I. **Data Entry** (continued).

B. **Mortality Endpoint.**

1. Sea water (negative) control sample.
   a. Initial Value = the stocking density = the average number of larvae introduced to individual beakers or containers at the beginning of the sea water control exposure.
   b. Final Value = the total number of survivors (normal + abnormal) in each replicate at the end of the sea water control exposure.

2. Positive control sample.
   a. Initial Value = the average total number of survivors (average of all replicates) at the end of the sea water control exposure.
   b. Final Value = the total number of survivors in each replicate (normal + abnormal) at the end of the positive control exposure.

3. Test/reference area sediment samples.
   a. Initial Value = the average total number of survivors (average of all replicates) at the end of the sea water control exposure.
   b. Final Value = the total number of survivors in each replicate (normal + abnormal) at the end of the test/reference sample exposure.

I. **Data Entry** (continued).

C. **Effective Mortality Endpoint (Abnormality + Mortality).**

1. Sea water (negative) control sample.
   a. Initial Value = the stocking density = the average number of larvae introduced to individual beakers or containers at the beginning of the sea water control exposure.
   b. Final Value = the total number of normal survivors in each replicate at the end of the sea water control exposure.

2. Positive control sample.
   a. Initial Value = the average total number of normal survivors (average of all replicates) at the end of the sea water control exposure.
   b. Final Value = total number of normal survivors in each replicate at end of positive control exposure.

3. Test/reference sediment samples.
   a. Initial Value = the average total number of normal survivors (average of all replicates) at the end of the sea water control exposure.
   b. Final Value = the total number of normal survivors in each replicate at the end of the test/reference sediment sample exposure.

Exhibit A-3
Sediment Larvae Bioassay
Data Entry and Response Calculation

II. Calculation of percent abnormality, mortality and effective mortality.

Percent larvae abnormality, mortality and effective mortality were calculated using the appropriate Initial and Final Values, described above, as:

$$\frac{[\text{Initial (test sample) Value} - \text{Final (test sample) Value}]}{\text{Initial (test sample) Value}} \times 100$$

Figure A-1. Reference sample amphipod mortality: frequency distribution of standard deviations. Arrow indicates 95th percentile value.

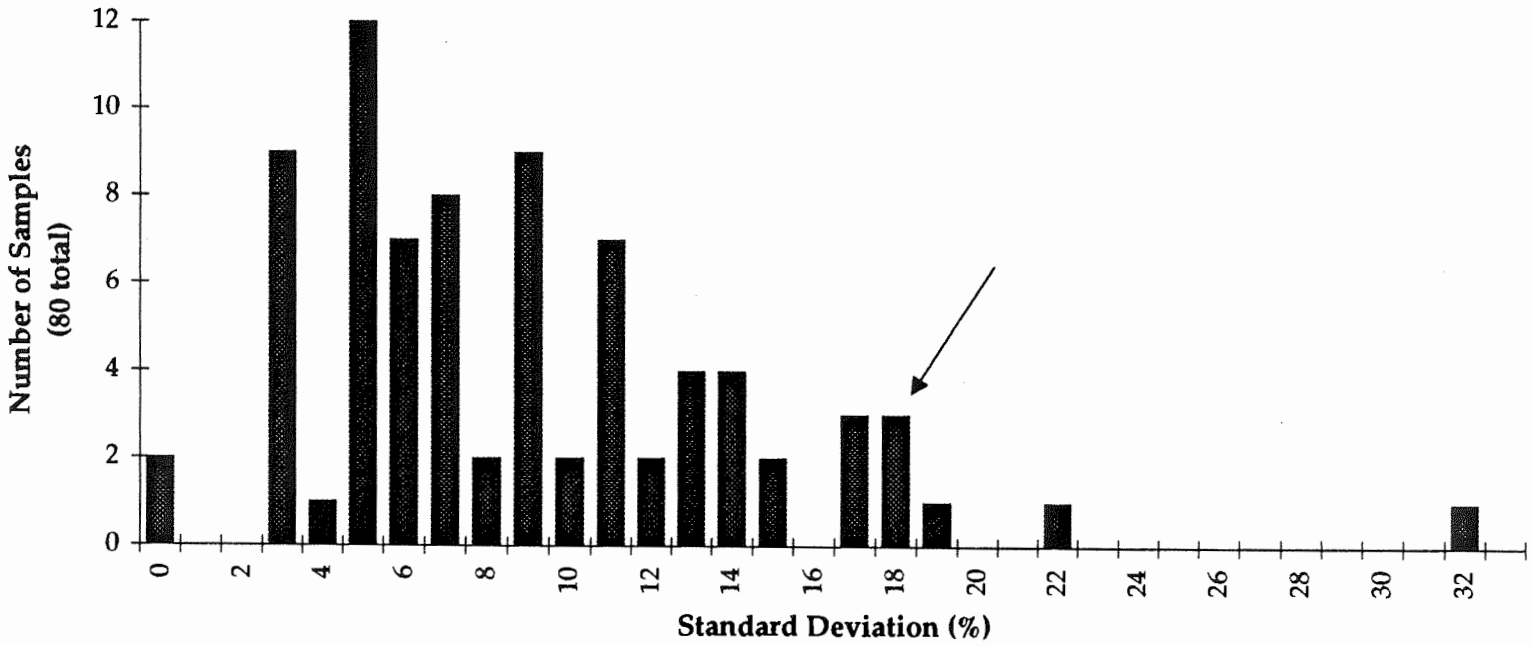


Figure A-2. Reference sample larval abnormality: frequency distribution of standard deviations. Arrow indicates 95th percentile value.

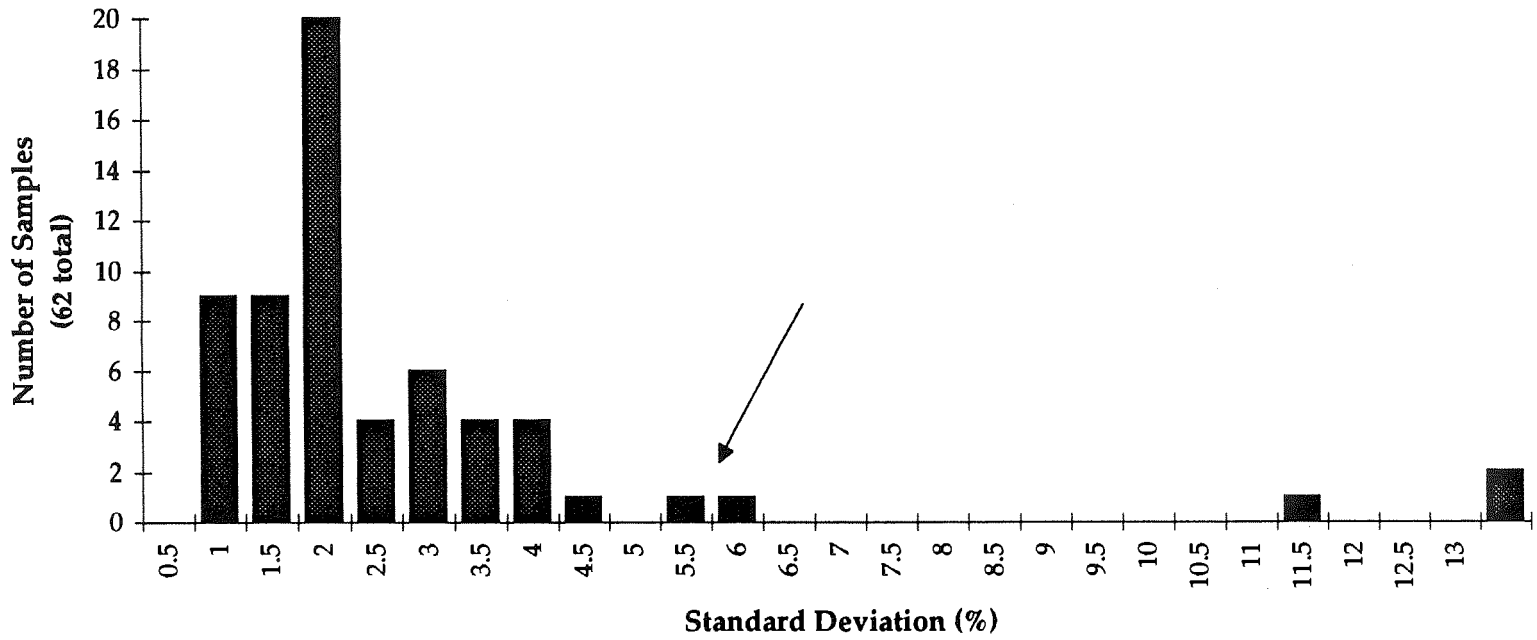


Figure A-3. Reference larval effective mortality: frequency distribution of standard deviations. Arrow indicates 95th percentile value.

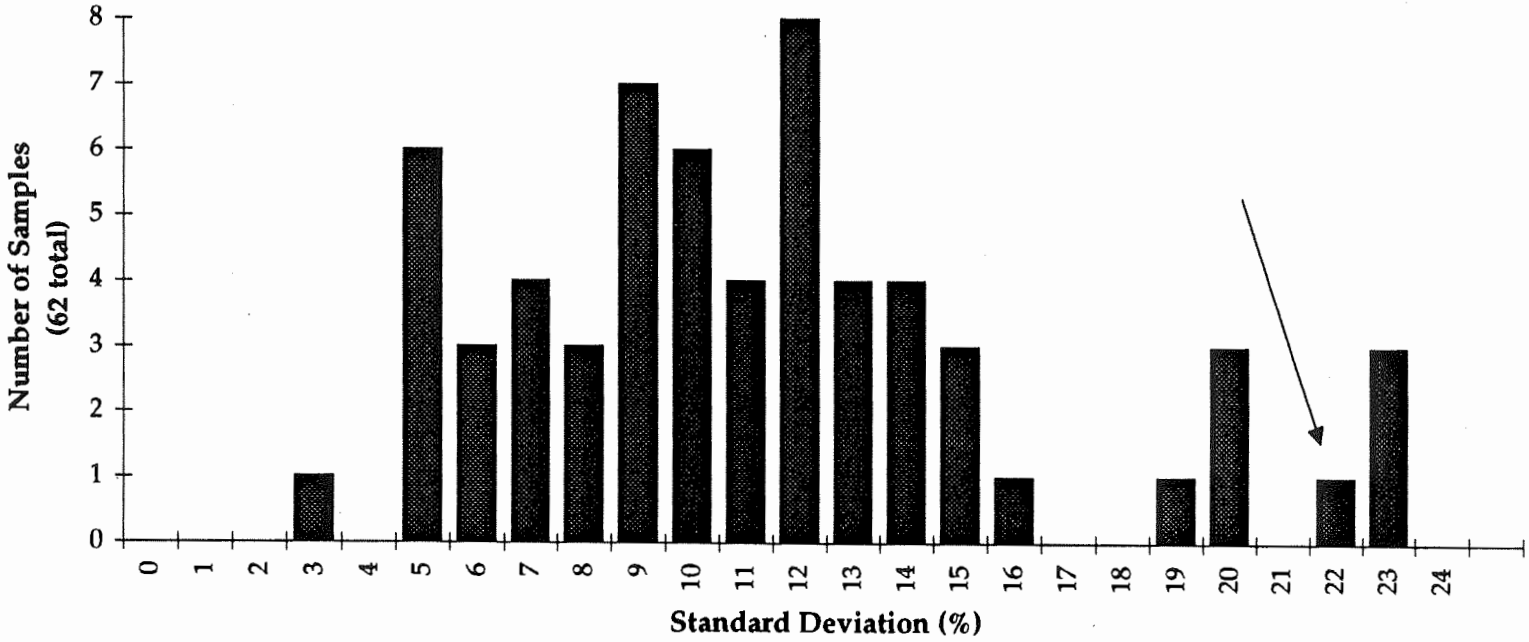


Figure A-4. Phased determination of significant adverse effects in amphipod mortality bioassay samples. A test sample is considered to be a "Hit" if it exhibits greater than or equal to 25% mortality and is significantly different ($p<0.05$) from the corresponding reference sample(s).

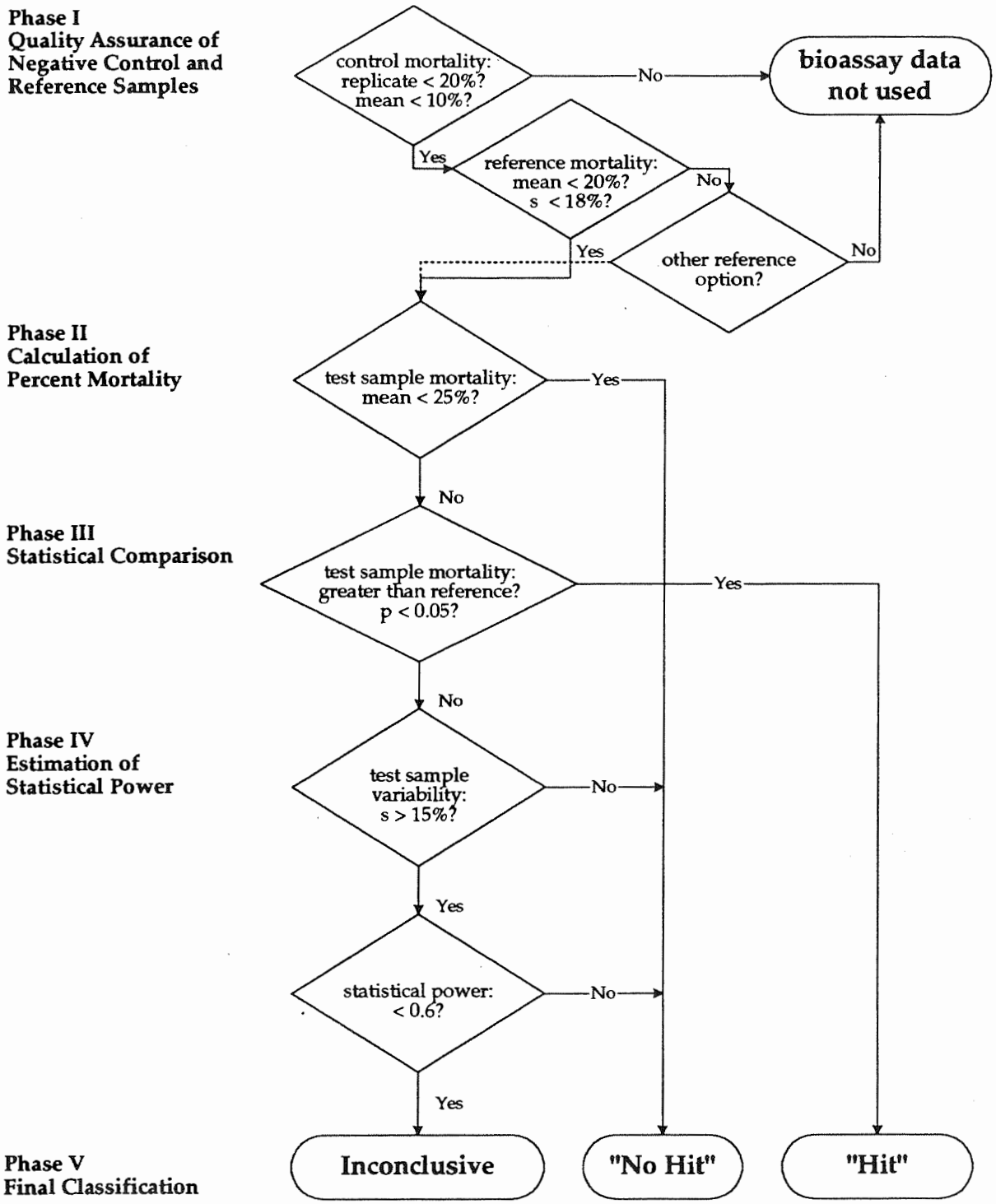


Figure A-5. Test sample amphipod mortality: frequency distribution of standard deviations. Arrow indicates 80th percentile value.

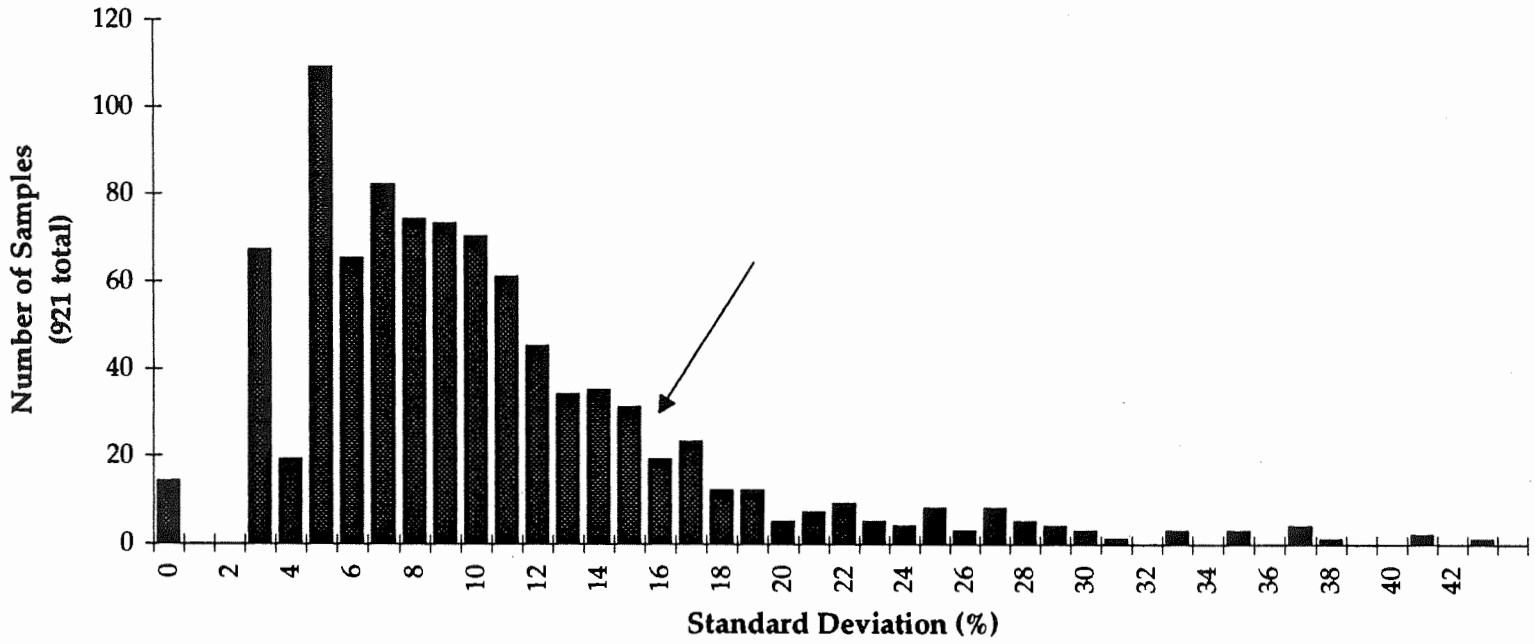


Figure A-6. Phased evaluation procedure for determining significant adverse effects in echinoderm larvae abnormality bioassays. A test sample is considered to be a "Hit" if it exhibits significantly greater abnormality ($p<0.05$) than the corresponding reference sample(s).

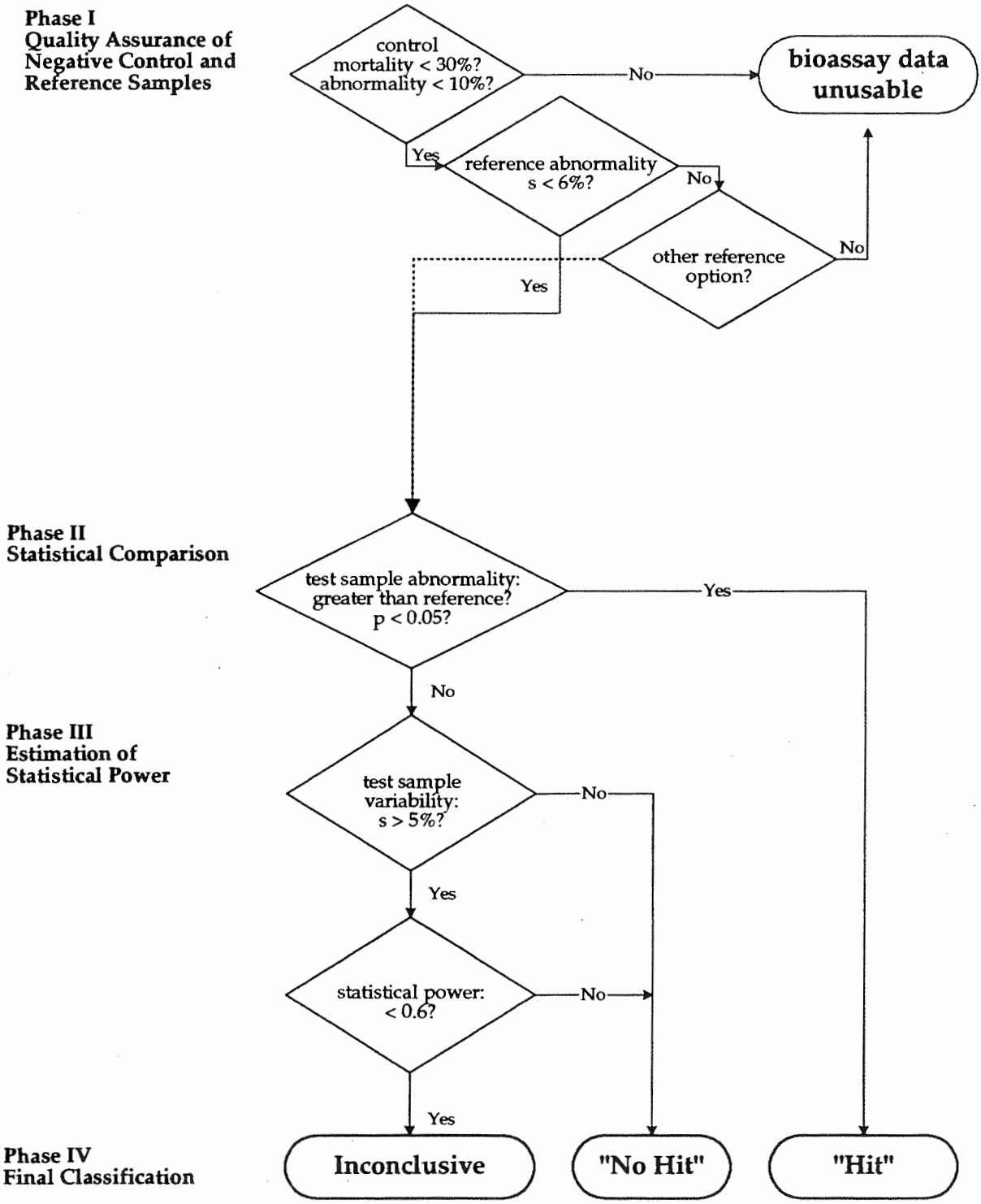


Figure A-7. Test sample larval abnormality: frequency distribution of standard deviations. Arrow indicates 80th percentile value.

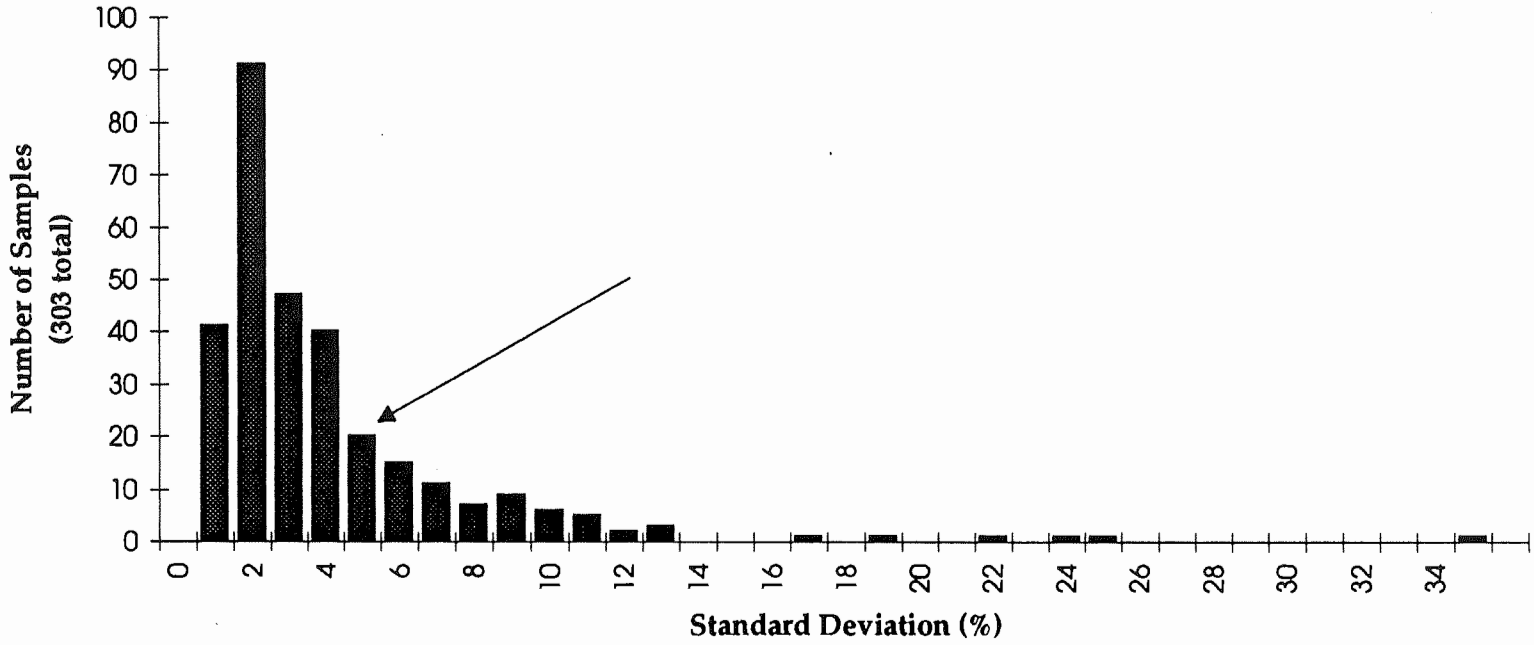


Figure A-8. Phased determination of significant adverse effects in echinoderm larval effective mortality bioassays. Three separate definitions of a "Hit" sample are explored in this investigation: if the effective mortality (abnormality plus mortality) of test samples is a) significantly greater than that of the corresponding reference sample ($p<0.05$), b) 15% > the reference ($p<0.05$), and c) 30% > the reference ($p<0.05$).

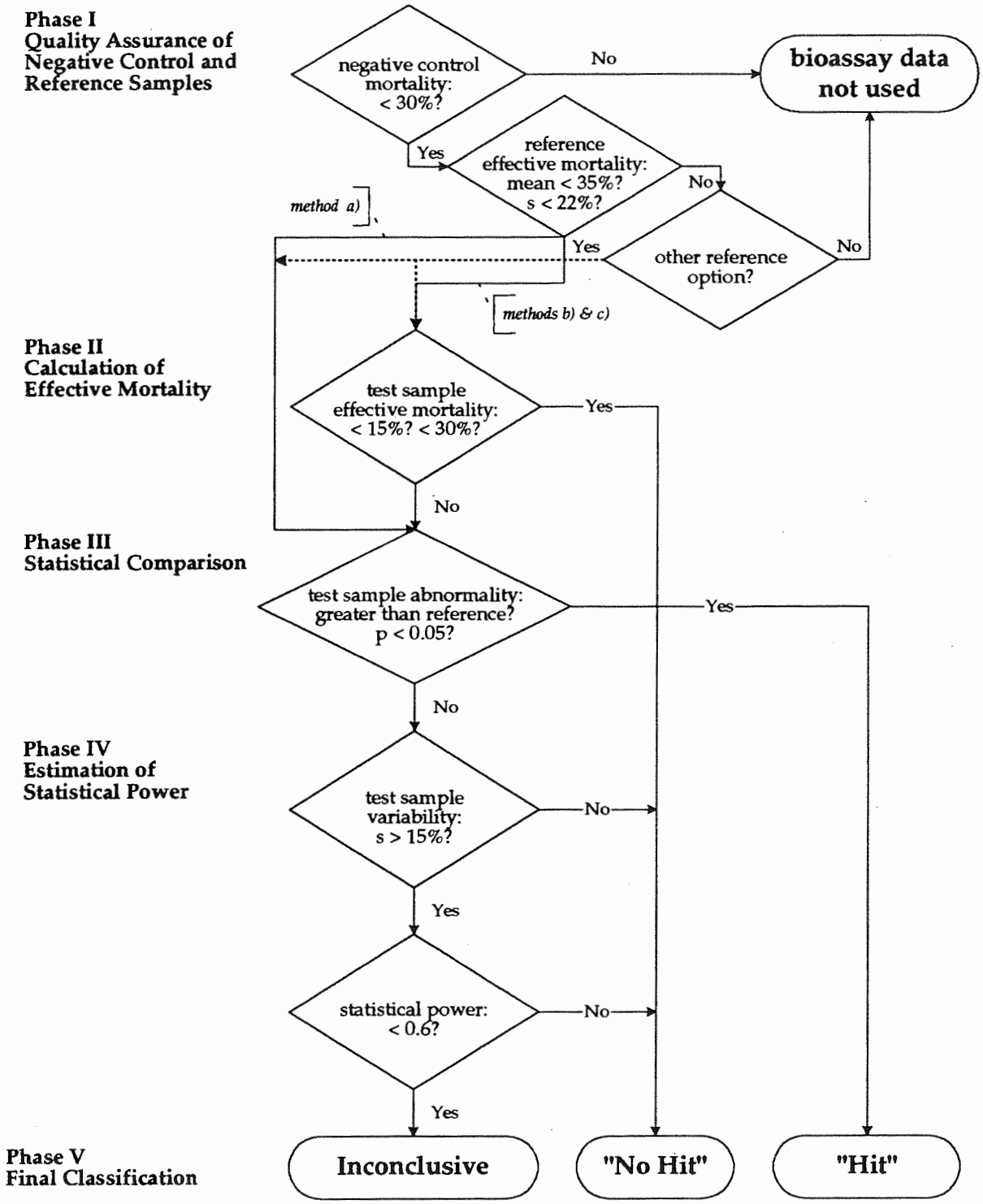
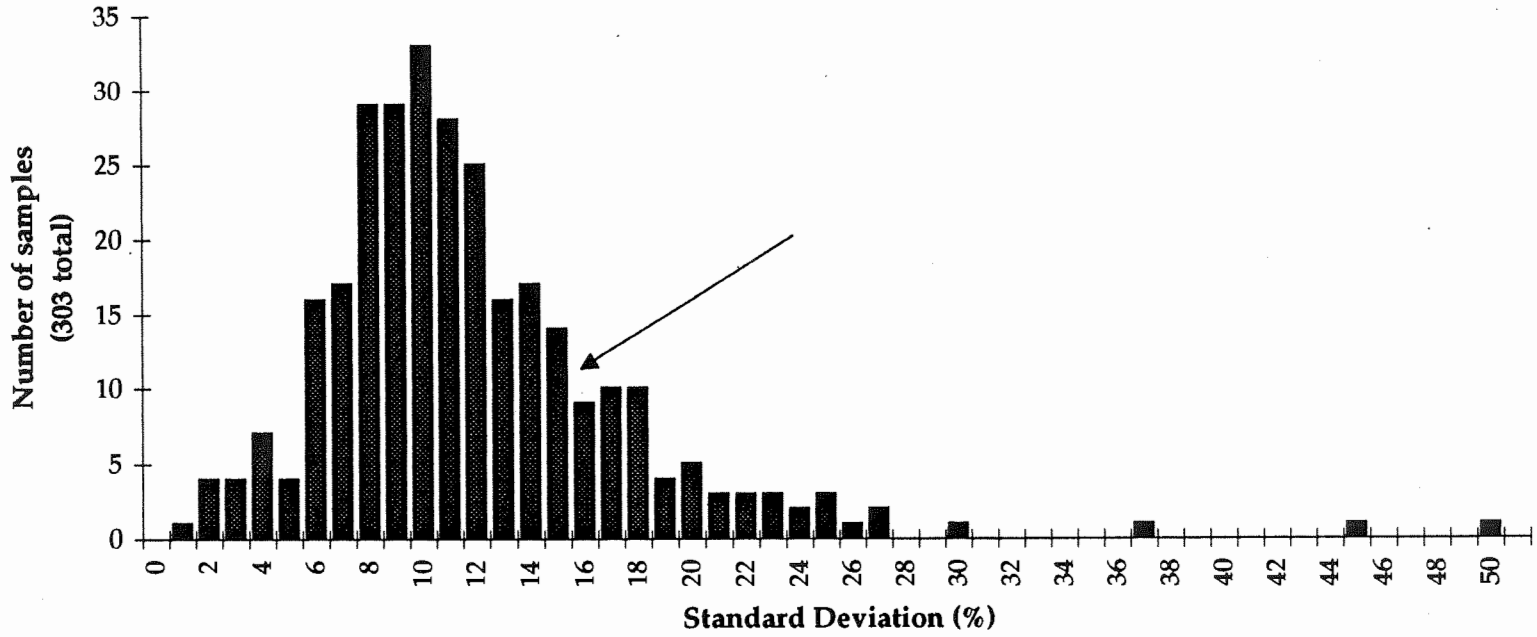


Figure A-9. Test sample larval effective mortality: frequency distribution of standard deviations. Arrow indicates 80th percentile value.



APPENDIX B:

The 1994 Puget Sound Sediment Quality Database (SEDQUAL)

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Table B-1. Inventory of synoptic surveys and bioassay samples for potential use in calculating 1994 AETs. Surveys are ordered alphabetically by Survey Code. Those used to derive 1988 amphipod, 1988 benthic, 1986 Micr and 1986 oyster AET and reliability values are highlighted. A = amphipod mortality (Rhepoxinius abronius), B= b infaunal abundance, E = echinoderm larval abnormality (Dendraster excentricus, Stongylocentrotus purpuratus, S. droebachiensis,), M = Microtox luminosity, and O = oyster/bivalve larval abnormality (Crassostrea gigas or Mytilus edulis). Sample numbers are totalled at the end.

Survey Code	Survey Name	A	B	E	M	O
1TREE_89	LOTT outfall dredging sediment characterization	3				
ALKI	METRO survey of Alki Point sewage treatment outfall		**11**			
AMPRES92	American President's Line maintenance dredging	2		2		
ANCHOR90	Anchor Cove condominium marina project	1		1		
ARCOCPC2	ARCO Cherry Point refinery, Class II inspection	2		2		
BCWTACC2	Boise Cascade's W. Tacoma mill, Class II inspection	2				
BLAIR_91	Port of Tacoma, Blair Waterway project	27		27		
BLGM_91A	Maintenance/other dredging of Bellingham Bay.	37		20 ?		
BPFERNC2	BP Oil Refinery, Class II inspection	3				
BREMWTC2	Bremerton treatment plant, Class II inspection	3				
CASCADRI	Cascade Pole Remedial Investigation	1		1		
CBBLAIR	Commencmnt Bay RI Blair Waterway dredging	**6**	**6**			**6**
CBMSQS	Commencement Bay RI, main sediment quality survey	**52**	**48**		**50**	**50**
CGPIER35	U.S. Coast Guard Pier 35 dredging project	3		3		
CHEVMD90	Chevron USA Edmonds dock maintenance dredging	3		3		
CNKTSPC2	1988 Central Kitsap treatment plant, Class II inspection	3				
COLUMBIA	Columbia Cement proposed maintenance dredging	1				
DAYISL91	Day Island Yacht Club (Tacoma) sediment characterizat	1		1		
DUWO&M89	Duwamish River maintenance dredging project, 1989	30		30		
DUWO&M90	Duwamish River maintenance dredging, Phase 1	4				4
DUWO&M91	Duwamish River maintenance dredging, Phase 2	14		14		
DUWRIV1	PSDDA Duwamish River I data set	**9**				
DUWRIV2	PSDDA Duwamish River II data set	**31**				
DUYACHT1	Duwamish Yacht Club marina maintenance dredging	5		5		

Table B-1. Inventory of synoptic surveys and bioassay samples for potential use in calculating 1994 AETs. Surveys are ordered alphabetically by Survey Code. Those used to derive 1988 amphipod, 1988 benthic, 1986 Micr and 1986 oyster AET and reliability values are highlighted. A = amphipod mortality (Rhepoxinius abronius), B= b infaunal abundance, E = echinoderm larval abnormality (Dendraster excentricus, Stongylocentrotus purpuratus, S. droebachiensis,), M = Microtox luminosity, and O = oyster/bivalve larval abnormality (Crassostrea gigas or Mytilus edulis). Sample numbers are totalled at the end.

Survey Code	Survey Name	A	B	E	M	O
EBCHEM	1985 Elliott Bay sediment quality survey	**110**	**82**			
EDMDWTC2	Edmonds treatment plant, Class II inspection	3				
EHCHEM	Eagle Harbor sediment chemistry survey	**10**	**10**			
EHRITM10	Eagle Harbor RI, Technical Memo. #10	6				6
EIGHTBAY	1985 Puget Sound Eight-Bay survey	**48**				
EVCHEM	1985 Everett Harbor chemistry & biological data	**29**	**19**			
EVERETT1	A subset of NAVYHP85 (Navy Homeport EIS)	**6**				
EVMAR_88	Everett Marina maintenance dredging	5				5
EVRT10TH	Everett Harbor, 10th St. boat ramp expansion	1		1		
EVRT12TH	Everett Harbor, 12th St. barge channel dredging	6		6		
EVWEYCII	Everett Weyerhaueser, Class II inspection	3				
GAPAC_C2	Georgia Pacific (Bellingham), Class II inspection	3				
HULB90FC	Hulbert Mill proposed 12th St. marina	8		8		
HURLEN89	Hurlen Construction Co. maintenance dredging	1				
INTALCC2	1988 Intalco, Class II inspection	4				
LONEST89	Lonestar NW, maintenance dredging in Duwamish Riv	1				
LONEST92	Lonestar Northwest, west terminal dredging	1		1		
LOTTO041	Olympia treatment plant (LOTT) outfall sampling, DY8	3				
LOTTO043	Olympia treatment plant (LOTT) outfall sampling, DY9	1		1		
METAMB88	1988 METRO NPDES & ambient subtidal monitoring	8				
METAMB90	1990METRO NPDES & ambient subtidal monitoring	8				
METAMB92	1992 METRO NPDES & ambient subtidal monitoring	8				
METROEBP	METRO's West Point emergency bypass outfall samplir	7		7		
MORTON89	Morton Marine wharf construction & draft increase	1				

Table B-1. Inventory of synoptic surveys and bioassay samples for potential use in calculating 1994 AETs. Surveys are ordered alphabetically by Survey Code. Those used to derive 1988 amphipod, 1988 benthic, 1986 Micr and 1986 oyster AET and reliability values are highlighted. A = amphipod mortality (Rhepoxinius abronius), B= b infaunal abundance, E = echinoderm larval abnormality (Dendraster excentricus, Stongylocentrotus purpuratus, S. droebachiensis,), M = Microtox luminosity, and O = oyster/bivalve larval abnormality (Crassostrea gigas or Mytilus edulis). Sample numbers are totalled at the end.

Survey Code	Survey Name	A	B	E	M	O
MORTON92	Morton Marine maintenance dredging	1		1		
NAVYHP85	U.S. Navy Homeport sediment characterization, 1985	6				
NAVYHPFC	U.S. Navy Homeport (full sediment characterization)	31		31		
NAVYHPII	U.S. Navy Homeport Element II full characterization	4		4		
NAVYMANC	U.S. Navy Manchester fuel pier replacement	15		15		
OLYHARFC	Olympia Harbor planning, full characterization	13		13		
OLYTERC2	Olympus Terrace treatment plant, Class II inspection	3		3		
PENNWLC2	Pennwalt, Class II inspection	3				
PIER53BL	Pier 53-55 sediment capping project, baseline	6				6
PIERD_91	U.S. Navy Bremerton Pier D	28		28		
POSTPTC2	Post Point (Bellingham) treatment plant, Class II inspec	3				
PSDDA1	PSDDA Phase 1 baseline survey	14				14
PSDDA2	PSDDA Phase 2 baseline survey	6				6
PSDDAM90	1990 PSDDA post-disposal site monitoring	10		10		
PSDDAM91	1991 PSDDA site monitoring/Port Gardner PGB09	1		1		
PSDDAM92	1992 PSDDA full monitoring, Elliott Bay	3		3		
PSREF90	Puget Sound reference areas survey	21		21		21
PTORCHC2	Port Orchard treatment plant, Class II inspection	3				
PTWNPCC2	Port Townsend Paper Company, Class II inspection	3				
PTWNPENR	Port Townsend pen-reared salmon study	2				
SEATLSC2	Seattle Steel, Class II inspection	2				
SED18804	Puget Sound non-urban reconnaisance survey	24				
SED18903	Puget Sound Ambient Monitoring - 1989	50				
SED19003	Puget Sound Ambient Monitoring - 1990	82				

Table B-1. Inventory of synoptic surveys and bioassay samples for potential use in calculating 1994 AETs. Surveys are ordered alphabetically by Survey Code. Those used to derive 1988 amphipod, 1988 benthic, 1986 Micr and 1986 oyster AET and reliability values are highlighted. A = amphipod mortality (Rhepoxinius abronius), B= b infaunal abundance, E = echinoderm larval abnormality (Dendraster excentricus, Stongylocentrotus purpuratus, S. droebachiensis,), M = Microtox luminosity, and O = oyster/bivalve larval abnormality (Crassostrea gigas or Mytilus edulis). Sample numbers are totalled at the end.

Survey Code	Survey Name	A	B	E	M	O
SED19103	Puget Sound Ambient Monitoring - 1991	61				
SHELLCII	Shell Oil refinery (Anacortes), Class II inspection	1				
SITCUMRI	Port of Tacoma RI/NRDA (Sitcum/Milwaukee/Blair)	79		38 ?		38
SNDREF92	Sound Refining NPDES sediment monitoring	3		3		
SOPARK91	South Park Marina maintenance dredging, 1991	2		2		
SOTERM86	Port of Everett, Hewitt Ave./South Terminal characteri:	17				
SSRECON	South Puget Sound Reconnaissance	17				
TACCENC2	Tacoma Central treatment plant, Class II inspection	3				
TERM5_91	Terminal 5 (Elliott Bay, West Waterway) maint. dredgir	3		3		
TERMNL91	Terminal 91, west side apron construction	3		3		
TEXACOC2	Texaco Inc. refinery (Anacortes), Class II inspection	3				
TPPS3AB	METRO's Toxicant Priority Pollutant Survey, 198?		29			
TXNPDS92	Texaco Inc. refinery (Anacortes), NPDES sediment stud	3				
USOILVLF	U.S. Oil refinery (Blair Waterway) maintenance dredgin	13		4 ?		
WYCKOFRI	Wyckoff RI (Eagle Harb.), effluent study	68				68
1988 INVENTORY		301	205	0	50	56
NEW INVENTORY		833	0	316	0	168
1994 INVENTORY		1134	205	316	50	224

Table B-2. Samples excluded from 1994 amphipod mortality AET calculations. Sample data were excluded because they were not synoptic, failed to meet chemica quality assurance (QA1) or various bioassay QA requirements, were statistically in clusive or were chemically anomalous. Exclusions are ordered by survey code.

Surveys/Batches/Samples Excluded			Criteria for Exclusion:						
Survey Code	Batch	Number of Samples	Not Synopyic	Failed Chemical QA	Insufficient Lab Replicates	Negative Control Sample Failure	No Reference or Reference Failur	Statistically Inconclusive	Chemically Anomalous
1TREEISL	1	3					X		
ARCOCPC2	1	2					X		
BCWTACC2	1	2					X		
BLAIR_91	1	27					X		
BLAIR_91	?	(5)						X	
BLGM_91A	1	18					X		
BLGM_91A	2	10					X		
BLGM_91A	4	3					X		
BPFERNC2	1	3					X		
BREMWTC2	1	3					X		
CASCADRI	1	1					X		
CBMSQS	1	2							X
CNKTSPC2	1	3					X		
COLUMBIA	1	1				X			
DUWO&M89	1	18				X			
DUWO&M91	1	13				X			
DUWO&M91	1	(1)						X	
EBCHEM	1	4						X	
EBCHEM	1	6							X
EDMDWTC2	1	3					X		
EHRITM10	1	6		X					
EVRT12TH	1	6				X			
EVWEYCII	1	3					X		
GAPAC_C2	1	3					X		
INTALCC2	1	4					X		
METAMB88	1	8					X		
METAMB90	1	8					X		
METAMB92	1	8					X		
METROEBP	1	7					X		
OLYHARFC	1	1						X	
OLYHARFC	2	1					X		

Table B-2. Samples excluded from 1994 amphipod mortality AET calculations. Sample data were excluded because they were not synoptic, failed to meet chemica quality assurance (QA1) or various bioassay QA requirements, were statistically in clusive or were chemically anomalous. Exclusions are ordered by survey code.

Surveys/Batches/Samples Excluded			Criteria for Exclusion:						
Survey Code	Batch	Number of Samples	Not Synopyic	Failed Chemical QA	Insufficient Lab Replicates	Negative Control Sample Failure	No Reference or Reference Failur	Statistically Inconclusive	Chemically Anomalous
OLYTERC2	1	3					X		
PENNWLC2	1	3					X		
PIER53BL	1	6					X		
POSTPTC2	1	3					X		
PSDDA1	1	1						X	
PSDDA1	1	1							X
PSREF90	1	21					X		
PTORCHC2	1	3					X		
PTWNPCC2	1	3					X		
PTWNPENR	1	3					X		
SEATTLSTL	1	2		X					
SED18804	1	12				X			
SED18804	2	12					X		
SED18903	1	2					X		
SED18903	1	1						X	
SED19003	1	24					X		
SED19003	2	20					X		
SED19003	3	21					X		
SED19003	4	17					X		
SED19103	2	1			X				
SHELLCII	1	1					X		
SITCUMRI	2	4							X
SNDREF92	1	3					X		
SOTERM86	1	17					X		
SSRECON	1	17					X		
TACCENC2	1	3					X		
TEXACOC2	1	3					X		
WYCKOFF	1	68		X					
TOTAL	72	452							

Table B-3. Data excluded from 1994 bivalve abnormality AET calculations. Sample data were excluded from 1994 AET calculations because they were not synoptic, failed to meet minimum chemical quality assurance (QA1) requirements, failed to meet various bioassay QA requirements, were statistically inconclusive or were considered chemically anomalous. Exclusions are ordered by survey code.

Surveys/Batches/Samples Excluded			Criteria for Exclusion:						
Survey Code	Batch	Number of Samples	Not Synopyic	Failed Chemical QA	Insufficient Lab Replicates	Negative Control Sample Failure	No Reference or Reference Failur	Statistically Inconclusive	Chemically Anomalous
CBBLAIR	1	6			X				
CBMSQS	1	50			X				
DUWO&M90	1	4							X
EHRITM10	1	6		X					
PIER53BL	1	6					X		
PSDDA1	1	14					X		
PSDDA1	1	6					X		
PSREF90	1	21					X		
SITCUMRI	1	38				X			X
WYCKOFF	1	68		X					
TOTAL	10	219							

Table B-4. Data excluded from 1994 echinoderm abnormality AET calculations. Sample data were excluded from 1994 AET calculations because they were not synoptic, failed to meet minimum chemical quality assurance (QA1) requirements, failed to meet various bioassay QA requirements, were statistically inconclusive or were considered chemically anomalous. Exclusions are ordered by survey code.

Surveys/Batches/Samples Excluded			Criteria for Exclusion:						
Survey Code	Batch	Number of Samples	Not Synopyic	Failed Chemical QA	Insufficient Lab Replicates	Negative Control Sample Failure	No Reference or Reference Failur	Statistically Inconclusive	Chemically Anomalous
ANCHOR90	1	1					X		
ARCOCPC2	1	2					X		
BLAIR_91	1	1						X	
BLGM_91A	1	7					X		
BLGM_91A	2	2							X
BLGM_91A	3	1						X	
CASCADRI	1	1					X		
CGPIER35	1	1							X
CHEVMD90	1	1						X	
DUWO&M89	1	?					X		
DUWO&M89	2	11					X		
DUWO&M89	3	1					X		
DUWO&M91	1	13				X			
DUWO&M91	2	12							
DUWO&M91	2	2	X						
DUYACHT1	1	5					X		
EVRT10TH		1							X
HULB90FC	1	8				X			
LONEST92	1	1						X	
NAVYHPII	2	4				X	X		
NAVYMANC	1	1			X				
OLYHARFC	1	2						X	
OLYTERC2	1	3					X		
PIER_D91	1	4						X	
PIER_D91	1	2							X
PSDDAM90	1	1						X	
PSREF90	1	21					X		
SITCUMRI	1	1							X

Table B-4. Data excluded from 1994 echinoderm abnormality AET calculations. Sample data were excluded from 1994 AET calculations because they were not synoptic, failed to meet minimum chemical quality assurance (QA1) requirements, failed to meet various bioassay QA requirements, were statistically inconclusive or were considered chemically anomalous. Exclusions are ordered by survey code.

Surveys/Batches/Samples Excluded			Criteria for Exclusion:						
Survey Code	Batch	Number of Samples	Not Synopyic	Failed Chemical QA	Insufficient Lab Replicates	Negative Control Sample Failure	No Reference or Reference Failur	Statistically Inconclusive	Chemically Anomalous
SNDREF92	1	3					X		
TERMNL91	1	1							X
TOTAL	38	114							

Table B-5. Exclusions from 1994 echinoderm effective mortality AET calculatior
Sample data were excluded from 1994 AET calculations because they were not synoptic, failed to meet minimum chemical quality assurance (QA1) requirements, failed to meet various bioassay QA requirements, were statistically inconclusive or were considered chemically anomalous. Exclusions are ordered by survey code.

Surveys/Batches/Samples Excluded			Criteria for Exclusion:						
Survey Code	Batch	Number of Samples	Not Synopyic	Failed Chemical QA	Insufficient Lab Replicates	Negative Control Sample Failure	No Reference or Reference Failur	Statistically Inconclusive	Chemically Anomalous
AMPRES92									
ANCHOR90									
ARCOCPC2									
BLAIR_91									
BLGM_91A									
CASCADRI									
DAYISL91									
DUWO&M89									
DUWO&M89									
DUWO&M89									
DUWO&M91									
DUYACHT1									
EVRT10TH									
EVRT12TH									
HULB90FC									
LONEST92									
LOTTO043									
METROEBP									
MORTON92									
NAVYHPFC									
NAVYHPII									
NAVYMANC									
OLYHARFC									
OLYTERC2									
PIERD_91									
POSTPTC2									
PSDDAM90									
PSDDAM91									

Table B-5. Exclusions from 1994 echinoderm effective mortality AET calculatior
Sample data were excluded from 1994 AET calculations because they were not synoptic, failed to meet minimum chemical quality assurance (QA1) requirements, failed to meet various bioassay QA requirements, were statistically inconclusive or were considered chemically anomalous. Exclusions are ordered by survey code.

Surveys/Batches/Samples Excluded			Criteria for Exclusion:						
Survey Code	Batch	Number of Samples	Not Synopyic	Failed Chemical QA	Insufficient Lab Replicates	Negative Control Sample Failure	No Reference or Reference Failur	Statistically Inconclusive	Chemically Anomalous
PSDDAM92									
PSREF90									
SITCUMRI									
SNDREF92									
SOPARK91									
TERM_91									
TREMNL91									
USOILVLF									
TOTAL									

Table B-6. List of 1994 synoptic samples for which the determination of significant adverse biological effects was statistically inconclusive.
Samples in italics were determined to be inconclusive for 1988 AET calculatio:

Survey Code	Station_ID	Sample_ID	AET Test Type	Test Endpoint
EBCHEM	*DR-05*	*DR-05*	*AMPT*	*Mortality*
EBCHEM	*DR-08*	*DR-08*	*AMPT*	*Mortality*
EBCHEM	*EW-03*	*EW-03*	*AMPT*	*Mortality*
EBCHEM	*NS-04*	*NS-04*	*AMPT*	*Mortality*
EVCHEM	*EW-14*	*EW-14G*	*AMPT*	*Mortality*
EVCHEM	*SD-02*	*SD-02G*	*AMPT*	*Mortality*
EVCHEM	*SR-07*	*SR-07G*	*AMPT*	*Mortality*
BLAIR_91	BL9106MC	BLAIR91XC003	AMPT	Mortality
BLAIR_91	BL9109MC	BLAIR91XC004	AMPT	Mortality
BLAIR_91	BL9112MC	BLAIR91XC005	AMPT	Mortality
BLAIR_91	BL9136MC	BLAIR91XC013	AMPT	Mortality
BLAIR_91	BL9141MC	BLAIR91XC015	AMPT	Mortality
DUWO&M91	DU9111XX	DUWO&M91S003	AMPT	Mortality
OLYHARFC	OLYH06MC	OLYHFCXXC020	AMPT	Mortality
PSDDA1	CBB02	CBB02C	AMPT	Mortality
SED18903	20	1	AMPT	Mortality
BLAIR_91	BL912409	BLAIR91XC009	ECHN	Abnormality
BLGM_91A	BLGM3312	BLGMBYXXC012	ECHN	Abnormality
CHEVMD90	CHEV02XX	CHEV90XXS001	ECHN	Abnormality
LONEST92	LSNW0101	LONEST92C001	ECHN	Abnormality
OLYHARFC	OLYH09MC	OLYHFCXXC005	ECHN	Abnormality
OLYHARFC	OLYH21MC	OLYHFCXXC019	ECHN	Abnormality
PIERD_91	3	C2	ECHN	Abnormality
PIERD_91	3	S3	ECHN	Abnormality
PIERD_91	4	S4	ECHN	Abnormality
PIERD_91	15	S15	ECHN	Abnormality
PSDDAM90	EB_BO3BX	EB90_B03B	ECHN	Abnormality

Table B-7. Summary of chemically anomalous samples excluded from 1994 dry weight-normalized AET calculations. Data are listed alphabetically first by AET type, then by chemical of concern. AMPT = 10-day amphipod mortality AETs. ECHN = 96-hour echinoderm larvae abnormality AETs. The survey, station and "No Hit" sample having the highest concentration for a given chemical is listed, together with its ratio to the next highest "No Hit" sample.

AET Type	Survey Code	Station_ID	"No Hit" Sample_ID	Chemical of Concern	Sample Concentration(s)	Ratio(s) to Next Highest "No Hit" Sample Conc.
AMPT	CBMSQS	CI-16	CI-16	1,2-Dichlorobenzene	350	3.2
AMPT	SITCUMRI	NC-S6	300042NCS6	2-Methylphenol, 2,4-Dimethylphenol	355	4.6
AMPT	SITCUMRI	NC-S5	300043NCS5	2-Methylphenol, 2,4-Dimethylphenol	370	4.8
AMPT	EBCHEM	NH-10	NH-10	Aldrin	90	9.5
AMPT	EBCHEM	WW-14	WW-14	Antimony	1370	6.9
AMPT	EBCHEM	EW-12	EW-12	Benzyl alcohol	870	11.9
AMPT	CBMSQS	HY-12	HY-12	Di-n-butyl phthalate	5100	3.2
AMPT	EBCHEM	NS-06	NS-06	Di-n-octyl phthalate	9900	4.7
AMPT	EBCHEM	NH-10	NH-10	Dieldrin	51	14.6
AMPT	PSDDA1	EBS02	EBS02C	Mercury	7.3	3.2
AMPT	CBMSQS	CI-16	CI-16	N-Nitroso diphenylamine	220	4.6
AMPT	SITCUMRI	NS-D6	300095NSD6	Silver	24.5	4.0
AMPT	SITCUMRI	NS-D4	300098NSD4	Silver	33.4	5.5
ECHN	TERMNL91	T91_03XX	TERMNL91S003	2-methylnaphthalene	790	4.9
ECHN	BLGM_91A	BLGM3813	BLGMBYXXS002	Antimony	110	3.1
ECHN	CGPIER35	PIER01MC	PIER35XXC001	Antimony	36	3.9
ECHN	SITCUMRI	NS-E3	300105NSE3	Antimony	36	3.9
ECHN	EVRT10TH	EV100101	EV10ST92C001	Benzoic acid	240	7.7
ECHN	CGPIER35	PIER01MC	PIER35XXC001	Butylbenzylphthalate	760	4.8
ECHN	PIERD_91	16	C6	Dieldrin	44	3.7
ECHN	PIERD_91	18	C7	Total DDT	420	6.3
ECHN	PIERD_91	11	C5	Total PCBs	920	3.2
ECHN	PIERD_91	16	C6	Total PCBs	910	3.1

Table B-8. Final list of synoptic surveys and samples used to calculate 1994 Puget Sound AETs.
Surveys and sample numbers in bold italics were used to calculate 1988 AETs.

Survey Code	Survey Description	Type and Number of Biological Effect Samples: A	B	E mort	E abnm	M	O abnm
ALKI	***METRO - Alki Point outfall sediments, 1982***		***11***				
AMPRES92	American President's Line maint. dredge, 1992	2			2		
ANCHOR90	Anchor Cove condominium marina proj., 1990	1					
BLAIR_91	Port of Tacoma, Blair Waterway proj., 1991				26		
BLGM_91A	maint./other dredge of Bellingham Bay, 1991	6			17		
CBBLAIR	***Commencmnt Bay RI Blair Waterway dredge***	***6***	***6***				***6***
CBMSQS	***Commencement Bay RI, main sediment quality survey***	***48***	***48***			***50***	***50***
CGPIER35	U.S. Coast Guard dredge and construction	3			2		
CHEVMD90	Chevron USA Edmonds dock maint. dredge	3			2		
DAYISL91	Day Island Yacht Club (Tacoma) sediment characterizatic	1			1		
DUWO&M89	Duwamish R. maint. dredge proj., 1989	12					
DUWO&M90	Duwamish R. maint. dredge 1990, Phase 1	4					
DUWO&M91	Duwamish R. maint. dredge 1990, Phase 2 ,	1					
DUWRIV1	***PSDDA Duwamish R. I data set***	***9***					
DUWRIV2	***PSDDA Duwamish R. II data set***	***31***					
DUYACHT1	Duwamish Yacht Club marina maint. dredge	5					
EBCHEM	***1985 Elliott Bay sediment quality survey***	***100***	***80***				
EHCHEM	***Eagle Harbor sediment chemistry survey***	***10***	***10***				
EIGHTBAY	***1985 Puget Sound Eight-Bay survey***	***48***					
EVCHEM	***1985 Everett Harbor chemistry & biological data***	***29***	***19***				
EVERETT1	***A subset of NAVYHP85 (Navy Homeport EIS)***	***6***					
EVMAR_88	Everett Marina maint. dredge, 1988	5					
EVRT10TH	Everett Harbor, 10th St. boat ramp expansion	1					
EVRT12TH	Everett Harbor, 12th St. barge channel dredge				6		
HULB90FC	Hulbert Mill proposed 12th St. marina dredge	8			4		
HURLEN89	Hurlen Construction Co. maint. dredge	1					
LONEST89	Lonestar NW, maint. dredge in Duwamish R., 1989	1					
LONEST92	Lonestar NW, west terminal dredge, 1992	1					
LOTTO041	Olympia treatment plant (LOTT) outfall sampling, DY89	3					
LOTTO043	Olympia treatment plant (LOTT) outfall sampling, DY91	1			1		
METROEBP	METRO West Point emergency bypass outfall sampling				4		

Table B-8. Final list of synoptic surveys and samples used to calculate 1994 Puget Sound AETs.
Surveys and sample numbers in bold italics were used to calculate 1988 AETs.

Survey Code	Survey Description	Type and Number of Biological Effect Samples: A	B	E mort	E abnm	M	O abnm
MORTON89	Morton Marine wharf construction & draft increase	1					
MORTON92	Morton Marine maint. dredge, 1992	1			1		
NAVYHPFC	U.S. Navy Homeport (full characterization)	31			30		
NAVYHPII	U.S. Navy Homeport Element II (full characterization)	4			4		
NAVYMANC	U.S. Navy Manchester fuel pier replacement	15			11		
OLYHARFC	Olympia Harbor planning (full characterization)	11			9		
PIERD_91	U.S. Navy Bremerton Pier D	28			24		
PSDDA1	PSDDA Phase 1 baseline survey	13					
PSDDA2	PSDDA Phase 2 baseline survey	6					
PSDDAM90	1990 PSDDA post-disposal site monitoring	10			9		
PSDDAM91	1991 PSDDA site monitoring/Port Gardner PGB09	1			1		
PSDDAM92	1992 PSDDA full monitoring, Elliott Bay	3			3		
SED18903	Puget Sound Ambient Monitoring - 1989	48					
SED19103	Puget Sound Ambient Monitoring - 1991	57					
SITCUMRI	Port of Tacoma RI/NRDA (Sitcum/Milwaukee/Blair)	79			36		
SOPARK91	South Park Marina maint. dredge, 1991	2			1		
TERM5_91	Terminal 5 (Elliott Bay, West Waterway) maint. dredge	3			3		
TERMNL91	Terminal 91, west side apron construction	3			3		
TPPS3AB	***METRO Toxic Priority Pollutant Survey, 198?***		***27***				
TXNPDS92	Texaco Inc. refinery (Anacortes), NPDES sediment studie	3					
USOILVLF	U.S. Oil refinery (Blair Waterway) maint. dredge	9			5		
1988 Subtotal		***287***	***201***		***0***	***50***	***56***
1994 Subtotal		387	0		205	0	0
Grand Total		674	201		205	50	56

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
1TREE_89	TR890101	TR89FDL4C001	NO HIT					
1TREE_89	TR890702	TR89FDL5C002	HIT					
1TREE_89	TR892305	TR89DVR8C005	NO HIT					
ALKI	AP-01	AP-01		NO HIT				
ALKI	AP-02	AP-02		NO HIT				
ALKI	AP-03	AP-03		NO HIT				
ALKI	AP-04	AP-04		HIT				
ALKI	AP-05	AP-05		NO HIT				
ALKI	AP-06	AP-06		NO HIT				
ALKI	AP-07	AP-07		NO HIT				
ALKI	PW-01	PW-01		NO HIT				
ALKI	PW-02	PW-02		NO HIT				
ALKI	PW-03	PW-03		NO HIT				
ALKI	PW-04	PW-04		NO HIT				
AMPRES92	APL_01MC	AMPRES92C001	NO HIT		HIT			
AMPRES92	APL_01MC	AMPRES92C002	NO HIT		NO HIT			
ANCHOR90	ANCH0101	ANCH90XXC001	NO HIT		HIT			
ARCOCPC2	CP9101XX	CP91EDGES001	HIT					
ARCOCPC2	CP9102XX	CP91BKGDS002	NO HIT					
BCWTACC2	BC8901XX	BC89MIDPS001	NO HIT					
BCWTACC2	BC8902XX	BC89OUTZS002	NO HIT					
BLAIR_91	BL910101	BLAIR91XC001	HIT		HIT			
BLAIR_91	BL910402	BLAIR91XC002	NO HIT		NO HIT			
BLAIR_91	BL9106MC	BLAIR91XC003			NO HIT			
BLAIR_91	BL9109MC	BLAIR91XC004			HIT			
BLAIR_91	BL9112MC	BLAIR91XC005			HIT			
BLAIR_91	BL911606	BLAIR91XC006	NO HIT		NO HIT			
BLAIR_91	BL911907	BLAIR91XC007	NO HIT		NO HIT			

Table B-9. Final biological effects file used for 1994 AET calculations.
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			Bioeffect Type:					
Survey Code	Station ID	Sample ID	A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
BLAIR_91	BL912208	BLAIR91XC008	NO HIT		HIT			
BLAIR_91	BL912409	BLAIR91XC009	HIT					
BLAIR_91	BL9127MC	BLAIR91XC010	NO HIT		HIT			
BLAIR_91	BL913011	BLAIR91XC011	NO HIT		HIT			
BLAIR_91	BL913412	BLAIR91XC012	NO HIT		HIT			
BLAIR_91	BL9136MC	BLAIR91XC013			NO HIT			
BLAIR_91	BL9138MC	BLAIR91XC014	HIT		HIT			
BLAIR_91	BL9141MC	BLAIR91XC015			HIT			
BLAIR_91	BL914516	BLAIR91XC016	HIT		HIT			
BLAIR_91	BL914817	BLAIR91XC017	NO HIT		HIT			
BLAIR_91	BL915118	BLAIR91XC018	NO HIT		HIT			
BLAIR_91	BL915419	BLAIR91XC019	NO HIT		HIT			
BLAIR_91	BL915720	BLAIR91XC020	NO HIT		HIT			
BLAIR_91	BL915921	BLAIR91XC021	NO HIT		HIT			
BLAIR_91	BL916322	BLAIR91XC022	NO HIT		NO HIT			
BLAIR_91	BL9105MC	BLAIR91XC023	NO HIT		NO HIT			
BLAIR_91	BL9110MC	BLAIR91XC024	NO HIT		NO HIT			
BLAIR_91	BL9123MC	BLAIR91XC025	NO HIT		NO HIT			
BLAIR_91	BL9140MC	BLAIR91XC026	NO HIT		NO HIT			
BLAIR_91	BL9127MC	BLAIR91XC027	NO HIT		NO HIT			
BLGM_91A	BLGM09MC	BLGMBYXXC004	NO HIT		NO HIT			
BLGM_91A	BLGM0606	BLGMBYXXC006	NO HIT		NO HIT			
BLGM_91A	BLGM1608	BLGMBYXXC008	NO HIT		HIT			
BLGM_91A	BLGM3312	BLGMBYXXC012	NO HIT					
BLGM_91A	BLGM3713	BLGMBYXXC013	HIT		NO HIT			
BLGM_91A	BLGM4714	BLGMBYXXC014	NO HIT		NO HIT			
BLGM_91A	BLGM6518	BLGMBYXXC018	HIT		HIT			
BLGM_91A	BLGM3713	BLGMBYXXS001	HIT		HIT			

Table B-9. Final biological effects file used for 1994 AET calculations.
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			Bioeffect Type:		ECHN	ECHN		
Survey Code	Station ID	Sample ID	A	B	abnorm.	Eff. Mort.	M	O
BLGM_91A	BLGM3813	BLGMBYXXS002	HIT		NO HIT			
BLGM_91A	BLGM39XX	BLGMBYXXS003	HIT		HIT			
BLGM_91A	BLGM40XX	BLGMBYXXS004	HIT		NO HIT			
BLGM_91A	BLGM41XX	BLGMBYXXS005	HIT		HIT			
BLGM_91A	BLGM42XX	BLGMBYXXS006	NO HIT		NO HIT			
BLGM_91A	BLGM43XX	BLGMBYXXS007	NO HIT		HIT			
BLGM_91A	BLGM45XX	BLGMBYXXS009	HIT		NO HIT			
BLGM_91A	BLGM46XX	BLGMBYXXS010	HIT		HIT			
BLGM_91A	BLGM4714	BLGMBYXXS011	HIT		HIT			
BLGM_91A	BLGM4814	BLGMBYXXS012	HIT		HIT			
BLGM_91A	BLGM5015	BLGMBYXXS014			HIT			
BLGM_91A	BLGM57XX	BLGMBYXXS024			HIT			
BPFERNC2	BP8901XX	BPATOUTFS001	NO HIT					
BPFERNC2	BP8903XX	BPCNTROLS003	NO HIT					
BPFERNC2	BP8902XX	BPNROUTFS002	NO HIT					
BREMWTC2	BM8801XX	BM88EASTS001	NO HIT					
BREMWTC2	BM8802XX	BM88WESTS002	NO HIT					
BREMWTC2	BM8803XX	BM88CTRLS003	NO HIT					
CASCADRI	CASC2D3	E	NO HIT		NO HIT			
CBBLAIR	B03	B03	NO HIT	NO HIT				NO HIT
CBBLAIR	B04	B04	NO HIT	NO HIT				NO HIT
CBBLAIR	B09	B09	NO HIT	NO HIT				NO HIT
CBBLAIR	B10	B10	NO HIT	NO HIT				HIT
CBBLAIR	B12	B12	NO HIT	NO HIT				NO HIT
CBBLAIR	B15	B15	HIT	NO HIT				NO HIT
CBMSQS	BL-11	BL-11	NO HIT	NO HIT			NO HIT	NO HIT
CBMSQS	BL-13	BL-13	NO HIT	NO HIT			HIT	NO HIT
CBMSQS	BL-21	BL-21	NO HIT	NO HIT			NO HIT	NO HIT

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

			Bioeffect Type:		ECHN	ECHN		
Survey Code	Station ID	Sample ID	A	B	abnorm.	Eff. Mort.	M	O
CBMSQS	BL-25	BL-25	HIT	NO HIT			NO HIT	NO HIT
CBMSQS	BL-28	BL-28	NO HIT	NO HIT			NO HIT	NO HIT
CBMSQS	BL-31	BL-31	NO HIT	NO HIT			HIT	NO HIT
CBMSQS	CI-11	CI-11	HIT	HIT			HIT	HIT
CBMSQS	CI-13	CI-13	NO HIT	HIT			HIT	HIT
CBMSQS	CI-16	CI-16		HIT			HIT	HIT
CBMSQS	CI-17	CI-17	NO HIT	HIT			HIT	NO HIT
CBMSQS	CI-20	CI-20	HIT	NO HIT			NO HIT	HIT
CBMSQS	CI-22	CI-22	NO HIT	NO HIT			NO HIT	NO HIT
CBMSQS	CR-11	CR-11	NO HIT	NO HIT			NO HIT	NO HIT
CBMSQS	CR-12	CR-12	NO HIT	NO HIT			NO HIT	NO HIT
CBMSQS	CR-13	CR-13	NO HIT	NO HIT			NO HIT	NO HIT
CBMSQS	CR-14	CR-14	NO HIT	NO HIT			NO HIT	NO HIT
CBMSQS	HY-12	HY-12	NO HIT	NO HIT			HIT	HIT
CBMSQS	HY-14	HY-14	NO HIT	HIT			HIT	NO HIT
CBMSQS	HY-17	HY-17	NO HIT	HIT			HIT	HIT
CBMSQS	HY-22	HY-22	HIT	HIT			HIT	HIT
CBMSQS	HY-23	HY-23	HIT	HIT			HIT	HIT
CBMSQS	HY-24	HY-24	NO HIT	HIT			HIT	NO HIT
CBMSQS	HY-28	HY-28	NO HIT	HIT			NO HIT	NO HIT
CBMSQS	HY-32	HY-32	NO HIT	HIT			NO HIT	NO HIT
CBMSQS	HY-37	HY-37	NO HIT	HIT			HIT	NO HIT
CBMSQS	HY-42	HY-42	HIT	HIT			HIT	NO HIT
CBMSQS	HY-43	HY-43	NO HIT	HIT			HIT	NO HIT
CBMSQS	HY-44	HY-44	NO HIT	NO HIT			NO HIT	NO HIT
CBMSQS	HY-47	HY-47	HIT	HIT			HIT	HIT
CBMSQS	HY-50	HY-50	NO HIT	NO HIT			HIT	NO HIT
CBMSQS	MD-12	MD-12	NO HIT	HIT			NO HIT	NO HIT

Table B-9. Final biological effects file used for 1994 AET calculations.
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			Bioeffect Type:		ECHN	ECHN		
Survey Code	Station ID	Sample ID	A	B	abnorm.	Eff. Mort.	M	O
CBMSQS	MI-11	MI-11	HIT	NO HIT			NO HIT	NO HIT
CBMSQS	MI-13	MI-13	NO HIT	NO HIT			HIT	NO HIT
CBMSQS	MI-15	MI-15	HIT	NO HIT			HIT	NO HIT
CBMSQS	RS-12	RS-12	NO HIT	NO HIT			NO HIT	NO HIT
CBMSQS	RS-13	RS-13	HIT	NO HIT			NO HIT	HIT
CBMSQS	RS-14	RS-14	NO HIT	NO HIT			NO HIT	NO HIT
CBMSQS	RS-18	RS-18	HIT	HIT			HIT	HIT
CBMSQS	RS-19	RS-19	HIT	HIT			HIT	HIT
CBMSQS	RS-20	RS-20	NO HIT	HIT			HIT	NO HIT
CBMSQS	RS-22	RS-22	NO HIT	NO HIT			NO HIT	NO HIT
CBMSQS	RS-24	RS-24	HIT	NO HIT			NO HIT	NO HIT
CBMSQS	SI-11	SI-11	NO HIT	HIT			HIT	NO HIT
CBMSQS	SI-12	SI-12	HIT	HIT			HIT	NO HIT
CBMSQS	SI-15	SI-15	HIT	NO HIT			NO HIT	NO HIT
CBMSQS	SP-11	SP-11	NO HIT	HIT			HIT	NO HIT
CBMSQS	SP-12	SP-12	NO HIT	NO HIT			HIT	HIT
CBMSQS	SP-14	SP-14	HIT	HIT			HIT	HIT
CBMSQS	SP-15	SP-15	HIT	HIT			HIT	HIT
CBMSQS	SP-16	SP-16	HIT	HIT			HIT	HIT
CGPIER35	PIER01MC	PIER35XXC001	NO HIT		NO HIT			
CGPIER35	PIER01MC	PIER35XXC002	HIT		HIT			
CGPIER35	PIER02MC	PIER35XXS001	NO HIT		HIT			
CHEVMD90	CHEV01MC	CHEV90XXC001	NO HIT		NO HIT			
CHEVMD90	CHEV0302	CHEV90XXC002	NO HIT		HIT			
CHEVMD90	CHEV02XX	CHEV90XXS001	NO HIT					
CNKTSPC2	CK8801XX	CK88OUTFS001	NO HIT					
CNKTSPC2	CK8802XX	CK88OUTFS002	NO HIT					
CNKTSPC2	CK8803XX	CK88BKGDS003	NO HIT					

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
DAYISL91	DAYI0101	DAYISL91C001	NO HIT		NO HIT			
DUWO&M89	27	C8	NO HIT		NO HIT			
DUWO&M89	DU891111	DUWR89XXC011	NO HIT					
DUWO&M89	DU891312	DUWR89XXC012	NO HIT					
DUWO&M89	DU8906XX	DUWR89XXS006	NO HIT					
DUWO&M89	DU8908XX	DUWR89XXS008	NO HIT					
DUWO&M89	DU8909XX	DUWR89XXS009	NO HIT					
DUWO&M89	DU8910XX	DUWR89XXS010	NO HIT					
DUWO&M89	DU8915XX	DUWR89XXS013	NO HIT					
DUWO&M89	DU8916XX	DUWR89XXS014	HIT					
DUWO&M89	DU8917XX	DUWR89XXS015	HIT					
DUWO&M89	DU8918XX	DUWR89XXS016	HIT					
DUWO&M89	DU8919XX	DUWR89XXS017	NO HIT					
DUWO&M90	DU9001XX	DUWO&M90S001	HIT		HIT			HIT
DUWO&M90	DU9003XX	DUWO&M90S003	NO HIT		HIT			HIT
DUWO&M90	DU9004XX	DUWO&M90S004	HIT		HIT			HIT
DUWO&M90	DU9005XX	DUWO&M90S005	NO HIT		HIT			HIT
DUWO&M91	DU9111XX	DUWO&M91S003	NO HIT					
DUWRIV1	DR-01	DR-01	NO HIT					
DUWRIV1	DR-02	DR-02	NO HIT					
DUWRIV1	DR-03	DR-03	NO HIT					
DUWRIV1	DR-04	DR-04	NO HIT					
DUWRIV1	DR-05	DR-05	NO HIT					
DUWRIV1	DR-06	DR-06	NO HIT					
DUWRIV1	DR-07	DR-07	HIT					
DUWRIV1	DR-08	DR-08	HIT					
DUWRIV1	SQ-09	SQ-09	NO HIT					
DUWRIV2	DR-10	CA1	HIT					

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

			Bioeffect Type:		ECHN	ECHN		
Survey Code	Station ID	Sample ID	A	B	abnorm.	Eff. Mort.	M	O
DUWRIV2	DR-11	CA2	HIT					
DUWRIV2	DR-12	CA3	NO HIT					
DUWRIV2	DR-13	CB1	NO HIT					
DUWRIV2	DR-14	CB2	NO HIT					
DUWRIV2	DR-15	CB3	NO HIT					
DUWRIV2	DR-16	CB4	HIT					
DUWRIV2	DR-17	CB5	NO HIT					
DUWRIV2	DR-18	CC1	NO HIT					
DUWRIV2	DR-19	CC2	NO HIT					
DUWRIV2	DR-20	CC3	NO HIT					
DUWRIV2	DR-21	CC4	NO HIT					
DUWRIV2	DR-22	CC5	NO HIT					
DUWRIV2	DR-23	CD1	NO HIT					
DUWRIV2	DR-24	CD2	NO HIT					
DUWRIV2	DR-25	CE1	HIT					
DUWRIV2	DR-26	CE2	HIT					
DUWRIV2	DR-27	CE3	HIT					
DUWRIV2	DR-28	CF1	NO HIT					
DUWRIV2	DR-29	CF2	HIT					
DUWRIV2	DR-30	CF3	NO HIT					
DUWRIV2	DR-31	CF4	NO HIT					
DUWRIV2	DR-32	CF5	NO HIT					
DUWRIV2	DR-33	CG1	NO HIT					
DUWRIV2	DR-34	CG2	NO HIT					
DUWRIV2	DR-35	CG3	NO HIT					
DUWRIV2	DR-36	CG4	NO HIT					
DUWRIV2	DR-37	CG5	NO HIT					
DUWRIV2	DR-38	CH1	NO HIT					

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
DUWRIV2	DR-39	CW/A1	NO HIT					
DUWRIV2	SQ-21	SEQUIM	NO HIT					
DUYACHT1	DUWY01XX	DUWYATXXS001	HIT					
DUYACHT1	DUWY02XX	DUWYATXXS002	HIT					
DUYACHT1	DUWY03XX	DUWYATXXS003	NO HIT					
DUYACHT1	DUWY04XX	DUWYATXXS004	HIT					
DUYACHT1	DUWY05XX	DUWYATXXS005	HIT					
EBCHEM	AB-01	AB-01	HIT					
EBCHEM	AB-02	AB-02	NO HIT	NO HIT				
EBCHEM	AB-03	AB-03	NO HIT	HIT				
EBCHEM	AB-04	AB-04	NO HIT	NO HIT				
EBCHEM	DR-01	DR-01	NO HIT					
EBCHEM	DR-02	DR-02	HIT					
EBCHEM	DR-03	DR-03	NO HIT					
EBCHEM	DR-04	DR-04	NO HIT					
EBCHEM	DR-06	DR-06	NO HIT					
EBCHEM	DR-07	DR-07	NO HIT					
EBCHEM	DR-09	DR-09	NO HIT					
EBCHEM	DR-10	DR-10	NO HIT					
EBCHEM	DR-11	DR-11	NO HIT					
EBCHEM	DR-12	DR-12	NO HIT					
EBCHEM	DR-13	DR-13	HIT					
EBCHEM	DR-14	DR-14	HIT					
EBCHEM	DR-15	DR-15	HIT					
EBCHEM	DR-16	DR-16	HIT					
EBCHEM	DR-17	DR-17	NO HIT					
EBCHEM	DR-25	DR-25	HIT					
EBCHEM	EW-01	EW-01	NO HIT					

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

			Bioeffect Type:		ECHN	ECHN		
Survey Code	Station ID	Sample ID	A	B	abnorm.	Eff. Mort.	M	O
EBCHEM	EW-02	EW-02	HIT	HIT				
EBCHEM	EW-03	EW-03		NO HIT				
EBCHEM	EW-04	EW-04	HIT	HIT				
EBCHEM	EW-05	EW-05	HIT	HIT				
EBCHEM	EW-05	EW-05	HIT	HIT				
EBCHEM	EW-06	EW-06	HIT	HIT				
EBCHEM	EW-07	EW-07	HIT	HIT				
EBCHEM	EW-08	EW-08	HIT	HIT				
EBCHEM	EW-09	EW-09	HIT	HIT				
EBCHEM	EW-10	EW-10	HIT	NO HIT				
EBCHEM	EW-11	EW-11	HIT	HIT				
EBCHEM	EW-12	EW-12	NO HIT	NO HIT				
EBCHEM	EW-13	EW-13	NO HIT	NO HIT				
EBCHEM	EW-14	EW-14	NO HIT	NO HIT				
EBCHEM	EW-15	EW-15	NO HIT	NO HIT				
EBCHEM	EW-16	EW-16	HIT	NO HIT				
EBCHEM	KG-01	KG-01	NO HIT	HIT				
EBCHEM	KG-02	KG-02	HIT					
EBCHEM	KG-03	KG-03	HIT	NO HIT				
EBCHEM	KG-04	KG-04	NO HIT					
EBCHEM	KG-05	KG-05	HIT	HIT				
EBCHEM	KG-06	KG-06	NO HIT	HIT				
EBCHEM	KG-07	KG-07	NO HIT	HIT				
EBCHEM	KG-08	KG-08	NO HIT	HIT				
EBCHEM	KG-09	KG-09	HIT	NO HIT				
EBCHEM	KG-10	KG-10	HIT					
EBCHEM	KG-11	KG-11	HIT	HIT				
EBCHEM	MG-01	MG-01	NO HIT	HIT				

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
EBCHEM	MG-02	MG-02	NO HIT	HIT				
EBCHEM	MG-03	MG-03	NO HIT	HIT				
EBCHEM	MG-04	MG-04	NO HIT	HIT				
EBCHEM	NH-01	NH-01	NO HIT	HIT				
EBCHEM	NH-02	NH-02	HIT	HIT				
EBCHEM	NH-03	NH-03	HIT	HIT				
EBCHEM	NH-04	NH-04	HIT	HIT				
EBCHEM	NH-05	NH-05	HIT	HIT				
EBCHEM	NH-06	NH-06	HIT	HIT				
EBCHEM	NH-07	NH-07	NO HIT					
EBCHEM	NH-08	NH-08	HIT	HIT				
EBCHEM	NH-09	NH-09	HIT	NO HIT				
EBCHEM	NH-10	NH-10	NO HIT					
EBCHEM	NH-11	NH-11	HIT	HIT				
EBCHEM	NS-01	NS-01	HIT					
EBCHEM	NS-02	NS-02	NO HIT	NO HIT				
EBCHEM	NS-03	NS-03	NO HIT	NO HIT				
EBCHEM	NS-05	NS-05	NO HIT	NO HIT				
EBCHEM	NS-06	NS-06		HIT				
EBCHEM	NS-07	NS-07	HIT	NO HIT				
EBCHEM	NS-08	NS-08	HIT	HIT				
EBCHEM	PS-01	PS-01	NO HIT	NO HIT				
EBCHEM	PS-01	PS-01	NO HIT	NO HIT				
EBCHEM	PS-02	PS-02	NO HIT	NO HIT				
EBCHEM	PS-03	PS-03	NO HIT	NO HIT				
EBCHEM	PS-04	PS-04	NO HIT	NO HIT				
EBCHEM	SS-01	SS-01	NO HIT	NO HIT				
EBCHEM	SS-03	SS-03	HIT	HIT				

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
EBCHEM	SS-04	SS-04	NO HIT	HIT				
EBCHEM	SS-05	SS-05	NO HIT	NO HIT				
EBCHEM	SS-05	SS-05	NO HIT	NO HIT				
EBCHEM	SS-06	SS-06	HIT	HIT				
EBCHEM	SS-07	SS-07	HIT	NO HIT				
EBCHEM	SS-08	SS-08	HIT	HIT				
EBCHEM	SS-09	SS-09	HIT	HIT				
EBCHEM	SS-11	SS-11	NO HIT	NO HIT				
EBCHEM	SS-12	SS-12	NO HIT	NO HIT				
EBCHEM	WW-01	WW-01	NO HIT	HIT				
EBCHEM	WW-02	WW-02	HIT					
EBCHEM	WW-03	WW-03	NO HIT	HIT				
EBCHEM	WW-04	WW-04	NO HIT	HIT				
EBCHEM	WW-05	WW-05	NO HIT	HIT				
EBCHEM	WW-06	WW-06	NO HIT	HIT				
EBCHEM	WW-06	WW-06	NO HIT	HIT				
EBCHEM	WW-08	WW-08	HIT	HIT				
EBCHEM	WW-09	WW-09	HIT	HIT				
EBCHEM	WW-10	WW-10	NO HIT	HIT				
EBCHEM	WW-11	WW-11	HIT	HIT				
EBCHEM	WW-12	WW-12	HIT	HIT				
EBCHEM	WW-13	WW-13	NO HIT	NO HIT				
EBCHEM	WW-14	WW-14		HIT				
EBCHEM	WW-15	WW-15	NO HIT					
EBCHEM	WW-16	WW-16	NO HIT	HIT				
EBCHEM	WW-17	WW-17	NO HIT	HIT				
EBCHEM	WW-18	WW-18	NO HIT	HIT				
EBCHEM	WW-19	WW-19	NO HIT	HIT				

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
EBCHEM	WW-20	WW-20	NO HIT	HIT				
EDMDWTC2	ED8901XX	OUTRIDGAS001	NO HIT					
EDMDWTC2	ED8902XX	SWOUTFLBS002	NO HIT					
EDMDWTC2	ED8903XX	ED89BKGDS003	NO HIT					
EHCHEM	BH-01	B1	NO HIT	NO HIT				
EHCHEM	BH-02	B1	NO HIT	NO HIT				
EHCHEM	EH-01	B1	NO HIT	NO HIT				
EHCHEM	EH-02	B1	NO HIT	HIT				
EHCHEM	EH-05	V1	NO HIT	HIT				
EHCHEM	EH-08	V1	HIT	HIT				
EHCHEM	EH-15	V1	NO HIT	HIT				
EHCHEM	EH-16	V1	NO HIT	HIT				
EHCHEM	EH-03	V6	NO HIT	HIT				
EHCHEM	EH-06	V6	NO HIT	HIT				
EIGHTBAY	BH-03	BH-03	NO HIT					
EIGHTBAY	BH-04	BH-04	NO HIT					
EIGHTBAY	BH-05	BH-05	HIT					
EIGHTBAY	BH-07	BH-07	NO HIT					
EIGHTBAY	BH-11	BH-11	NO HIT					
EIGHTBAY	BH-12	BH-12	NO HIT					
EIGHTBAY	BH-23	BH-23	HIT					
EIGHTBAY	BH-24	BH-24	NO HIT					
EIGHTBAY	CS-01	CS-01	HIT					
EIGHTBAY	CS-11	CS-11	HIT					
EIGHTBAY	CS-15	CS-15	HIT					
EIGHTBAY	CS-17	CS-17	HIT					
EIGHTBAY	DB-01	DB-01	NO HIT					
EIGHTBAY	DB-05	DB-05	NO HIT					

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

			Bioeffect Type:		ECHN	ECHN		
Survey Code	Station ID	Sample ID	A	B	abnorm.	Eff. Mort.	M	O
EIGHTBAY	DB-07	DB-07	HIT					
EIGHTBAY	DB-15	DB-15	HIT					
EIGHTBAY	EL-09	EL-09	NO HIT					
EIGHTBAY	EL-10	EL-10	NO HIT					
EIGHTBAY	EL-12	EL-12	NO HIT					
EIGHTBAY	EL-17	EL-17	NO HIT					
EIGHTBAY	EL-20	EL-20	NO HIT					
EIGHTBAY	EL-22	EL-22	NO HIT					
EIGHTBAY	EL-23	EL-23	NO HIT					
EIGHTBAY	EL-24	EL-24	NO HIT					
EIGHTBAY	EV-01	EV-01	HIT					
EIGHTBAY	EV-02	EV-02	HIT					
EIGHTBAY	EV-03	EV-03	HIT					
EIGHTBAY	EV-04	EV-04	HIT					
EIGHTBAY	EV-05	EV-05	HIT					
EIGHTBAY	EV-06	EV-06	NO HIT					
EIGHTBAY	EV-07	EV-07	NO HIT					
EIGHTBAY	EV-11	EV-11	HIT					
EIGHTBAY	SC-06	SC-06	HIT					
EIGHTBAY	SC-07	SC-07	NO HIT					
EIGHTBAY	SC-08	SC-08	HIT					
EIGHTBAY	SC-14	SC-14	HIT					
EIGHTBAY	SC-17	SC-17	HIT					
EIGHTBAY	SC-18	SC-18	HIT					
EIGHTBAY	SC-19	SC-19	NO HIT					
EIGHTBAY	SC-20	SC-20	HIT					
EIGHTBAY	SM-01	SM-01	HIT					
EIGHTBAY	SM-03	SM-03	HIT					

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
EIGHTBAY	SM-07	SM-07	HIT					
EIGHTBAY	SM-20	SM-20	HIT					
EIGHTBAY	SQ-14	SQ-14	NO HIT					
EIGHTBAY	SQ-17	SQ-17	NO HIT					
EIGHTBAY	SQ-18	SQ-18	NO HIT					
EIGHTBAY	SQ-20	SQ-20	NO HIT					
EVCHEM	ES-01	ES-01G	NO HIT					
EVCHEM	ES-02	ES-02G	NO HIT					
EVCHEM	ES-03	ES-03G	NO HIT					
EVCHEM	EW-01	EW-01G	HIT	HIT				
EVCHEM	EW-04	EW-04G	HIT	HIT				
EVCHEM	EW-07	EW-07G	HIT	HIT				
EVCHEM	EW-10	EW-10G	HIT	HIT				
EVCHEM	EW-12	EW-12G	NO HIT	HIT				
EVCHEM	EW-14	EW-14G		HIT				
EVCHEM	NG-01	NG-01G	NO HIT	NO HIT				
EVCHEM	NG-02	NG-02G	NO HIT	HIT				
EVCHEM	NG-03	NG-03G	NO HIT	HIT				
EVCHEM	NG-04	NG-04G	HIT	HIT				
EVCHEM	NG-06	NG-06G	HIT	NO HIT				
EVCHEM	NG-10	NG-10G	NO HIT	NO HIT				
EVCHEM	NG-12	NG-12G	NO HIT					
EVCHEM	NG-13	NG-13G	NO HIT					
EVCHEM	NG-14	NG-14G	NO HIT					
EVCHEM	NG-15	NG-15G	NO HIT					
EVCHEM	OG-03	OG-03G	HIT					
EVCHEM	PS-02	PS-02G	NO HIT	NO HIT				
EVCHEM	PS-03	PS-03G	NO HIT	NO HIT				

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

			Bioeffect Type:		ECHN	ECHN		
Survey Code	Station ID	Sample ID	A	B	abnorm.	Eff. Mort.	M	O
EVCHEM	PS-04	PS-04G	NO HIT	NO HIT				
EVCHEM	SD-01	SD-01G	NO HIT	HIT				
EVCHEM	SD-02	SD-02G		NO HIT				
EVCHEM	SR-01	SR-01G	NO HIT					
EVCHEM	SR-02	SR-02G	NO HIT					
EVCHEM	SR-04	SR-04G	NO HIT					
EVCHEM	SR-07	SR-07G		HIT				
EVCHEM	SR-08	SR-08G	NO HIT	HIT				
EVCHEM	SS-01	SS-01G	NO HIT					
EVCHEM	SS-03	SS-03G	NO HIT					
EVERETT1	EV-20	EV-20	NO HIT					
EVERETT1	EV-21	EV-21	NO HIT					
EVERETT1	EV-22	EV-22	NO HIT					
EVERETT1	EV-23	EV-23	NO HIT					
EVERETT1	EV-24	EV-24	HIT					
EVERETT1	EV-25	EV-25	NO HIT					
EVMAR_88	EVMR0601	EVRTMRXXC001	NO HIT					NO HIT
EVMAR_88	EVMR0302	EVRTMRXXC002	HIT					NO HIT
EVMAR_88	EVMR0203	EVRTMRXXC003	NO HIT					NO HIT
EVMAR_88	EVMR0405	EVRTMRXXC005	NO HIT					NO HIT
EVMAR_88	EVMR0506	EVRTMRXXC006	NO HIT					NO HIT
EVRT10TH	EV100101	EV10ST92C001	NO HIT		NO HIT			
EVRT12TH	EV1201MC	EV12TH92C001			HIT			
EVRT12TH	EV1202MC	EV12TH92C002			HIT			
EVRT12TH	EV1204MC	EV12TH92C004			HIT			
EVRT12TH	EV1205MC	EV12TH92C005			HIT			
EVRT12TH	EV1206MC	EV12TH92C006			HIT			
EVRT12TH	EV1207MC	EV12TH92C007			HIT			

Table B-9. Final biological effects file used for 1994 AET calculations.
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			Bioeffect Type:					
Survey Code	Station ID	Sample ID	A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
EVWEYCII	WE8801XX	FIELDCNTS001	NO HIT					
EVWEYCII	WE8802XX	OUTFALLXS002	NO HIT					
EVWEYCII	WE8803XX	BELOWOUTS003	NO HIT					
GAPAC_C2	GAPA02XX	GA_PACXXS002	NO HIT					
GAPAC_C2	GAPA03XX	GA_PACXXS003	NO HIT					
GAPAC_C2	GAPA04XX	GA_PACXXS004	HIT					
HULB90FC	HULB0101	HULB90FCC001	HIT		NO HIT			
HULB90FC	HULB0402	HULB90FCC002	HIT		NO HIT			
HULB90FC	HULB07MC	HULB90FCC003	HIT		NO HIT			
HULB90FC	HULB10MC	HULB90FCC004	HIT		NO HIT			
HULB90FC	HULB0305	HULB90FCC005	NO HIT		HIT			
HULB90FC	HULB0402	HULB90FCC006	HIT		NO HIT			
HULB90FC	HULB07MC	HULB90FCC007	HIT		NO HIT			
HULB90FC	HULB10MC	HULB90FCC008	HIT		NO HIT			
HURLEN89	HURL0101	HURLEN89C001	NO HIT					
INTALCC2	INC201XX	INTALCC2S001	HIT					
INTALCC2	INC202XX	INTALCC2S002	NO HIT					
INTALCC2	INC203XX	INTALCC2S003	NO HIT					
INTALCC2	INC204XX	INTALCC2S004	NO HIT					
LONEST89	LONE0101	LONE89XXC001	NO HIT					
LONEST92	LSNW0101	LONEST92C001	NO HIT					
LOTTO041	1	S1	NO HIT					
LOTTO041	1	S2	NO HIT					
LOTTO041	2	S3	NO HIT					
LOTTO043	1	C1	NO HIT		NO HIT			
METAMB88	JSTU01	METAMB88S614	NO HIT					
METAMB88	JSWW01	METAMB88S615	NO HIT					
METAMB88	KSGX02	METAMB88S617	NO HIT					

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

			Bioeffect Type:					
Survey Code	Station ID	Sample ID	A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
METAMB88	KSIV01	METAMB88S618	NO HIT					
METAMB88	KSRK02	METAMB88S619	NO HIT					
METAMB88	KSTK06	METAMB88S620	NO HIT					
METAMB88	LSKQ04	METAMB88S621	NO HIT					
METAMB88	LSLR03	METAMB88S622	NO HIT					
METAMB90	JSTU01	METAMB90S680	NO HIT					
METAMB90	JSWW01	METAMB90S686	NO HIT					
METAMB90	KSGX02	METAMB90S693	NO HIT					
METAMB90	KSIV01	METAMB90S699	NO HIT					
METAMB90	KSRK02	METAMB90S705	NO HIT					
METAMB90	KSTK06	METAMB90S711	NO HIT					
METAMB90	LSKQ04	METAMB90S717	NO HIT					
METAMB90	LSLR03	METAMB90S723	NO HIT					
METAMB92	JSTU01	METAMB92S770	NO HIT					
METAMB92	JSWW01	METAMB92S776	NO HIT					
METAMB92	KSGX02	METAMB92S783	NO HIT					
METAMB92	KSIV01	METAMB92S789	NO HIT					
METAMB92	KSRK02	METAMB92S795	NO HIT					
METAMB92	KSTK06	METAMB92S801	NO HIT					
METAMB92	LSKQ04	METAMB92S807	NO HIT					
METAMB92	LSLR03	METAMB92S813	NO HIT					
METROEBP	METR0101	MET154XXC001	NO HIT		NO HIT			
METROEBP	METR0402	MET407XXC002	NO HIT		HIT			
METROEBP	METR0703	MET571XXC003	NO HIT		NO HIT			
METROEBP	METR0201	MET153XXS001	NO HIT		HIT			
METROEBP	METR0301	MET155XXS002	NO HIT		HIT			
METROEBP	METR0602	MET406XXS003	NO HIT		NO HIT			
METROEBP	METR0803	MET570XXS004	NO HIT		NO HIT			

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

			Bioeffect Type:		ECHN	ECHN		
Survey Code	Station ID	Sample ID	A	B	abnorm.	Eff. Mort.	M	O
MORTON89	MORT0101	MORTONXXC001	NO HIT					
MORTON92	MORT0101	MORT92XXC001	NO HIT		NO HIT			
NAVYHPFC	NAVY01MC	NAVY89XXC001	NO HIT		NO HIT			
NAVYHPFC	NAVY0402	NAVY89XXC002	NO HIT		NO HIT			
NAVYHPFC	NAVY07MC	NAVY89XXC003	NO HIT		NO HIT			
NAVYHPFC	NAVY12MC	NAVY89XXC005	NO HIT		NO HIT			
NAVYHPFC	NAVY16MC	NAVY89XXC006	NO HIT		NO HIT			
NAVYHPFC	NAVY20MC	NAVY89XXC007	NO HIT		NO HIT			
NAVYHPFC	NAVY21MC	NAVY89XXC008	NO HIT		NO HIT			
NAVYHPFC	NAVY28MC	NAVY89XXC009	NO HIT		NO HIT			
NAVYHPFC	NAVY01MC	NAVY89XXC010	NO HIT		NO HIT			
NAVYHPFC	NAVY05MC	NAVY89XXC011	NO HIT		NO HIT			
NAVYHPFC	NAVY09MC	NAVY89XXC012	NO HIT		NO HIT			
NAVYHPFC	NAVY21MC	NAVY89XXC013	NO HIT		NO HIT			
NAVYHPFC	NAVY28MC	NAVY89XXC014	NO HIT		NO HIT			
NAVYHPFC	NAVY01MC	NAVY89XXC015	NO HIT		HIT			
NAVYHPFC	NAVY07MC	NAVY89XXC016	NO HIT		NO HIT			
NAVYHPFC	NAVY20MC	NAVY89XXC017	NO HIT		HIT			
NAVYHPFC	NAVY25MC	NAVY89XXC018	NO HIT		HIT			
NAVYHPFC	NAVY01MC	NAVY89XXC019	NO HIT		HIT			
NAVYHPFC	NAVY05MC	NAVY89XXC020	NO HIT		HIT			
NAVYHPFC	NAVY20MC	NAVY89XXC021	NO HIT		HIT			
NAVYHPFC	NAVY25MC	NAVY89XXC022	NO HIT		HIT			
NAVYHPFC	NAVY01MC	NAVY89XXC023	NO HIT		HIT			
NAVYHPFC	NAVY05MC	NAVY89XXC024	NO HIT		HIT			
NAVYHPFC	NAVY20MC	NAVY89XXC025	NO HIT		HIT			
NAVYHPFC	NAVY01MC	NAVY89XXC026	NO HIT		HIT			
NAVYHPFC	NAVY20MC	NAVY89XXC027	NO HIT		HIT			

Table B-9. Final biological effects file used for 1994 AET calculations.
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			Bioeffect Type:					
Survey Code	Station ID	Sample ID	A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
NAVYHPFC	NAVY01MC	NAVY89XXC028	HIT		HIT			
NAVYHPFC	NAVY20MC	NAVY89XXC029	HIT		HIT			
NAVYHPFC	NAVY01MC	NAVY89XXC030	NO HIT		HIT			
NAVYHPFC	NAVY20MC	NAVY89XXC031	HIT		HIT			
NAVYHPFC	NAVY11MC	NAVY89XXS004	NO HIT		NO HIT			
NAVYHPII	EVNV03MC	NAVYII90C002	NO HIT		HIT			
NAVYHPII	EVNV07MC	NAVYII90C003	NO HIT		HIT			
NAVYHPII	EVNV05MC	NAVYII90C005	HIT		HIT			
NAVYHPII	EVNV05MC	NAVYII90C007	NO HIT		HIT			
NAVYMANC	MANC0101	MANCHEXXC001	NO HIT		HIT			
NAVYMANC	MANC0702	MANCHEXXC002	NO HIT		HIT			
NAVYMANC	MANC04MC	MANCHEXXC003	NO HIT		NO HIT			
NAVYMANC	MANC1204	MANCHEXXC004	NO HIT		NO HIT			
NAVYMANC	MANC1505	MANCHEXXC005	NO HIT		HIT			
NAVYMANC	MANC1906	MANCHEXXC006	NO HIT					
NAVYMANC	MANC2207	MANCHEXXC007	NO HIT		NO HIT			
NAVYMANC	MANC1204	MANCHEXXS001	NO HIT		HIT			
NAVYMANC	MANC1505	MANCHEXXS002	NO HIT		HIT			
NAVYMANC	MANC1605	MANCHEXXS003	NO HIT		NO HIT			
NAVYMANC	MANC1705	MANCHEXXS004	NO HIT		NO HIT			
NAVYMANC	MANC18XX	MANCHEXXS005	HIT		HIT			
NAVYMANC	MANC1906	MANCHEXXS006	NO HIT		HIT			
NAVYMANC	MANC2006	MANCHEXXS007	NO HIT		NO HIT			
NAVYMANC	MANC2106	MANCHEXXS008	NO HIT		NO HIT			
OLYHARFC	OLYH17MC	OLYHFCXXC001	NO HIT		NO HIT			
OLYHARFC	OLYH19MC	OLYHFCXXC002	NO HIT		NO HIT			
OLYHARFC	OLYH09MC	OLYHFCXXC005	HIT					
OLYHARFC	OLYH02MC	OLYHFCXXC006	NO HIT		NO HIT			

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Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
OLYHARFC	OLYH08MC	OLYHFCXXC007	NO HIT		NO HIT			
OLYHARFC	OLYH07MC	OLYHFCXXC017	NO HIT					
OLYHARFC	OLYH21MC	OLYHFCXXC019	NO HIT					
OLYHARFC	OLYH06MC	OLYHFCXXC020	HIT		NO HIT			
OLYHARFC	OLYH25MC	OLYHFCXXS012			NO HIT			
OLYHARFC	OLYH07MC	OLYHFCXXS013	NO HIT		NO HIT			
OLYHARFC	OLYH24MC	OLYHFCXXS014	NO HIT		NO HIT			
OLYHARFC	OLYH25MC	OLYHFCXXS015	NO HIT		NO HIT			
OLYHARFC	OLYH26XX	OLYHFCXXS023	HIT		NO HIT			
OLYTERC2	OT9201XX	NORTHOUTS001	NO HIT		NO HIT			
OLYTERC2	OT9202XX	SOUTHOUTS002	NO HIT		HIT			
OLYTERC2	OT9203XX	OT92BKGDS003			HIT			
PENNWLC2	PN8801XX	EASTOUTFS001	NO HIT					
PENNWLC2	PN8802XX	WESTOUTFS002	NO HIT					
PENNWLC2	PN8803XX	MIDCHANLS003	NO HIT					
PIER53BL	P53_92S1	PIER53BLS294	NO HIT					HIT
PIER53BL	P53_92S2	PIER53BLS295	NO HIT					HIT
PIER53BL	P53_92T2	PIER53BLS296	NO HIT					HIT
PIER53BL	P5392S11	PIER53BLS297	NO HIT					HIT
PIER53BL	P5392ST1	PIER53BLS298	NO HIT					HIT
PIER53BL	P53_92S9	PIER53BLS299	NO HIT					HIT
PIERD_91	1	C1	HIT		HIT			
PIERD_91	3	C2	HIT					
PIERD_91	6	C3	HIT		HIT			
PIERD_91	8	C4	HIT		HIT			
PIERD_91	11	C5	NO HIT		NO HIT			
PIERD_91	16	C6	HIT		HIT			
PIERD_91	18	C7	HIT		NO HIT			

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			Bioeffect Type:		ECHN	ECHN		
Survey Code	Station ID	Sample ID	A	B	abnorm.	Eff. Mort.	M	O
PIERD_91	21	C8	HIT		NO HIT			
PIERD_91	18	C9	HIT		HIT			
PIERD_91	20	C10	HIT		HIT			
PIERD_91	22	C11	HIT		HIT			
PIERD_91	1	S1	NO HIT		HIT			
PIERD_91	2	S2	HIT		HIT			
PIERD_91	3	S3	HIT					
PIERD_91	4	S4	HIT					
PIERD_91	5	S5	HIT		HIT			
PIERD_91	6	S6	HIT		HIT			
PIERD_91	7	S7	HIT		HIT			
PIERD_91	8	S8	HIT		NO HIT			
PIERD_91	9	S9	HIT		HIT			
PIERD_91	10	S10	HIT		HIT			
PIERD_91	11	S11	HIT		HIT			
PIERD_91	12	S12	HIT		HIT			
PIERD_91	13	S13	HIT		HIT			
PIERD_91	14	S14	HIT		NO HIT			
PIERD_91	15	S15	NO HIT					
PIERD_91	16	S16	HIT		HIT			
PIERD_91	17	S17	HIT		HIT			
POSTPTC2	POST01XX	POSTPTXXS001	HIT					
POSTPTC2	POST03XX	POSTPTXXS003	HIT					
PSDDA1	CBB01	CBB01C	HIT					
PSDDA1	CBB03	CBB03C	HIT					
PSDDA1	CBS01	CBS01C	NO HIT					
PSDDA1	CBS08	CBS08C	NO HIT					
PSDDA1	CBZ01	CBZ01C	HIT					

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Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
PSDDA1	EBB01	EBB01C	NO HIT					
PSDDA1	EBB02	EBB02C	NO HIT					
PSDDA1	EBS01	EBS01C	NO HIT					
PSDDA1	EBS02	EBS02C	NO HIT					
PSDDA1	EBZ01	EBZ01C	NO HIT					
PSDDA1	PGB01	PGB01C	HIT					
PSDDA1	PGB02	PGB02C	HIT					
PSDDA1	PGZ01	PGZ01C	HIT					
PSDDA2	AKB02	AKB02C	NO HIT					
PSDDA2	AKZ01	AKZ01C	NO HIT					
PSDDA2	BBB01	BBB01C	NO HIT					
PSDDA2	BBB02	BBB02C	NO HIT					
PSDDA2	BBB04	BBB04C	NO HIT					
PSDDA2	BBZ01	BBZ01C	NO HIT					
PSDDAM90	EB_B01XX	EB90_B01	NO HIT		NO HIT			
PSDDAM90	EB_B02XX	EB90_B02	NO HIT		NO HIT			
PSDDAM90	EB_B03BX	EB90_B03B	HIT					
PSDDAM90	EB_B04AX	EB90_B04	NO HIT		NO HIT			
PSDDAM90	EB_Z01XX	EB90_Z01	NO HIT		HIT			
PSDDAM90	PG_B01XX	PG90_B01	NO HIT		NO HIT			
PSDDAM90	PG_B02XX	PG90_B02	HIT		HIT			
PSDDAM90	PG_S04XX	PG90_S04	NO HIT		HIT			
PSDDAM90	PG_S08XX	PG90_S08	NO HIT		HIT			
PSDDAM90	PG_Z06XX	PG90_Z06	NO HIT		HIT			
PSDDAM91	P91PG1XX	P91PGB09S001	HIT		HIT			
PSDDAM92	PMONZ01	PMONZ01S001	NO HIT		HIT			
PSDDAM92	PMONS02	PMONS02S002	NO HIT		HIT			
PSDDAM92	PMONS04	PMONS04S003	HIT		HIT			

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			Bioeffect Type:					
Survey Code	Station ID	Sample ID	A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
PSREF90	CR02	SD0002	NO HIT		NO HIT			NO HIT
PSREF90	CR20	SD0003	NO HIT		HIT			NO HIT
PSREF90	CR21	SD0004	NO HIT		NO HIT			HIT
PSREF90	CR22	SD0005	NO HIT		NO HIT			HIT
PSREF90	CR23	SD0006	NO HIT		NO HIT			NO HIT
PSREF90	CR24	SD0007	NO HIT		HIT			HIT
PSREF90	CR25	SD0008	NO HIT		NO HIT			NO HIT
PSREF90	SM30	SD0010	NO HIT		HIT			HIT
PSREF90	SM31	SD0011	NO HIT		NO HIT			HIT
PSREF90	SM32	SD0012	NO HIT		HIT			HIT
PSREF90	SM33	SD0013	NO HIT		NO HIT			HIT
PSREF90	SM34	SD0014	NO HIT		NO HIT			HIT
PSREF90	SM35	SD0015	NO HIT		NO HIT			HIT
PSREF90	SM36	SD0016	NO HIT		NO HIT			HIT
PSREF90	HH01	SD0017	NO HIT		HIT			HIT
PSREF90	HH02	SD0018	NO HIT		NO HIT			HIT
PSREF90	HM03	SD0019	NO HIT		NO HIT			HIT
PSREF90	HM04	SD0020	NO HIT		NO HIT			HIT
PSREF90	HM05	SD0021	NO HIT		HIT			HIT
PSREF90	HM06	SD0024	NO HIT		HIT			HIT
PSREF90	HM07	SD0025	NO HIT		HIT			HIT
PTORCHC2	PO8901XX	POATOUTFS001	NO HIT					
PTORCHC2	PO8902XX	PONROUTFS002	NO HIT					
PTORCHC2	PO8903XX	POCNTROLS003	NO HIT					
PTWNPCC2	PTC203XX	PTPCC287K003	NO HIT					
PTWNPCC2	PTC201XX	PTPCC287S001	NO HIT					
PTWNPCC2	PTC202XX	PTPCC287S002	NO HIT					
PTWNPENR	PT8702XX	PTWGLENCS002	NO HIT					

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
PTWNPENR	PT8703XX	PTEGLENCS003	NO HIT					
PTWNPENR	PT8705XX	PTPTWLSNS005	NO HIT					
SED18804	OH-1	OH-1	NO HIT					
SED18804	OH-2	OH-2	NO HIT					
SED18804	OH-3	OH-3	NO HIT					
SED18804	OH-4	OH-4	NO HIT					
SED18804	OH-5	OH-5	NO HIT					
SED18804	OH-6	OH-6	NO HIT					
SED18804	PA-1	PA-1	NO HIT					
SED18804	PA-2	PA-2	NO HIT					
SED18804	PA-3	PA-3	NO HIT					
SED18804	PA-4	PA-4A	NO HIT					
SED18804	PA-5	PA-5	NO HIT					
SED18804	PA-6	PA-6	NO HIT					
SED18903	1	1	NO HIT					
SED18903	2	1	NO HIT					
SED18903	3	1	NO HIT					
SED18903	4	1	NO HIT					
SED18903	5	1	NO HIT					
SED18903	6	1	NO HIT					
SED18903	7	1	NO HIT					
SED18903	8	1	NO HIT					
SED18903	9	1	NO HIT					
SED18903	10	1	NO HIT					
SED18903	11	1	NO HIT					
SED18903	12	1	NO HIT					
SED18903	13	1	NO HIT					
SED18903	14	1	NO HIT					

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
SED18903	15	1	NO HIT					
SED18903	16	1	NO HIT					
SED18903	17	1	NO HIT					
SED18903	18	1	NO HIT					
SED18903	19	1	NO HIT					
SED18903	20	1	NO HIT					
SED18903	21	1	NO HIT					
SED18903	22	1	NO HIT					
SED18903	23	1	NO HIT					
SED18903	24	1	HIT					
SED18903	25	1	NO HIT					
SED18903	26	1	NO HIT					
SED18903	27	1	NO HIT					
SED18903	28	1	NO HIT					
SED18903	29	1	NO HIT					
SED18903	30	1	NO HIT					
SED18903	31	1	NO HIT					
SED18903	32	1	NO HIT					
SED18903	33	1	NO HIT					
SED18903	34	1	NO HIT					
SED18903	35	1	HIT					
SED18903	36	1	NO HIT					
SED18903	37	1	NO HIT					
SED18903	38	1	NO HIT					
SED18903	39	1	NO HIT					
SED18903	40	1	NO HIT					
SED18903	41	1	NO HIT					
SED18903	42	1	NO HIT					

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Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
SED18903	43	1	NO HIT					
SED18903	44	1	NO HIT					
SED18903	45	1	NO HIT					
SED18903	46	1	NO HIT					
SED18903	47	1	NO HIT					
SED18903	48	1	NO HIT					
SED18903	49	1	NO HIT					
SED18903	50	1	NO HIT					
SED19003	1	1	HIT					
SED19003	3	3	NO HIT					
SED19003	4	4	HIT					
SED19003	5	5	NO HIT					
SED19003	5	51	NO HIT					
SED19003	5	52	HIT					
SED19003	5	53	HIT					
SED19003	8	8	NO HIT					
SED19003	12	12	HIT					
SED19003	14	14	HIT					
SED19003	15	15	NO HIT					
SED19003	17	17	HIT					
SED19003	18	18	HIT					
SED19003	19	19	HIT					
SED19003	20	20	HIT					
SED19003	21	21	NO HIT					
SED19003	22	22	NO HIT					
SED19003	26	26	NO HIT					
SED19003	29	29	NO HIT					
SED19003	30	30	NO HIT					

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
SED19003	32	32	NO HIT					
SED19003	32	57	NO HIT					
SED19003	32	58	NO HIT					
SED19003	32	59	NO HIT					
SED19003	33	33	NO HIT					
SED19003	34	34	HIT					
SED19003	35	35	HIT					
SED19003	35	72	HIT					
SED19003	35	73	HIT					
SED19003	35	74	HIT					
SED19003	38	38	HIT					
SED19003	38	60	NO HIT					
SED19003	38	61	HIT					
SED19003	38	62	HIT					
SED19003	39	39	NO HIT					
SED19003	40	40	NO HIT					
SED19003	41	41	NO HIT					
SED19003	43	43	NO HIT					
SED19003	44	44	NO HIT					
SED19003	44	63	NO HIT					
SED19003	44	64	NO HIT					
SED19003	44	65	NO HIT					
SED19003	45	45	NO HIT					
SED19003	47	47	NO HIT					
SED19003	48	48	HIT					
SED19003	49	49	HIT					
SED19003	69	69	NO HIT					
SED19003	70	70	NO HIT					

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
SED19003	71	71	NO HIT					
SED19003	101R	101R	HIT					
SED19003	102R	102R	HIT					
SED19003	103R	103R	NO HIT					
SED19003	104R	104R	HIT					
SED19003	105R	105R	HIT					
SED19003	106R	106R	HIT					
SED19003	108R	108R	NO HIT					
SED19003	109R	109R	HIT					
SED19003	110R	110R	HIT					
SED19003	111R	111R	NO HIT					
SED19003	112R	112R	NO HIT					
SED19003	113R	113R	NO HIT					
SED19003	114R	114R	HIT					
SED19003	115R	115R	HIT					
SED19003	116R	116R	NO HIT					
SED19003	46R	46R	NO HIT					
SED19103	1	1	NO HIT					
SED19103	3	3	NO HIT					
SED19103	4	4	NO HIT					
SED19103	5	5	NO HIT					
SED19103	5	51	NO HIT					
SED19103	5	52	NO HIT					
SED19103	5	53	NO HIT					
SED19103	8	8	NO HIT					
SED19103	12	12	NO HIT					
SED19103	14	14	NO HIT					
SED19103	15	15	NO HIT					

Table B-9. Final biological effects file used for 1994 AET calculations.
Results are ordered alphabetically by Survey Code and Sample ID. A = amphipod bioassay, B = benthic infaunal abundance, ECHN abnorm. = echinoderm larval abnormality, ECHN mort = echinoderm larval effective mortality, M = Microtox luminosity (saline extract), and O = oyster/bivalve larval abnormality.

Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
SED19103	17	17	NO HIT					
SED19103	18	18	HIT					
SED19103	19	19	NO HIT					
SED19103	20	20	NO HIT					
SED19103	21	21	NO HIT					
SED19103	22	22	NO HIT					
SED19103	26	26	NO HIT					
SED19103	29	29	NO HIT					
SED19103	30	30	NO HIT					
SED19103	32	32	NO HIT					
SED19103	32	57	NO HIT					
SED19103	32	58	NO HIT					
SED19103	32	59	NO HIT					
SED19103	33	33	NO HIT					
SED19103	34	34	NO HIT					
SED19103	35	35	NO HIT					
SED19103	35	72	NO HIT					
SED19103	35	73	NO HIT					
SED19103	35	74	NO HIT					
SED19103	38	38	NO HIT					
SED19103	38	60	NO HIT					
SED19103	38	61	NO HIT					
SED19103	38	62	NO HIT					
SED19103	39	39	NO HIT					
SED19103	40	40	NO HIT					
SED19103	41	41	NO HIT					
SED19103	43	43	NO HIT					
SED19103	44	44	NO HIT					

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Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
SED19103	44	63	NO HIT					
SED19103	44	64	NO HIT					
SED19103	44	65	NO HIT					
SED19103	45	45	NO HIT					
SED19103	47	47	NO HIT					
SED19103	48	48	NO HIT					
SED19103	49	49	NO HIT					
SED19103	69	69	NO HIT					
SED19103	70	70	NO HIT					
SED19103	71	71	NO HIT					
SED19103	R09	9	NO HIT					
SED19103	R10	10	NO HIT					
SED19103	R11	11	NO HIT					
SED19103	R13	13	NO HIT					
SED19103	R201	201	NO HIT					
SED19103	R202	202	NO HIT					
SED19103	R203	203	NO HIT					
SED19103	R204	204	NO HIT					
SED19103	R206	206	NO HIT					
SED19103	R207	207	HIT					
SED19103	R208	208	NO HIT					
SED19103	R209	209	NO HIT					
SHELLCII	SH8901XX	SH89OUTFS001	NO HIT					
SITCUMRI	NB-1	300001NB1	HIT					
SITCUMRI	NB-2	300055NB2	NO HIT					
SITCUMRI	NB-A1	300056NBA1	NO HIT					
SITCUMRI	NB-A2	300057NBA2	HIT					
SITCUMRI	NB-A3	300027NBA3	NO HIT					

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			Bioeffect Type:					
Survey Code	Station ID	Sample ID	A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
SITCUMRI	NB-A4	300003NBA4	NO HIT					
SITCUMRI	NB-A5	300023NBA5	NO HIT					
SITCUMRI	NB-A6	300032NBA6	NO HIT					
SITCUMRI	NB-A7	300034NBA7	NO HIT					
SITCUMRI	NB-B1	300029NBB1	NO HIT					
SITCUMRI	NB-B2	300030NBB2	NO HIT					
SITCUMRI	NB-B3	300054NBB3	NO HIT					
SITCUMRI	NB-B4	300041NBB4	NO HIT					
SITCUMRI	NB-B5	300053NBB5	NO HIT					
SITCUMRI	NB-B6	300052NBB6	NO HIT					
SITCUMRI	NB-C1	300087NBC1	NO HIT					
SITCUMRI	NB-C2	300104NBC2	NO HIT					
SITCUMRI	NB-C3	300103NBC3	NO HIT					
SITCUMRI	NB-C4	300102NBC4	NO HIT					
SITCUMRI	NB-C5	300101NBC5	NO HIT					
SITCUMRI	NB-C6	300100NBC6	NO HIT					
SITCUMRI	NC-I1	300092NCI1	NO HIT					
SITCUMRI	NC-I10	300080NCI10	NO HIT		NO HIT			
SITCUMRI	NC-I11	300079NCI11	NO HIT		HIT			
SITCUMRI	NC-I12	300078NCI12	NO HIT		NO HIT			
SITCUMRI	NC-I2	300091NCI2	NO HIT					
SITCUMRI	NC-I3	300090NCI3	NO HIT					
SITCUMRI	NC-I4	300089NCI4	NO HIT					
SITCUMRI	NC-I5	300088NCI5	NO HIT					
SITCUMRI	NC-I6	300086NCI6	NO HIT					
SITCUMRI	NC-I7	300085NCI7	HIT		HIT			
SITCUMRI	NC-I8	300084NCI8	NO HIT		NO HIT			
SITCUMRI	NC-I9	300081NCI9	NO HIT		NO HIT			

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Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
SITCUMRI	NC-S1	300051NCS1	NO HIT					
SITCUMRI	NC-S2	300050NCS2	NO HIT					
SITCUMRI	NC-S3	300049NCS3	NO HIT					
SITCUMRI	NC-S4	300048NCS4	NO HIT					
SITCUMRI	NC-S5	300043NCS5	NO HIT					
SITCUMRI	NC-S6	300042NCS6	NO HIT					
SITCUMRI	NC-S7	300033NCS7	NO HIT					
SITCUMRI	NM-1	300113NM1	NO HIT					
SITCUMRI	NM-2	300115NM2	NO HIT					
SITCUMRI	NM-3	300020NM3	NO HIT					
SITCUMRI	NM-4	300114NM4	NO HIT					
SITCUMRI	NM-5	300112NM5	NO HIT					
SITCUMRI	NM-6	300111NM6	NO HIT					
SITCUMRI	NM-7	300109NM7	NO HIT					
SITCUMRI	NS-1	300004NS1	NO HIT		NO HIT			
SITCUMRI	NS-2	300001NS2	NO HIT		HIT			
SITCUMRI	NS-3	300108NS3	NO HIT		NO HIT			
SITCUMRI	NS-A1	300016NSA1	NO HIT		HIT			
SITCUMRI	NS-A2	300047NSA2	NO HIT		NO HIT			
SITCUMRI	NS-A3	300031NSA3	NO HIT		NO HIT			
SITCUMRI	NS-A4	300012NSA4	NO HIT		NO HIT			
SITCUMRI	NS-A5	300014NSA5	NO HIT		HIT			
SITCUMRI	NS-A6	300015NSA6	NO HIT		HIT			
SITCUMRI	NS-B1	300018NSB1	HIT		NO HIT			
SITCUMRI	NS-B2	300046NSB2	NO HIT		HIT			
SITCUMRI	NS-B3	300017NSB3	NO HIT		HIT			
SITCUMRI	NS-B4	300009NSB4	NO HIT		HIT			
SITCUMRI	NS-B5	300010NSB5	HIT		NO HIT			

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Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
SITCUMRI	NS-B6	300013NSB6	NO HIT		NO HIT			
SITCUMRI	NS-C1	300005NSC1	NO HIT		NO HIT			
SITCUMRI	NS-C2	300008NSC2	NO HIT		HIT			
SITCUMRI	NS-C3	300019NSC3	HIT		HIT			
SITCUMRI	NS-C4	300006NSC4	NO HIT		HIT			
SITCUMRI	NS-C5	300044NSC5	NO HIT		NO HIT			
SITCUMRI	NS-C6	300011NSC6	HIT		NO HIT			
SITCUMRI	NS-D1A	300082NSD1A	NO HIT		HIT			
SITCUMRI	NS-D2	300083NSD2	HIT		HIT			
SITCUMRI	NS-D3	300093NSD3	NO HIT		HIT			
SITCUMRI	NS-D4	300098NSD4	NO HIT		HIT			
SITCUMRI	NS-D5	300099NSD5	HIT		HIT			
SITCUMRI	NS-D6	300095NSD6	HIT		HIT			
SITCUMRI	NS-E1A	300097NSE1A	NO HIT		HIT			
SITCUMRI	NS-E2	300096NSE2	NO HIT		HIT			
SITCUMRI	NS-E3	300105NSE3	NO HIT		NO HIT			
SITCUMRI	NS-E4	300106NS34	NO HIT		HIT			
SITCUMRI	NS-E5	300094NSE5	NO HIT		HIT			
SNDREF92	SD920101	SD92OUTFC001	NO HIT		HIT			
SNDREF92	SD920602	SD92HYLBC002	NO HIT		NO HIT			
SNDREF92	SD921103	SD92UPSTC003	NO HIT		NO HIT			
SOPARK91	SPRK0101	SOPARK91C001	NO HIT		NO HIT			
SOPARK91	SPRK0302	SOPARK91C002	NO HIT		NO HIT			
SOTERM86	ST86H101	ST86HA1SC001	NO HIT					
SOTERM86	ST86H302	ST86HA3SC002	NO HIT					
SOTERM86	ST86H503	ST86HA5SC003	NO HIT					
SOTERM86	ST86H704	ST86HA7SC004	HIT					
SOTERM86	ST86H905	ST86HA9SC005	NO HIT					

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Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
SOTERM86	ST86W106	ST86W1S_C006	NO HIT					
SOTERM86	ST86W407	ST86W4S_C007	HIT					
SOTERM86	ST86W708	ST86W7S_C008	NO HIT					
SOTERM86	ST86H302	ST86HA3B_S01	NO HIT					
SOTERM86	ST86H905	ST86HA9B_S04	NO HIT					
SOTERM86	ST861005	ST86HA10BS05	NO HIT					
SOTERM86	ST86W206	ST86W2B__S06	NO HIT					
SOTERM86	ST86W306	ST86W3B__S07	NO HIT					
SOTERM86	ST86W507	ST86W5B__S08	NO HIT					
SOTERM86	ST86W607	ST86W6B__S09	NO HIT					
SOTERM86	ST86W10X	ST86W10S_S10	NO HIT					
SOTERM86	ST86W10X	ST86W10B_S11	NO HIT					
SSRECON	BUD-9	C00001	NO HIT					
SSRECON	BUD-10	C00002	NO HIT					
SSRECON	BUD-8	C00003	NO HIT					
SSRECON	BUD-4	C00004	NO HIT					
SSRECON	BUD-7	C00005	NO HIT					
SSRECON	BUD-5	C00006	NO HIT					
SSRECON	BUD-2	C00007	NO HIT					
SSRECON	BUD-3	C00008	NO HIT					
SSRECON	BUD-6	C00009	NO HIT					
SSRECON	BUD-1	C00010	NO HIT					
SSRECON	BUD-11	C00011	NO HIT					
SSRECON	BUD-12	C00012	NO HIT					
SSRECON	ELD-16	C00013	NO HIT					
SSRECON	HEND-17	C00014	NO HIT					
SSRECON	CR-23	C00019	NO HIT					
SSRECON	WOLL-24	C00021	NO HIT					

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Survey Code	Station ID	Sample ID	Bioeffect Type: A	B	ECHN abnorm.	ECHN Eff. Mort.	M	O
SSRECON	CORM-20	C00024	NO HIT					
TACCENC2	TC8901XX	TACCN89AS001	NO HIT					
TACCENC2	TC8902XX	TACCN89BS002	NO HIT					
TACCENC2	TC8903XX	TACCN89CS003	NO HIT					
TERM5_91	TER50101	TER592C001	NO HIT		NO HIT			
TERM5_91	TER50302	TER592C002	NO HIT		NO HIT			
TERM5_91	TER50503	TER592C003	NO HIT		NO HIT			
TERMNL91	T91_01XX	TERMNL91S001	HIT		HIT			
TERMNL91	T91_02XX	TERMNL91S002	NO HIT		HIT			
TERMNL91	T91_03XX	TERMNL91S003	HIT		NO HIT			
TEXACOC2	TX8801XX	TX88DOCKS001	NO HIT					
TEXACOC2	TX8802XX	TX88DISCS002	NO HIT					
TEXACOC2	TX8803XX	TX88CTRLS003	NO HIT					
TPPS3AB	EB-33	1779		HIT				
TPPS3AB	EB-33	2080		HIT				
TPPS3AB	EB-35	1775		HIT				
TPPS3AB	EB-35	2079		HIT				
TPPS3AB	EB-36	1776		HIT				
TPPS3AB	EB-36	2072		HIT				
TPPS3AB	EB-38	1778		HIT				
TPPS3AB	EB-38	2074		HIT				
TPPS3AB	WP-01	2088		NO HIT				
TPPS3AB	WP-02	2089		NO HIT				
TPPS3AB	WP-03	2090		HIT				
TPPS3AB	WP-04	2091		NO HIT				
TPPS3AB	WP-05	2092		NO HIT				
TPPS3AB	WP-06	2084		NO HIT				
TPPS3AB	WP-07	2093		NO HIT				

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			Bioeffect Type:		ECHN	ECHN		
Survey Code	Station ID	Sample ID	A	B	abnorm.	Eff. Mort.	M	O
TPPS3AB	WP-08	2083		HIT				
TPPS3AB	WP-09	2082		NO HIT				
TPPS3AB	WP-10	2076		NO HIT				
TPPS3AB	WP-11	1789						
TPPS3AB	WP-12	1786		NO HIT				
TPPS3AB	WP-12	2069		NO HIT				
TPPS3AB	WP-13	1784		NO HIT				
TPPS3AB	WP-13	2070		NO HIT				
TPPS3AB	WP-14	1785		NO HIT				
TPPS3AB	WP-14	2085						
TPPS3AB	WP-15	1817		NO HIT				
TPPS3AB	WP-15	2094		NO HIT				
TPPS3AB	WP-16	1816		HIT				
TPPS3AB	WP-16	2086		NO HIT				
TXNPDS92	TX920101	TX92OUTFC001	NO HIT					
TXNPDS92	TX920602	TX92DILZC002	NO HIT					
TXNPDS92	TX921103	TX92AMBSC003	NO HIT					
USOILVLF	USOL0101	USOILVLFC001	NO HIT					
USOILVLF	USOL0101	USOILVLFS001	NO HIT			HIT		
USOILVLF	USOL0101	USOILVLFS002	NO HIT					
USOILVLF	USOL0201	USOILVLFS003	NO HIT			HIT		
USOILVLF	USOL0201	USOILVLFS004	NO HIT					
USOILVLF	USOL03XX	USOILVLFS005	NO HIT			HIT		
USOILVLF	USOL0401	USOILVLFS006	HIT					
USOILVLF	USOL0501	USOILVLFS007	NO HIT			HIT		
USOILVLF	USOL0501	USOILVLFS008	NO HIT					

Table B-10. Chemicals eliminated from AET groups prior to database comparisons and calculations of predictive reliability. Chemicals appear in bold italics were eliminated from 1988 AET comparisons.

Chemical Name
Acid volatile sulfides
Ammonia-nitrogen
Ammonium (NH4+)
Biochemical oxygen demand
Biochemical oxygen demand-5 day test
Calcium
Carbon Dioxide
Carbon Monoxide
Chemical oxygen demand
Conductivity
Dissolved oxygen
Dissolved oxygen-% Saturation
Dry weight of sediment or tissue
Iron
Manganese
Oil And Grease
PCB-1242
PCB-1248
PCB-1254
PCB-1260
Percent clay
Percent gravel
Percent moisture
Percent rocks
Percent sand
Percent silt
Percent sulfur
pH
Phi Class -1.00+ To 0.00
Phi Class 0.00+ To 1.00
Phi Class 1.00+ To 2.00
Phi Class 2.00+ To 3.00
Phi Class 3.00+ To 4.00
Phosphorus
Potassium
Salinity
Silica
Silicate
Sodium
Specific Gravity
Sulfate
Sulfates

Table B-10. Chemicals eliminated from AET groups prior to database comparisons and calculations of predictive reliability. Chemicals appear in bold italics were eliminated from 1988 AET comparisons.

Chemical Name
Total alkalinity
Total carbon
Total nitrogen (no2+no3)
Total nitrogen (no3+no3+nh4)
Total NO2-n (nitrite Nitrogen)
Total NO3-n (nitrate Nitrogen)
Total phosphate
Total Solids
Total Suspended Solids
Total volatile solids
Viscosity
Wet weight of sediment or tissue