ERMQs and shared some chemical exceedances. Newport Island had some high ammonia and sulfide concentrations, but also had significant amphipod toxicity. Although Arches Storm Drain had elevated chemistry, only one test demonstrated significant toxicity. This station had a high percentage of total organic carbon (3.8%) which might have reduced the bioavailability of the chemicals in the sediment.

Category 6 – Biological impact with measured chemical concentrations below threshold values

Stations in this category have at least one measure of biological impact, either toxicity, benthos or both, and no elevated chemistry. Most of the stations in the Santa Ana Region (67%) fell into this category. Although none of these stations met the definition for elevated chemistry, many had ERM exceedances for total chlordane and p,p'DDE, particularly in Anaheim Bay and Huntington Harbor. The highest ERMQ and exceedances of these chemicals were at stations from the Upper and Middle Huntington Harbor sites. At these stations total chlordane was up to 2.9 times the ERM and p,p'DDE was up to 3.2 times the ERM. Toxicity at these stations was significant but not recurrent, and the benthos was not degraded.

Four stations in Newport Bay had degraded benthos and toxicity in more than one test. All of these stations were located near the central portion of the bay and might be affected by dredging operations. All of these stations had exceedances of p,p'DDE ERM values, and three were significantly toxic to amphipods.

Category 7 – Biological and chemical measurements below threshold values

Stations placed in this category have biological and chemical measurements below threshold values, and biological effects that can be explained by ammonia or sulfide concentrations. These stations include five from Anaheim Bay and five from Newport Bay. Six stations had significant toxicity to larval development in porewater, but all of these stations also had concentrations of ammonia that were high enough to cause the observed toxicity. Only one station in Region 8 was not tested with marine organisms. The San Diego Creek – Campus station (86001.0) was tested with the *Hyalella* amphipod and *Ceriodaphnia* acute tests in porewater and at the sediment-water interface. None of these tests were significantly toxic.

Table 31. Categorization of Region 8 stations based on chemistry, toxicity and benthic analysis. Shading indicates significant toxicity or benthic degradation. {} indicate Mytilus larval development test. [] indicate freshwater sediment test with Hyalella or fresh porewater test with Ceriodaphnia. NA indicates not analyzed, None indicates no exceedances, N indicates ammonia exceedance, and S indicates sulfide exceedance.

Station Number	Station Name	Date	IDOrg	ERMQ	ERM Exceedances (ERMQ) Percentile Exceedances (%)	Amphipod		Larval Development						Purple Urchin		Ampelisca		Benthic Index	
						NH ₃ Surv	H ₂ S	100% NH ₃ PW	50% NH ₃ H ₂ S	25% NH ₃ PW	NH ₃ SWI	H ₂ S Fert	NH ₃ Surv	H ₂ S					
Category 4 - Elevated Chemistry, one measure of Biological Impact (no data for second biol. indicator)																			
82030.0	Anaheim Bay- Naval Res.	Dec-92	430	NA	NA	87													
82030.0	Anaheim Bay- Naval Res.	Apr-93	772	NA	NA	87													
82030.0	Anaheim Bay- Naval Res.- R1	Feb-94	1044	0.182	TChl (1.1) p,p' DDE (1.1)	38													
82030.0	Anaheim Bay- Naval Res.- R2	Feb-94	1045	0.183	TChl (1.1) p,p' DDE (1.2)	69													
82030.0	Anaheim Bay- Naval Res.- R3	Feb-94	1046	0.597	TChl (7.4) p,p' DDE (1.4)	62													
82030.0	Anaheim Bay- Naval Res.- R1	Apr-94	1195	NA	NA	82													
82030.0	Anaheim Bay- Naval Res.- R2	Apr-94	1196	NA	NA	79													
82030.0	Anaheim Bay- Naval Res.- R3	Apr-94	1197	NA	NA	90													
82030.0	Anaheim Bay- Naval Reserve	May-94	1335	NA	NA	79													
Category 5 - Elevated Chemistry, mixed results from biological indicators																			
80028.3	Huntington Harbor- Upper	Sep-92	99	0.352	TChl (2.7) p,p' DDE (3.4)	52													
80028.3	Huntington Harbor- Upper- R1	Mar-94	1174	0.654	TChl (7.0) p,p' DDE (4.0) Chlorpyrifos (90th)	75													
80028.3	Huntington Harbor- Upper- R2	Mar-94	1175	0.626	TChl (6.8) p,p' DDE (5.3) Chlorpyrifos (90th)	83													
80028.3	Huntington Harbor- Upper- R3	Mar-94	1176	0.582	TChl (6.2) p,p' DDE (5.0) Chlorpyrifos (90th)	80													
85013.0	Newport Bay- Rhine Channel	Sep-94	1424	1.270	Cu (1.9) Hg (12.3) p,p' DDE (1.5) TPCB (2.0) TBT (90th)	60													
85013.0	Newport Bay- Rhine Channel	Jun-96	1633	1.124	Cu (1.8) Hg (10.7) p,p' DDE (1.6) TPCB (2.0) TBT (90th)	49													
85014.0	Newport Bay- Newport Island	Sep-94	1425	0.733	Hg (10.7) Zn (1.1) TChl (3.8) P,p' DDE (1.8) TPCB (1.1) TBT (90th)	56													
85015.0	Newport Bay- Arches Storm Drain	Sep-94	1426	0.668	TChl (5.2) p,p' DDE (2.4) TBT (90th)	93													

Station Number	Station Name	Date	IDOrg	ERMQ	ERM Exceedances (ERMQ) Percentile Exceedances (%)	Amphipod			Larval Development						Purple Urchin		Ampelisca		Benthic Index
						Surv	NH ₃	H ₂ S	100% PW	NH ₃ H ₂ S	50% PW	NH ₃ H ₂ S	25% PW	NH ₃ H ₂ S	SWI	NH ₃ H ₂ S	Fert	Surv	
Category 6 - Biological impact, chemistry below threshold values																			
80024.1	Anaheim Bay- Outer	Sep-92	85	0.101	NONE	87	12	98	66	NA	NA	NA	NA	NA	NA	NA	NA	0.80	
80024.2	Anaheim Bay- Outer	Sep-92	86	NA	NA	84	0	98	97	NA	NA	NA	NA	NA	NA	NA	NA	0.55	
80024.3	Anaheim Bay- Outer	Sep-92	87	0.141	NONE	82	18	N	99	NA	NA	NA	NA	NA	NA	NA	NA	0.56	
80024.3	Anaheim Bay- Outer	May-93	807	NA	NA	34	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
80024.3	Anaheim Bay- Outer- R1	Mar-94	1171	0.210	TChl (1.2) p,p' DDE (1.4)	91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
80024.3	Anaheim Bay- Outer- R2	Mar-94	1172	0.206	TChl (1.2) p,p' DDE (1.2) TBT (90th)	88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
80024.3	Anaheim Bay- Outer- R3	Mar-94	1173	0.194	TChl (1.2) p,p' DDE (1.1)	85	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
80025.1	Anaheim Bay- Oil Island	Oct-92	88	NA	NA	65	12	91	97	NA	NA	NA	NA	NA	NA	NA	NA	0.43	
80025.2	Anaheim Bay- Oil Island	Oct-92	89	NA	NA	80	32	97	97	NA	NA	NA	NA	NA	NA	NA	NA	0.60	
80026.1	Huntington Harbor- Lower	Sep-92	91	0.117	NONE	86	0	N	0	NA	NA	NA	NA	NA	NA	NA	NA	0.75	
80026.2	Huntington Harbor- Lower	Sep-92	92	0.076	NONE	92	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	0.65	
80026.3	Huntington Harbor- Lower	Sep-92	93	NA	NA	82	0	0	61	NA	NA	NA	NA	NA	NA	NA	NA	0.66	
80027.1	Huntington Harbor- Middle	Sep-92	94	NA	NA	64	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	0.79	
80027.2	Huntington Harbor- Middle	Sep-92	95	0.261	TChl (1.5) p,p' DDE (2.8)	67	0	N	14	NA	NA	NA	NA	NA	NA	NA	NA	0.75	
80027.3	Huntington Harbor- Middle	Sep-92	96	0.250	TChl (1.6) p,p' DDE (2.7)	44	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	0.84	
80027.3	Huntington Harbor- Middle- R1	Mar-94	1177	0.309	TChl (2.6) p,p' DDE (2.0)	93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
80027.3	Huntington Harbor- Middle- R2	Mar-94	1178	0.296	TChl (2.5) p,p' DDE (2.4)	78	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
80027.3	Huntington Harbor- Middle- R3	Mar-94	1179	0.332	TChl (2.9) p,p' DDE (3.2)	89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
80028.1	Huntington Harbor- Upper	Sep-92	97	NA	NA	73	0	0	65	NA	NA	NA	NA	NA	NA	NA	NA	0.53	
80028.2	Huntington Harbor- Upper	Sep-92	98	0.356	TChl (2.9) p,p' DDE (3.0)	73	0	N	0	NA	NA	NA	NA	NA	NA	NA	NA	0.33	

Station Number	Station Name	Date	IDOrg	ERMQ	ERM Exceedances (ERMQ)		ERMQ	ERMQ		Larval Development		Purple Urchin		Ampelisca		Benthic Index
					Percentile Exceedances (%)	Percentile Exceedances (%)		100% NH ₃ PW	50% NH ₃ PW	25% NH ₃ PW	NH ₃ H ₂ S	NH ₃ H ₂ S	NH ₃ H ₂ S	NH ₃ H ₂ S	NH ₃ H ₂ S	
Category 6 - Biological impact, chemistry below threshold values																
82001.0	Anaheim Bay- Navy Marsh	Dec-92	401	0.073	NONE											
82001.0	Anaheim Bay- Navy Marsh- R1	Feb-94	1086	0.082	NONE											
82001.0	Anaheim Bay- Navy Marsh- R2	Feb-94	1087	0.078	NONE											
82001.0	Anaheim Bay- Navy Marsh- R3	Feb-94	1088	0.101	NONE											
82002.0	Anaheim Bay- Navy Marsh 2	Dec-92	402		NA											
82002.0	Anaheim Bay- Navy Marsh 2	May-93	809		NA											
82002.0	Anaheim Bay- Navy Marsh 2- R1	Feb-94	1089	0.108	NONE											
82002.0	Anaheim Bay- Navy Marsh 2- R2	Feb-94	1090	0.090	NONE											
82002.0	Anaheim Bay- Navy Marsh 2- R3	Feb-94	1091	0.099	NONE											
82005.0	Huntington Harbor- Launch	Dec-92	405	0.163	p,p' DDE (1.1)											
82005.0	Huntington Harbor- Launch- R1	Apr-94	1201	NA	NA											
82005.0	Huntington Harbor- Launch- R2	Apr-94	1202	NA	NA											
82005.0	Huntington Harbor- Launch- R3	Apr-94	1203	NA	NA											
82006.0	Huntington Harbor- Peter's	Dec-92	406	0.296	TChl (1.5) p,p' DDE (2.9)											
82009.0	Huntington Harbor- Har. La.	Dec-92	409	NA	NA											
82009.0	Huntington Harbor- Har. La.	May-93	808	NA	NA											
82020.0	Seal Beach NWR- Nasa Island	Dec-92	420	NA	NA											
82020.0	Seal Beach NWR- Nasa Island	Apr-93	769	NA	NA											
82023.0	Seal Beach NWR- Bolsa Ave	Dec-92	423	NA	NA											
82023.0	Seal Beach NWR- Bolsa Ave	Apr-93	771	NA	NA											
82023.0	Seal Beach NWR- Bolsa Ave- R1	Feb-94	1092	0.107	NONE											
82023.0	Seal Beach NWR- Bolsa Ave- R2	Feb-94	1093	0.117	NONE											
82023.0	Seal Beach NWR- Bolsa Ave- R3	Feb-94	1094	0.131	NONE											
82024.0	Bolsa Bay- Mouth of Eggw Flood	Dec-92	424	NA	NA											
82024.0	Bolsa Bay- Mouth of Eggw Flood	Apr-93	770	NA	NA											

Station Number	Station Name	Date	IDOrg	ERMQ	ERM Exceedances (%)	Amphipod		Larval Development				Purple Urchin		Ampelisca		Benthic Index	
						Surv	NH ₃ H ₂ S	100% PW	NH ₃ H ₂ S	50% PW	NH ₃ H ₂ S	25% PW	NH ₃ H ₂ S	SWI	NH ₃ H ₂ S Fert		Surv
Category 6 - Biological impact, chemistry below threshold values																	
82039.0	Bolsa Chica Ecol. Res.	Dec-92	439	0.146	NONE	57		(0)	N								NA
82039.0	Bolsa Chica Eco. Res.- R1	Apr-94	1204	NA	NA	21		NA									NA
82039.0	Bolsa Chica Eco. Res.- R2	Apr-94	1205	NA	NA	9		NA									NA
82039.0	Bolsa Chica Eco. Res.- R3	Apr-94	1206	NA	NA	38		NA									NA
82040.0	Seal Beach NWR	Dec-92	440	0.078	NONE	59		50	N								NA
82040.0	Seal Beach NWR- R1	Feb-94	1095	0.086	NONE	62		NA									NA
82040.0	Seal Beach NWR- R2	Feb-94	1096	0.094	NONE	63		NA									NA
82040.0	Seal Beach NWR- R3	Feb-94	1097	0.089	NONE	87		NA									NA
85001.0	Newport Bay (523)	Sep-94	1387	0.180	p,p' DDE (2.1)	29	N	0	NS	0	NS	0	NS	NA			0.82
85001.0	Newport Bay (523)	Jun-96	1634	0.089	NONE	93	N	1	S					NA			0.62
85001.0	Newport Bay (523)	Aug-97	1788	NA	NA	93		NA						NA			0.47
85002.0	Newport Bay (616)	Sep-94	1388	0.239	Hg (1.1) p,p' DDE (2.3)	58		0						NA			0.74
85003.0	Newport Bay (791)	Sep-94	1389	0.147	p,p' DDE (1.0)	72		0						NA			0.50
85004.0	Newport Bay (877)	Sep-94	1390	0.198	p,p' DDE (2.0)	70		0						NA			0.32
85005.0	Newport Bay (949)	Sep-94	1391	0.244	p,p' DDE (2.3)	63		0	S					NA			
85006.0	Newport Bay (1009)	Sep-94	1392	0.318	Hg (2.5) p,p' DDE (1.5)	79		0	N					NA			0.34
85007.0	Newport Bay (431)	Sep-94	1418	0.070	NONE	93		0	NS	0	NS	0	N	NA		87	1.00
85008.0	Newport Bay (670)	Sep-94	1419	0.175	TChl (1.1) p,p' DDE (2.5)	57	N	0	N	0	N	0	N	NA			0.49
85009.0	Newport Bay (705)	Sep-94	1420	0.131	p,p' DDE (1.0)	93		0	N	1	N	51	N	NA		87	0.61
85010.0	Newport Bay (819)	Sep-94	1421	0.216	p,p' DDE (2.6)	74		0	N	0		50		NA		76	
85011.0	Newport Bay (905)	Sep-94	1422	0.200	TChl (1.1) p,p' DDE (2.4)	80		0	N	0		3		NA		95	
85012.0	Newport Bay (1064)	Sep-94	1423	0.212	TChl (1.0) p,p' DDE (3.2)	59		2		43		23		NA		67	

Station Number	Station Name	Date	IDOrg	ERMQ	ERM Exceedances (ERMQ) Percentile Exceedances (%)	Amphipod		Larval Development						Purple Urchin		Ampellicca		Benthic Index
						Surv	H ₂ S	100% NH ₃ PW	50% NH ₃ H ₂ S	25% NH ₃ PW	NH ₃ H ₂ S	NH ₃ H ₂ S	Fert	Fert	Surv	H ₂ S		
Category 6 - Biological impact, chemistry below threshold values																		
85017.0	Newport Bay- Unit I Basin	Sep-94	1428	0.256	TChl (1.8) p.p' DDE (2.2)	81		0	NS	1	N	80	N	NA	96	93		0.69
85018.0	Newport Bay- Unit II Basin	Sep-94	1429	0.093	NONE	89		0	N	0	N			NA		86		0.51
Category 7 - Biological and chemical results below threshold values																		
80025.3	Anaheim Bay- Oil Island	Oct-92	90	NA	NA	75		29	N	74	N	96		NA		NA		0.76
82003.0	Anaheim Bay- Entrance	Dec-92	403	NA	NA	93		0	N					NA		NA		NA
82004.0	Anaheim Bay- Fuel Dock	Dec-92	404	NA	NA	91		0	N					NA		NA		NA
82021.0	Seal Beach NWR- Hog Island	Dec-92	421	NA	NA	94		0	N					NA		NA		NA
82022.0	Seal Beach NWR- Sunset AGU	Dec-92	422	NA	NA	79		0	N					NA		NA		NA
85016.0	Newport Bay- Yachtmans Cove	Sep-94	1427	0.163	NONE	85		81		97		97		NA	86	89		0.85
86001.0	San Diego Creek- Campus	Aug-97	1789	NA	NA	[96]		[94]						[94]		NA		NA
86002.0	San Diego Creek- MacArthur	Aug-97	1790	NA	NA	97	N	NA						89		NA		NA
86003.0	Santa Ana/Delhi Channel- Bridge	Aug-97	1791	NA	NA	91		NA						65	NS	NA		NA
86004.0	Santa Ana/Delhi Channel- Outer	Aug-97	1792	NA	NA	95		NA						78		NA		NA

CONCLUSIONS

Using a weight-of-evidence approach based on the Sediment Quality Triad, various measures of chemical contamination, toxicity, and benthic community structure were completed at 96 stations to determine relative degradation in Santa Ana Region water bodies that included Anaheim Bay, Huntington Harbor and Newport Bay. When combined with measures of other sediment characteristics such as grain size, TOC, unionized ammonia, and hydrogen sulfide, these measures were useful for categorizing sites for further investigations.

The data set was limited by lack of the following information: sediment Acid-Volatile Sulfides and Simultaneously Extracted Metals (AVS-SEM), which limited conclusions regarding metal bioavailability; and lack of *in situ* measures of dissolved oxygen concentrations, which limited conclusions regarding effects of anoxia on benthic community structure. Lack of tissue analysis limited conclusions about bioaccumulation. Additional un-measured factors that may have influenced benthic community structure included seasonal variations in salinity and temperature.

Degree of chemical contamination was assessed using sediment quality guidelines developed by NOAA (Long et al., 1995). These guidelines were used to screen for chemical potential to induce biological effects, but are limited by the list of chemicals. Also, because bioavailability is sample specific, chemicals with concentrations above guideline values may not be responsible for observed impacts. Chemicals without guideline values, such as chlorpyrifos and tributyltin, can also play a role in biological effects. Only site-specific investigations including Toxicity Identification Evaluations and other methods can be used to determine causal relationships.

Relative to the ERL/ERM guidelines, p,p'DDE, total chlordane, total PCB, copper, mercury, and zinc were found to be the chemicals or chemical groups of greatest concern. Chlorpyrifos and tributyltin were found at concentrations above the 90th percentile of the statewide BPTCP database. Chemical contamination in the water bodies studied was generally considered to be low in most areas and moderate in a few areas relative to other more highly industrialized areas.

Exceedances of toxicity thresholds were determined by comparing sample toxicity to the laboratory negative control and a protocol specific MSD value. Using the t-test/MSD method, 41% of the 96 solid-phase samples tested with the amphipods were significantly toxic. Ninety-five percent of the 56 porewater samples tested at 100% concentrations were toxic in larval development tests.

There were several negative associations between toxicity test results and chemical compounds measured in bulk-phase samples. Amphipod survival from the entire region was negatively correlated with several metals and fine-grained sediments. Newport Bay amphipod survival was negatively correlated with metals, total chlordane and total PCB. Purple urchin larval development in 100% porewater was correlated with several metals, total chlordane, several DDT metabolites, tributyltin and total PCB. There was a significant negative correlation between sea urchin embryo development and pore water unionized ammonia concentrations. There was also a significant negative correlation between *Ampelisca* survival and unionized ammonia.

Benthic community structure was assessed using a Relative Benthic Index, calculated based on measures of the Total Number of Fauna, Number of Crustacean Species, and Numbers of Positive and Negative Indicator Species. Using this index, 4 of the 36 stations sampled (11%), were considered significantly degraded. All four of the degraded stations were located in the central portion of Newport Bay and might have been affected by dredging activities. Benthic community degradation was associated with several measured bulk-phase chemicals and amphipod survival. The RBI was significantly correlated with several metals, DDT metabolites and fine-grained sediments.

Stations were categorized based on chemistry, toxicity and benthic degradation to aid State and Regional Water Board staff in recommending and directing further investigations. There were no stations listed in Categories 1 through 3. One station from Anaheim Bay was listed in Category 4, and four stations were listed in Category 5. These two categories included stations with elevated chemistry and varied biological impacts. Category 5 stations included one from Huntington Harbor and three from Newport Bay. Thirty-seven stations were listed under Category 6 (biological impact with measured chemical concentrations below threshold values), and ten stations were listed in Category 7 (biological and chemical measurements below threshold values).

Future investigations and actions at sites should include studies of the areal extent of contamination and associated effects, spatial and temporal variability of contaminant effects, contaminant source identification and causes of toxicity (such as those identified through Toxicity Identification Evaluations). Regional board staff will dictate any site remediation, such as source control, and/or toxic hot spot cleanup.

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Appendix A
Data Base Description

DATABASE DESCRIPTION

for the

Bay Protection and Toxic Cleanup Program

Prepared for:

**California State Water Resources Control Board
Bays and Estuaries Unit**

and

**California Department of Fish and Game
Marine Pollution Studies Laboratories**

by

Moss Landing Marine Laboratories

I. OVERVIEW OF THE BAY PROTECTION PROGRAM

The California State Water Resources Control Board (SWRCB) has contracted the California Department of Fish and Game (CDFG) to coordinate the scientific aspects of the Bay Protection and Toxic Cleanup Program (BPTCP), a SWRCB program mandated by the California Legislature. The BPTCP is a comprehensive, long-term effort to regulate toxic pollutants in California's enclosed bays and estuaries. The program consists of both short-term and long-term activities. The short-term activities include the identification and priority ranking of toxic hot spots, development and implementation of regional monitoring programs designed to identify toxic hot spots, development of narrative sediment quality objectives, development and implementation of cleanup plans, revision of waste discharge requirements as needed to alleviate impacts of toxic pollutants, and development of a comprehensive database containing information pertinent to describing and managing toxic hot spots. The long-term activities include development of numeric sediment quality objectives; development and implementation of strategies to prevent the formation of new toxic hot spots and to reduce the severity of effects from existing toxic hot spots; revision of water quality control plans, cleanup plans, and monitoring programs; and maintenance of the comprehensive database.

Actual field and laboratory work is performed under contract by the California Department of Fish and Game (CDFG). The CDFG subcontracts the toxicity testing to Dr. Ron Tjeerdema at the University of California at Santa Cruz (UCSC) and the laboratory testing is performed at the CDFG toxicity testing laboratory at Granite Canyon, south of Carmel. The CDFG contracts the majority of the sample collection activities to Dr. John Oliver of San Jose State University at the Moss Landing Marine Laboratories (MLML) in Moss Landing. Dr. Oliver also is subcontracted to perform the TOC and grain size analyses, as well as to perform the benthic community analyses. CDFG personnel perform the trace metals analyses at the trace metals facility at Moss Landing Marine Laboratories in Moss Landing. The synthetic organic pesticides, PAHs and PCBs are contracted by CDFG to Dr. Ron Tjeerdema at the UCSC trace organics facility at Long Marine Laboratory in Santa Cruz. MLML currently maintains the Bay Protection and Toxic Cleanup Database for the SWRCB. Described below is a description of that database system.

II. DESCRIPTION OF COMPUTER FILES

The sample collection/field information, chemical, and toxicity data are stored on hard copy, computer disks and on a 486DX PC at Moss Landing Marine Laboratories. Access is limited to Russell Fairey. Contact Russell Fairey at (408) 633-6035 for copies of data. The data are stored in a dBase 4 program and can be exported to a variety of formats. There are three backups of this database stored in two different laboratories. The data are entered into 1 of 5 files. CHEM1_56.DBF file contains a collection of chemical analyses data in sediments. TOX1_56.DBF file contains toxicity test data and associated water quality data. TISS1_56.DBF file contains a collection of chemical analyses in tissue matrix. WATR1_56.DBF file contains a collection of chemical analyses in water. BEN1_56.XLS file contains a summary of benthic community analyses. This file is

stored in Excel 5.0. A hardcopy printout of the dBase database structure is attached, showing precise characteristics of each field.

The CHEM1_56.DBF file contains the following fields (the number at the start of each field is the field number):

1. STANUM. This numeric field is 7 characters wide with 1 decimal place and contains the CDFG station numbers that are used statewide. The format is YXXXX.Z where Y is the Regional Water Quality Control Board Region number and XXXX is the number that corresponds to a given location or site and Z is the number of the station within that site. An example is San Pablo Bay- Island #1, in San Francisco Bay, where the STANUM is 20007.0. The 2 indicates Region 2. The 0007 indicates it is Site 7 and the .0 is the replicate (if any) at the station within Site 7.
2. STATION. This character field is 30 characters wide and contains the exact name of the station.
3. IDORG. This numeric field is 8 characters wide and contains the unique i.d. organizational number for the sample. For each station collected on a unique date, an idorg sample number is assigned. This should be the field that links the collection, toxicity, chemical, and other databases.
4. DATE. This date field is 8 characters wide and is the date that each sample was collected in the field. It is listed as MM/DD/YY.
5. LEG. This numeric field is 6 characters wide with 1 decimal place, and is the leg number of the project in which the sample was collected.
6. LATITUDE. This character field is 12 characters wide and contains the latitude of the center of the station sampled. The format is a character field as follows: XX,YY,ZZ, where XX is in degrees, YY is in minutes, and ZZ is in seconds or hundreds.
7. LONGITUDE. This character field is 14 characters wide and contains the longitude of the center of the station sampled. The format is a character field as follows: XXX,YY,ZZ, where XXX is in degrees, YY is in minutes, and ZZ is in seconds or hundreds.
8. HUND_SECS. This character field is 3 characters wide and contains the designation "h" if the latitude and longitude are given in degrees, minutes, hundredths of a minute. If differential accuracy was achieved with the GPS at the station the designation is given as "h/d". The designation "s" is given when latitude and longitude are given in degrees, minutes, seconds.
9. GISLAT. This numeric field is 12 characters wide with 8 decimal places and contains the latitude of the station sampled in Geographical Information System format. The format is a numeric field as follows: XX.YYYYYYYY, where XX is in degrees and YYYYYYYY is a decimal fraction of the preceding degree.
10. GISLONG. This numeric field is 14 characters wide with 8 decimal places and contains the longitude of the station sampled. The format is a character field as follows: XXXX.YYYYYYYY where XXXX is in degrees and YYYYYYYY is a decimal fraction of the preceding degree.

11. **DEPTH.** This character field is 4 characters wide and contains the depth at which the sediment sample was collected, in meters to the nearest one half meter.
12. **METADATA.** This is a text index directing the user to tables or files of ancillary data pertinent to the associated data file. Character field, width 12.

TRACE METALS IN SEDIMENT are presented in fields 13 through 32. All sediment trace metal results are reported on a dry weight basis in parts per million (ppm).

- A. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed.
- B. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected.

Sediment trace metals are numeric fields of varying character width, and including the following elements, listed by field number, then field name as it appears in the database, then numeric character width and number of decimal places:

13. **TMMOIST.** 6.2
14. **ALUMINUM.** 9.2
15. **ANTIMONY.** 7.3
16. **ARSENIC.** 6.3
17. **CADMIUM.** 7.4
18. **CHROMIUM.** 8.3
19. **COPPER.** 7.2
20. **IRON.** 7.1
21. **LEAD.** 7.3
22. **MANGANESE.** 7.2
23. **MERCURY.** 7.4
24. **NICKEL.** 7.3
25. **SILVER.** 7.4
26. **SELENIUM.** 6.3
27. **TIN.** 8.4
28. **ZINC.** 9.4
29. **ASBATCH.** 5.1
30. **SEBATCH.** 5.1
31. **TMBATCH.** The Batch number that the sample was digested in, numeric field width of 5 with 2 decimal place.
32. **TMDATAQC.** Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field width 3. Data qualifier codes are as follows:
 - A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are

made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.

- C. When the QA samples has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
- D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".

TRACE METALS IN POREWATER are presented in fields 33 through 43. All porewater trace metal results are reported on a dry weight basis in parts per billion (ppb).

- A. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed.
- B. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected.

The porewater trace metals are numeric fields of varying character width, and including the following elements, listed by field number, then field name as it appears in the database, then numeric character width and number of decimal places:

- 33. PWAL. This field is porewater aluminum. 5.0
- 34. PWCD. This field is porewater cadmium. 5.3
- 35. PWCU. This field is porewater copper. 5.2
- 36. PWFE. This field is porewater iron. 6.0
- 37. PWPB. This field is porewater lead. 6.2
- 38. PWMN. This field is porewater manganese. 5.0
- 39. PWNI. This field is porewater nickel. 5.2
- 40. PWAG. This field is porewater silver. 6.4
- 41. PWZN. This field is porewater zinc. 6.1
- 42. PWBATCH. The batch number the sample was extracted in, character field width 11.
- 43. PWDATAQC. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field width 3. Data qualifier codes are as follows:
 - A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.
 - C. When the QA samples has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".

AVS/SEM concentrations are presented in fields 44 through 53. All AVS/SEM results are reported on a dry weight basis in parts per million (ppm or ug/g). Acid volatile sulfides (AVS) and simultaneous extracted metals (SEM) are numeric fields of varying character width, and including the following elements, listed by field number, then field name as it appears in the database, then numeric character width and number of decimal places.

- 44. AVS. 7.2
- 45. SEM_CD. 7.4
- 46. SEM_CU. 7.2
- 47. SEM_NI. 7.3
- 48. SEM_PB. 7.3
- 49. SEM_ZN. 9.4
- 50. SEM_SUM. 9.4
- 51. SEM_AVS. 9.3
- 52. AVS_BATCH. The batch number the sample was extracted in, numeric field width 5.
- 53. AVSDATAQC. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field width 3. Data qualifier codes are as follows:
 - A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.
 - C. When the QA samples has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".

SYNTHETIC ORGANICS are presented in fields 54 through 173 . All synthetic organic results are reported on a dry weight basis in parts per billion (ppb or ng/g).

- A. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed.
- B. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected.

Synthetic organics are reported on a dry weight basis in parts per billion (ppb or ng/g) and are numeric fields of varying width, and include the following compounds, listed by field number, then field name as it appears in database (and followed by the compound name if not obvious), and then finally, the numeric character width and number of decimal places is given:

54. SOWEIGHT. This numeric field is 6 characters wide with 2 decimal places and contains the weight of the sample extracted for analysis.
55. SOMOIST. This numeric field is 6 characters wide with 2 decimal places and contains the percent moisture of the sample extracted.
56. ALDRIN. 9.3
57. CCHLOR. cis-Chlordane. 9.3
58. TCHLOR. trans-Chlordane. 9.3
59. ACDEN. alpha-Chlordene. 9.3
60. GCDEN. gamma-Chlordene. 9.3
61. CLPYR. Chlorpyrifos (Dursban). 8.2
62. DACTH. Dacthal. 9.3
63. OPDDD. o,p'-DDD. 8.2
64. PPDDD. p,p'-DDD. 9.3
65. OPDDE. o,p'-DDE. 8.2
66. PPDDE. p,p'-DDE. 8.2
67. PPDDMS. p,p'-DDMS. 8.2
68. PPDDMU. p,p'-DDMU. 8.2
69. OPDDT. o,p'-DDT. 8.2
70. PPDDT. p,p'-DDT. 8.2
71. DICLB. p,p'-Dichlorobenzophenone. 8.2
72. DIELDRIN. 9.3
73. ENDO_I. Endosulfan I. 9.3
74. ENDO_II. Endosulfan II. 8.2
75. ESO4. Endosulfan sulfate. 8.2
76. ENDRIN. 8.2
77. ETHION. 8.2
78. HCHA. alpha HCH 9.3
79. HCHB. beta HCH 8.2
80. HCHG. gamma HCH (Lindane) 9.3
81. HCHD. delta HCH 9.3
82. HEPTACHLOR. 9.3
83. HE. Heptachlor Epoxide. 9.3
84. HCB. Hexachlorobenzene. 9.3
85. METHOXY. Methoxychlor. 8.2
86. MIREX. 9.3
87. CNONA. cis-Nonachlor. 9.3
88. TNONA. trans-Nonachlor. 9.3
89. OXAD. Oxadiazon. 8.2
90. OCDAN. Oxychlordane. 9.3
91. TOXAPH. Toxaphene. 7.2
92. PESBATCH. The batch number that the sample was extracted in, character field width 11.
93. TBT. Tributyltin. 8.4
94. TBTBATCH. The batch number that the sample was extracted in, numeric field width 5 and 1 decimal places.
95. PCB5. 9.3

- 96. PCB8. 9.3
- 97. PCB15. 9.3
- 98. PCB18. 9.3
- 99. PCB27. 9.3
- 100. PCB28. 9.3
- 101. PCB29. 9.3
- 102. PCB31. 9.3
- 103. PCB44. 9.3
- 104. PCB49. 9.3
- 105. PCB52. 9.3
- 106. PCB66. 9.3
- 107. PCB70. 9.3
- 108. PCB74. 9.3
- 109. PCB87. 9.3
- 110. PCB95. 9.3
- 111. PCB97. 9.3
- 112. PCB99. 9.3
- 113. PCB101. 9.3
- 114. PCB105. 9.3
- 115. PCB110. 9.3
- 116. PCB118. 9.3
- 117. PCB128. 9.3
- 118. PCB132. 9.3
- 119. PCB137. 9.3
- 120. PCB138. 9.3
- 121. PCB149. 9.3
- 122. PCB151. 9.3
- 123. PCB153. 9.3
- 124. PCB156. 9.3
- 125. PCB157. 9.3
- 126. PCB158. 9.3
- 127. PCB170. 9.3
- 128. PCB174. 9.3
- 129. PCB177. 9.3
- 130. PCB180. 9.3
- 131. PCB183. 9.3
- 132. PCB187. 9.3
- 133. PCB189. 9.3
- 134. PCB194. 9.3
- 135. PCB195. 9.3
- 136. PCB201. 9.3
- 137. PCB203. 9.3
- 138. PCB206. 9.3
- 139. PCB209. 9.3
- 140. ARO1248. 9.3
- 141. ARO1254. 9.3

142. ARO1260. 9.3
143. ARO5460. 9.3
144. PCBBATCH. The batch number that the sample was extracted in, character field width 11.
145. ACY. Acenaphthylene. 8.2
146. ACE. Acenaphthene. 8.2
147. ANT. Anthracene. 8.2
148. BAA. Benz[a]anthracene. 8.2
149. BAP. Benzo[a]pyrene. 8.2
150. BBF. Benzo[b]fluoranthene. 8.2
151. BKF. Benzo[k]fluoranthene. 8.2
152. BGP. Benzo[ghi]perylene. 8.2
153. BEP. Benzo[e]pyrene. 8.2
154. BPH. Biphenyl. 8.2
155. CHR. Chrysene. 8.2
156. COR. Coronene. 8.2
157. DBA. Dibenz[a,h]anthracene. 8.2
158. DBT. Dibenzothiophene. 8.2
159. DMN. 2,6-Dimethylnaphthalene. 8.2
160. FLA. Fluoranthene. 8.2
161. FLU. Fluorene. 8.2
162. IND. Indeno[1,2,3-cd]pyrene. 8.2
163. MNP1. 1-Methylnaphthalene. 8.2
164. MNP2. 2-Methylnaphthalene. 8.2
165. MPH1. 1-Methylphenanthrene. 8.2
166. NPH. Naphthalene. 8.2
167. PHN. Phenanthrene. 8.2
168. PER. Perylene. 8.2
169. PYR. Pyrene. 8.2
170. TMN. 2,3,5-Trimethylnaphthalene. 8.2
171. TRY. Triphenylene. 8.2
172. PAHBATCH. The batch number that the sample was extracted in, character field width 11.
173. SODATAQA. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field width 3. Data qualifier codes are as follows:
 - A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.
 - C. When QA samples have major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".

- D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".

SEDIMENT PARTICULATE SIZE ANALYSES DATA are presented in fields 174-182. The grain size results are reported as follows:

- A. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed.
 - B. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected.
- 174. **FINES.** Sediment grain size for each station, reported as percent fines. Numeric field, width 5 with 2 decimal places.
 - 175. **FINEBATCH.** The batch number that the sample was analyzed in, character field, width 6.
 - 176. **FINEDATAQC.** Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field, width 3. Data qualifier codes are as follows:
 - A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, QA evaluations should be consulted before using the data.
 - C. When QA samples have major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".
 - 177. **COARSE SAND.** Sediment grain size greater than 0.500 mm ($\phi = 1.0$) for each station, reported as a fractional percentage of the total sample wet weight. Numeric field, width 5 with 2 decimal places.
 - 178. **FINESAND.** Sediment grain size less than 0.500 mm and greater than 0.063 mm ($\phi > 1.0$ and $\phi \leq 4.0$) for each station, reported as a fractional percentage of the total sample wet weight. Numeric field, width 5 with 2 decimal places.
 - 179. **COARSE SILT.** Sediment grain size less than 0.063 mm and greater than 0.031 mm ($\phi > 4.0$ and $\phi \leq 5.0$) for each station, reported as a fractional percentage of the total sample wet weight. Numeric field, width 5 with 2 decimal places.
 - 180. **FINESILT.** Sediment grain size less than 0.031 mm and greater than 0.004 mm ($\phi > 5.0$ and $\phi \leq 8.0$) for each station, reported as a fractional percentage of the total sample wet weight. Numeric field, width 5 with 2 decimal places.
 - 181. **CLAY.** Sediment grain size less than 0.004 mm ($\phi > 8.0$) for each station, reported as a fractional percentage of the total sample wet weight. Numeric field, width 5 with 2 decimal places.

182. **EXPANDEDQC.** Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field, width 3. Data qualifier codes are as follows:
- A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, QA evaluations should be consulted before using the data.
 - C. When QA samples have major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".

SEDIMENT TOTAL ORGANIC CARBON (TOC) ANALYSES DATA. Field 183-186 presents the levels of total organic carbon detected in the sediment samples at each station. All TOC results are reported as percent of dry weight.

183. **TOC.** Total Organic Carbon (TOC) levels (percent of dry weight) in sediment, for each station. Numeric field, width 6 and 2 decimal places.
- A. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed.
 - B. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected.
184. **TOCBATCH.** The batch number that the sample was analyzed in, numeric field width 4.
185. **TOCDATAQC.** Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field width 3. Data qualifier codes are as follows:
- A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.
 - C. When QA samples have major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".

DISSOLVED ORGANIC CARBON (DOC) ANALYSES DATA. Field 186 presents the levels of dissolved organic carbon (μM) detected in water or porewater for each station.

186. DOC. Dissolved Organic Carbon (DOC) levels (μM) in water or porewater, for each station. Numeric field, width 6.
- When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed.
 - When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected.

The TISS1_56.DBF file contains the same fields as CHEM1_56.DBF file with the exception of the following fields:

- TISS_TYPE. This character field is 25 characters wide and describes what type of tissue was analyzed.
- NO_IN_COMP. The number of fish in each composite making up each sample. Numeric field, width 5.

The following purgeable aromatic hydrocarbons (BTEX) and extractable petroleum hydrocarbons (TPH) are reported on a dry weight basis in parts per billion (ppb or ng/g) and are numeric fields of varying width, and include the following compounds, listed by field number, then field name as it appears in database (and followed by the compound name if not obvious), and then by the numeric character width and number of decimal places is given:

- BENZENE. 8.2
- TOLUENE. 8.2
- ETHBENZENE. Ethylbenzene. 8.2
- XYLENES. (Total). 8.2
- TPH_DIESEL. Total Petroleum Hydrocarbons (Diesel). 8.2

The TOX1_56.DBF file is the toxicity data file which contains the following fields (the number at the start of each field is the field number):

- STANUM. This numeric field is 7 characters wide with 1 decimal place and contains the CDFG station numbers that are used statewide. The format is YXXXX.Z where Y is the Regional Water Quality Control Board Region number and XXXX is the number that corresponds to a given location or site and Z is the number of the station within that site. An example is Southwest Slip in Los Angeles Harbor where the STANUM is 40001.1. The 4 indicates Region 4. The 0001 indicates that it is Site #1 and the .1 is the replicate station within Site #1. A site with a .0 designation indicates this is the only station at the site.
- STATION. This character field is 30 characters wide and contains the exact name of the station.

3. **IDORG.** This numeric field is 8 characters wide and contains the unique i.d. organizational number for the sample. For each station collected on a unique date, an idorg sample number is assigned. This should be the field that links the collection, toxicity, chemical, and other databases.
4. **DATE.** This date field is 8 characters wide and is the date that each sample was collected in the field. It is listed as MM/DD/YY.
5. **LEG.** This numeric field is 6 characters wide and is the leg number of the project in which the sample was collected.
6. **TYPE.** This character field is 7 characters wide and describes whether the sample was a field sample, replicate or control.
7. **METADATA.** This is an index directing the user to tables or files of ancillary data pertinent to associated test. Character field, width 12.
8. **CTRL.** This character field is 5 characters wide and indicates the type of control sample used for the test.
9. **LATITUDE.** This character field is 12 characters wide and contains the latitude of the center of the station sampled. The format is a character field as follows: XX,YY,ZZ, where XX is in degrees, YY is in minutes, and ZZ is in seconds or hundreds.
10. **LONGITUDE.** This character field is 14 characters wide and contains the longitude of the center of the station sampled. The format is a character field as follows: XXX,YY,ZZ, where XXX is in degrees, YY is in minutes, and ZZ is in seconds or hundreds.
11. **HUND_SECS.** This character is 3 character wide and contains the designation "h" if the latitude and longitude are given in degrees, minutes, hundredths of a minute. The designation "h/d" is given if differential accuracy is achieved with the GPS unit. The designation "s" is given when latitude and longitude are given in degrees, minutes, seconds.
12. **GISLAT.** This numeric field is 12 characters wide with 8 decimal places and contains the latitude of the station sampled in Geographical Information System format. The format is a numeric field as follows: XX.YYYYYYYY, where XX is in degrees and YYYYYYYY is a decimal fraction of the preceding degree.
13. **GISLONG.** This numeric field is 14 characters wide with 8 decimal places and contains the longitude of the station sampled. The format is a character field as follows: XXXX.YYYYYYYY where XXXX is in degrees and YYYYYYYY is a decimal fraction of the preceding degree.

AMPHIPOD SURVIVAL TOXICITY TEST DATA. The following are descriptions of the field headings for the amphipod *Rhepoxynius abronius* (RA) toxicity test using homogenized sediment samples; presented in fields 14 through 25.

14. **RA_MN.** Station mean percent survival. Numeric field width 6, with 2 decimal places..
15. **RA_SD.** Station standard deviation of percent survival. Numeric field, width 6 with 2 decimal places.

16. RA_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. A "-9" indicates no statistics were run. Character field, width 5.
17. RA_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p = 0.05$). 2) If sample mean as a percent of the control mean is less than 77% of the control (MSD as a percent of the control). "NT" signifies non-toxic. Character field, width 3.
18. RA_OTNH3. Total ammonia concentration (ppm in water) in overlying water (water above bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
19. RA_OUNH3. Unionized ammonia concentration (ppm in water) in overlying water (water above bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
20. RA_OH2S. Hydrogen sulfide concentration (ppm in water) in overlying water (water above bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.
21. RA_ITNH3. Total ammonia concentration (ppm in water) in interstitial water (water within bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
22. RA_IUNH3. Unionized ammonia concentration (ppm in water) interstitial water (water within bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
23. RA_IH2S. Hydrogen sulfide concentration (ppm in water) in interstitial water (water within bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.

24. RA_BATCH. The batch number that the sample were run in, character width 10.
25. RAQC. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric width 4. Data qualifier codes are as follows:
 - A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.
 - C. When the QA sample has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".

AMPHIPOD SURVIVAL TOXICITY TEST DATA. The following are descriptions of the field headings for the amphipod *Eohaustorius estuarius* (EE) toxicity test using homogenized sediment samples; presented in fields 26 through 37.

26. EE_MN. Station mean percent survival. Numeric field, width 6 and 2 decimal places.
27. EE_SD. Station standard deviation of percent survival. Numeric field, width 6 and 2 decimal places.
28. EE_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. Character field, width 5.
29. EE_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p = 0.05$). 2) If sample mean as a percent of the control mean is less than 75% of the control (MSD as a percent of the control). "NT" signifies non-toxic. Character field, width 3.
30. EE_BATCH. The batch number that the sample were run in, character width 10.
31. EEQC. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric width 4. Data qualifier codes are as follows:
 - A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported

as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.

- C. When the QA sample has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".
32. EE_OTNH3. Total ammonia concentration (ppm in water) in overlying water (water above bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
 33. EE_OUNH3. Unionized ammonia concentration (ppm in water) in overlying water (water above bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
 34. EE_OH2S. Hydrogen sulfide concentration (ppm in water) in overlying water (water above bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.
 35. EE_ITNH3. Total ammonia concentration (ppm in water) in interstitial water (water within bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
 36. EE_IUNH3. Unionized ammonia concentration (ppm in water) interstitial water (water within bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
 37. EE_IH2S. Hydrogen sulfide concentration (ppm in water) in interstitial water (water within bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.

ABALONE LARVAL SHELL DEVELOPMENT TOXICITY TEST DATA. The following are descriptions of the field headings for the abalone larval (*Haliotis rufescens*) shell development toxicity tests, presented in fields 38 through 46. Results are given for undiluted subsurface water (100%).

38. HRS100_MN. Station mean percent normal development in 100% subsurface water. Numeric field, width 6 and 2 decimal places.
39. HRS100_SD. Station standard deviation of percent normal development in 100% subsurface water. Numeric field, width 6 and 2 decimal places.
40. HRS100_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. Character field, width 5.
41. HRS100_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p= 0.05$). 2) If sample mean as a percent of the control mean is less than 80% of the control. "NT" signifies non-toxic. Character field, width 3.
42. HRS_OUNH3. Unionized ammonia concentration (ppm in water) in overlying water for each station analyzed in abalone toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
43. HRS_OTNH3. Total ammonia concentration (ppm in water) in overlying water for each station analyzed in abalone toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
44. HRS_OH2S. Hydrogen sulfide concentration (ppm in water) in overlying water for each station analyzed in abalone toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.
45. HRS_BATCH. The batch number that the sample were run in, character field width 10.
46. HRSQC. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field width 4. Data qualifier codes are as follows:
 - A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported

as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.

- C. When the QA samples has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
- D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".

ABALONE LARVAL SHELL DEVELOPMENT TOXICITY TEST DATA. The following are descriptions of the field headings for the abalone larval (*Haliotis rufescens*) shell development toxicity tests, presented in fields 47 through 63. Results are given for undiluted porewater (100%) and diluted porewater (50% and 25% dilutions).

- 47. HRP100_MN. Station mean percent normal development in 100% porewater. Numeric field, width 6 and 2 decimal places.
- 48. HRP100_SD. Station standard deviation of percent normal development in 100% porewater. Numeric field, width 6 and 2 decimal places.
- 49. HRP100_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. Character field, width 5.
- 50. HRP100_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p=0.05$). 2) If sample mean as a percent of the control mean is less than 80% of the control. "NT" signifies non-toxic. Character field, width 3.
- 51. HRP50_MN. Station mean percent normal development in 50% porewater. Numeric field, width 6 and 2 decimal places.
- 52. HRP50_SD. Station standard deviation of percent normal development in 50% porewater. Numeric field, width 6 and 2 decimal places.
- 53. HRP50_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. Character field, width 5.
- 54. HRP50_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p=0.05$). 2) If sample mean as a percent of the control mean is less than 80% of the control. "NT" signifies non-toxic. Character field, width 3.
- 55. HRP25_MN. Station mean percent normal development in 25% porewater. Numeric field, width 6 and 2 decimal places.
- 56. HRP25_SD. Station standard deviation of percent normal development in 25% porewater. Numeric field, width 6 and 2 decimal places.

57. HRP25_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. Character field, width 5.
58. HRP25_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p=0.05$). 2) If sample mean as a percent of the control mean is less than 80% of the control. "NT" signifies non-toxic. Character field, width 3.
59. HRP_IUNH3. Unionized ammonia concentration (ppm) in porewater for each station analyzed in abalone toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
60. HRP_ITNH3. Total ammonia concentration (ppm) in porewater for each station analyzed in abalone toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
61. HRP_IH2S. Hydrogen sulfide concentration (ppm) in porewater for each station analyzed in abalone toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.
62. HRPBATCH. The batch number that the sample were run in, character field width 10.
63. HRPQC. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field width 4. Data qualifier codes are as follows:
- A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.
 - C. When the QA samples has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".

The following are descriptions of the field headings for the sea urchin (*Strongylocentrotus purpuratus*) fertilization toxicity tests (SPPF) using sediment pore (interstitial) water samples; presented in fields 64 through 80. Results are given for undiluted porewater (100% porewater) and diluted porewater (50% and 25% porewater).

64. SPPF100_MN. Station mean percent fertilization in 100% porewater. Numeric field, width 6 and 2 decimal places.
65. SPPF100_SD. Station standard deviation of percent fertilization in 100% pore- water. Numeric field, width 6 and 2 decimal places.
66. SPPF100_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. A "-9" indicates that no statistics were run. Character field, width 5.
67. SPPF100TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test (= 0.05). 2) If sample mean as a percent of the control mean is less than 80% of the control. "NT" signifies non-toxic. Character field, width 3.
68. SPPF50_MN. Station mean percent fertilization in 50% porewater. Numeric field, width 6 and 2 decimal places.
69. SPPF50_SD. Station standard deviation of percent fertilization in 50% pore- water. Numeric field, width 6 and 2 decimal places.
70. SPPF50_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. A "-9" indicates that no statistics were run. Character field, width 5.
71. SPPF50_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p= 0.05$). 2) If sample mean as a percent of the control mean is less than 80% of the control. "NT" signifies non-toxic. Character field, width 3.
72. SPPF25_MN. Station mean percent fertilization in 25% porewater. Numeric field, width 6 and 2 decimal places.
73. SPPF25_SD. Station standard deviation of percent fertilization in 25% pore- water. Numeric field, width 6 and 2 decimal places.
74. SPPF25_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. A "-9" indicates that no statistics were run. Character field, width 5.
75. SPPF25_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p= 0.05$). 2) If sample mean as a percent of the control

- mean is less than 80% of the control. "NT" signifies non-toxic. Character field, width 3.
76. SPPF_ITNH3. Total ammonia concentration (ppm) in porewater for each station analyzed using urchin toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
 77. SPPF_IUNH3. Unionized ammonia concentration (ppm) in porewater for each station analyzed using urchin toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
 78. SPPF_IH2S. Hydrogen sulfide concentration (ppm) in porewater for each station analyzed using urchin toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.
 79. SPPF_BATCH. The batch number that the samples were analyzed in, character width 10.
 80. SPPFQC. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field width 4. Data qualifier codes are as follows:
 - A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.
 - C. When the QA sample has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".

The following are descriptions of the field headings for the sea urchin (*Strongylocentrotus purpuratus*) development toxicity tests (SPPD) using sediment pore (interstitial) water samples; presented in fields 81 through 97. Results are given for undiluted interstitial water (100% porewater) and diluted (50% and 25% porewater).

81. SPPD100_MN. Station mean percent normal development in 100% porewater. Numeric field, width 6 and 2 decimal places.

82. SPPD100_SD. Station standard deviation of percent normal development in 100% porewater. Numeric field, width 6 and 2 decimal places.
83. SPPD100_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. Character field, width 5.
84. SPPD100TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p = 0.05$). 2) If sample mean as a percent of the control mean is less than 68% of the control (MSD as a percent of the control). "NT" signifies non-toxic. Character field, width 3.
85. SPPD50_MN. Station mean percent normal development in 50% porewater. Numeric field, width 6 and 2 decimal places.
86. SPPD50_SD. Station standard deviation of percent normal development in 50% porewater. Numeric field, width 6 and 2 decimal places.
87. SPPD50_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. A "-9" indicates that no statistics were run. Character field, width 5.
88. SPPD50_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p = 0.05$). 2) If sample mean as a percent of the control mean is less than 68% of the control (MSD as a percent of the control). "NT" signifies non-toxic. Character field, width 3.
89. SPPD25_MN. Station mean percent normal development in 25% porewater. Numeric field, width 6 and 2 decimal places.
90. SPPD25_SD. Station standard deviation of percent normal development in 25% porewater. Numeric field, width 6 and 2 decimal places.
91. SPPD25_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. A "-9" indicates that no statistics were run. Character field, width 5.
92. SPPD25_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p = 0.05$). 2) If sample mean as a percent of the control mean is less than 68% of the control (MSD as a percent of the control). "NT" signifies non-toxic. Character field, width 3.
93. SPPD_BATCH. The batch number that the samples were analyzed in, character width 10.
94. SPPDQC. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field width 4. Data qualifier codes are as follows:

- A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.
 - C. When the QA sample has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".
95. SPPD_ITNH3. Total ammonia concentration (ppm) in porewater for each station analyzed using urchin toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
96. SPPD_IUNH3. Unionized ammonia concentration (ppm) in porewater for each station analyzed using urchin toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
97. SPPD_IH2S. Hydrogen sulfide concentration (ppm) in porewater for each station analyzed using urchin toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.

The following are descriptions of the field headings for the sea urchin (*Strongylocentrotus purpuratus*) development toxicity tests (SPDI), using the sediment/water interface exposure to intact sediment cores; presented in fields 98 through 106.

- 98. SPDI_MN. Station mean percent normal development in the sediment/water interface exposure. Numeric field, width 6 and 2 decimal places.
- 99. SPDI_SD. Station standard deviation of percent normal development in the sediment/water interface exposure. Numeric field, width 6 and 2 decimal places.
- 100. SPDI_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents

- significance at the .01 level. ns = not statistically significant. Character field, width 5.
101. SPDI_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p= 0.05$). 2) If sample mean as a percent of the control mean is less than 59% of the control (MSD as a percent of the control). "NT" signifies non-toxic. Character field, width 3.
 102. SPDI_BATCH. The batch number that the samples were analyzed in, character field width 10.
 103. SPDIQC. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field width 4. Data qualifier codes are as follows:
 - A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.
 - C. When the QA sample has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".
 104. SPDI_OTNH3. Total ammonia concentration (ppm in water) in overlying water samples (water above bedded sediment used for urchin toxicity tests). When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
 105. SPDI_OUNH3. Unionized ammonia concentration (ppm in water) in overlying water samples (water above bedded sediment) for each station analyzed using urchin toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
 106. SPDI_OH2S. Hydrogen sulfide concentration (ppm in water) in overlying water (water above bedded sediment) for each station analyzed using urchin toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.

The following are descriptions of the field headings for the mussel larval (*Mytilus* sp.) shell development toxicity tests; (MEP) using pore (interstitial) water samples; presented

in fields 107 through 115. Results are given for undiluted interstitial water (100% porewater).

107. MEP100_MN. Station mean percent normal development in 100% porewater. Numeric field, width 6 and 2 decimal places.
108. MEP100_SD. Station standard deviation of percent normal development in 100% porewater. Numeric field, width 6 and 2 decimal places.
109. MEP100_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. Character field, width 5.
110. MEP100_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p=0.05$). 2) If sample mean as a percent of the control mean is less than 80% of the control. "NT" signifies non-toxic. Character field, width 3
111. MEP_ITNH3. Total ammonia concentration (ppm in water) in interstitial water samples (water within bedded sediment) used for mussel toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
112. MEP_IUNH3. Unionized ammonia concentration (ppm in water) in interstitial water samples (water within bedded sediment) used for mussel toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
113. MEP_IH2S. Hydrogen sulfide concentration (ppm in water) in interstitial water samples (water within bedded sediment) used for mussel toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.
114. MEP_BATCH. The batch number that the samples were analyzed in, character field width 10.
115. MEPQC. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric width 4. Data qualifier codes are as follows:
 - A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are

made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.

- C. When the QA sample has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
- D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".

POLYCHAETE SURVIVAL TOXICITY TEST DATA. The following are descriptions of the field headings for the polychaete worm *Neanthes arenaceodentata* (NA), survival tests presented in fields 116 through 119.

- 116. NASURV_MN. Station mean percent survival of 5 replicates. Numeric field, width 6 with 2 decimal places.
- 117. NASURV_SD. Station standard deviation of percent survival. Numeric field, width 6 with 2 decimal places.
- 118. NASURV_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. Character field, width 5.
- 119. NASURV_TOX. Sample is considered toxic and denoted with a "T" if:
1) Sample mean is significantly different from control mean when compared using a t-test ($p = 0.05$). 2) If sample mean as a percent of the control mean is less than 64% of the control (MSD as a percent of the control). "NT" signifies non-toxic. Character field, width 3.

POLYCHAETE WEIGHT CHANGE TOXICITY TEST DATA. The following are descriptions of the field headings for the polychaete worm *Neanthes arenaceodentata* (NAWT) weight change toxicity test using homogenized sediment samples; presented in fields 120 through 131.

- 120. NAWT_MN. Station mean weight (gm). Numeric field, width 6 and 2 decimal places.
- 121. NAWT_SD. Station standard deviation of weight (gm). Numeric field, width 6 and 2 decimal places.
- 122. NAWT_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. Character field, width 5.
- 123. NAWT_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test

- ($p=0.05$). 2) If sample mean as a percent of the control mean is less than 44% of the control (MSD as a percent of the control). "NT" signifies non-toxic. Character field, width 3.
124. NA_OTNH3. Total ammonia concentration (ppm in water) in overlying water (water above bedded sediment) for each station analyzed using polychaete toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
 125. NA_OUNH3. Unionized ammonia concentration (ppm in water) in overlying water (water above bedded sediment) for each station analyzed using polychaete toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
 126. NA_OH2S. Hydrogen sulfide concentration (ppm in water) in overlying water (water above bedded sediment) for each station analyzed using polychaete toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.
 127. NA_ITNH3. Total ammonia concentration (ppm in water) in interstitial water (water within bedded sediment) for each station analyzed using polychaete toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
 128. NA_IUNH3. Unionized ammonia concentration (ppm in water) in interstitial water (water within bedded sediment) for each station analyzed using polychaete toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
 129. NA_IH2S. Hydrogen sulfide concentration (ppm in water) in interstitial water (water within bedded sediment) for each station analyzed using polychaete toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.
 130. NA_BATCH. The batch number that the samples were analyzed in, character field width 10.
 131. NAQC. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field width 4. Data qualifier codes are as follows:
 - A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".

- B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.
- C. When the QA sample has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
- D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".

AMPHIPOD SURVIVAL TOXICITY TEST DATA. The following are descriptions of the field headings for the amphipod *Ampelisca abdita* (AA) toxicity test using homogenized sediment samples; presented in fields 132 through 176.

- 132. AA_MN. Station mean percent survival. Numeric field, width 6.
- 133. AA_SD. Station standard deviation of percent survival. Numeric field, width 6.
- 134. AA_SG. Station statistical significance, representing the significance of the statistical test between the home sediment and the sample. A single * represents significance at the .05 level, and double ** represents significance at the .01 level. ns = not statistically significant. Character field, width 5.
- 135. AA_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p = 0.05$). 2) If sample mean as a percent of the control mean is less than 80% of the control (MSD as a percent of the control). "NT" signifies non-toxic. Character field, width 3.
- 136. AA_BATCH. The batch number that the sample were run in, character width 10.
- 137. AAQC. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric width 4. Data qualifier codes are as follows:
 - A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.
 - C. When the QA sample has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".

138. AA_OTNH3. Total ammonia concentration (ppm in water) in overlying water (water above bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
139. AA_OUNH3. Unionized ammonia concentration (ppm in water) in overlying water (water above bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
140. AA_OH2S. Hydrogen sulfide concentration (ppm in water) in overlying water (water above bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.
141. AA_ITNH3. Total ammonia concentration (ppm in water) in interstitial water (water within bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
142. AA_IUNH3. Unionized ammonia concentration (ppm in water) interstitial water (water within bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 3 decimal places.
143. AA_IH2S. Hydrogen sulfide concentration (ppm in water) in interstitial water (water within bedded sediment) for each station analyzed using amphipod toxicity tests. When the value is missing or not analyzed, the value is reported as "-9.0" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8.0" = not detected. Numeric field, width 7 and 4 decimal places.

The following are descriptions of the field headings for the water flea (*Ceriodaphnia dubia*) survival tests for sediment/water interface exposure (CDSI); presented in fields 144 through 155.

144. CDSI_MN. Station mean percent *Ceriodaphnia* survival in sediment/water interface exposure. Numeric field, width 6.
145. CDSI_SD. Station standard deviation of percent survival in sediment/water interface exposure. Numeric field, width 6.

146. **CDSI_SG.** Sample is considered toxic if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p = 0.05$). 2) If sample mean as a percent of the control mean is less than 80% of the control. Character field, width 5.
147. **CDSI_TOX.** Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p = 0.05$). 2) If sample mean as a percent of the control mean is less than 80% of the control. "NT" signifies non-toxic. Character field, width 3.
148. **CDSI_BATCH.** The batch number that the samples were analyzed in, character width 10.
149. **CDSIQC.** Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field width 4. Data qualifier codes are as follows:
- A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.
 - C. When the QA sample has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".
150. **CDSI_OTNH3.** Total ammonia concentration (ppm in water) in overlying water samples (water above bedded sediment) from sediment/water interface exposures. When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7 and 3 decimal places.
151. **CDSI_OUNH3.** Unionized ammonia concentration (ppm in water) in overlying water samples (water above bedded sediment) from sediment/water interface exposures. When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7 and 3 decimal places.
152. **CDSI_OH2S.** Hydrogen sulfide concentration (ppm in water) in overlying water samples (water above bedded sediment) from sediment/water interface exposures. When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7 and 4 decimal places.
153. **CDSI_OHDLO.** The lower measurement of Hardness in overlying water samples (water above bedded sediment) from sediment/water interface

exposures. When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7.

154. CDSI_OHDHI. The upper measurement of Hardness in overlying water samples (water above bedded sediment) from sediment/water interface exposures. When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7.
155. CDSI_OCYHI. The upper measurement of Conductivity in overlying water samples (water above bedded sediment) from sediment/water interface exposures. When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7.

The following are descriptions of the field headings for the amphipod (*Hyaella azteca*) survival tests with sediment (HA); presented in fields 156 through 169.

156. HA_MN. Station mean percent *Hyaella* survival in sediment. Numeric field, width 6.
157. HA_SD. Station standard deviation of percent survival in sediment. Numeric field, width 6.
158. HA_SG. Sample is considered toxic if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p = 0.05$). 2) If sample mean as a percent of the control mean is less than 80% of the control. Character field, width 5.
159. HA_TOX. Sample is considered toxic and denoted with a "T" if: 1) Sample mean is significantly different from control mean when compared using a t-test ($p = 0.05$). 2) If sample mean as a percent of the control mean is less than 80% of the control. "NT" signifies non-toxic. Character field, width 3.
160. HA_BATCH. The batch number that the samples were analyzed in, character width 10.
161. HAQC. Data qualifier codes are notations used by data reviewers to briefly describe, or qualify data and the systems producing data, numeric field width 4. Data qualifier codes are as follows:
- A. When the sample meets or exceeds the control criteria requirements, the value is reported as "-4".
 - B. When the sample has minor exceedances of control criteria but is generally usable for most assessments and reporting purposes, the value is reported as "-5". For samples coded "-5" it is recommended that if assessments are made that are especially sensitive or critical, the QA evaluations should be consulted before using the data.

- C. When the QA sample has major exceedances of control criteria requirements and the data are not usable for most assessments and reporting purposes, the value is reported as "-6".
 - D. When the sample has minor exceedances of control criteria and is unlikely to affect assessments, the value is reported as "-3".
162. HA_OTNH3. Total ammonia concentration (ppm in water) in overlying water samples (water above bedded sediment). When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7 and 3 decimal places.
 163. HA_OUNH3. Unionized ammonia concentration (ppm in water) in overlying water samples (water above bedded sediment). When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7 and 3 decimal places.
 164. HA_ITNH3. Total ammonia concentration (ppm in water) in overlying water samples (water above bedded sediment). When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7 and 3 decimal places.
 165. HA_IUNH3. Unionized ammonia concentration (ppm in water) in overlying water samples (water above bedded sediment). When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7 and 3 decimal places.
 166. HA_IH2S. Hydrogen sulfide concentration (ppm in water) in overlying water samples (water above bedded sediment). When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7 and 4 decimal places.
 167. HA_OHDLO. The lower measurement of Hardness in overlying water samples (water above bedded sediment). When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7.
 168. HA_OHDHI. The upper measurement of Hardness in overlying water samples (water above bedded sediment). When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7.

169. **HA_OCYHL.** The upper measurement of Conductivity in overlying water samples (water above bedded sediment). When the value is missing or not analyzed, the value is reported as "-9" = not analyzed. When the value is less than the detection limit of the analytical test, the value is reported as "-8" = not detected. Numeric field, width 7.
170. **MB_META.** Notation of the presence or absence of the clam (*Macoma balthica*) bioaccumulation tests with sediment (MB) and whether tissue chemistry data are available for this sample. "Y" signifies that bioaccumulation exposures were performed and tissue chemistry values are available for this sample, "-9" means there were no bioaccumulation exposures conducted. Character field, width 4.
171. **TIE_META.** Notation of the presence or absence of Toxicity Identification Evaluation (TIE) data in the toxicity metafile. "Y" signifies that a TIE was conducted, "-9" means there were no TIE's conducted. Character field, width 4.

The BEN1_56.XLS file contains the following fields (the number at the start of each field is the field number):

1. **STANUM.** This field contains the CDFG station numbers that are used statewide. The format is YXXXX.Z where Y is the Regional Water Quality Control Board Region number and XXXX is the number that corresponds to a given location or site and Z is the number of the station within that site. An example is San Pablo Bay- Island #1, in San Francisco Bay, where the STANUM is 20007.0. The 2 indicates Region 2. The 0007 indicates it is Site 7 and the .0 is the replicate (if any) at the station within Site 7.
2. **STATION.** This field contains the exact name of the station.
3. **IDORG.** This field contains the unique i.d. organizational number for the sample. For each station collected on a unique date, an idorg sample number is assigned. This should be the field that links the collection, toxicity, chemical, and other databases.
4. **DATE.** This field is the date that each sample was collected in the field. It is listed as MM/DD/YY.
5. **LEG.** This field is the leg number of the project in which the sample was collected.
6. **SPECIES.** This field contains the different organisms found at a station, genus is given, and species if available.
7. **TOTAL INDIVIDUALS.** This field contains the total number of individuals found at a station.
8. **TOTAL SPECIES.** This field contains the total number of species found at a station.
9. **TOTAL CRUST. INDIV.** This field contains the total number of individuals in the Subphylum Crustacea found at a station.

10. **TOTAL CRUST. SP.** This field contains the total number of species in the Subphylum Crustacea found at a station.
 - A. **GAMMARID INDIV.** This field contains the number of individuals in the Suborder Gammaridea found at a station.
 - B. **GAMMARID SP.** This field contains the number of species in the Suborder Gammaridea found at a station.
 - C. **OTHER CRUSTACEAN INDIV.** This field contains the number of individuals, other than in the Suborder Gammaridea, in the Subphylum Crustacea, found at a station.
 - D. **OTHER CRUSTACEAN SP.** This field contains the number of species, other than in the Suborder Gammaridea, in the Subphylum Crustacea, found at a station.
11. **TOTAL ECHINODERM INDIV.** This field contains the number of individuals in the Phylum Echinodermata found at a station.
12. **TOTAL ECHINODERM SP.** This field contains the number of species in the Phylum Echinodermata found at a station.
13. **TOTAL MOLLUSC INDIV.** This field contains the number of individuals in the Phylum Mollusca found at a station.
14. **TOTAL MOLLUSC SP.** This field contains the number of species in the Phylum Mollusca found at a station.
15. **TOTAL POLYCHAETE INDIV.** This field contains the number of individuals in the Class Polychaeta found at a station.
16. **TOTAL POLYCHAETE SP.** This field contains the number of species in the Class Polychaeta found at a station.
17. **TAXA.** This field contains the different taxa found at a station.
18. **NUMBER PER CORE.** Number of individuals/species found in a numbered replicate core.
19. **SUMMARY STATISTICS.** This field contains a summary of statistical analyses. This field refers to fields 6-23.
 - A. **MEAN.** Mean value of individuals/species in all cores analyzed.
 - B. **MEDIAN.** Median of individuals/species in all cores analyzed.
 - C. **MIN.** Minimum number of individuals/species found in any core.
 - D. **MAX.** Maximum number of individuals/species found in any core.
 - E. **ST. DEV.** Standard deviation of the above mean value.
 - F. **S.E.** Standard error of the above mean value.
 - G. **95%CL.** 95% Confidence limit.
 - H. **SUM.** This field contains the sum of individuals/species found in all cores analyzed.

Appendix B

Sampling Data

Sampling Data

STANUM	STATION	IDORG	DATE	LEG	LATITUDE	LONGITUDE	HUND_SECS	GISLAT	GISLONG	DEPTH
80024.1	ANAHEIM BAY- OUTER	85	9/15/92	4.0	33,44,06N	118,05,42W	s	33.73500000	118.09500000	13.5
80024.2	ANAHEIM BAY- OUTER	86	9/15/92	4.0	33,44,11N	118,05,43W	s	33.73638900	118.09527800	15.0
80024.3	ANAHEIM BAY- OUTER	87	9/15/92	4.0	33,44,08N	118,05,39W	s	33.73555600	118.09416700	13.5
80026.1	HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	33,43,34N	118,04,34W	s	33.72611100	118.07611100	4.0
80026.2	HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	33,43,35N	118,04,33W	s	33.72638900	118.07583300	4.0
80026.3	HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	33,43,36N	118,04,33W	s	33.72666700	118.07583300	4.0
80027.1	HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	33,43,15N	118,03,52W	s	33.72083300	118.06444400	7.0
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	33,43,20N	118,03,51W	s	33.72222200	118.06416700	6.0
80027.3	HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	33,43,19N	118,03,54W	s	33.72194400	118.06500000	6.0
80028.1	HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	33,42,46N	118,03,38W	s	33.71277800	118.06055600	8.0
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	33,42,50N	118,03,39W	s	33.71388900	118.06083300	7.5
80028.3	HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	33,42,49N	118,03,42W	s	33.71361100	118.06166700	6.0
80025.1	ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	33,44,05N	118,05,04W	s	33.73472200	118.08444400	0.5
80025.2	ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	33,44,04N	118,05,03W	s	33.73444400	118.08416700	0.5
80025.3	ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	33,44,03N	118,05,03W	s	33.73416700	118.08416700	0.5
82001.0	ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	33,43,53N	118,04,44W	s	33.73138900	118.07888900	0.5
82002.0	ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	33,44,26N	118,04,21W	s	33.74055600	118.07250000	0.5
82003.0	ANEHEIM BAY-ENTRANCE	403	12/11/92	9.0	33,43,56N	118,05,08W	s	33.73222200	118.08555600	1.5
82004.0	ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	33,43,41N	118,04,48W	s	33.72805600	118.08000000	8.5
82005.0	HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	33,43,37N	118,03,56W	s	33.72694400	118.06555600	3.5
82006.0	HUNTINGTON HARBOR-PETERS	406	12/10/92	9.0	33,43,09N	118,04,04W	s	33.71903800	118.06775200	4.0
82009.0	HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	33,43,21N	118,03,23W	s	33.72250000	118.05638900	5.0
82020.0	SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	33,44,07N	118,04,40W	s	33.73525400	118.07775100	0.5
82021.0	SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	33,44,00N	118,04,21W	s	33.73343000	118.07247800	1.0
82022.0	SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	33,43,58N	118,04,36W	s	33.73277800	118.07666700	1.0
82023.0	SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	33,44,39N	118,04,40W	s	33.74405500	118.07768500	1.5
82024.0	BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	33,42,38N	118,03,36W	s	33.71058500	118.06005700	1.0
82030.0	ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	33,44,08N	118,05,20W	s	33.73542900	118.08881600	5.0
82039.0	BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	33,41,44N	118,02,46W	s	33.69555600	118.04611100	1.0
82040.0	SEAL BEACH NWR	440	12/11/92	9.0	33,44,16N	118,05,10W	s	33.73772100	118.08614900	1.5
82020.0	SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	33,44,12N	118,04,65W	h	33.73532400	118.07758000	1
82024.0	BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	33,42,62N	118,03,59W	h	33.71033900	118.05979700	1
82023.0	SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	33,44,65N	118,04,66W	h	33.74416700	118.07766700	1.5
82030.0	ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	33,44,11N	118,05,34W	h	33.73516700	118.08900000	3
80024.3	ANAHEIM BAY- OUTER	807	5/27/93	19.0	33,44,12N	118,05,67W	h	33.73533300	118.09450000	12
82009.0	HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	33,43,33N	118,03,42W	h	33.72216700	118.05700000	4
82002.0	ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	33,44,44N	118,04,67W	h	33.74073000	118.07275900	3
82030.0	ANAHEIM BAY-NAVAL RES.- REP 1	1044	2/2/94	25.0	33,44,13N	118,05,34W	h	33.73550000	118.08900000	12

Sampling Data

STANUM	STATION	IDORG	DATE	LEG	LATITUDE	LONGITUDE	HUND_SECS	GISLAT	GISLONG	DEPTH
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1045	2/2/94	25.0	33,44,12N	118,05,31W	h	33.73533300	118.08850000	12
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1046	2/2/94	25.0	33,44,12N	118,05,32W	h	33.73533300	118.08866700	12
82001.0	ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	33,43,88N	118,04,73W	h	33.73133300	118.07883300	1
82001.0	ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	33,43,88N	118,04,72W	h	33.73133300	118.07866700	5
82001.0	ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	33,43,90N	118,04,72W	h	33.73166700	118.07866700	1
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	33,44,44N	118,04,40W	h	33.74066700	118.07333300	1
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	33,44,44N	118,04,39W	h	33.74066700	118.07316700	1
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	33,44,44N	118,04,38W	h	33.74066700	118.07300000	1
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	33,44,64N	118,04,66W	h	33.74400000	118.07766700	1
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	33,44,65N	118,04,66W	h	33.74416700	118.07766700	1
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	33,44,62N	118,04,66W	h	33.74366700	118.07766700	1
82040.0	SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	33,44,27N	118,05,17W	h	33.73782300	118.08612600	1
82040.0	SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	33,44,29N	118,05,16W	h	33.73816700	118.08600900	1
82040.0	SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	33,44,26N	118,05,17W	h	33.73764900	118.08619100	1
80024.3	ANAHEIM BAY, OUTER-REP 1	1171	3/31/94	29.0	33,44,12N	118,05,70W	h	33.73533300	118.09500000	12
80024.3	ANAHEIM BAY, OUTER-REP 2	1172	3/31/94	29.0	33,44,12N	118,05,66W	h	33.73533300	118.09433300	12
80024.3	ANAHEIM BAY, OUTER-REP 3	1173	3/31/94	29.0	33,44,13N	118,05,70W	h	33.73550000	118.09500000	13
80028.3	HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	33,42,80N	118,03,64W	h	33.71333300	118.06066700	1
80028.3	HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	33,42,82N	118,03,66W	h	33.71333300	118.06100000	3
80028.3	HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	33,42,80N	118,03,67W	h	33.71333300	118.06116700	4
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 1	1177	3/30/94	29.0	33,43,28N	118,03,88W	h	33.72133300	118.06466700	3
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 2	1178	3/30/94	29.0	33,43,27N	118,03,89W	h	33.72116700	118.06483300	3
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 3	1179	3/30/94	29.0	33,43,29N	118,03,89W	h	33.72150000	118.06483300	3
82030.0	ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	33,44,12N	118,05,35W	h	33.73533300	118.08916700	6
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	33,44,13N	118,05,35W	h	33.73550000	118.08916700	8
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	33,44,10N	118,05,32W	h	33.73500000	118.08866700	8
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	33,43,61N	118,03,91W	h	33.72683300	118.06516700	3
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	33,43,61N	118,03,93W	h	33.72683300	118.06550000	3
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	33,43,61N	118,03,95W	h	33.72683300	118.06583300	3
82039.0	BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	33,41,75N	118,02,77W	h	33.69583300	118.04616700	0.5
82039.0	BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	33,41,75N	118,02,75W	h	33.69583300	118.04583300	0.5
82039.0	BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	33,41,75N	118,02,76W	h	33.69583300	118.04600000	0.5
82030.0	ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	33,44,15N	118,05,69W	h	33.73583300	118.09483300	12
85001.0	NEWPORT BAY (523)	1387	9/1/94	34.0	33,38,083N	117,53,454W	h	33.63471667	117.89090000	1.5
85002.0	NEWPORT BAY (616)	1388	9/1/94	34.0	33,36,980N	117,55,255W	h	33.61633333	117.92091667	4
85003.0	NEWPORT BAY (791)	1389	8/31/94	34.0	33,36,545N	117,53,398W	h	33.60908333	117.88996667	5
85004.0	NEWPORT BAY (877)	1390	9/1/94	34.0	33,36,668N	117,54,132W	h	33.61113333	117.90220000	2
85005.0	NEWPORT BAY (949)	1391	8/31/94	34.0	33,36,512N	117,53,721W	h	33.60853333	117.89550000	4

Sampling Data

STANUM	STATION	IDORG	DATE	LEG	LATITUDE	LONGITUDE	HUND_SECS	GISLAT	GISLONG	DEPTH
85006.0	NEWPORT BAY (1009)	1392	8/30/94	34.0	33,36,697N	117,55,389W	h	33.61161667	117.92315000	4
85007.0	NEWPORT BAY (431)	1418	9/19/94	36.0	33,38,902N	117,52,633W	h	33.64836667	117.87721667	1
85008.0	NEWPORT BAY (670)	1419	9/20/94	36.0	33,37,268N	117,53,660W	h	33.62113333	117.89433333	3
85009.0	NEWPORT BAY (705)	1420	9/20/94	36.0	33,37,195N	117,54,064W	h	33.61991667	117.90106667	2
85010.0	NEWPORT BAY (819)	1421	9/19/94	36.0	33,36,889N	117,54,935W	h	33.61481667	117.91558333	6
85011.0	NEWPORT BAY (905)	1422	9/20/94	36.0	33,36,580N	117,54,164W	h	33.60966667	117.90273333	4
85012.0	NEWPORT BAY (1064)	1423	9/19/94	36.0	33,36,461N	117,54,717W	h	33.60768333	117.91195000	3
85013.0	NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	33,36,721N	117,55,670W	h	33.61201667	117.92783333	4
85014.0	NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	33,37,251N	117,56,174W	h	33.62085000	117.93623333	4
85015.0	NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	33,37,199N	117,55,697W	h	33.61998333	117.92828333	5
85016.0	NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	33,36,411N	117,53,175W	h	33.60685000	117.88625000	3
85017.0	NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	33,38,742N	117,53,180W	h	33.64570000	117.88633333	2
85018.0	NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	33,39,022N	117,52,053W	h	33.65036667	117.86755000	0.5
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	33,36,728N	117,55,684W	h/d	33.61213300	117.92806600	4
85001.0	NEWPORT BAY (523)	1634	6/20/96	45.0	33,38,106N	117,53,437W	h/d	33.63510000	117.89061660	3
85001.0	NEWPORT BAY (523)	1788	8/20/97	54.0	33,38,089N	117,53,435W	h/d	33.63481667	117.89058330	1.3
86001.0	SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	33,39,085N	117,51,359W	h/d	33.65141667	117.85598330	0.5
86002.0	SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	33,39,070N	117,51,749W	h/d	33.65116800	117.86248000	0.5
86003.0	SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	33,39,185N	117,53,010W	h	33.65308333	117.88350000	1.5
86004.0	SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	33,39,154N	117,53,100W	h/d	33.65256667	117.88500000	1

Appendix C

Analytical Chemistry Data

Section 1

Trace Metal Concentrations

Trace Metal Concentrations in Sediment (ppm)

STANUM	STATION	IDORG	DATE	LEG	METADATA	TMMOIST	ALUMINUM	ANTIMONY	ARSENIC	CADMIUM
80024.1	ANAHEIM BAY- OUTER	85	9/15/92	4.0	-9	-9.00	73000.00	0.070	4.900	0.2100
80024.2	ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9	-9.00	-9.00	-9.000	-9.000	-9.0000
80024.3	ANAHEIM BAY- OUTER	87	9/15/92	4.0	-9	-9.00	32000.00	0.700	6.700	0.3000
80026.1	HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	-9	-9.00	69000.00	0.110	4.200	0.1900
80026.2	HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	-9	-9.00	68000.00	0.500	2.000	0.0900
80026.3	HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9	-9.00	-9.00	-9.000	-9.000	-9.0000
80027.1	HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9	-9.00	-9.00	-9.000	-9.000	-9.0000
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	-9	-9.00	47000.00	0.600	6.600	0.2700
80027.3	HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	-9	-9.00	33000.00	0.600	6.000	0.3400
80028.1	HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9	-9.00	-9.00	-9.000	-9.000	-9.0000
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	-9	-9.00	39000.00	0.600	4.900	0.6200
80028.3	HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	-9	-9.00	28000.00	0.500	6.200	0.7400
80025.1	ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9	-9.00	-9.00	-9.000	-9.000	-9.0000
80025.2	ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9	-9.00	-9.00	-9.000	-9.000	-9.0000
80025.3	ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9	-9.00	-9.00	-9.000	-9.000	-9.0000
82001.0	ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	QA5_23.TXT	-9.00	61000.00	0.500	5.400	0.1700
82002.0	ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82003.0	ANAHEIM BAY-ENTRANCE	403	12/11/92	9.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82004.0	ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82005.0	HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	QA5_23.TXT	-9.00	48000.00	0.770	5.400	0.1500
82006.0	HUNTINGTON HARBOR-PETER'S	406	12/10/92	9.0	QA5_23.TXT	-9.00	57000.00	0.990	7.600	0.2600
82009.0	HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82020.0	SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82021.0	SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82022.0	SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82023.0	SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82024.0	BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82030.0	ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82039.0	BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	QA5_23.TXT	-9.00	22000.00	1.840	8.500	0.2700
82040.0	SEAL BEACH NWR	440	12/11/92	9.0	QA5_23.TXT	-9.00	35000.00	0.730	6.200	0.1500
82020.0	SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82024.0	BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82023.0	SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82030.0	ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
80024.3	ANAHEIM BAY- OUTER	807	5/27/93	19.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82009.0	HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82002.0	ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	QA5_23.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
82030.0	ANAHEIM BAY-NAVAL RES.- REP 1	1044	2/2/94	25.0	chmmeta2.txt	51.90	30800.00	0.705	10.000	0.3090

Trace Metal Concentrations in Sediment (ppm)

STANUM	STATION	IDORG	DATE	LEG	METADATA	TMMOIST	ALUMINUM	ANTIMONY	ARSENIC	CADMIUM
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1045	2/2/94	25.0	chmmeta2.txt	52.60	24200.00	0.656	10.000	0.2710
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1046	2/2/94	25.0	chmmeta2.txt	54.10	35300.00	0.810	10.000	0.2940
82001.0	ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	chmmeta2.txt	43.60	59000.00	0.391	6.650	0.2500
82001.0	ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	chmmeta2.txt	32.30	53000.00	0.696	6.020	0.1960
82001.0	ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	chmmeta2.txt	58.80	103000.00	1.040	5.350	0.1350
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	chmmeta2.txt	50.00	64900.00	0.964	15.000	0.2400
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	chmmeta2.txt	48.50	58800.00	0.705	10.500	0.1950
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	chmmeta2.txt	51.50	61700.00	0.772	10.300	0.2530
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	chmmeta2.txt	57.40	67400.00	0.970	12.900	0.1750
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	chmmeta2.txt	56.70	81400.00	0.636	26.300	0.2400
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	chmmeta2.txt	59.40	69900.00	0.950	16.500	0.3290
82040.0	SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	chmmeta2.txt	40.80	48100.00	0.702	7.310	0.2010
82040.0	SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	chmmeta2.txt	45.50	49900.00	0.644	9.020	0.2370
82040.0	SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	chmmeta2.txt	38.80	60000.00	0.508	7.150	0.2180
80024.3	ANAHEIM BAY, OUTER-REP 1	1171	3/31/94	29.0	chmmeta2.txt	51.30	32100.00	1.080	10.000	0.4270
80024.3	ANAHEIM BAY, OUTER-REP 2	1172	3/31/94	29.0	chmmeta2.txt	49.00	64500.00	0.987	10.000	0.4190
80024.3	ANAHEIM BAY, OUTER-REP 3	1173	3/31/94	29.0	chmmeta2.txt	49.60	52400.00	0.490	12.000	0.3220
80028.3	HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	chmmeta2.txt	52.40	45100.00	0.650	8.080	1.2200
80028.3	HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	chmmeta2.txt	50.50	46500.00	0.484	7.800	1.4600
80028.3	HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	chmmeta2.txt	49.50	56000.00	0.467	8.470	1.2000
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 1	1177	3/30/94	29.0	chmmeta2.txt	52.90	48200.00	0.355	10.100	0.3820
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 2	1178	3/30/94	29.0	chmmeta2.txt	51.00	56800.00	0.346	8.470	0.4190
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 3	1179	3/30/94	29.0	chmmeta2.txt	50.00	52400.00	0.381	9.020	0.4630
82030.0	ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	chmmeta2.txt	-9.00	-9.00	-9.000	-9.000	-9.0000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	chmmeta2.txt	-9.00	-9.00	-9.000	-9.000	-9.0000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	chmmeta2.txt	-9.00	-9.00	-9.000	-9.000	-9.0000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	chmmeta2.txt	-9.00	-9.00	-9.000	-9.000	-9.0000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	chmmeta2.txt	-9.00	-9.00	-9.000	-9.000	-9.0000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	chmmeta2.txt	-9.00	-9.00	-9.000	-9.000	-9.0000
82039.0	BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	chmmeta2.txt	-9.00	-9.00	-9.000	-9.000	-9.0000
82039.0	BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	chmmeta2.txt	-9.00	-9.00	-9.000	-9.000	-9.0000
82039.0	BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	chmmeta2.txt	-9.00	-9.00	-9.000	-9.000	-9.0000
82030.0	ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	chmmeta2.txt	-9.00	-9.00	-9.000	-9.000	-9.0000
85001.0	NEWPORT BAY (523)	1387	9/1/94	34.0	CHEM3436.TXT	54.50	86500.00	0.696	5.580	1.0200
85002.0	NEWPORT BAY (616)	1388	9/1/94	34.0	CHEM3436.TXT	62.50	68100.00	0.815	6.730	0.6480
85003.0	NEWPORT BAY (791)	1389	8/31/94	34.0	CHEM3436.TXT	44.60	94200.00	0.575	8.240	0.3200
85004.0	NEWPORT BAY (877)	1390	9/1/94	34.0	CHEM3436.TXT	53.00	52400.00	0.651	8.170	0.6120
85005.0	NEWPORT BAY (949)	1391	8/31/94	34.0	CHEM3436.TXT	69.20	80700.00	1.120	7.260	0.8480

Trace Metal Concentrations in Sediment (ppm)

STANUM STATION	IDORG	DATE	LEG	METADATA	TMMOIST	ALUMINUM	ANTIMONY	ARSENIC	CADMIUM
85006.0 NEWPORT BAY (1009)	1392	8/30/94	34.0	CHEM3436.TXT	58.60	61800.00	0.678	7.880	0.4730
85007.0 NEWPORT BAY (431)	1418	9/19/94	36.0	CHEM3436.TXT	30.60	94500.00	0.566	2.450	0.2270
85008.0 NEWPORT BAY (670)	1419	9/20/94	36.0	CHEM3436.TXT	51.30	82000.00	0.628	6.240	0.8270
85009.0 NEWPORT BAY (705)	1420	9/20/94	36.0	CHEM3436.TXT	52.40	85900.00	0.536	4.870	0.7550
85010.0 NEWPORT BAY (819)	1421	9/19/94	36.0	CHEM3436.TXT	68.30	84100.00	0.980	7.020	0.9930
85011.0 NEWPORT BAY (905)	1422	9/20/94	36.0	CHEM3436.TXT	59.40	50300.00	0.860	9.360	0.8900
85012.0 NEWPORT BAY (1064)	1423	9/19/94	36.0	CHEM3436.TXT	63.00	72900.00	1.010	8.790	1.0700
85013.0 NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	CHEM3436.TXT	64.90	40200.00	1.320	24.800	0.7060
85014.0 NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	CHEM3436.TXT	61.90	59000.00	1.210	10.300	1.2300
85015.0 NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	CHEM3436.TXT	45.80	80400.00	1.420	10.600	1.6700
85016.0 NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	CHEM3436.TXT	34.60	98400.00	0.542	11.500	0.3900
85017.0 NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	CHEM3436.TXT	49.00	72500.00	0.990	7.340	1.1700
85018.0 NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	CHEM3436.TXT	36.60	96800.00	0.395	4.790	0.5210
85013.0 NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	CHEM3846.TXT	61.40	68200.00	1.060	17.400	0.8870
85001.0 NEWPORT BAY (523)	1634	6/20/96	45.0	CHEM3846.TXT	49.00	66900.00	0.236	6.100	0.7060
85001.0 NEWPORT BAY (523)	1788	8/20/97	54.0	CHM47_56.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
86001.0 SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	CHM47_56.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
86002.0 SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	CHM47_56.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
86003.0 SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	CHM47_56.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000
86004.0 SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	CHM47_56.TXT	-9.00	-9.00	-9.000	-9.000	-9.0000

Trace Metal Concentrations in Sediment (ppm)

STANUM STATION	IDORG	DATE	LEG	CHROMIUM	COPPER	IRON	LEAD	MANGANESE	MERCURY	NICKEL	SILVER
80024.1 ANAHEIM BAY- OUTER	85	9/15/92	4.0	37.000	22.00	26000.0	27.600	360.00	0.0450	18.000	0.1000
80024.2 ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
80024.3 ANAHEIM BAY- OUTER	87	9/15/92	4.0	49.000	42.00	34000.0	35.000	460.00	0.1500	27.000	0.2000
80026.1 HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	34.000	26.00	26000.0	32.900	380.00	0.0370	16.000	0.0700
80026.2 HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	25.000	13.00	21000.0	28.000	350.00	0.0400	11.000	0.2800
80026.3 HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
80027.1 HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
80027.2 HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	60.000	77.00	40000.0	77.000	560.00	0.1500	29.000	0.2100
80027.3 HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	57.000	68.00	39000.0	57.000	480.00	0.1600	27.000	0.2100
80028.1 HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
80028.2 HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	46.000	60.00	31000.0	72.000	440.00	0.2100	24.000	0.1900
80028.3 HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	49.000	72.00	33000.0	71.000	470.00	0.2200	26.000	0.2200
80025.1 ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
80025.2 ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
80025.3 ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82001.0 ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	41.000	27.00	30000.0	23.200	390.00	0.0380	18.000	0.0900
82002.0 ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82003.0 ANAHEIM BAY-ENTRANCE	403	12/11/92	9.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82004.0 ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82005.0 HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	50.000	54.00	37000.0	54.400	430.00	0.0810	20.000	0.1300
82006.0 HUNTINGTON HARBOR-PETER'S	406	12/10/92	9.0	67.000	84.00	53000.0	100.000	550.00	0.1040	31.000	0.2800
82009.0 HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82020.0 SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82021.0 SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82022.0 SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82023.0 SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82024.0 BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82030.0 ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82039.0 BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	75.000	29.00	33000.0	61.600	420.00	0.0420	24.000	0.0700
82040.0 SEAL BEACH NWR	440	12/11/92	9.0	41.000	25.00	32000.0	17.800	410.00	0.0370	18.000	0.0900
82020.0 SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82024.0 BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82023.0 SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82030.0 ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
80024.3 ANAHEIM BAY- OUTER	807	5/27/93	19.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82009.0 HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82002.0 ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82030.0 ANAHEIM BAY-NAVAL RES.- REP 1	1044	2/2/94	25.0	57.800	46.20	37600.0	33.600	473.00	0.0779	31.500	0.2580

Trace Metal Concentrations in Sediment (ppm)

STANUM STATION	IDORG	DATE	LEG	CHROMIUM	COPPER	IRON	LEAD	MANGANESE	MERCURY	NICKEL	SILVER
82030.0 ANAHEIM BAY-NAVAL RES.- REP 2	1045	2/2/94	25.0	55.700	46.20	35200.0	28.500	475.00	0.0913	32.300	0.2580
82030.0 ANAHEIM BAY-NAVAL RES.- REP 3	1046	2/2/94	25.0	65.900	51.70	39400.0	44.300	445.00	0.0955	33.400	0.2180
82001.0 ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	41.000	25.20	30000.0	22.400	412.00	-8.0000	21.700	0.0960
82001.0 ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	32.900	18.20	22900.0	16.600	331.00	-8.0000	22.300	0.0730
82001.0 ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	57.600	26.70	39900.0	21.700	608.00	0.0253	30.000	0.0860
82002.0 ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	56.100	33.30	47600.0	24.600	606.00	0.0201	28.900	0.0830
82002.0 ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	52.200	28.60	39000.0	16.800	583.00	-8.0000	27.300	0.0700
82002.0 ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	60.500	35.50	47100.0	23.300	563.00	-8.0000	30.900	0.0860
82023.0 SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	59.900	35.90	46600.0	17.100	555.00	-8.0000	32.400	0.0970
82023.0 SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	60.500	40.80	50300.0	20.700	443.00	-8.0000	31.300	0.1140
82023.0 SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	65.200	45.40	52200.0	21.100	649.00	0.0393	31.900	0.1230
82040.0 SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	41.100	20.80	30400.0	22.200	536.00	0.0353	20.200	0.0870
82040.0 SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	47.200	26.40	31600.0	20.500	479.00	0.0483	23.200	0.1030
82040.0 SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	40.900	22.90	30000.0	31.900	457.00	0.0493	22.700	0.0980
80024.3 ANAHEIM BAY, OUTER-REP 1	1171	3/31/94	29.0	67.700	46.70	41400.0	29.200	461.00	0.0843	30.900	0.2480
80024.3 ANAHEIM BAY, OUTER-REP 2	1172	3/31/94	29.0	68.100	44.40	39600.0	29.400	469.00	0.0595	30.100	0.2300
80024.3 ANAHEIM BAY, OUTER-REP 3	1173	3/31/94	29.0	63.500	45.70	37100.0	26.200	409.00	0.0789	30.900	0.2450
80028.3 HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	49.300	56.70	36500.0	76.800	500.00	0.1380	30.500	0.2100
80028.3 HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	47.800	52.10	32400.0	59.900	509.00	0.1660	32.900	0.2470
80028.3 HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	51.000	56.90	36000.0	67.100	562.00	0.1240	31.800	0.2240
80027.3 HUNTINGTON HARBOR,MIDDLE-REP 1	1177	3/30/94	29.0	61.000	64.60	39100.0	45.500	556.00	0.1400	34.500	0.1830
80027.3 HUNTINGTON HARBOR,MIDDLE-REP 2	1178	3/30/94	29.0	59.400	63.00	38100.0	55.200	555.00	0.1310	31.600	0.1630
80027.3 HUNTINGTON HARBOR,MIDDLE-REP 3	1179	3/30/94	29.0	59.800	63.40	38200.0	51.300	535.00	0.1350	33.300	0.2140
82030.0 ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82030.0 ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82030.0 ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82005.0 HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82005.0 HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82005.0 HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82039.0 BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82039.0 BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82039.0 BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
82030.0 ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
85001.0 NEWPORT BAY (523)	1387	9/1/94	34.0	61.300	38.70	32800.0	22.000	396.00	0.0642	23.400	0.9870
85002.0 NEWPORT BAY (616)	1388	9/1/94	34.0	65.700	75.20	37900.0	35.400	402.00	0.7690	23.800	0.3200
85003.0 NEWPORT BAY (791)	1389	8/31/94	34.0	39.200	42.20	22900.0	24.100	262.00	0.3430	14.100	0.4060
85004.0 NEWPORT BAY (877)	1390	9/1/94	34.0	60.000	60.30	30900.0	24.300	321.00	0.3840	21.900	0.3830
85005.0 NEWPORT BAY (949)	1391	8/31/94	34.0	83.100	91.80	48000.0	37.600	452.00	0.4480	31.800	0.3430

Trace Metal Concentrations in Sediment (ppm)

STANUM STATION	IDORG	DATE	LEG	CHROMIUM	COPPER	IRON	LEAD	MANGANESE	MERCURY	NICKEL	SILVER
85006.0 NEWPORT BAY (1009)	1392	8/30/94	34.0	59.600	89.30	33600.0	33.600	344.00	1.8100	20.900	0.2700
85007.0 NEWPORT BAY (431)	1418	9/19/94	36.0	24.300	5.80	15000.0	14.200	409.00	-8.0000	6.790	0.5390
85008.0 NEWPORT BAY (670)	1419	9/20/94	36.0	48.600	40.80	30000.0	20.400	325.00	0.0776	18.300	0.6140
85009.0 NEWPORT BAY (705)	1420	9/20/94	36.0	42.500	35.40	27700.0	18.200	267.00	0.0820	13.700	0.5830
85010.0 NEWPORT BAY (819)	1421	9/19/94	36.0	87.500	82.00	53600.0	33.300	451.00	0.2370	33.500	0.3520
85011.0 NEWPORT BAY (905)	1422	9/20/94	36.0	53.200	49.00	32100.0	14.800	277.00	0.1400	20.600	0.4800
85012.0 NEWPORT BAY (1064)	1423	9/19/94	36.0	77.500	60.50	47700.0	28.800	347.00	0.1550	28.700	0.4120
85013.0 NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	69.600	505.00	37100.0	78.100	264.00	8.7400	25.100	0.8240
85014.0 NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	76.800	240.00	41400.0	97.600	394.00	2.0400	30.200	0.6800
85015.0 NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	56.300	101.00	27300.0	114.000	290.00	0.4430	20.000	0.7680
85016.0 NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	35.700	29.50	22200.0	25.200	244.00	0.3970	15.400	0.3960
85017.0 NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	51.100	36.80	30100.0	29.600	341.00	0.0740	25.800	0.8620
85018.0 NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	30.800	10.70	18200.0	15.800	260.00	-8.0000	10.400	1.0400
85013.0 NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	51.500	479.00	36400.0	95.000	311.00	7.6200	27.700	0.1780
85001.0 NEWPORT BAY (523)	1634	6/20/96	45.0	27.400	20.20	22400.0	20.800	408.00	0.0377	14.200	0.0946
85001.0 NEWPORT BAY (523)	1788	8/20/97	54.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
86001.0 SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
86002.0 SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
86003.0 SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000
86004.0 SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	-9.000	-9.00	-9.0	-9.000	-9.00	-9.0000	-9.000	-9.0000

Trace Metal Concentrations in Sediment (ppm)

STANUM STATION	IDORG	DATE	LEG	SELENIUM	TIN	ZINC	ASBATCH	SEBATCH	TMBATCH	TMDATAQC
80024.1 ANAHEIM BAY- OUTER	85	9/15/92	4.0	-8.000	2.5900	95.0000	3.20	3.20	3.10	-9
80024.2 ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
80024.3 ANAHEIM BAY- OUTER	87	9/15/92	4.0	0.150	2.9000	130.0000	-9.00	-9.00	-9.00	-9
80026.1 HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	-8.000	2.9800	120.0000	3.20	3.20	3.10	-9
80026.2 HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	-8.000	1.8000	73.0000	-9.00	-9.00	-9.00	-9
80026.3 HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
80027.1 HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
80027.2 HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	0.150	4.9000	230.0000	-9.00	-9.00	-9.00	-9
80027.3 HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	0.200	4.9000	210.0000	-9.00	-9.00	-9.00	-9
80028.1 HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
80028.2 HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	0.220	4.4000	230.0000	-9.00	-9.00	-9.00	-9
80028.3 HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	0.230	6.5000	270.0000	-9.00	-9.00	-9.00	-9
80025.1 ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
80025.2 ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
80025.3 ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82001.0 ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	-8.000	2.2000	98.0000	2.20	2.20	2.10	-4
82002.0 ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82003.0 ANAHEIM BAY-ENTRANCE	403	12/11/92	9.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82004.0 ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	-9.000	3.8000	160.0000	2.20	2.20	2.10	-4
82005.0 HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	-8.000	5.8000	260.0000	2.20	2.20	2.10	-4
82006.0 HUNTINGTON HARBOR-PETERS	406	12/10/92	9.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82009.0 HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82020.0 SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82021.0 SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82022.0 SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82023.0 SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82024.0 BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82030.0 ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82039.0 BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	-8.000	2.4000	100.0000	2.20	2.20	2.10	-4
82040.0 SEAL BEACH NWR	440	12/11/92	9.0	-8.000	2.5000	85.0000	2.20	2.20	2.10	-4
82020.0 SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82024.0 BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82023.0 SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82030.0 ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
80024.3 ANAHEIM BAY- OUTER	807	5/27/93	19.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82009.0 HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82002.0 ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82030.0 ANAHEIM BAY-NAVAL RES.- REP 1	1044	2/2/94	25.0	0.370	3.3800	163.0000	7.10	7.10	7.10	-4

Trace Metal Concentrations in Sediment (ppm)

STANUM STATION	IDORG	DATE	LEG	SELENIUM	TIN	ZINC	ASBATCH	SEBATCH	TMBATCH	TMDATAQC
82030.0	1045	2/2/94	25.0	0.360	3.3300	159.0000	7.10	7.10	7.10	-4
82030.0	1046	2/2/94	25.0	0.350	3.4900	168.0000	7.10	7.10	8.30	-4
82001.0	1086	2/16/94	26.0	-8.000	1.3900	96.2000	8.30	8.30	8.20	-4
82001.0	1087	2/16/94	26.0	-8.000	1.0400	77.1000	8.30	8.30	8.20	-4
82001.0	1088	2/16/94	26.0	-8.000	1.8400	144.0000	8.30	8.30	8.20	-4
82002.0	1089	2/16/94	26.0	0.247	1.8400	134.0000	8.30	8.30	8.20	-4
82002.0	1090	2/16/94	26.0	0.204	1.7400	117.0000	8.30	8.30	8.20	-4
82002.0	1091	2/16/94	26.0	0.240	1.8600	132.0000	8.30	8.30	8.20	-4
82023.0	1092	2/16/94	26.0	0.391	1.8300	127.0000	8.30	8.30	8.20	-4
82023.0	1093	2/16/94	26.0	0.425	1.2300	132.0000	8.30	8.30	8.20	-4
82023.0	1094	2/16/94	26.0	0.443	1.9000	155.0000	8.30	8.30	8.20	-4
82040.0	1095	2/16/94	26.0	-8.000	1.4000	92.9000	8.30	8.30	8.20	-4
82040.0	1096	2/16/94	26.0	-8.000	1.6300	109.0000	8.30	8.30	8.20	-4
82040.0	1097	2/16/94	26.0	-8.000	1.3700	99.0000	8.30	8.30	8.20	-4
80024.3	1171	3/31/94	29.0	-8.000	3.7400	173.0000	7.30	7.30	7.10	-4
80024.3	1172	3/31/94	29.0	-8.000	2.9600	167.0000	7.30	7.30	7.10	-4
80024.3	1173	3/31/94	29.0	0.240	3.2800	159.0000	7.30	7.30	7.10	-4
80028.3	1174	3/30/94	29.0	0.618	2.1500	305.0000	8.60	8.60	8.30	-4
80028.3	1175	3/30/94	29.0	0.621	2.3200	288.0000	8.60	8.60	8.30	-4
80028.3	1176	3/30/94	29.0	0.660	2.1000	305.0000	8.60	8.60	8.30	-4
80027.3	1177	3/30/94	29.0	0.327	1.9800	214.0000	8.60	8.60	8.30	-4
80027.3	1178	3/30/94	29.0	0.296	2.1200	215.0000	8.60	8.60	8.30	-4
80027.3	1179	3/30/94	29.0	0.295	2.0000	213.0000	8.60	8.60	8.30	-4
82030.0	1195	4/12/94	30.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82030.0	1196	4/12/94	30.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82030.0	1197	4/12/94	30.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82005.0	1201	4/12/94	30.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82005.0	1202	4/12/94	30.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82005.0	1203	4/12/94	30.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82039.0	1204	4/12/94	30.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82039.0	1205	4/12/94	30.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82039.0	1206	4/12/94	30.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
82030.0	1335	5/19/94	32.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
85001.0	1387	9/1/94	34.0	0.158	2.2800	169.0000	13.10	13.10	13.10	-4
85002.0	1388	9/1/94	34.0	0.210	3.2600	209.0000	13.10	13.10	13.10	-4
85003.0	1389	8/31/94	34.0	0.110	1.7200	99.8000	13.10	13.10	13.10	-4
85004.0	1390	9/1/94	34.0	0.163	2.8400	162.0000	13.10	13.10	13.10	-4
85005.0	1391	8/31/94	34.0	0.232	3.6900	247.0000	13.10	13.10	13.10	-4

Trace Metal Concentrations in Sediment (ppm)

STANUM	STATION	IDORG	DATE	LEG	SELENIUM	TIN	ZINC	ASBATCH	SEBATCH	TMBATCH	TMDATAQC
85006.0	NEWPORT BAY (1009)	1392	8/30/94	34.0	0.166	2.7100	190.0000	13.10	13.10	13.10	-4
85007.0	NEWPORT BAY (431)	1418	9/19/94	36.0	-8.000	0.8290	46.4000	13.10	13.10	13.10	-4
85008.0	NEWPORT BAY (670)	1419	9/20/94	36.0	0.146	1.4100	141.0000	13.10	13.10	13.10	-4
85009.0	NEWPORT BAY (705)	1420	9/20/94	36.0	0.113	1.3700	136.0000	13.10	13.10	13.10	-4
85010.0	NEWPORT BAY (819)	1421	9/19/94	36.0	0.204	2.7800	237.0000	13.10	13.10	13.10	-4
85011.0	NEWPORT BAY (905)	1422	9/20/94	36.0	0.149	2.6900	155.0000	13.20	13.20	13.10	-4
85012.0	NEWPORT BAY (1064)	1423	9/19/94	36.0	0.186	2.7100	209.0000	13.20	13.20	13.10	-4
85013.0	NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	0.264	8.7700	303.0000	13.20	13.20	13.10	-4
85014.0	NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	0.269	5.5100	460.0000	13.20	13.20	13.10	-4
85015.0	NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	0.346	6.9300	359.0000	13.20	13.20	13.10	-4
85016.0	NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	0.121	1.2900	86.5000	13.20	13.20	13.10	-4
85017.0	NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	0.154	2.3600	171.0000	13.20	13.20	13.10	-4
85018.0	NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	-8.000	1.0400	59.6000	13.20	13.20	13.10	-4
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	0.900	6.4700	236.0000	19.00	19.00	4.00	-4
85001.0	NEWPORT BAY (523)	1634	6/20/96	45.0	0.920	1.3200	84.2000	19.00	19.00	4.00	-4
85001.0	NEWPORT BAY (523)	1788	8/20/97	54.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
86001.0	SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
86002.0	SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
86003.0	SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9
86004.0	SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	-9.000	-9.0000	-9.0000	-9.00	-9.00	-9.00	-9

Section 2

Trace Metal Concentrations in Porewater

Trace Metal Concentrations in Porewater (ppb)

STANUM	STATION	IDORG	DATE	LEG	PWAL	PWCD	PWCU	PWFE	PWPB	PWMN	PWNI	PWAG	PWZN	PWBATCH	PWDATAQC
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	76	0.019	2.60	7500	1.30	2300	3.00	-8.0000	14.0	-9.0	-4
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	45	0.025	1.50	1900	0.56	600	2.70	-8.0000	25.0	-9.0	-4
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	1090	0.100	30.00	7000	3.48	1270	3.33	0.0008	15.8	athpwm96	-9

Section 3

Acid Volatile Sulfides and Simultaneous Extracted Metals Concentrations

Acid Volatile Sulfides and Simultaneous Extracted Metals Concentrations (ppm)

STANUM	STATION	IDORG	DATE	LEG	AVS	SEM_CD	SEM_CU	SEM_NI	SEM_PB
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	1.4600	0.00220	4.3600	0.0450	0.3740
STANUM	STATION	IDORG	DATE	LEG	SEM_ZN	SEM_SUM	SEM_AVS	AVS_BATCH	AVSDATAQC
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	2.0200	6.8000	4.6450	19.00	-3

Section 4

Pesticide Concentrations

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	SOWEIGHT	SOMOIST	ALDRIN	CCHLOR	TCHLOR	ACDEN	GC DEN	CLPYR
80024.1	ANAHEIM BAY- OUTER	85	9/15/92	4.0	-9.00	-9.00	-8.000	0.700	-9.000	-8.000	-9.000	-9.00
80024.2	ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
80024.3	ANAHEIM BAY- OUTER	87	9/15/92	4.0	-9.00	-9.00	-8.000	1.100	-9.000	-9.000	-9.000	-9.00
80026.1	HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	-9.00	-9.00	-8.000	1.700	-9.000	-8.000	-9.000	-9.00
80026.2	HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	-9.00	-9.00	-8.000	0.800	-9.000	-9.000	-9.000	-9.00
80026.3	HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
80027.1	HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9.00	-9.00	-8.000	4.300	-9.000	-9.000	-9.000	-9.00
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	-9.00	-9.00	-8.000	4.300	-9.000	-9.000	-9.000	-9.00
80027.3	HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
80028.1	HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9.00	-9.00	-8.000	8.600	-9.000	-9.000	-9.000	-9.00
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	-9.00	-9.00	-8.000	8.000	-9.000	-9.000	-9.000	-9.00
80028.3	HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
80025.1	ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
80025.2	ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
80025.3	ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82001.0	ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	-9.00	-9.00	-8.000	-8.000	-9.000	-8.000	-9.000	-9.00
82002.0	ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82003.0	ANEHEIM BAY-ENTRANCE	403	12/11/92	9.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82004.0	ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82005.0	HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	-9.00	-9.00	-8.000	1.700	-9.000	-8.000	-9.000	-9.00
82006.0	HUNTINGTON HARBOR-PETER'S	406	12/10/92	9.0	-9.00	-9.00	-8.000	4.000	-9.000	0.500	-9.000	-9.00
82009.0	HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82020.0	SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82021.0	SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82022.0	SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82023.0	SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82024.0	BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82030.0	ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82039.0	BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	-9.00	-9.00	-8.000	0.900	-9.000	-8.000	-9.000	-9.00
82040.0	SEAL BEACH NWR	440	12/11/92	9.0	-9.00	-9.00	-8.000	-8.000	-9.000	-8.000	-9.000	-9.00
82020.0	SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82024.0	BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82023.0	SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82030.0	ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
80024.3	ANAHEIM BAY- OUTER	807	5/27/93	19.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82009.0	HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82002.0	ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82030.0	ANAHEIM BAY-NAVAL RES.- REP 1	1044	2/2/94	25.0	10.29	51.19	-8.000	1.210	1.730	-8.000	-8.000	1.32

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	SOWEIGHT	SOMOIST	ALDRIN	CCHLOR	TCHLOR	ACDEN	GCDEN	CLPYR
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1045	2/2/94	25.0	11.00	53.15	0.619	1.260	2.080	-8.000	-8.000	-8.00
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1046	2/2/94	25.0	11.73	54.26	0.776	10.300	15.100	-8.000	-8.000	-8.00
82001.0	ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	10.07	41.61	-8.000	-8.000	0.563	-8.000	-8.000	-8.00
82001.0	ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	10.92	39.23	-8.000	-8.000	0.541	-8.000	-8.000	-8.00
82001.0	ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	10.06	37.63	-8.000	-8.000	-8.000	-8.000	-8.000	-8.00
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	10.27	49.80	-8.000	-8.000	-8.000	-8.000	-8.000	-8.00
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	10.31	48.04	-8.000	-8.000	-8.000	-8.000	-8.000	-8.00
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	10.69	47.30	-8.000	-8.000	-8.000	-8.000	-8.000	-8.00
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	10.46	57.83	-8.000	-8.000	-8.000	-8.000	-8.000	-8.00
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	10.45	55.89	-8.000	0.503	-8.000	-8.000	-8.000	-8.00
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	10.65	61.17	-8.000	0.574	0.618	-8.000	-8.000	-8.00
82040.0	SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	10.30	39.88	-8.000	-8.000	-8.000	-8.000	-8.000	-8.00
82040.0	SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	10.05	45.81	-8.000	-8.000	-8.000	-8.000	-8.000	-8.00
82040.0	SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	10.25	39.24	-8.000	-8.000	-8.000	-8.000	-8.000	-8.00
80024.3	ANAHEIM BAY, OUTER-REP 1	1171	3/31/94	29.0	10.79	51.76	0.738	0.641	2.200	0.502	-8.000	2.72
80024.3	ANAHEIM BAY, OUTER-REP 2	1172	3/31/94	29.0	10.13	49.16	0.515	1.700	2.430	-8.000	-8.000	2.96
80024.3	ANAHEIM BAY, OUTER-REP 3	1173	3/31/94	29.0	10.25	49.25	-8.000	1.570	2.300	-8.000	-8.000	2.78
80028.3	HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	10.13	53.29	-8.000	12.200	11.300	2.860	1.430	41.60
80028.3	HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	10.29	51.13	-8.000	11.100	12.400	3.230	2.530	41.80
80028.3	HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	10.36	52.27	-8.000	10.200	10.900	2.690	1.940	29.80
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 1	1177	3/30/94	29.0	10.25	53.76	0.720	4.270	4.140	0.634	-8.000	6.68
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 2	1178	3/30/94	29.0	10.18	51.39	-8.000	3.700	4.610	0.500	-8.000	3.22
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 3	1179	3/30/94	29.0	10.43	51.17	-8.000	4.320	5.410	-8.000	-8.000	9.36
82030.0	ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82039.0	BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82039.0	BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82039.0	BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
82030.0	ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
85001.0	NEWPORT BAY (523)	1387	9/1/94	34.0	10.11	55.42	-8.000	2.360	2.990	-8.000	-8.000	1.10
85002.0	NEWPORT BAY (616)	1388	9/1/94	34.0	10.39	59.00	-8.000	1.520	1.560	-8.000	-8.000	-8.00
85003.0	NEWPORT BAY (791)	1389	8/31/94	34.0	10.17	44.09	-8.000	0.859	0.857	-8.000	-8.000	-8.00
85004.0	NEWPORT BAY (877)	1390	9/1/94	34.0	10.56	55.06	-8.000	1.540	2.180	-8.000	-8.000	-8.00
85005.0	NEWPORT BAY (949)	1391	8/31/94	34.0	10.27	66.63	-8.000	1.630	2.600	-8.000	-8.000	-8.00

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	SOWEIGHT	SOMOIST	ALDRIN	CCHLOR	TCHLOR	ACDEN	GC DEN	CLPYR
85006.0	NEWPORT BAY (1009)	1392	8/30/94	34.0	10.27	56.37	-8.000	0.674	0.997	-8.000	-8.000	-8.00
85007.0	NEWPORT BAY (431)	1418	9/19/94	36.0	10.00	32.17	-8.000	-8.000	0.581	-8.000	-8.000	-8.00
85008.0	NEWPORT BAY (670)	1419	9/20/94	36.0	10.22	55.77	-8.000	2.890	3.530	-8.000	-8.000	-8.00
85009.0	NEWPORT BAY (705)	1420	9/20/94	36.0	10.00	46.18	-8.000	1.090	1.400	-8.000	-8.000	-8.00
85010.0	NEWPORT BAY (819)	1421	9/19/94	36.0	10.13	62.34	-8.000	2.060	2.560	-8.000	-8.000	-8.00
85011.0	NEWPORT BAY (905)	1422	9/20/94	36.0	9.98	58.63	-8.000	2.870	3.660	-8.000	-8.000	-8.00
85012.0	NEWPORT BAY (1064)	1423	9/19/94	36.0	10.48	59.50	-8.000	2.730	3.130	-8.000	-8.000	-8.00
85013.0	NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	10.03	58.89	-8.000	1.510	2.100	-8.000	-8.000	-8.00
85014.0	NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	10.33	58.48	-8.000	9.230	13.100	1.630	0.540	-8.00
85015.0	NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	10.24	50.20	-8.000	14.100	15.900	2.740	1.380	-8.00
85016.0	NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	10.39	34.24	-8.000	0.517	0.944	-8.000	-8.000	-8.00
85017.0	NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	10.38	48.01	-8.000	4.870	5.810	0.829	-8.000	1.38
85018.0	NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	10.34	36.72	-8.000	0.955	0.985	-8.000	-8.000	-8.00
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	10.29	61.58	-8.000	0.893	1.460	-8.000	-8.000	1.84
85001.0	NEWPORT BAY (5.33)	1634	6/20/96	45.0	10.10	47.70	-8.000	0.564	0.683	-8.000	-8.000	-8.00
85001.0	NEWPORT BAY (5.33)	1788	8/20/97	54.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
86001.0	SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
86002.0	SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
86003.0	SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00
86004.0	SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	-9.00	-9.00	-9.000	-9.000	-9.000	-9.000	-9.000	-9.00

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	DACTH	OPDD	FPDD	OPDDE	FPDDE	PPDDMS	PPDDMU	OPDDT	FPDDT	DICLB
80024.1	ANAHEIM BAY- OUTER	85	9/15/92	4.0	-9.000	-8.00	-8.000	1.10	10.60	-9.00	-9.00	-8.00	1.70	-9.00
80024.2	ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
80024.3	ANAHEIM BAY- OUTER	87	9/15/92	4.0	-9.000	1.80	3.700	2.40	25.00	-9.00	-9.00	-8.00	-8.00	-9.00
80026.1	HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	-9.000	-8.00	-8.000	-8.00	12.70	-9.00	-9.00	-8.00	2.10	-9.00
80026.2	HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	-9.000	1.40	2.500	-8.00	5.60	-9.00	-9.00	-8.00	3.50	-9.00
80026.3	HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
80027.1	HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	-9.000	3.00	11.000	2.30	76.00	-9.00	-9.00	-8.00	3.40	-9.00
80027.3	HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	-9.000	2.70	9.500	2.00	72.00	-9.00	-9.00	-8.00	5.10	-9.00
80028.1	HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	-9.000	3.60	12.000	1.80	82.00	-9.00	-9.00	-8.00	3.80	-9.00
80028.3	HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	-9.000	2.80	12.000	1.90	93.00	-9.00	-9.00	-8.00	4.30	-9.00
80025.1	ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
80025.2	ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
80025.3	ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82001.0	ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	-9.000	-8.00	1.400	-8.00	8.90	-9.00	-9.00	-8.00	-8.00	-9.00
82002.0	ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82003.0	ANEHEIM BAY-ENTRANCE	403	12/11/92	9.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82004.0	ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82005.0	HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	-9.000	-8.00	3.500	1.10	28.80	-9.00	-9.00	-8.00	1.80	-9.00
82006.0	HUNTINGTON HARBOR-PETERS	406	12/10/92	9.0	-9.000	3.40	10.000	2.80	78.40	-9.00	-9.00	-8.00	5.70	-9.00
82009.0	HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82020.0	SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82021.0	SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82022.0	SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82023.0	SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82024.0	BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82030.0	ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82039.0	BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	-9.000	1.40	6.100	-8.00	11.30	-9.00	-9.00	-8.00	-8.00	-9.00
82040.0	SEAL BEACH NWR	440	12/11/92	9.0	-9.000	-8.00	1.100	-8.00	9.00	-9.00	-9.00	-8.00	-8.00	-9.00
82020.0	SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82024.0	BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82023.0	SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82030.0	ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
80024.3	ANAHEIM BAY- OUTER	807	5/27/93	19.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82009.0	HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82002.0	ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82030.0	ANAHEIM BAY-NAVAL RES.- REP 1	1044	2/2/94	25.0	-8.000	1.69	4.570	1.92	29.50	-8.00	-8.00	-8.00	5.75	-8.00

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	DACTH	OPDDD	FPDDD	OPDDE	FPDDE	FPDDMS	FPDDMU	OPDDT	FPDDT	DICLB
82030.0	ANAHEIM BAY-NAVAL RES.- REP 2	1045	2/2/94	25.0	0.442	2.00	4.240	3.11	33.50	-8.00	4.30	-8.00	1.01	-8.00
82030.0	ANAHEIM BAY-NAVAL RES.- REP 3	1046	2/2/94	25.0	-8.000	10.00	22.000	3.09	36.80	-8.00	27.80	-8.00	48.30	-8.00
82001.0	ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	-8.000	-8.00	1.220	-8.00	7.49	-8.00	-8.00	-8.00	3.38	-8.00
82001.0	ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	-8.000	-8.00	1.190	-8.00	6.81	-8.00	-8.00	-8.00	-8.00	-8.00
82001.0	ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	-8.000	-8.00	0.593	-8.00	3.95	-8.00	-8.00	-8.00	-8.00	-8.00
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	-8.000	-8.00	0.733	-8.00	4.71	-8.00	-8.00	-8.00	-8.00	-8.00
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	-8.000	-8.00	-8.000	-8.00	4.62	-8.00	-8.00	-8.00	-8.00	-8.00
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	-8.000	-8.00	0.440	-8.00	3.84	-8.00	-8.00	-8.00	-8.00	-8.00
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	0.216	-8.00	1.040	-8.00	8.61	-8.00	-8.00	-8.00	-8.00	-8.00
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	-8.000	-8.00	1.290	-8.00	6.86	-8.00	-8.00	-8.00	-8.00	-8.00
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	0.294	-8.00	1.990	-8.00	11.30	-8.00	-8.00	-8.00	1.17	-8.00
82040.0	SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	-8.000	-8.00	0.971	-8.00	8.42	-8.00	-8.00	-8.00	-8.00	-8.00
82040.0	SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	-8.000	-8.00	1.110	-8.00	11.90	-8.00	-8.00	-8.00	-8.00	-8.00
82040.0	SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	-8.000	-8.00	0.645	-8.00	7.49	-8.00	-8.00	-8.00	-8.00	-8.00
80024.3	ANAHEIM BAY, OUTER-REP 1	1171	3/31/94	29.0	0.974	1.80	3.870	3.14	36.90	-8.00	4.57	1.20	9.93	-8.00
80024.3	ANAHEIM BAY, OUTER-REP 2	1172	3/31/94	29.0	0.244	1.60	5.300	2.28	31.70	-8.00	4.03	-8.00	4.11	-8.00
80024.3	ANAHEIM BAY, OUTER-REP 3	1173	3/31/94	29.0	0.347	1.82	4.640	1.42	30.30	-8.00	3.94	-8.00	11.20	-8.00
80028.3	HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	-8.000	6.59	25.200	2.48	107.00	5.45	9.58	4.16	22.20	-8.00
80028.3	HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	1.440	6.61	25.100	2.61	143.00	4.17	7.88	-8.00	16.70	-8.00
80028.3	HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	1.430	5.80	21.200	2.25	134.00	4.14	10.90	-8.00	18.20	-8.00
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 1	1177	3/30/94	29.0	1.140	2.75	11.100	2.33	53.90	-8.00	4.65	1.51	9.57	-8.00
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 2	1178	3/30/94	29.0	0.409	2.67	8.300	-8.00	65.70	-8.00	-8.00	-8.00	5.34	-8.00
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 3	1179	3/30/94	29.0	0.641	3.60	13.100	-8.00	86.20	-8.00	-8.00	-8.00	8.31	-8.00
82030.0	ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82039.0	BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82039.0	BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82039.0	BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
82030.0	ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
85001.0	NEWPORT BAY (523)	1387	9/1/94	34.0	0.206	2.83	8.750	-8.00	56.00	-8.00	-8.00	-8.00	3.55	-8.00
85002.0	NEWPORT BAY (616)	1388	9/1/94	34.0	-8.000	2.02	8.050	1.31	60.90	-8.00	-8.00	-8.00	2.44	-8.00
85003.0	NEWPORT BAY (791)	1389	8/31/94	34.0	-8.000	1.47	5.310	-8.00	28.20	-8.00	-8.00	-8.00	1.27	-8.00
85004.0	NEWPORT BAY (877)	1390	9/1/94	34.0	-8.000	2.00	8.970	1.30	55.10	-8.00	-8.00	-8.00	2.38	-8.00
85005.0	NEWPORT BAY (949)	1391	8/31/94	34.0	-8.000	2.63	10.800	1.85	62.40	-8.00	-8.00	-8.00	3.12	-8.00

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	DACTH	OPDDI	PPDDI	OPPDE	PPDDE	PPDDMS	PPDDMU	OPDDT	PPDDT	DICLB
850060	NEWPORT BAY (670)	1418	9/19/94	36.0	-8.000	1.21	4.090	-8.00	39.80	-8.00	-8.00	-8.00	1.34	-8.00
850070	NEWPORT BAY (431)	1418	9/19/94	36.0	-8.000	-8.00	2.800	-8.00	8.83	-8.00	-8.00	-8.00	18.30	-8.00
850080	NEWPORT BAY (670)	1419	9/20/94	36.0	-8.000	4.75	17.200	1.21	67.20	-8.00	-8.00	-8.00	3.60	-8.00
850090	NEWPORT BAY (705)	1420	9/20/94	36.0	-8.000	1.57	6.640	-8.00	27.60	-8.00	-8.00	-8.00	1.50	-8.00
850100	NEWPORT BAY (819)	1421	9/19/94	36.0	-8.000	3.13	14.000	1.70	70.20	-8.00	-8.00	-8.00	4.41	-8.00
850110	NEWPORT BAY (905)	1422	9/20/94	36.0	-8.000	3.75	14.600	1.24	64.60	-8.00	2.50	-8.00	4.06	-8.00
850120	NEWPORT BAY (1064)	1423	9/19/94	36.0	-8.000	3.78	16.300	2.01	87.20	-8.00	-8.00	-8.00	4.77	-8.00
850130	NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	-8.000	2.66	8.510	-8.00	39.40	-8.00	-8.00	-8.00	2.21	-8.00
850140	NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	-8.000	2.99	11.800	1.41	47.70	-8.00	-8.00	-8.00	1.26	-8.00
850150	NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	0.478	6.32	30.600	2.27	65.60	-8.00	2.90	-8.00	9.93	-8.00
850160	NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	-8.000	1.78	5.630	-8.00	18.40	-8.00	-8.00	-8.00	-8.00	-8.00
850170	NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	-8.000	4.91	19.700	-8.00	58.90	-8.00	-8.00	-8.00	4.46	-8.00
850180	NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	-8.000	1.47	5.870	-8.00	20.10	-8.00	-8.00	-8.00	2.24	-8.00
850130	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	-8.000	1.47	4.940	2.90	44.40	3.22	2.33	-8.00	1.49	-8.00
850010	NEWPORT BAY (523)	1634	6/20/96	45.0	-8.000	-8.00	2.640	-8.00	25.20	-8.00	-8.00	-8.00	1.52	-8.00
850010	NEWPORT BAY (523)	1788	8/20/97	54.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
860010	SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
860020	SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
860030	SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
860040	SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	-9.000	-9.00	-9.000	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	DIELD	DRIN	ENDO_I	ENDO_II	ESO4	ENDRIN	ETHION	HCHA	HCHB	HCHG	HCHD
80024.1	ANAHEIM BAY- OUTER	85	9/15/92	4.0	1.500	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-9.000
80024.2	ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY- OUTER	87	9/15/92	4.0	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-9.000
80026.1	HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	2.000	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-9.000
80026.2	HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-9.000
80026.3	HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80027.1	HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-9.000
80027.3	HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	0.900	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-9.000
80028.1	HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	1.800	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-9.000
80028.3	HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-9.000
80025.1	ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80025.2	ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80025.3	ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82003.0	ANEHEIM BAY-ENTRANCE	403	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82004.0	ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-9.000
82006.0	HUNTINGTON HARBOR-PETER'S	406	12/10/92	9.0	1.100	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-9.000
82009.0	HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82020.0	SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82021.0	SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82022.0	SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-9.000
82040.0	SEAL BEACH NWR	440	12/11/92	9.0	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-9.000
82020.0	SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY- OUTER	807	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82009.0	HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.- REP 1	1044	2/2/94	25.0	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-9.000	-9.000	-9.000	-8.000	-8.000

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	DIFLDRIN	ENDO_I	ENDO_II	ESO4	ENDRIN	ETHION	HCHA	HCHB	HCHG	HCHD
82030.0	ANAHEIM BAY-NAVAL RES.- REP 2	1045	2/2/94	25.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82030.0	ANAHEIM BAY-NAVAL RES.- REP 3	1046	2/2/94	25.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82040.0	SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82040.0	SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82040.0	SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
80024.3	ANAHEIM BAY, OUTER-REP 1	1171	3/31/94	29.0	0.674	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
80024.3	ANAHEIM BAY, OUTER-REP 2	1172	3/31/94	29.0	0.507	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
80024.3	ANAHEIM BAY, OUTER-REP 3	1173	3/31/94	29.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	3.500	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	3.090	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	2.370	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 1	1177	3/30/94	29.0	1.030	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 2	1178	3/30/94	29.0	0.708	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 3	1179	3/30/94	29.0	1.010	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
85001.0	NEWPORT BAY (523)	1387	9/1/94	34.0	0.608	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85002.0	NEWPORT BAY (616)	1388	9/1/94	34.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85003.0	NEWPORT BAY (791)	1389	8/31/94	34.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85004.0	NEWPORT BAY (877)	1390	9/1/94	34.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85005.0	NEWPORT BAY (949)	1391	8/31/94	34.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	DIELDRIN	ENDO_I	ENDO_II	ES04	ENDRIN	ETHION	HCHA	HCHB	HCHG	HCHD
85006.0	NEWPORT BAY (1009)	1392	8/30/94	34.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85007.0	NEWPORT BAY (431)	1418	9/19/94	36.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85008.0	NEWPORT BAY (670)	1419	9/20/94	36.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85009.0	NEWPORT BAY (705)	1420	9/20/94	36.0	1.040	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85010.0	NEWPORT BAY (819)	1421	9/19/94	36.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85011.0	NEWPORT BAY (905)	1422	9/20/94	36.0	0.868	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85012.0	NEWPORT BAY (1064)	1423	9/19/94	36.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85013.0	NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	4.880	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85014.0	NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85015.0	NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	1.460	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85016.0	NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	2.510	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85017.0	NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	0.512	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85018.0	NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85001.0	NEWPORT BAY (523)	1634	6/20/96	45.0	-8.000	-8.000	-8.00	-8.00	-8.00	-9.00	-8.000	-8.00	-8.000	-8.000
85001.0	NEWPORT BAY (523)	1788	8/20/97	54.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
86001.0	SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
86002.0	SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
86003.0	SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000
86004.0	SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	-9.000	-9.000	-9.00	-9.00	-9.00	-9.00	-9.000	-9.00	-9.000	-9.000

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	HEPTACHLOR	HE	HCB	METHOXY	MIREX	CNONA	TNONA	OXAD	OC DAN
80024.1	ANAHEIM BAY- OUTER	85	9/15/92	4.0	-8.000	-8.000	-8.000	-8.00	-8.000	-9.000	0.600	-9.00	-9.000
80024.2	ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
80024.3	ANAHEIM BAY- OUTER	87	9/15/92	4.0	-8.000	-8.000	-8.000	-8.00	-8.000	-9.000	1.200	-9.00	-9.000
80026.1	HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	-8.000	-8.000	-8.000	-8.00	-8.000	-9.000	1.900	-9.00	-9.000
80026.2	HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	-8.000	-8.000	-8.000	-8.00	-8.000	-9.000	0.800	-9.00	-9.000
80026.3	HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
80027.1	HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	-8.000	-8.000	0.500	-8.00	-8.000	-9.000	4.900	-9.00	-9.000
80027.3	HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	-8.000	-8.000	0.200	-8.00	-8.000	-9.000	5.000	-9.00	-9.000
80028.1	HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	-8.000	-8.000	0.300	-8.00	-8.000	-9.000	8.800	-9.00	-9.000
80028.3	HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	-8.000	-8.000	0.300	-8.00	-8.000	-9.000	8.400	-9.00	-9.000
80025.1	ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
80025.2	ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
80025.3	ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	-8.000	-8.000	-8.000	-8.00	-8.000	-9.000	-8.000	-9.00	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82003.0	ANEHEIM BAY-ENTRANCE	403	12/11/92	9.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82004.0	ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	-8.000	-8.000	-8.000	-8.00	-8.000	-9.000	2.300	-9.00	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	-8.000	-8.000	-8.000	-8.00	-8.000	-9.000	5.000	-9.00	-9.000
82006.0	HUNTINGTON HARBOR-PETER'S	406	12/10/92	9.0	-8.000	-8.000	0.400	-8.00	-8.000	-9.000	-9.000	-9.00	-9.000
82009.0	HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82020.0	SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82021.0	SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82022.0	SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82039.0	BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	-8.000	-8.000	-8.000	-8.00	-8.000	-9.000	0.800	-9.00	-9.000
82040.0	SEAL BEACH NWR	440	12/11/92	9.0	-8.000	-8.000	-8.000	-8.00	-8.000	-9.000	-8.000	-9.00	-9.000
82020.0	SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
80024.3	ANAHEIM BAY- OUTER	807	5/27/93	19.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82009.0	HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82030.0	ANAHEIM BAY-NAVAL RES. - REP 1	1044	2/2/94	25.0	-8.000	-8.000	-8.000	-8.00	-8.000	0.824	1.370	-8.00	1.190

Pesticide Concentrations (ppb)

STANUM STATION	IDORG	DATE	LEG	HEPTACHLOR	HE	HCB	METHOXY	MIREX	CNONA	TNONA	OXAD	OC DAN
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1045	2/2/94	25.0	-8.000	-8.000	-8.00	-8.000	0.913	2.010	-8.00	-8.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1046	2/2/94	25.0	-8.000	-8.000	-8.00	-8.000	7.320	11.600	-8.00	-8.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	-8.000	-8.000	-8.00	-8.000	-8.000	0.500	-8.00	-8.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	-8.000	-8.000	-8.00	-8.000	-8.000	-8.000	-8.00	-8.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	-8.000	-8.000	-8.00	-8.000	-8.000	-8.000	-8.00	-8.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	-8.000	-8.000	-8.00	-8.000	-8.000	-8.000	-8.00	-8.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	-8.000	-8.000	-8.00	-8.000	-8.000	-8.000	-8.00	-8.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	-8.000	-8.000	-8.00	-8.000	-8.000	-8.000	-8.00	-8.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	-8.000	-8.000	-8.00	-8.000	-8.000	-8.000	-8.00	-8.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	-8.000	-8.000	-8.00	-8.000	-8.000	0.574	-8.00	-8.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	-8.000	-8.000	-8.00	-8.000	-8.000	0.677	-8.00	-8.000
82040.0	SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	-8.000	-8.000	-8.00	-8.000	-8.000	-8.000	-8.00	-8.000
82040.0	SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	-8.000	-8.000	-8.00	-8.000	-8.000	-8.000	-8.00	-8.000
82040.0	SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	-8.000	-8.000	-8.00	-8.000	-8.000	-8.000	-8.00	-8.000
80024.3	ANAHEIM BAY, OUTER-REP 1	1171	3/31/94	29.0	-8.000	0.205	-8.00	-8.000	1.110	2.920	-8.00	-8.000
80024.3	ANAHEIM BAY, OUTER-REP 2	1172	3/31/94	29.0	-8.000	-8.000	-8.00	-8.000	1.270	1.790	-8.00	-8.000
80024.3	ANAHEIM BAY, OUTER-REP 3	1173	3/31/94	29.0	-8.000	-8.000	-8.00	-8.000	1.050	1.740	-8.00	-8.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	-8.000	0.490	-8.00	-8.000	8.030	9.920	-8.00	-8.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	-8.000	0.497	-8.00	-8.000	8.060	8.910	-8.00	-8.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	-8.000	0.597	-8.00	-8.000	5.590	9.970	15.60	-8.000
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 1	1177	3/30/94	29.0	-8.000	0.266	-8.00	-8.000	2.940	4.020	2.60	-8.000
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 2	1178	3/30/94	29.0	-8.000	-8.000	-8.00	-8.000	2.320	3.960	-8.00	-8.000
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 3	1179	3/30/94	29.0	-8.000	0.227	-8.00	-8.000	2.760	4.650	2.77	-8.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
85001.0	NEWPORT BAY (523)	1387	9/1/94	34.0	-8.000	-8.000	-8.00	-8.000	1.240	2.770	3.41	-8.000
85002.0	NEWPORT BAY (616)	1388	9/1/94	34.0	-8.000	-8.000	-8.00	-8.000	1.190	1.720	-8.00	-8.000
85003.0	NEWPORT BAY (791)	1389	8/31/94	34.0	-8.000	-8.000	-8.00	-8.000	-8.000	0.921	-8.00	-8.000
85004.0	NEWPORT BAY (877)	1390	9/1/94	34.0	-8.000	-8.000	-8.00	-8.000	1.140	1.890	-8.00	-8.000
85005.0	NEWPORT BAY (949)	1391	8/31/94	34.0	-8.000	-8.000	-8.00	-8.000	1.160	2.110	-8.00	-8.000

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	HEPTACHLOR	HE	HCB	METHOXY	MIREX	CNONA	TNONA	OXAD	OC DAN
85006.0	NEWPORT BAY (1009)	1392	8/30/94	34.0	-8.000	-8.000	-8.000	-8.00	-8.000	0.788	0.933	-8.00	-8.000
85007.0	NEWPORT BAY (431)	1418	9/19/94	36.0	-8.000	-8.000	-8.000	-8.00	-8.000	-8.000	-8.000	-8.00	-8.000
85008.0	NEWPORT BAY (670)	1419	9/20/94	36.0	-8.000	-8.000	-8.000	-8.00	-8.000	1.800	3.740	-8.00	-8.000
85009.0	NEWPORT BAY (705)	1420	9/20/94	36.0	-8.000	-8.000	-8.000	-8.00	-8.000	0.771	1.320	-8.00	-8.000
85010.0	NEWPORT BAY (819)	1421	9/19/94	36.0	-8.000	-8.000	-8.000	-8.00	-8.000	1.350	2.550	-8.00	-8.000
85011.0	NEWPORT BAY (905)	1422	9/20/94	36.0	-8.000	-8.000	-8.000	-8.00	-8.000	1.610	3.160	-8.00	-8.000
85012.0	NEWPORT BAY (1064)	1423	9/19/94	36.0	-8.000	-8.000	-8.000	-8.00	-8.000	1.600	3.030	-8.00	-8.000
85013.0	NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	-8.000	-8.000	-8.000	-8.00	-8.000	1.800	1.590	-8.00	-8.000
85014.0	NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	-8.000	-8.000	0.275	-8.00	-8.000	6.410	10.900	-8.00	-8.000
85015.0	NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	-8.000	0.679	0.458	-8.00	-8.000	5.960	12.800	-8.00	1.250
85016.0	NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	-8.000	-8.000	-8.000	-8.00	-8.000	-8.000	0.658	-8.00	-8.000
85017.0	NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	-8.000	-8.000	0.212	-8.00	-8.000	2.340	4.810	-8.00	-8.000
85018.0	NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	-8.000	-8.000	-8.000	-8.00	-8.000	-8.000	1.050	-8.00	-8.000
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	0.796	-8.000	-8.000	-8.00	-8.000	-8.000	1.410	0.60	-8.000
85001.0	NEWPORT BAY (523)	1634	6/20/96	45.0	-8.000	-8.000	-8.000	-8.00	-8.000	-8.000	0.837	0.87	-8.000
85001.0	NEWPORT BAY (523)	1788	8/20/97	54.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
86001.0	SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
86002.0	SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
86003.0	SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000
86004.0	SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	-9.000	-9.000	-9.000	-9.00	-9.000	-9.000	-9.000	-9.00	-9.000

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	TOXAPH	PESBATCH	TBT	TBTBATCH
80024.1	ANAHEIM BAY- OUTER	85	9/15/92	4.0	-8.00	-9.00	0.0200	3.1
80024.2	ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9.00	-9.00	-9.0000	-9.0
80024.3	ANAHEIM BAY- OUTER	87	9/15/92	4.0	-8.00	-9.00	-8.0000	-9.0
80026.1	HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	-8.00	-9.00	0.0200	3.1
80026.2	HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	-8.00	-9.00	0.0480	-9.0
80026.3	HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9.00	-9.00	-9.0000	-9.0
80027.1	HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9.00	-9.00	-9.0000	-9.0
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	-8.00	-9.00	0.0630	-9.0
80027.3	HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	-8.00	-9.00	0.0280	-9.0
80028.1	HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9.00	-9.00	-9.0000	-9.0
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	-8.00	-9.00	0.0410	-9.0
80028.3	HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	-8.00	-9.00	0.0420	-9.0
80025.1	ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9.00	-9.00	-9.0000	-9.0
80025.2	ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9.00	-9.00	-9.0000	-9.0
80025.3	ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9.00	-9.00	-9.0000	-9.0
82001.0	ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	-8.00	-9.00	-8.0000	2.1
82002.0	ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	-9.00	-9.00	-9.0000	-9.0
82003.0	ANEHEIM BAY-ENTRANCE	403	12/11/92	9.0	-9.00	-9.00	-9.0000	-9.0
82004.0	ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	-9.00	-9.00	-9.0000	-9.0
82005.0	HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	-8.00	-9.00	0.1200	2.1
82006.0	HUNTINGTON HARBOR-PETER'S	406	12/10/92	9.0	-8.00	-9.00	0.0800	2.2
82009.0	HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	-9.00	-9.00	-9.0000	-9.0
82020.0	SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	-9.00	-9.00	-9.0000	-9.0
82021.0	SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	-9.00	-9.00	-9.0000	-9.0
82022.0	SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	-9.00	-9.00	-9.0000	-9.0
82023.0	SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	-9.00	-9.00	-9.0000	-9.0
82024.0	BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	-9.00	-9.00	-9.0000	-9.0
82030.0	ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	-9.00	-9.00	-9.0000	-9.0
82039.0	BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	-8.00	-9.00	-8.0000	2.2
82040.0	SEAL BEACH NWR	440	12/11/92	9.0	-8.00	-9.00	-8.0000	2.2
82020.0	SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	-9.00	-9.00	-9.0000	-9.0
82024.0	BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	-9.00	-9.00	-9.0000	-9.0
82023.0	SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	-9.00	-9.00	-9.0000	-9.0
82030.0	ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	-9.00	-9.00	-9.0000	-9.0
80024.3	ANAHEIM BAY- OUTER	807	5/27/93	19.0	-9.00	-9.00	-9.0000	-9.0
82009.0	HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	-9.00	-9.00	-9.0000	-9.0
82002.0	ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	-9.00	-9.00	-9.0000	-9.0
82030.0	ANAHEIM BAY-NAVAL RES.- REP 1	1044	2/2/94	25.0	-8.00	73.22	0.0910	-9.0

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	TOXAPH	PESBATCH	TBT	TBTBATCH
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1045	2/2/94	25.0	-8.00	73.23	0.2500	-9.0
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1046	2/2/94	25.0	-8.00	73.23	0.0308	-9.0
82001.0	ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	-8.00	73.32	-8.0000	-9.0
82001.0	ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	-8.00	73.27	-8.0000	-9.0
82001.0	ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	-8.00	73.31	-8.0000	-9.0
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	-8.00	73.32	-8.0000	-9.0
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	-8.00	73.30	-8.0000	-9.0
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	-8.00	73.29	-8.0000	-9.0
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	-8.00	73.31	-8.0000	-9.0
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	-8.00	73.32	-8.0000	-9.0
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	-8.00	73.32	-8.0000	-9.0
82040.0	SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	-8.00	73.31	-8.0000	-9.0
82040.0	SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	-8.00	73.30	-8.0000	-9.0
82040.0	SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	-8.00	73.29	-8.0000	-9.0
80024.3	ANAHEIM BAY, OUTER-REP 1	1171	3/31/94	29.0	-8.00	73.23	0.1040	-9.0
80024.3	ANAHEIM BAY, OUTER-REP 2	1172	3/31/94	29.0	-8.00	73.21	0.5550	-9.0
80024.3	ANAHEIM BAY, OUTER-REP 3	1173	3/31/94	29.0	-8.00	73.22	0.0200	-9.0
80028.3	HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	-8.00	73.34	0.1080	-9.0
80028.3	HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	-8.00	73.35	0.1100	-9.0
80028.3	HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	-8.00	73.39	0.1210	-9.0
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 1	1177	3/30/94	29.0	-8.00	73.34	0.0722	-9.0
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 2	1178	3/30/94	29.0	-8.00	73.38	0.0904	-9.0
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 3	1179	3/30/94	29.0	-8.00	73.39	0.1220	-9.0
82030.0	ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	-9.00	-9.00	-9.0000	-9.0
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	-9.00	-9.00	-9.0000	-9.0
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	-9.00	-9.00	-9.0000	-9.0
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	-9.00	-9.00	-9.0000	-9.0
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	-9.00	-9.00	-9.0000	-9.0
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	-9.00	-9.00	-9.0000	-9.0
82039.0	BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	-9.00	-9.00	-9.0000	-9.0
82039.0	BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	-9.00	-9.00	-9.0000	-9.0
82039.0	BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	-9.00	-9.00	-9.0000	-9.0
82030.0	ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	-9.00	-9.00	-9.0000	-9.0
85001.0	NEWPORT BAY (523)	1387	9/1/94	34.0	-8.00	74.40	-8.0000	-9.0
85002.0	NEWPORT BAY (616)	1388	9/1/94	34.0	-8.00	74.30	0.3080	-9.0
85003.0	NEWPORT BAY (791)	1389	8/31/94	34.0	-8.00	74.30	0.0246	-9.0
85004.0	NEWPORT BAY (877)	1390	9/1/94	34.0	-8.00	74.40	0.0650	-9.0
85005.0	NEWPORT BAY (949)	1391	8/31/94	34.0	-8.00	74.40	0.0330	-9.0

Pesticide Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	TOXAPH	PESBATCH	TBT	TBTBATCH
85006.0	NEWPORT BAY (1009)	1392	8/30/94	34.0	-8.00	74.40	-8.0000	-9.0
85007.0	NEWPORT BAY (431)	1418	9/19/94	36.0	-8.00	74.10	-8.0000	-9.0
85008.0	NEWPORT BAY (670)	1419	9/20/94	36.0	-8.00	74.10	-8.0000	-9.0
85009.0	NEWPORT BAY (705)	1420	9/20/94	36.0	-8.00	74.20	-8.0000	-9.0
85010.0	NEWPORT BAY (819)	1421	9/19/94	36.0	-8.00	74.40	-8.0000	-9.0
85011.0	NEWPORT BAY (905)	1422	9/20/94	36.0	-8.00	74.20	-8.0000	-9.0
85012.0	NEWPORT BAY (1064)	1423	9/19/94	36.0	-8.00	74.40	-8.0000	-9.0
85013.0	NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	-8.00	74.20	2.0700	-9.0
85014.0	NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	-8.00	74.30	0.7100	-9.0
85015.0	NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	-8.00	74.20	0.5080	-9.0
85016.0	NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	-8.00	74.20	-8.0000	-9.0
85017.0	NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	-8.00	74.20	0.1480	-9.0
85018.0	NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	-8.00	74.30	-8.0000	-9.0
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	-8.00	75.10	0.8790	28.0
85001.0	NEWPORT BAY (523)	1634	6/20/96	45.0	-8.00	75.10	-8.0000	28.0
85001.0	NEWPORT BAY (523)	1788	8/20/97	54.0	-9.00	-9	-9.0000	-9.0
86001.0	SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	-9.00	-9	-9.0000	-9.0
86002.0	SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	-9.00	-9	-9.0000	-9.0
86003.0	SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	-9.00	-9	-9.0000	-9.0
86004.0	SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	-9.00	-9	-9.0000	-9.0

Section 5

PCB and Arochlor Concentrations

PCB and Arochlor Concentrations (ppt)

STANUM	STATION	IDORG	DATE	LEG	PCB5	PCB8	PCB15	PCB18	PCB27	PCB28	PCB29	PCB31	PCB44	PCB49	PCB52
80024.1	ANAHEIM BAY- OUTER	85	9/15/92	4.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
80024.2	ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY- OUTER	87	9/15/92	4.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
80026.1	HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
80026.2	HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
80026.3	HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80027.1	HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	-9.000	-8.000	-9.000	-8.000	-9.000	1.000	-9.000	-9.000	-8.000	-9.000	-8.000
80027.3	HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
80028.1	HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	1.300	-9.000	1.600
80028.3	HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	1.100	-9.000	1.400
80025.1	ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80025.2	ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80025.3	ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82003.0	ANEHEIM BAY-ENTRANCE	403	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82004.0	ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.700
82006.0	HUNTINGTON HARBOR-PETER'S	406	12/10/92	9.0	-9.000	-8.000	-9.000	-8.000	-9.000	0.700	-9.000	-9.000	0.800	-9.000	1.500
82009.0	HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82020.0	SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82021.0	SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82022.0	SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
82040.0	SEAL BEACH NWR	440	12/11/92	9.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
82020.0	SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY- OUTER	807	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82009.0	HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.- REP 1	1044	2/2/94	25.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.596

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	PCB5	PCB8	PCB15	PCB18	PCB27	PCB28	PCB29	PCB31	PCB44	PCB49	PCB52
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1045	2/2/94	25.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.655
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1046	2/2/94	25.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.899
82001.0	ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.688
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
82040.0	SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
82040.0	SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
82040.0	SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.900
80024.3	ANAHEIM BAY, OUTER-REP 1	1171	3/31/94	29.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	0.562	-9.000	0.879
80024.3	ANAHEIM BAY, OUTER-REP 2	1172	3/31/94	29.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.771
80024.3	ANAHEIM BAY, OUTER-REP 3	1173	3/31/94	29.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.640
80028.3	HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	1.830	-9.000	2.190
80028.3	HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	1.110	-9.000	1.790
80028.3	HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	1.190	-9.000	1.560
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 1	1177	3/30/94	29.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	0.543	-9.000	0.822
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 2	1178	3/30/94	29.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	0.525	-9.000	0.913
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 3	1179	3/30/94	29.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	0.590	-9.000	2.700
82030.0	ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
85001.0	NEWPORT BAY (523)	1387	9/1/94	34.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.736
85002.0	NEWPORT BAY (616)	1388	9/1/94	34.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	0.605	-9.000	1.260
85003.0	NEWPORT BAY (791)	1389	8/31/94	34.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.767
85004.0	NEWPORT BAY (877)	1390	9/1/94	34.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.832
85005.0	NEWPORT BAY (949)	1391	8/31/94	34.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	1.240

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	PCB5	PCB8	PCB15	PCB18	PCB27	PCB28	PCB29	PCB31	PCB44	PCB49	PCB52
85006.0	NEWPORT BAY (1009)	1392	8/30/94	34.0	-9.000	-8.000	-9.000	-8.000	-9.000	0.729	-9.000	-9.000	0.839	-9.000	1.750
85007.0	NEWPORT BAY (431)	1418	9/19/94	36.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
85008.0	NEWPORT BAY (670)	1419	9/20/94	36.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
85009.0	NEWPORT BAY (705)	1420	9/20/94	36.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
85010.0	NEWPORT BAY (819)	1421	9/19/94	36.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.757
85011.0	NEWPORT BAY (905)	1422	9/20/94	36.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.515
85012.0	NEWPORT BAY (1064)	1423	9/19/94	36.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.588
85013.0	NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	-9.000	0.688	-9.000	2.100	-9.000	4.620	-9.000	-9.000	8.490	-9.000	15.600
85014.0	NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	-9.000	-8.000	-9.000	-8.000	-9.000	2.410	-9.000	-9.000	3.820	-9.000	6.470
85015.0	NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	-9.000	-8.000	-9.000	0.588	-9.000	0.950	-9.000	-9.000	2.030	-9.000	2.960
85016.0	NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.900
85017.0	NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	0.792
85018.0	NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	-9.000	-8.000	-9.000	-8.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	-8.000	0.648	-9.000	2.410	-8.000	5.360	-8.000	4.410	9.070	9.510	16.800
85001.0	NEWPORT BAY (523)	1634	6/20/96	45.0	-8.000	-8.000	-9.000	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	0.753
85001.0	NEWPORT BAY (523)	1788	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86001.0	SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86002.0	SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86003.0	SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86004.0	SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	PCB66	PCB70	PCB74	PCB87	PCB95	PCB97	PCB99	PCB101	PCB105	PCB110
80024.1	ANAHEIM BAY- OUTER	85	9/15/92	4.0	-8.000	-9.000	-9.000	-8.000	-9.000	-9.000	-9.000	0.600	-8.000	-9.000
80024.2	ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY- OUTER	87	9/15/92	4.0	1.600	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.900	-8.000	-9.000
80026.1	HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	-8.000	-9.000	-9.000	-8.000	-9.000	-9.000	-9.000	0.700	-8.000	-9.000
80026.2	HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
80026.3	HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80027.1	HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	1.500	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	3.200	-8.000	-9.000
80027.3	HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	1.400	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	2.800	1.200	-9.000
80028.1	HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	1.600	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	3.400	1.300	-9.000
80028.3	HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	1.600	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	3.800	1.600	-9.000
80025.1	ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80025.2	ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80025.3	ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	-8.000	-9.000	-9.000	-8.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82003.0	ANEHEIM BAY-ENTRANCE	403	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82004.0	ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	0.800	-9.000	-9.000	-8.000	-9.000	-9.000	-9.000	1.900	0.600	-9.000
82006.0	HUNTINGTON HARBOR-PETER'S	406	12/10/92	9.0	1.900	-9.000	-9.000	1.100	-9.000	-9.000	-9.000	4.000	1.400	-9.000
82009.0	HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82020.0	SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82021.0	SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82022.0	SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	-8.000	-9.000	-9.000	-8.000	-9.000	-9.000	-9.000	1.000	-8.000	-9.000
82040.0	SEAL BEACH NWR	440	12/11/92	9.0	-8.000	-9.000	-9.000	-8.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
82020.0	SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY- OUTER	807	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82009.0	HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.- REP 1	1044	2/2/94	25.0	0.811	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.390	-8.000	-9.000

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	PCB66	PCB70	PCB74	PCB87	PCB95	PCB97	PCB99	PCB101	PCB105	PCB110
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1045	2/2/94	25.0	0.997	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.650	0.683	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1046	2/2/94	25.0	1.050	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.760	0.711	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.180	-8.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
82040.0	SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
82040.0	SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
82040.0	SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.660	-8.000	-9.000
80024.3	ANAHEIM BAY, OUTER-REP 1	1171	3/31/94	29.0	1.100	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.940	0.750	-9.000
80024.3	ANAHEIM BAY, OUTER-REP 2	1172	3/31/94	29.0	1.160	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.550	-8.000	-9.000
80024.3	ANAHEIM BAY, OUTER-REP 3	1173	3/31/94	29.0	0.692	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.540	-8.000	-9.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	1.800	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	4.450	2.270	-9.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	1.860	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	3.940	1.530	-9.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	1.730	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	4.100	1.880	-9.000
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 1	1177	3/30/94	29.0	1.070	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	2.160	0.982	-9.000
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 2	1178	3/30/94	29.0	1.190	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	2.510	1.300	-9.000
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 3	1179	3/30/94	29.0	1.460	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	2.780	1.280	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
85001.0	NEWPORT BAY (523)	1387	9/1/94	34.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	0.769	-8.000	-9.000
85002.0	NEWPORT BAY (616)	1388	9/1/94	34.0	1.970	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	2.610	0.939	-9.000
85003.0	NEWPORT BAY (791)	1389	8/31/94	34.0	0.971	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	2.170	0.769	-9.000
85004.0	NEWPORT BAY (877)	1390	9/1/94	34.0	0.737	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.810	0.501	-9.000
85005.0	NEWPORT BAY (949)	1391	8/31/94	34.0	1.130	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.970	0.686	-9.000

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	PCB66	PCB70	PCB74	PCB87	PCB95	PCB97	PCB99	PCB101	PCB105	PCB110
85006.0	NEWPORT BAY (1009)	1392	8/30/94	34.0	2.550	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	3.730	1.220	-9.000
85007.0	NEWPORT BAY (431)	1418	9/19/94	36.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
85008.0	NEWPORT BAY (670)	1419	9/20/94	36.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	0.907	-8.000	-9.000
85009.0	NEWPORT BAY (705)	1420	9/20/94	36.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.380	-8.000	-9.000
85010.0	NEWPORT BAY (819)	1421	9/19/94	36.0	0.789	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.450	0.507	-9.000
85011.0	NEWPORT BAY (905)	1422	9/20/94	36.0	0.650	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.010	-8.000	-9.000
85012.0	NEWPORT BAY (1064)	1423	9/19/94	36.0	0.504	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.020	-8.000	-9.000
85013.0	NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	24.500	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	24.300	5.730	-9.000
85014.0	NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	7.950	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	11.400	3.450	-9.000
85015.0	NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	3.060	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	6.130	2.540	-9.000
85016.0	NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	0.999	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.450	-8.000	-9.000
85017.0	NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	1.440	-8.000	-9.000
85018.0	NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	-8.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-8.000	-8.000	-9.000
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	23.700	15.100	8.130	5.640	12.900	8.020	11.400	21.500	6.990	21.800
85001.0	NEWPORT BAY (523)	1634	6/20/96	45.0	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	0.579
85001.0	NEWPORT BAY (523)	1788	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86001.0	SAN DIEGO CREEK - CAMPUS	1789	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86002.0	SAN DIEGO CREEK - MACARTHUR	1790	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86003.0	SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86004.0	SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LFG	PCB118	PCB128	PCB132	PCB137	PCB138	PCB149	PCB151	PCB153	PCB156
80024.1	ANAHEIM BAY- OUTER	85	9/15/92	4.0	0.600	-8.000	-9.000	-9.000	1.100	-9.000	-9.000	0.800	-9.000
80024.2	ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY- OUTER	87	9/15/92	4.0	1.300	-8.000	-9.000	-9.000	2.700	-9.000	-9.000	1.800	-9.000
80026.1	HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	0.700	-8.000	-9.000	-9.000	1.600	-9.000	-9.000	1.000	-9.000
80026.2	HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	-8.000	-8.000	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000
80026.3	HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80027.1	HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	3.000	1.000	-9.000	-9.000	7.300	-9.000	-9.000	5.800	-9.000
80027.3	HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	2.700	1.000	-9.000	-9.000	5.800	-9.000	-9.000	4.900	-9.000
80028.1	HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	3.300	1.100	-9.000	-9.000	6.800	-9.000	-9.000	4.500	-9.000
80028.3	HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	3.800	1.500	-9.000	-9.000	8.300	-9.000	-9.000	6.300	-9.000
80025.1	ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80025.2	ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80025.3	ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	-8.000	-8.000	-9.000	-9.000	0.900	-9.000	-9.000	0.800	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82003.0	ANEHEIM BAY-ENTRANCE	403	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82004.0	ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	1.800	0.500	-9.000	-9.000	4.900	-9.000	-9.000	4.500	-9.000
82006.0	HUNTINGTON HARBOR-PETER'S	406	12/10/92	9.0	3.800	1.500	-9.000	-9.000	9.200	-9.000	-9.000	7.700	-9.000
82009.0	HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82020.0	SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82021.0	SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82022.0	SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	1.000	-8.000	-9.000	-9.000	2.600	-9.000	-9.000	2.100	-9.000
82040.0	SEAL BEACH NWR	440	12/11/92	9.0	-8.000	0.500	-9.000	-9.000	0.800	-9.000	-9.000	0.500	-9.000
82020.0	SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY- OUTER	807	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82009.0	HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.- REP 1	1044	2/2/94	25.0	1.610	-8.000	-9.000	-9.000	2.790	-9.000	-9.000	2.150	-9.000

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	PCBI18	PCBI28	PCBI32	PCBI37	PCBI38	PCBI49	PCBI51	PCBI53	PCBI56
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1045	2/2/94	25.0	1.720	0.706	-9.000	-9.000	3.100	-9.000	-9.000	2.360	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1046	2/2/94	25.0	1.870	0.728	-9.000	-9.000	3.200	-9.000	-9.000	2.520	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	-8.000	-8.000	-9.000	-9.000	0.752	-9.000	-9.000	0.589	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	-8.000	-8.000	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	-8.000	-8.000	-9.000	-9.000	0.746	-9.000	-9.000	0.505	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	-8.000	-8.000	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	-8.000	-8.000	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	-8.000	-8.000	-9.000	-9.000	0.611	-9.000	-9.000	-8.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	1.040	-8.000	-9.000	-9.000	1.730	-9.000	-9.000	1.090	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	-8.000	-8.000	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	-8.000	-8.000	-9.000	-9.000	0.654	-9.000	-9.000	0.546	-9.000
82040.0	SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	-8.000	-8.000	-9.000	-9.000	0.604	-9.000	-9.000	-8.000	-9.000
82040.0	SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	-8.000	-8.000	-9.000	-9.000	0.856	-9.000	-9.000	0.631	-9.000
82040.0	SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	1.290	-8.000	-9.000	-9.000	2.320	-9.000	-9.000	1.410	-9.000
80024.3	ANAHEIM BAY, OUTER-REP 1	1171	3/31/94	29.0	1.880	0.777	-9.000	-9.000	3.130	-9.000	-9.000	2.460	-9.000
80024.3	ANAHEIM BAY, OUTER-REP 2	1172	3/31/94	29.0	1.740	-8.000	-9.000	-9.000	3.270	-9.000	-9.000	2.300	-9.000
80024.3	ANAHEIM BAY, OUTER-REP 3	1173	3/31/94	29.0	1.710	0.966	-9.000	-9.000	3.140	-9.000	-9.000	2.340	-9.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	4.670	1.500	-9.000	-9.000	9.680	-9.000	-9.000	5.600	-9.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	3.440	1.390	-9.000	-9.000	6.770	-9.000	-9.000	5.690	-9.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	3.740	1.050	-9.000	-9.000	7.240	-9.000	-9.000	5.560	-9.000
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 1	1177	3/30/94	29.0	2.330	0.785	-9.000	-9.000	6.190	-9.000	-9.000	4.050	-9.000
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 2	1178	3/30/94	29.0	2.080	0.590	-9.000	-9.000	4.970	-9.000	-9.000	4.480	-9.000
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 3	1179	3/30/94	29.0	2.330	0.670	-9.000	-9.000	5.210	-9.000	-9.000	4.570	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	-9.000	-9.000	-9.000	-9.000	1.870	-9.000	-9.000	1.340	-9.000
85001.0	NEWPORT BAY (523)	1387	9/1/94	34.0	0.682	-8.000	-9.000	-9.000	5.450	-9.000	-9.000	4.600	-9.000
85002.0	NEWPORT BAY (616)	1388	9/1/94	34.0	2.750	0.520	-9.000	-9.000	4.990	-9.000	-9.000	3.990	-9.000
85003.0	NEWPORT BAY (791)	1389	8/31/94	34.0	2.340	0.522	-9.000	-9.000	5.890	-9.000	-9.000	6.140	-9.000
85004.0	NEWPORT BAY (877)	1390	9/1/94	34.0	1.460	-8.000	-9.000	-9.000	4.520	-9.000	-9.000	3.470	-9.000
85005.0	NEWPORT BAY (949)	1391	8/31/94	34.0	1.790	-8.000	-9.000	-9.000	4.520	-9.000	-9.000	3.470	-9.000

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	PCBI18	PCBI28	PCBI32	PCBI37	PCBI38	PCBI49	PCBI51	PCBI53	PCBI56
85006.0	NEWPORT BAY (1009)	1392	8/30/94	34.0	3.780	0.782	-9.000	-9.000	7.950	-9.000	-9.000	7.410	-9.000
85007.0	NEWPORT BAY (431)	1418	9/19/94	36.0	-8.000	-8.000	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000
85008.0	NEWPORT BAY (670)	1419	9/20/94	36.0	0.848	-8.000	-9.000	-9.000	1.930	-9.000	-9.000	1.370	-9.000
85009.0	NEWPORT BAY (705)	1420	9/20/94	36.0	1.030	-8.000	-9.000	-9.000	2.220	-9.000	-9.000	1.750	-9.000
85010.0	NEWPORT BAY (819)	1421	9/19/94	36.0	1.570	-8.000	-9.000	-9.000	3.420	-9.000	-9.000	2.600	-9.000
85011.0	NEWPORT BAY (905)	1422	9/20/94	36.0	0.880	-8.000	-9.000	-9.000	2.230	-9.000	-9.000	1.730	-9.000
85012.0	NEWPORT BAY (1064)	1423	9/19/94	36.0	1.040	-8.000	-9.000	-9.000	2.700	-9.000	-9.000	2.070	-9.000
85013.0	NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	24.200	2.230	-9.000	-9.000	21.600	-9.000	-9.000	20.400	-9.000
85014.0	NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	12.000	1.520	-9.000	-9.000	14.600	-9.000	-9.000	12.900	-9.000
85015.0	NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	5.590	1.280	-9.000	-9.000	8.660	-9.000	-9.000	6.840	-9.000
85016.0	NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	1.360	-8.000	-9.000	-9.000	2.150	-9.000	-9.000	1.980	-9.000
85017.0	NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	1.420	-8.000	-9.000	-9.000	3.260	-9.000	-9.000	2.580	-9.000
85018.0	NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	-8.000	-8.000	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	20.600	3.280	4.790	0.848	20.100	12.300	3.850	19.200	1.950
85001.0	NEWPORT BAY (523)	1634	6/20/96	45.0	-8.000	-8.000	-8.000	-8.000	0.851	-8.000	-8.000	-8.000	-8.000
85001.0	NEWPORT BAY (523)	1788	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86001.0	SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86002.0	SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86003.0	SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86004.0	SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	PCB157	PCB158	PCB170	PCB174	PCB177	PCB180	PCB183	PCB187	PCB189
80024.1	ANAHEIM BAY- OUTER	85	9/15/92	4.0	-9.000	-9.000	-8.000	-9.000	-9.000	0.500	-9.000	-8.000	-9.000
80024.2	ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY- OUTER	87	9/15/92	4.0	-9.000	-9.000	-8.000	-9.000	-9.000	1.300	-9.000	-8.000	-9.000
80026.1	HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	-9.000	-9.000	-8.000	-9.000	-9.000	0.600	-9.000	-8.000	-9.000
80026.2	HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
80026.3	HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80027.1	HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	-9.000	-9.000	1.800	-9.000	-9.000	4.000	-9.000	2.100	-9.000
80027.3	HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	-9.000	-9.000	1.500	-9.000	-9.000	3.200	-9.000	1.900	-9.000
80028.1	HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	-9.000	-9.000	1.500	-9.000	-9.000	3.100	-9.000	1.600	-9.000
80028.3	HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	-9.000	-9.000	1.900	-9.000	-9.000	3.900	-9.000	2.300	-9.000
80025.1	ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80025.2	ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80025.3	ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82003.0	ANEHEIM BAY-ENTRANCE	403	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82004.0	ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	-9.000	-9.000	-8.000	-9.000	-9.000	2.600	-9.000	1.800	-9.000
82006.0	HUNTINGTON HARBOR-PETER'S	406	12/10/92	9.0	-9.000	-9.000	2.300	-9.000	-9.000	5.000	-9.000	2.900	-9.000
82009.0	HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82020.0	SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82021.0	SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82022.0	SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	-9.000	-9.000	0.600	-9.000	-9.000	1.300	-9.000	0.800	-9.000
82040.0	SEAL BEACH NWR	440	12/11/92	9.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
82020.0	SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY- OUTER	807	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82009.0	HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES. - REP 1	1044	2/2/94	25.0	-9.000	-9.000	-8.000	-9.000	-9.000	1.150	-9.000	0.797	-9.000

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	PCB157	PCB158	PCB170	PCB174	PCB177	PCB180	PCB183	PCB187	PCB189
82030.0	ANAHEIM BAY-NAVAL RES.- REP 2	1045	2/2/94	25.0	-9.000	-9.000	0.873	-9.000	-9.000	1.390	-9.000	0.963	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.- REP 3	1046	2/2/94	25.0	-9.000	-9.000	0.853	-9.000	-9.000	1.560	-9.000	1.010	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
82040.0	SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
82040.0	SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
82040.0	SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	-9.000	-9.000	-8.000	-9.000	-9.000	0.578	-9.000	-8.000	-9.000
80024.3	ANAHEIM BAY, OUTER-REP 1	1171	3/31/94	29.0	-9.000	-9.000	0.603	-9.000	-9.000	1.840	-9.000	1.120	-9.000
80024.3	ANAHEIM BAY, OUTER-REP 2	1172	3/31/94	29.0	-9.000	-9.000	0.795	-9.000	-9.000	1.640	-9.000	0.981	-9.000
80024.3	ANAHEIM BAY, OUTER-REP 3	1173	3/31/94	29.0	-9.000	-9.000	-8.000	-9.000	-9.000	1.410	-9.000	0.914	-9.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	-9.000	-9.000	1.940	-9.000	-9.000	3.990	-9.000	1.620	-9.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	-9.000	-9.000	1.220	-9.000	-9.000	3.770	-9.000	1.330	-9.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	-9.000	-9.000	1.380	-9.000	-9.000	2.980	-9.000	1.540	-9.000
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 1	1177	3/30/94	29.0	-9.000	-9.000	1.410	-9.000	-9.000	3.050	-9.000	1.720	-9.000
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 2	1178	3/30/94	29.0	-9.000	-9.000	1.040	-9.000	-9.000	2.330	-9.000	1.440	-9.000
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 3	1179	3/30/94	29.0	-9.000	-9.000	1.140	-9.000	-9.000	2.440	-9.000	1.420	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
85001.0	NEWPORT BAY (523)	1387	9/1/94	34.0	-9.000	-9.000	-8.000	-9.000	-9.000	0.960	-9.000	-8.000	-9.000
85002.0	NEWPORT BAY (616)	1388	9/1/94	34.0	-9.000	-9.000	1.050	-9.000	-9.000	3.060	-9.000	1.170	-9.000
85003.0	NEWPORT BAY (791)	1389	8/31/94	34.0	-9.000	-9.000	0.991	-9.000	-9.000	2.550	-9.000	1.350	-9.000
85004.0	NEWPORT BAY (877)	1390	9/1/94	34.0	-9.000	-9.000	2.170	-9.000	-9.000	7.250	-9.000	3.420	-9.000
85005.0	NEWPORT BAY (949)	1391	8/31/94	34.0	-9.000	-9.000	1.060	-9.000	-9.000	2.850	-9.000	1.220	-9.000

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	PCB157	PCB158	PCB170	PCB174	PCB177	PCB180	PCB183	PCB187	PCB189
85006.0	NEWPORT BAY (1009)	1392	8/30/94	34.0	-9.000	-9.000	1.770	-9.000	-9.000	4.810	-9.000	2.030	-9.000
85007.0	NEWPORT BAY (431)	1418	9/19/94	36.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
85008.0	NEWPORT BAY (670)	1419	9/20/94	36.0	-9.000	-9.000	-8.000	-9.000	-9.000	0.870	-9.000	-8.000	-9.000
85009.0	NEWPORT BAY (705)	1420	9/20/94	36.0	-9.000	-9.000	-8.000	-9.000	-9.000	0.842	-9.000	-8.000	-9.000
85010.0	NEWPORT BAY (819)	1421	9/19/94	36.0	-9.000	-9.000	0.717	-9.000	-9.000	1.850	-9.000	0.725	-9.000
85011.0	NEWPORT BAY (905)	1422	9/20/94	36.0	-9.000	-9.000	0.510	-9.000	-9.000	1.180	-9.000	0.621	-9.000
85012.0	NEWPORT BAY (1064)	1423	9/19/94	36.0	-9.000	-9.000	0.625	-9.000	-9.000	1.520	-9.000	0.642	-9.000
85013.0	NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	-9.000	-9.000	3.100	-9.000	-9.000	10.500	-9.000	6.580	-9.000
85014.0	NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	-9.000	-9.000	2.130	-9.000	-9.000	7.140	-9.000	4.150	-9.000
85015.0	NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	-9.000	-9.000	1.620	-9.000	-9.000	5.050	-9.000	2.740	-9.000
85016.0	NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	-9.000	-9.000	-8.000	-9.000	-9.000	0.919	-9.000	0.681	-9.000
85017.0	NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	-9.000	-9.000	0.769	-9.000	-9.000	2.190	-9.000	0.923	-9.000
85018.0	NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	-9.000	-9.000	-8.000	-9.000	-9.000	-8.000	-9.000	-8.000	-9.000
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	1.170	1.410	3.700	2.950	2.910	9.910	2.130	6.000	-8.000
85001.0	NEWPORT BAY (523)	1634	6/20/96	45.0	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000
85001.0	NEWPORT BAY (523)	1788	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86001.0	SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86002.0	SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86003.0	SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86004.0	SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	PCB194	PCB195	PCB201	PCB203	PCB206	PCB209	ARO1248	ARO1254	ARO1260
80024.1	ANAHEIM BAY- OUTER	85	9/15/92	4.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80024.2	ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY- OUTER	87	9/15/92	4.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80026.1	HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80026.2	HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80026.3	HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80027.1	HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80027.3	HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80028.1	HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80028.3	HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80025.1	ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80025.2	ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80025.3	ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82003.0	ANEHEIM BAY-ENTRANCE	403	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82004.0	ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82006.0	HUNTINGTON HARBOR-PETER'S	406	12/10/92	9.0	-9.000	-8.000	-9.000	-9.000	0.800	-8.000	-9.000	-9.000	-9.000
82009.0	HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82020.0	SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82021.0	SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82022.0	SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82040.0	SEAL BEACH NWR	440	12/11/92	9.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82020.0	SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82024.0	BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY- OUTER	807	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82009.0	HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.- REP I	1044	2/2/94	25.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	PCB194	PCB195	PCB201	PCB203	PCB206	PCB209	ARO1248	ARO1254	ARO1260
82030.0	ANAHEIM BAY-NAVAL RES.- REP 2	1045	2/2/94	25.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.- REP 3	1046	2/2/94	25.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82001.0	ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82040.0	SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82040.0	SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82040.0	SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY, OUTER-REP 1	1171	3/31/94	29.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY, OUTER-REP 2	1172	3/31/94	29.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80024.3	ANAHEIM BAY, OUTER-REP 3	1173	3/31/94	29.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	-9.000	-8.000	-9.000	-9.000	0.569	-8.000	-9.000	-9.000	-9.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80028.3	HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	-9.000	-8.000	-9.000	-9.000	0.526	-8.000	-9.000	-9.000	-9.000
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 1	1177	3/30/94	29.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 2	1178	3/30/94	29.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
80027.3	HUNTINGTON HARBOR, MIDDLE-REP 3	1179	3/30/94	29.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82039.0	BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
82030.0	ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
85001.0	NEWPORT BAY (523)	1387	9/1/94	34.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
85002.0	NEWPORT BAY (616)	1388	9/1/94	34.0	-9.000	-8.000	-9.000	-9.000	0.546	-8.000	-9.000	-9.000	-9.000
85003.0	NEWPORT BAY (791)	1389	8/31/94	34.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
85004.0	NEWPORT BAY (877)	1390	9/1/94	34.0	-9.000	0.659	-9.000	-9.000	0.552	-8.000	-9.000	-9.000	-9.000
85005.0	NEWPORT BAY (949)	1391	8/31/94	34.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	PCB194	PCB195	PCB201	PCB203	PCB206	PCB209	ARO1248	ARO1254	ARO1260
85006.0	NEWPORT BAY (1009)	1392	8/30/94	34.0	-9.000	-8.000	-9.000	-9.000	0.690	-8.000	-9.000	-9.000	-9.000
85007.0	NEWPORT BAY (431)	1418	9/19/94	36.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
85008.0	NEWPORT BAY (670)	1419	9/20/94	36.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
85009.0	NEWPORT BAY (705)	1420	9/20/94	36.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
85010.0	NEWPORT BAY (819)	1421	9/19/94	36.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
85011.0	NEWPORT BAY (905)	1422	9/20/94	36.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
85012.0	NEWPORT BAY (1064)	1423	9/19/94	36.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
85013.0	NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	-9.000	0.905	-9.000	-9.000	3.270	5.600	-9.000	-9.000	-9.000
85014.0	NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	-9.000	0.568	-9.000	-9.000	2.080	1.540	-9.000	-9.000	-9.000
85015.0	NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	-9.000	0.556	-9.000	-9.000	3.980	1.680	-9.000	-9.000	-9.000
85016.0	NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
85017.0	NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
85018.0	NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	-9.000	-8.000	-9.000	-9.000	-8.000	-8.000	-9.000	-9.000	-9.000
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	3.130	0.750	3.500	1.780	3.410	6.010	130.000	210.000	130.000
85001.0	NEWPORT BAY (523)	1634	6/20/96	45.0	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	-8.000	7.900	6.300
35001.0	NEWPORT BAY (523)	1788	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86001.0	SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86002.0	SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86003.0	SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000
86004.0	SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000	-9.000

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	ARO5460	PCB	BATCH
80024.1	ANAHEIM BAY- OUTER	85	9/15/92	4.0	-9.000	73.20	
80024.2	ANAHEIM BAY- OUTER	86	9/15/92	4.0	-9.000	-9.00	
80024.3	ANAHEIM BAY- OUTER	87	9/15/92	4.0	-9.000	-90.00	
80026.1	HUNTINGTON HARBOR- LOWER	91	9/15/92	4.0	-9.000	973.20	
80026.2	HUNTINGTON HARBOR- LOWER	92	9/15/92	4.0	-9.000	-9.00	
80026.3	HUNTINGTON HARBOR- LOWER	93	9/15/92	4.0	-9.000	-9.00	
80027.1	HUNTINGTON HARBOR- MIDDLE	94	9/15/92	4.0	-9.000	-9.00	
80027.2	HUNTINGTON HARBOR- MIDDLE	95	9/15/92	4.0	-9.000	-9.00	
80027.3	HUNTINGTON HARBOR- MIDDLE	96	9/15/92	4.0	-9.000	-9.00	
80028.1	HUNTINGTON HARBOR- UPPER	97	9/15/92	4.0	-9.000	-9.00	
80028.2	HUNTINGTON HARBOR- UPPER	98	9/15/92	4.0	-9.000	-9.00	
80028.3	HUNTINGTON HARBOR- UPPER	99	9/15/92	4.0	-9.000	-9.00	
80025.1	ANAHEIM BAY- OIL ISLAND	88	10/14/92	5.0	-9.000	-9.00	
80025.2	ANAHEIM BAY- OIL ISLAND	89	10/14/92	5.0	-9.000	-9.00	
80025.3	ANAHEIM BAY- OIL ISLAND	90	10/14/92	5.0	-9.000	-9.00	
82001.0	ANAHEIM BAY-NAVY MARSH	401	12/11/92	9.0	-9.000	72.10	
82002.0	ANAHEIM BAY-NAVY MARSH #2	402	12/11/92	9.0	-9.000	-9.00	
82003.0	ANEHEIM BAY-ENTRANCE	403	12/11/92	9.0	-9.000	-9.00	
82004.0	ANAHEIM BAY-FUEL DOCK S.	404	12/10/92	9.0	-9.000	-9.00	
82005.0	HUNTINGTON HARBOR-LAUNCH	405	12/10/92	9.0	-9.000	72.10	
82006.0	HUNTINGTON HARBOR-PETER'S	406	12/10/92	9.0	-9.000	72.80	
82009.0	HUNTINGTON HARBOR-HAR. LA	409	12/10/92	9.0	-9.000	-9.00	
82020.0	SEAL BEACH NWR-NASA IS.	420	12/11/92	9.0	-9.000	-9.00	
82021.0	SEAL BEACH NWR-HOG IS.	421	12/11/92	9.0	-9.000	-9.00	
82022.0	SEAL BEACH NWR-SUNSET AGU	422	12/11/92	9.0	-9.000	-9.00	
82023.0	SEAL BEACH NWR-BOLSA AVE	423	12/11/92	9.0	-9.000	-9.00	
82024.0	BOLSA BAY-MOUTH OF EGGW	424	12/10/92	9.0	-9.000	-9.00	
82030.0	ANAHEIM BAY-NAVAL RESERVE	430	12/10/92	9.0	-9.000	-9.00	
82039.0	BOLSA CHICA ECOL RESERVE	439	12/10/92	9.0	-9.000	72.80	
82040.0	SEAL BEACH NWR	440	12/11/92	9.0	-9.000	72.80	
82020.0	SEAL BEACH NWR-NASA IS.	769	4/22/93	17.0	-9.000	-9.00	
82024.0	BOLSA BAY-MOUTH OF EGGW FLOOD	770	4/21/93	17.0	-9.000	-9.00	
82023.0	SEAL BEACH NWR-BOLSA AVE.	771	4/22/93	17.0	-9.000	-9.00	
82030.0	ANAHEIM BAY-NAVAL RESERVE	772	4/22/93	17.0	-9.000	-9.00	
80024.3	ANAHEIM BAY- OUTER	807	5/27/93	19.0	-9.000	-9.00	
82009.0	HUNTINGTON HARBOR-HAR. LA	808	5/27/93	19.0	-9.000	-9.00	
82002.0	ANAHEIM BAY-NAVY MARSH #2	809	5/27/93	19.0	-9.000	-9.00	
82030.0	ANAHEIM BAY-NAVAL RES.- REP I	1044	2/2/94	25.0	11.900	73.22	

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	ARO5460	PCBBATCH
82030.0	ANAHEIM BAY-NAVAL RES.- REP 2	1045	2/2/94	25.0	45.000	73.23
82030.0	ANAHEIM BAY-NAVAL RES.- REP 3	1046	2/2/94	25.0	49.800	73.23
82001.0	ANAHEIM BAY-NAVY MARSH-REP 1	1086	2/16/94	26.0	8.800	73.32
82001.0	ANAHEIM BAY-NAVY MARSH-REP 2	1087	2/16/94	26.0	7.500	73.27
82001.0	ANAHEIM BAY-NAVY MARSH-REP 3	1088	2/16/94	26.0	10.800	73.31
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP1	1089	2/16/94	26.0	-8.000	73.32
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP2	1090	2/16/94	26.0	-8.000	73.30
82002.0	ANAHEIM BAY-NAVY MARSH #2-REP3	1091	2/16/94	26.0	10.600	73.29
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 1	1092	2/16/94	26.0	24.300	73.31
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 2	1093	2/16/94	26.0	5.100	73.32
82023.0	SEAL BEACH NWR-BOLSA AVE-REP 3	1094	2/16/94	26.0	8.400	73.32
82040.0	SEAL BEACH NWR-REP 1	1095	2/16/94	26.0	10.400	73.31
82040.0	SEAL BEACH NWR-REP 2	1096	2/16/94	26.0	10.900	73.30
82040.0	SEAL BEACH NWR-REP 3	1097	2/16/94	26.0	42.900	73.29
80024.3	ANAHEIM BAY. OUTER-REP 1	1171	3/31/94	29.0	60.000	73.23
80024.3	ANAHEIM BAY. OUTER-REP 2	1172	3/31/94	29.0	26.700	73.21
80024.3	ANAHEIM BAY. OUTER-REP 3	1173	3/31/94	29.0	-8.000	73.22
80028.3	HUNTINGTON HARBOR, UPPER-REP 1	1174	3/30/94	29.0	45.300	73.34
80028.3	HUNTINGTON HARBOR, UPPER-REP 2	1175	3/30/94	29.0	49.300	73.35
80028.3	HUNTINGTON HARBOR, UPPER-REP 3	1176	3/30/94	29.0	48.300	73.39
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 1	1177	3/30/94	29.0	41.900	73.34
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 2	1178	3/30/94	29.0	54.100	73.38
80027.3	HUNTINGTON HARBOR,MIDDLE-REP 3	1179	3/30/94	29.0	49.000	73.39
82030.0	ANAHEIM BAY-NAVAL RES.-REP 1	1195	4/12/94	30.0	-9.000	-9.00
82030.0	ANAHEIM BAY-NAVAL RES.-REP 2	1196	4/12/94	30.0	-9.000	-9.00
82030.0	ANAHEIM BAY-NAVAL RES.-REP 3	1197	4/12/94	30.0	-9.000	-9.00
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 1	1201	4/12/94	30.0	-9.000	-9.00
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 2	1202	4/12/94	30.0	-9.000	-9.00
82005.0	HUNTINGTON HARBOR-LAUNCH-REP 3	1203	4/12/94	30.0	-9.000	-9.00
82039.0	BOLSA CHICA ECOL RESERVE-REP 1	1204	4/12/94	30.0	-9.000	-9.00
82039.0	BOLSA CHICA ECOL RESERVE-REP 2	1205	4/12/94	30.0	-9.000	-9.00
82039.0	BOLSA CHICA ECOL RESERVE-REP 3	1206	4/12/94	30.0	-9.000	-9.00
82030.0	ANAHEIM BAY-NAVAL RESERVE	1335	5/19/94	32.0	-9.000	-9.00
85001.0	NEWPORT BAY (523)	1387	9/1/94	34.0	-9.000	74.40
85002.0	NEWPORT BAY (616)	1388	9/1/94	34.0	-9.000	74.30
85003.0	NEWPORT BAY (791)	1389	8/31/94	34.0	-9.000	74.30
85004.0	NEWPORT BAY (877)	1390	9/1/94	34.0	-9.000	74.40
85005.0	NEWPORT BAY (949)	1391	8/31/94	34.0	-9.000	74.40

PCB and Arochlor Concentrations (ppb)

STANUM	STATION	IDORG	DATE	LEG	AROS460	PCRBATCH
85006.0	NEWPORT BAY (1009)	1392	8/30/94	34.0	-9.000	74.40
85007.0	NEWPORT BAY (431)	1418	9/19/94	36.0	-9.000	74.10
85008.0	NEWPORT BAY (670)	1419	9/20/94	36.0	-9.000	74.10
85009.0	NEWPORT BAY (705)	1420	9/20/94	36.0	-9.000	74.20
85010.0	NEWPORT BAY (819)	1421	9/19/94	36.0	-9.000	74.40
85011.0	NEWPORT BAY (905)	1422	9/20/94	36.0	-9.000	74.20
85012.0	NEWPORT BAY (1064)	1423	9/19/94	36.0	-9.000	74.40
85013.0	NEWPORT BAY (RHINE CHANNEL)	1424	9/19/94	36.0	-9.000	74.20
85014.0	NEWPORT BAY (NEWPORT ISLAND)	1425	9/19/94	36.0	-9.000	74.30
85015.0	NEWPORT BAY (ARCHES S. DRAINS)	1426	9/19/94	36.0	-9.000	74.20
85016.0	NEWPORT BAY (YACHTMANS COVE)	1427	9/20/94	36.0	-9.000	74.20
85017.0	NEWPORT BAY (UNIT II BASIN)	1428	9/19/94	36.0	-9.000	74.20
85018.0	NEWPORT BAY (UNIT I BASIN)	1429	9/19/94	36.0	-9.000	74.30
85013.0	NEWPORT BAY (RHINE CHANNEL)	1633	6/20/96	45.0	214.000	75.10
85001.0	NEWPORT BAY (523)	1634	6/20/96	45.0	-8.000	75.10
85001.0	NEWPORT BAY (523)	1788	8/20/97	54.0	-9.000	-9
86001.0	SAN DIEGO CREEK- CAMPUS	1789	8/20/97	54.0	-9.000	-9
86002.0	SAN DIEGO CREEK- MACARTHUR	1790	8/20/97	54.0	-9.000	-9
86003.0	SANTA ANA/DELHI CHANNEL-BRIDGE	1791	8/20/97	54.0	-9.000	-9
86004.0	SANTA ANA/DELHI CHANNEL-OUTER	1792	8/20/97	54.0	-9.000	-9