Appendix A

Table A-1. Checklist of species found at Duwamish Head, Site #1, 1996. (Buckley)

Table A-2. Checklist of species found at the Seacrest nearshore area, Site #2, 1996. (Buckley and Bookheim)

Table A-1. Checklist of species found at Duwamish Head, Site #1, 1996.

Fish	**Echinodermata (continued)**
Big skate (*Raja binoculata*)	Ochre sea star (*Pisaster brevispinus*)
Shiner perch (*Cymatogaster aggrtegata*)	California sea cucumber (*Parastichopus californicus*)
Puget Sound sculpin (*artedius meanyi*)	White sea cucumber (*Eupentacta* quinquesemita)
Painted greenling (*Oxylebius pictus*)	Cnidaria
C-O sole (*Pleuronectes coenosus*)	White plumed anemone (*Metridium giganteum*)
Mollusca	Anemone (*Metridium senile*)
Gumboot chiton (*Cryptochiton stelleri*)	Painted anemone (*Urticina crassicomis*)
Lined chiton (*Tonicella lineata*)	Sand-rose anemone (*Urticina columbiana*)
Black chiton (*Katharina tunicata*)	Sea pen (*Ptilosaris gumey*)
Nudibrach (*Armina californica*)	**Annelida**
Purple olive (*Olivella biplicate*)	Polycheate worm (*Mesochaetopterus taylon*)
Wrinkled amphissa (*Amphissa columbiana*)	Northern feater duster worm (*Eudistylia vancouveri*)
Rock oyster (*Pododesmus macroschisma*)	Serpulid worm (*Serpula vermicularis*)
Gaper clam (*Tresus sp.*)	**Angiosperms**
Piddock (*Zirfaea pilsbryi*)	Eelgrass (*Zostera marina*)
Heart cockle (*Clinocardium nuttalli*)	**Algae**
Native littleneck clam (*Protothaca staminea*)	*Navicula*
Bay mussel (*Myatilus edulis*)	*Laminaria saccharina*
Horse mussel (*Mytilus edulis*)	*Nereocystis leutkeana*
Arthopoda	*Alaria marginata*
Northern kelp crab (*Pugettia producta*)	*Pterygophora californica*
Graceful kelp crab (*Pugettia gracilis*)	*Desmarestia ligulata*
Red rock crab (*Cancer productus*)	*Iridea cordata*
Coonstripe shrimp (Pandalus danae)	*Gigartina exasperata*
Acorn barnacle (*Balanus glandula*)	*Gracilaria sjoestedtii*
Echinodermata	*Ahnfeltiopsis pacifica*
Brittle star (*Ophiopteris papillosa*)	*Sarcodiotheca gaudichaudii*
Sunflower star (*Pcynopodia helianthoides*)	*Callophyllis sp.*
Rose star (*Crossaster papposus*)	*Opuntiella californica*
Sand star (*Luidia foliolata*)	*Delessaria decipiens*
False ochre sea star (*Evasterias troschelli*)	

Source: Buckley, undated

Table A-2. Checklist of Species found at Seacrest nearshore area Site #2, 1996.

Fish	**Arthropoda** (continued)
Tubesnout (*Aulorhynchus flavidus*)	Red rock crab (*Cancer productus*)
Wolf-eel (*Anarrhichthys ocellatus*)	Graceful crab (*Cancer gracilis*)
	Hermit crab (*Pagurus armatus*)
Pacific herring (*Clupea harengus pallasi*)	Coonstripe shrimp (*Pandalus danae*)
Brown rockfish (*Sebates auriculatus*)	**Annelida**
Copper rockfish (*Sebastes cauprinus*)	Feather duster worm (*Eudistylia polymorpha*)
Quillback rockfish (*Sebastes maliger*)	Polycheate (*Mesochaetopterus taylori*)
Lingcod (*Ophiodon elongates*)	**Echinodermata**
Whitespotted greenling (*Hexagrammos stelleri*)	Sunflower star(*Pcynopodi halianthoides*)
Sculpin (*Artedius sp.*)	Stimpson's sun star (*Solaster stimpsoni*)
Buffalo sculpin (*Enophrys bison*)	Rose star (*Crossaster papposus*)
Sailfin sculpin (*Nautichthys oculofasciatus*)	Sand star (*Luidia foliolata*)
Kelp perch (*Brachyistius frenatus*)	False ochre star (*Pisaster ochraceus*)
Pile perch (*Rhacochilus vacca*)	Cushion star (*Pteraster tesselatus*)
Shiner perch (*Cymatogaster aggregata*)	California sea cucumber (*Parastichopus californicus*)
Striped perch (*Embiotoca lateralis*)	**Cnidaria**
Speckled sanddab (*Citharichthys stigmaeus*)	White plumed anemone (*Metridium giganteum*)
Rock sole (*Lepidopsetta bilineata*)	White spotted rose anemone (*Urticina lofotensis*)
C-O sole (*Pleuronichthys coenosus*)	Sand-rose anemone (*Urticina columbiana*)
Mollusca	Aggregating anemone (*Anthopleura elegantissima*)
Giant Pacific octopus (*Octopus dofleini*)	Water jellyfish (*Aeqorea aequorea*)
Stubby squid (*Rossia pacifica*)	Lion's mane jellyfish (*Cyanea capillata*)
Market squid (*Loligo opalescens*)	Fleshy sea pen (*Ptilosarcus gurneyi*)
Lewis' moon snail (*Polinices lewisii*)	**Macro-algae**
Gaper clam (*Tresus capax* or *nuttallii*)	*Navicula sp.*
Bay mussel (*Mytilis edulis*)	*Sargassum muticum*
Nudibrach (*Flabellina fusca*)	*Laminaria saccharina*
False sea lemon (*Archidoris montereyensis*)	*Sarcociotheca sp.*
Arthropoda	*Sarcodiotheca sp.*
Acorn barnacle (*Balanus glandula*)	*Callophyis flabellulata*
Northern kelp crab (*Pugettia producta*)	*Opuntiella californica*
Dungeness crab (*Cancer magister*)	

Appendix B

Site #2 (Seacrest): 1998 Pea Gravel and Control (Mud)
Plot Sampling Results

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* SITE SUMMARY *
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IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - MUD
FROM SAMPLES E 6 E 7 E 8

SPECIES DEFINITION -
TRUNCATED = NO
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

ABUNDANCES AND WEIGHTS ARE ADJUSTED TO AN AREA OF 1.0 SQUARE METERS

	MEAN	RANGE	S.D.	COEF.VAR
SAMPLE AREA (M**2)	.100	.100- .100	.000	.000
TOTAL WET WEIGHT (PER M**2)	.000	.000- .000	.000	.000
TOTAL ABUNDANCE (PER M**2)	24196.67	9720.00- 44660.00	18223.09	.75
SAMPLE WET WEIGHT (PER M**2)	.000	.000- .000	.000	.000
SAMPLE DRY WEIGHT (PER M**2)	.000	.000- .000	.000	.000

ORGANISM NAME		* NUMBERS/M**2				* WET WEIGHT,GRAMS/M**2				* AVG. BIOMASS		* PERCENTAGES	
PARTS CODE	LH-STAGE	* TOTAL	MEAN	RANGE	S.D.	* TOTAL	MEAN	RANGE	S.D.	* MEAN	S.D.	* ABUN-DANCE	BIO-MASS
Turbellaria	C	240.0	80.0	40.0 - 200.0	105.8	.000	.000	.000 - .000	.00	.0000	.0000	.33	.00
Nematoda	C	3630.0	1210.0	560.0 - 2300.0	949.8	.000	.000	.000 - .000	.00	.0000	.0000	5.00	.00
Polychaeta	AC	910.0	303.3	160.0 - 420.0	132.0	.000	.000	.000 - .000	.00	.0000	.0000	1.25	.00
Oligochaeta	AC	1060.0	353.3	190.0 - 590.0	209.8	.000	.000	.000 - .000	.00	.0000	.0000	1.46	.00
Gastropoda	7	90.0	30.0	10.0 - 80.0	43.6	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Littorina scutulata	+-egg	1050.0	350.0	280.0 - 400.0	62.4	.000	.000	.000 - .000	.00	.0000	.0000	1.45	.00
Nudibranchia	7	100.0	33.3	100.0 - 100.0	57.7	.000	.000	.000 - .000	.00	.0000	.0000	.14	.00
Bivalvia	7	1160.0	386.7	80.0 - 1000.0	531.2	.000	.000	.000 - .000	.00	.0000	.0000	1.60	.00
Halacaridae	C	60.0	20.0	20.0 - 40.0	20.0	.000	.000	.000 - .000	.00	.0000	.0000	.08	.00
Podocopida	AC	230.0	76.7	80.0 - 150.0	75.1	.000	.000	.000 - .000	.00	.0000	.0000	.32	.00

IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - MUD
FROM SAMPLES E 6 E 7 E 8

ORGANISM NAME	PARTS CODE	LH-STAGE	NUMBERS/M**2 TOTAL	MEAN	RANGE	S.D.	WET WEIGHT,GRAMS/M**2 TOTAL	MEAN	RANGE	S.D.	AVG. BIOMASS MEAN	S.D.	PERCENTAGES ABUN-DANCE	BIO-MASS
Calanus sp.		2F	60.0	20.0	20.0 - 40.0	20.0	.000	.000	.000 - .000	.00	.0000	.0000	.08	.00
Paracalanus sp.		A calanoid	240.0	80.0	40.0 - 200.0	105.8	.000	.000	.000 - .000	.00	.0000	.0000	.33	.00
Stephos pacificus		A	1800.0	600.0	240.0 - 800.0	312.4	.000	.000	.000 - .000	.00	.0000	.0000	2.48	.00
Harpacticoida HC		F	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.03	.00
Porcellidium sp. HC		F	100.0	33.3	100.0 - 100.0	57.7	.000	.000	.000 - .000	.00	.0000	.0000	.14	.00
Longipedia sp. HC		8	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.06	.00
Ectinosomatidae HC		A	3270.0	1090.0	610.0 - 1500.0	449.1	.000	.000	.000 - .000	.00	.0000	.0000	4.50	.00
Harpacticus sp.-obscurus group HC		A	820.0	273.3	60.0 - 400.0	185.8	.000	.000	.000 - .000	.00	.0000	.0000	1.13	.00
Zaus sp. HC		8	50.0	16.7	10.0 - 40.0	20.8	.000	.000	.000 - .000	.00	.0000	.0000	.07	.00
Tisbe sp. HC		A	7530.0	2510.0	1570.0 - 3000.0	814.3	.000	.000	.000 - .000	.00	.0000	.0000	10.37	.00
Scutellidium hippolytes HC		A	130.0	43.3	30.0 - 100.0	51.3	.000	.000	.000 - .000	.00	.0000	.0000	.18	.00
Laophontidae HC		F8	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.03	.00
Paralaophonte pacifica HC		A	450.0	150.0	40.0 - 300.0	134.5	.000	.000	.000 - .000	.00	.0000	.0000	.62	.00
Paralaophonte perplexa HC		A	630.0	210.0	80.0 - 400.0	168.2	.000	.000	.000 - .000	.00	.0000	.0000	.87	.00
Heterolaophonte discophora HC		8	100.0	33.3	100.0 - 100.0	57.7	.000	.000	.000 - .000	.00	.0000	.0000	.14	.00
Ameira sp. HC		A	140.0	46.7	40.0 - 100.0	50.3	.000	.000	.000 - .000	.00	.0000	.0000	.19	.00
Ameira longipes HC		8	320.0	106.7	20.0 - 300.0	167.7	.000	.000	.000 - .000	.00	.0000	.0000	.44	.00
Enhydrosoma sp. HC		8	140.0	46.7	40.0 - 100.0	50.3	.000	.000	.000 - .000	.00	.0000	.0000	.19	.00
Amonardia perturbata HC		A	530.0	176.7	30.0 - 500.0	280.4	.000	.000	.000 - .000	.00	.0000	.0000	.73	.00
Diosaccus spinatus HC		A	270.0	90.0	110.0 - 160.0	81.9	.000	.000	.000 - .000	.00	.0000	.0000	.37	.00
Amphiascopsis cinctus HC		A	190.0	63.3	80.0 - 110.0	56.9	.000	.000	.000 - .000	.00	.0000	.0000	.26	.00
Amphiascus sp. HC		8	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Amphiascus undosus HC		8	380.0	126.7	40.0 - 300.0	150.1	.000	.000	.000 - .000	.00	.0000	.0000	.52	.00

EPIBENTHIC PLANKTON ANALYSIS
****

IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - MUD
FROM SAMPLES E 6 E 7 E 8

ORGANISM NAME	PARTS CODE	LH-STAGE	NUMBERS/M**2 TOTAL	NUMBERS/M**2 MEAN	NUMBERS/M**2 RANGE	NUMBERS/M**2 S.D.	WET WEIGHT, GRAMS/M**2 TOTAL	WET WEIGHT, GRAMS/M**2 MEAN	WET WEIGHT, GRAMS/M**2 RANGE	WET WEIGHT, GRAMS/M**2 S.D.	AVG. BIOMASS MEAN	AVG. BIOMASS S.D.	PERCENTAGES ABUNDANCE	PERCENTAGES BIOMASS
Stenhelia peniculata		A	230.0	76.7	50.0 - 100.0	25.2	.000	.000	.000 - .000	.00	.0000	.0000	.32	.00
Typhlamphiascus pectinifer		A	2410.0	803.3	520.0 - 1300.0	431.5	.000	.000	.000 - .000	.00	.0000	.0000	3.32	.00
Mesochra sp.		B	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Dactylopusia vulgaris		A	27520.0	9173.3	1420.0 - 21100.0	10482.8	.000	.000	.000 - .000	.00	.0000	.0000	37.91	.00
Dactylopusia crassipes		B	100.0	33.3	100.0 - 100.0	57.7	.000	.000	.000 - .000	.00	.0000	.0000	.14	.00
Dactylopusia paratisboides		A	520.0	173.3	520.0 - 520.0	300.2	.000	.000	.000 - .000	.00	.0000	.0000	.72	.00
Paradactylopodia sp.		A	7880.0	2626.7	620.0 - 5700.0	2702.8	.000	.000	.000 - .000	.00	.0000	.0000	10.86	.00
Parathalestris californica		B	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Diarthrodes sp.		A	460.0	153.3	120.0 - 200.0	41.6	.000	.000	.000 - .000	.00	.0000	.0000	.63	.00
Rhyncothalestris helgolandica		B	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.06	.00
Idomene purpurocincta		B	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.06	.00
Cyclopoida		A	2110.0	703.3	430.0 - 1680.0	872.7	.000	.000	.000 - .000	.00	.0000	.0000	2.91	.00
Corycaeus anglicus		A	110.0	36.7	30.0 - 80.0	40.4	.000	.000	.000 - .000	.00	.0000	.0000	.15	.00
Hemicylops sp.		F	100.0	33.3	100.0 - 100.0	57.7	.000	.000	.000 - .000	.00	.0000	.0000	.14	.00
Balanomorpha		7E	850.0	283.3	80.0 - 600.0	277.9	.000	.000	.000 - .000	.00	.0000	.0000	1.17	.00
Cumella vulgaris		A	240.0	80.0	60.0 - 100.0	20.0	.000	.000	.000 - .000	.00	.0000	.0000	.33	.00
Munna ubiquita		A	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.03	.00
Epicaridea		C	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Ampithoe sp.		7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Aoroides sp.		7A	540.0	180.0	60.0 - 360.0	158.7	.000	.000	.000 - .000	.00	.0000	.0000	.74	.00
Pontogeneia sp. cf rostrata		A	460.0	153.3	110.0 - 220.0	58.6	.000	.000	.000 - .000	.00	.0000	.0000	.63	.00
Desdimelita desdichada		A	30.0	10.0	10.0 - 20.0	10.0	.000	.000	.000 - .000	.00	.0000	.0000	.04	.00
Photis sp.		A7	340.0	113.3	140.0 - 200.0	102.6	.000	.000	.000 - .000	.00	.0000	.0000	.47	.00

EPIBENTHIC PLANKTON ANALYSIS
****

IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - MUD
FROM SAMPLES E 6 E 7 E 8

ORGANISM NAME		NUMBERS/M**2				WET WEIGHT,GRAMS/M**2				AVG. BIOMASS		PERCENTAGES	
PARTS CODE	LH-STAGE	TOTAL	MEAN	RANGE	S.D.	TOTAL	MEAN	RANGE	S.D.	MEAN	S.D.	ABUN-DANCE	BIO-MASS
Gammaropsis sp.	A	2070.0	690.0	360.0 - 1200.0	448.0	.000	.000	.000 - .000	.00	.0000	.0000	2.85	.00
Ischyrocerus sp.	A	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.06	.00
Americhelidium sp.	A	110.0	36.7	20.0 - 90.0	47.3	.000	.000	.000 - .000	.00	.0000	.0000	.15	.00
Eobrolgus chumashi	A	340.0	113.3	40.0 - 240.0	110.2	.000	.000	.000 - .000	.00	.0000	.0000	.47	.00
Pleustidae	8	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Pleusirus secorrus	A	70.0	23.3	30.0 - 40.0	20.8	.000	.000	.000 - .000	.00	.0000	.0000	.10	.00
Caprellidea	7	60.0	20.0	10.0 - 50.0	26.5	.000	.000	.000 - .000	.00	.0000	.0000	.08	.00
Mayerella banksia	A	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Hippolytidae	7	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.03	.00
Hippolyte clarki	C	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Eualus subtilis	7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Crangon sp.	7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Majidae	7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Diptera-chironomidae	6	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00

TOTAL NUMBER OF PLANKTON CATEGORIES 70

SHANNON-WEINER DIVERSITY INDEX NUMBERS 3.67
BIOMASS .00
BRILLOUIN-S DIVERSITY INDEX BASED ON NUMBERS 3.67

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* SITE SUMMARY *
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IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - GRAVEL
FROM SAMPLES E 1 E 2 E 3

SPECIES DEFINITION -
TRUNCATED = NO
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

ABUNDANCES AND WEIGHTS ARE ADJUSTED TO AN AREA OF 1.0 SQUARE METERS

	MEAN	RANGE	S.D.	COEF.VAR
SAMPLE AREA (M**2)	.100	.100- .100	.000	.000
TOTAL WET WEIGHT (PER M**2)	.000	.000- .000	.000	.000
TOTAL ABUNDANCE (PER M**2)	11053.33	7680.00- 14170.00	3252.60	.29
SAMPLE WET WEIGHT (PER M**2)	.000	.000- .000	.000	.000
SAMPLE DRY WEIGHT (PER M**2)	.000	.000- .000	.000	.000

ORGANISM NAME		NUMBERS/M**2				WET WEIGHT,GRAMS/M**2				AVG. BIOMASS		PERCENTAGES	
PARTS CODE	LH-STAGE	TOTAL	MEAN	RANGE	S.D.	TOTAL	MEAN	RANGE	S.D.	MEAN	S.D.	ABUN-DANCE	BIO-MASS
Turbellaria		40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
	C												
Nematoda		200.0	66.7	40.0 - 80.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.60	.00
	C												
Polychaeta		200.0	66.7	80.0 - 120.0	61.1	.000	.000	.000 - .000	.00	.0000	.0000	.60	.00
	C												
Polynoidae		40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
	7												
Gastropoda		40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
	7												
Littorina scutulata		1320.0	440.0	320.0 - 600.0	144.2	.000	.000	.000 - .000	.00	.0000	.0000	3.98	.00
	+-egg												
Nudibranchia		40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
	7												
Bivalvia		200.0	66.7	40.0 - 80.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.60	.00
	7												
Podocopida		160.0	53.3	40.0 - 80.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.48	.00
	C												
Calanus sp.		120.0	40.0	40.0 - 80.0	40.0	.000	.000	.000 - .000	.00	.0000	.0000	.36	.00
	F												

IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - GRAVEL
FROM SAMPLES E 1 E 2 E 3

ORGANISM NAME	PARTS CODE	LH-STAGE	NUMBERS/M**2 TOTAL	MEAN	RANGE	S.D.	WET WEIGHT, GRAMS/M**2 TOTAL	MEAN	RANGE	S.D.	AVG. BIOMASS MEAN	S.D.	PERCENTAGES ABUN-DANCE	BIO-MASS
Paracalanus sp.		A	120.0	40.0	40.0 - 80.0	40.0	.000	.000	.000 - .000	.00	.0000	.0000	.36	.00
Microcalanus sp.		A	200.0	66.7	200.0 - 200.0	115.5	.000	.000	.000 - .000	.00	.0000	.0000	.60	.00
Stephos pacificus		A	2000.0	666.7	960.0 - 1040.0	578.7	.000	.000	.000 - .000	.00	.0000	.0000	6.03	.00
Harpacticoida -HC		F	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Tegastidae -HC		B	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Ectinosomatidae -HC		A	1760.0	586.7	520.0 - 640.0	61.1	.000	.000	.000 - .000	.00	.0000	.0000	5.31	.00
Harpacticus sp. HC		F	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Harpacticus compressus HC		B	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Harpacticus sp.-obscurus group -HC		A	640.0	213.3	160.0 - 280.0	61.1	.000	.000	.000 - .000	.00	.0000	.0000	1.93	.00
Zaus sp. HC		AB	160.0	53.3	40.0 - 120.0	61.1	.000	.000	.000 - .000	.00	.0000	.0000	.48	.00
Tisbe sp. -HC		A	4680.0	1560.0	1040.0 - 2120.0	541.1	.000	.000	.000 - .000	.00	.0000	.0000	14.11	.00
Scutellidium hippolytes HC		B	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Danielssenia sp. - HC		B	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Laophontidae HC		F	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Paralaophonte pacifica HC		A	80.0	26.7	80.0 - 80.0	46.2	.000	.000	.000 - .000	.00	.0000	.0000	.24	.00
Paralaophonte perplexa HC		A	480.0	160.0	40.0 - 280.0	120.0	.000	.000	.000 - .000	.00	.0000	.0000	1.45	.00
Enhydrosoma sp. HC		B	80.0	26.7	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.24	.00
Amonardia perturbata HC		A	280.0	93.3	80.0 - 120.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.84	.00
Diosaccus spinatus HC		A	1360.0	453.3	120.0 - 720.0	305.5	.000	.000	.000 - .000	.00	.0000	.0000	4.10	.00
Amphiascopsis cinctus		A	240.0	80.0	40.0 - 200.0	105.8	.000	.000	.000 - .000	.00	.0000	.0000	.72	.00
Stenhelia peniculata HC		A	240.0	80.0	80.0 - 160.0	80.0	.000	.000	.000 - .000	.00	.0000	.0000	.72	.00
Typhlamphiascus pectinifer HC		A	480.0	160.0	120.0 - 200.0	40.0	.000	.000	.000 - .000	.00	.0000	.0000	1.45	.00
Amphiascoides sp. HC		A	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00

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IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - GRAVEL
FROM SAMPLES E 1 E 2 E 3

ORGANISM NAME	PARTS CODE	LH-STAGE	NUMBERS/M**2 TOTAL	MEAN	RANGE	S.D.	WET WEIGHT,GRAMS/M**2 TOTAL	MEAN	RANGE	S.D.	AVG. BIOMASS MEAN	S.D.	PERCENTAGES ABUN-DANCE	BIO-MASS
Amphiascoides sp. a	8A		80.0	26.7	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.24	.00
Mesochra sp.	A		80.0	26.7	80.0 - 80.0	46.2	.000	.000	.000 - .000	.00	.0000	.0000	.24	.00
Thalestridae	F		160.0	53.3	160.0 - 160.0	92.4	.000	.000	.000 - .000	.00	.0000	.0000	.48	.00
Dactylopusia vulgaris	A		7040.0	2346.7	1600.0 - 3720.0	1190.9	.000	.000	.000 - .000	.00	.0000	.0000	21.23	.00
Paradactylopodia sp.	A		1240.0	413.3	320.0 - 560.0	128.6	.000	.000	.000 - .000	.00	.0000	.0000	3.74	.00
Parathalestris sp. a	8		40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Diarthrodes sp.	A		1080.0	360.0	120.0 - 600.0	240.0	.000	.000	.000 - .000	.00	.0000	.0000	3.26	.00
Rhyncothalestris helgolandica	8		40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Cyclopoida	A		1440.0	480.0	320.0 - 800.0	277.1	.000	.000	.000 - .000	.00	.0000	.0000	4.34	.00
Corycaeus anglicus	A		360.0	120.0	80.0 - 160.0	40.0	.000	.000	.000 - .000	.00	.0000	.0000	1.09	.00
Balanomorpha	E7		680.0	226.7	120.0 - 440.0	184.8	.000	.000	.000 - .000	.00	.0000	.0000	2.05	.00
Cumella vulgaris	A		80.0	26.7	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.24	.00
Munna ubiquita	C		40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Gammaridea	7		240.0	80.0	240.0 - 240.0	138.6	.000	.000	.000 - .000	.00	.0000	.0000	.72	.00
Aoroides sp.	7C		90.0	30.0	10.0 - 80.0	43.6	.000	.000	.000 - .000	.00	.0000	.0000	.27	.00
Pontogeneia sp. cf rostrata	A		330.0	110.0	80.0 - 130.0	26.5	.000	.000	.000 - .000	.00	.0000	.0000	1.00	.00
Photis sp.	7		40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Gammaropsis sp.	A		4300.0	1433.3	280.0 - 2620.0	1170.4	.000	.000	.000 - .000	.00	.0000	.0000	12.97	.00
Ischyrocerus sp.	A		80.0	26.7	80.0 - 80.0	46.2	.000	.000	.000 - .000	.00	.0000	.0000	.24	.00
Oedicerotidae	7		40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Eobrolgus chumashi	A		50.0	16.7	50.0 - 50.0	28.9	.000	.000	.000 - .000	.00	.0000	.0000	.15	.00
Pleusirus secorrus	A		40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Mayerella banksia	C		110.0	36.7	30.0 - 80.0	40.4	.000	.000	.000 - .000	.00	.0000	.0000	.33	.00

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IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - GRAVEL
FROM SAMPLES E 1 E 2 E 3

TOTAL NUMBER OF PLANKTON CATEGORIES 56

SHANNON-WEINER DIVERSITY INDEX	NUMBERS	4.13
	BIOMASS	.00
BRILLOUIN-S DIVERSITY INDEX BASED ON NUMBERS		4.13

****
* FRACTION SUMMARY *
****

IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - GRAVEL
SAMPLE E 1

TIDE STAGE - NOT GIVEN
TIDE HEIGHT .0 METERS
COLLECTION TIME 1410 PST

SPECIES DEFINITION -
TRUNCATED = NO
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

SAMPLE AREA = .1000 SQUARE METERS (M**2)
ABUNDANCES AND WEIGHTS ARE ADJUSTED TO A SAMPLE FRACTION OF .0250 SQUARE METERS

GEAR TYPE 62 (.1 M**2 plankton pump - 253u mesh net fraction of 3 nets)

FRACTION WET WEIGHT = .0000 /.0250 M**2
FRACTION DRY WEIGHT = .0000 /.0250 M**2

ORGANISM CODE	- NAME	LIFE HISTORY STAGE	PARTS CODE	COUNT (PER SAMPLE FRACTION)	WET WT,GMS	COUNT (PER M**2)	WET WT,GMS
3901	- Turbellaria	C		1.	.000	40.	.000
47	- Nematoda	C		2.	.000	80.	.000
5001	- Polychaeta	C		2.	.000	80.	.000
51	- Gastropoda	7		1.	.000	40.	.000
5103100104	- Littorina scutulata	+-egg		8.	.000	320.	.000
5127	- Nudibranchia	7		1.	.000	40.	.000
55	- Bivalvia	7		2.	.000	80.	.000
6113	- Podocopida	C		2.	.000	80.	.000
61180401	- Paracalanus sp.	A		2.	.000	80.	.000
61180504	- Microcalanus sp.	A		5.	.000	200.	.000
611909	- Ectinosomatidae	A		13.	.000	520.	.000
61191001	- Harpacticus sp.	F		1.	.000	40.	.000
6119100108	- Harpacticus compressus	8		1.	.000	40.	.000
6119100194	- Harpacticus sp.-obscurus group	A		5.	.000	200.	.000
61191002	- Zaus sp.	A		3.	.000	120.	.000
61191301	- Tisbe sp.	A		53.	.000	2120.	.000
6119150104	- Paralaophonte perplexa	A		7.	.000	280.	.000
61192704	- Enhydrosoma sp.	8		1.	.000	40.	.000
6119280102	- Amonardia perturbata	A		3.	.000	120.	.000
6119280201	- Diosaccus spinatus	A		18.	.000	720.	.000
6119280301	- Amphiascopsis cinctus	A		5.	.000	200.	.000
6119280905	- Stenhelia peniculata	A		2.	.000	80.	.000
6119281002	- Typhlamphiascus pectinifer	A		4.	.000	160.	.000
6119281299	- Amphiascoides sp. a	8		1.	.000	40.	.000
61192903	- Mesochra sp.	A		2.	.000	80.	.000
611931	- Thalestridae	F		4.	.000	160.	.000
6119310102	- Dactylopusia vulgaris	A		93.	.000	3720.	.000
61193102	- Paradactylopodia sp.	A		14.	.000	560.	.000

EPIBENTHIC PLANKTON ANALYSIS
****

IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - GRAVEL
SAMPLE E 1

TIDE STAGE - NOT GIVEN
TIDE HEIGHT .0 METERS
COLLECTION TIME 1410 PST

ORGANISM CODE	- NAME	LIFE HISTORY STAGE	PARTS CODE	COUNT (PER SAMPLE FRACTION)	WET WT,GMS (PER SAMPLE FRACTION)	COUNT (PER M**2)	WET WT,GMS (PER M**2)
6119310399	- Parathalestris sp. a	8		1.	.000	40.	.000
61193104	- Diarthrodes sp.	A		15.	.000	600.	.000
6120	- Cyclopoida	A		20.	.000	800.	.000
6120040101	- Corycaeus anglicus	A		2.	.000	80.	.000
6134	- Balanomorpha	E7		11.	.000	440.	.000
6154080102	- Cumella vulgaris	A		1.	.000	40.	.000
6169	- Gammaridea	7		6.	.000	240.	.000
6169201299	- Pontogeneia sp. cf rostrata	A		3.	.000	130.	.000
61692604	- Gammaropsis sp.	A		35.	.000	1400.	.000
61692702	- Ischyrocerus sp.	A		2.	.000	80.	.000
6171010301	- Mayerella banksia	C		2.	.000	80.	.000
TOTAL				354.	.000	14170.	.000

****
* FRACTION SUMMARY *
****

IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - GRAVEL
SAMPLE E 2

TIDE STAGE - NOT GIVEN
TIDE HEIGHT .0 METERS
COLLECTION TIME 1422 PST

SPECIES DEFINITION -
TRUNCATED = NO
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

SAMPLE AREA = .1000 SQUARE METERS (M**2)
ABUNDANCES AND WEIGHTS ARE ADJUSTED TO A SAMPLE FRACTION OF .0250 SQUARE METERS

GEAR TYPE 62 (.1 M**2 plankton pump - 253u mesh net fraction of 3 nets)

FRACTION WET WEIGHT = .0000 /.0250 M**2
FRACTION DRY WEIGHT = .0000 /.0250 M**2

ORGANISM CODE	- NAME	LIFE HISTORY STAGE	PARTS CODE	COUNT (PER SAMPLE FRACTION)	WET WT,GMS	COUNT (PER M**2)	WET WT,GMS
47	- Nematoda	C		2.	.000	80.	.000
500102	- Polynoidae	7		1.	.000	40.	.000
5103100104	- Littorina scutulata	~~1-egg~~		15.	.000	600.	.000
55	- Bivalvia	7		2.	.000	80.	.000
6113	- Podocopida	C		1.	.000	40.	.000
61180102	- Calanus sp.	F		1.	.000	40.	.000
61180401	- Paracalanus sp.	A		1.	.000	40.	.000
6118120299	- Stephos pacificus	A		24.	.000	960.	.000
611909	- Ectinosomatidae	A		15.	.000	600.	.000
6119100194	- Harpacticus sp.-obscurus group	A		7.	.000	280.	.000
61191301	- Tisbe sp.	A		38.	.000	1520.	.000
611915	- Laophontidae	F		1.	.000	40.	.000
6119150103	- Paralaophonte pacifica	A		2.	.000	80.	.000
6119150104	- Paralaophonte perplexa	A		4.	.000	160.	.000
61192704	- Enhydrosoma sp.	8		1.	.000	40.	.000
6119280102	- Amonardia perturbata	A		2.	.000	80.	.000
6119280201	- Diosaccus spinatus	A		13.	.000	520.	.000
6119280301	- Amphiascopsis cinctus	A		1.	.000	40.	.000
6119281002	- Typhlamphiascus pectinifer	A		3.	.000	120.	.000
61192812	- Amphiascoides sp.	A		1.	.000	40.	.000
6119281299	- Amphiascoides sp. a	A		1.	.000	40.	.000
6119310102	- Dactylopusia vulgaris	A		40.	.000	1600.	.000
61193102	- Paradactylopodia sp.	A		8.	.000	320.	.000
61193104	- Diarthrodes sp.	A		9.	.000	360.	.000
6120	- Cyclopoida	A		8.	.000	320.	.000
6120040101	- Corycaeus anglicus	A		4.	.000	160.	.000
6134	- Balanomorpha	E		3.	.000	120.	.000
6154080102	- Cumella vulgaris	A		1.	.000	40.	.000

EPIBENTHIC PLANKTON ANALYSIS
****

IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - GRAVEL
SAMPLE E 2

TIDE STAGE - NOT GIVEN
TIDE HEIGHT .0 METERS
COLLECTION TIME 1422 PST

ORGANISM CODE	- NAME	LIFE HISTORY STAGE	PARTS CODE	COUNT (PER SAMPLE FRACTION)	WET WT,GMS	COUNT (PER M**2)	WET WT,GMS
61690602	- Aoroides sp.	7		2.	.000	80.	.000
6169201299	- Pontogeneia sp. cf rostrata	A		3.	.000	120.	.000
61692604	- Gammaropsis sp.	A		66.	.000	2620.	.000
616937	- Oedicerotidae	7		1.	.000	40.	.000
6169420999	- Eobrolgus chumashi	A		1.	.000	50.	.000
6169430701	- Pleusirus secorrus	A		1.	.000	40.	.000
TOTAL				283.	.000	11310.	.000

****
* FRACTION SUMMARY *
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IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - GRAVEL
SAMPLE E 3

TIDE STAGE - NOT GIVEN
TIDE HEIGHT .0 METERS
COLLECTION TIME 1435 PST

SPECIES DEFINITION -
TRUNCATED = NO
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

SAMPLE AREA = .1000 SQUARE METERS (M**2)
ABUNDANCES AND WEIGHTS ARE ADJUSTED TO A SAMPLE FRACTION OF .0250 SQUARE METERS

GEAR TYPE 62 (.1 M**2 plankton pump - 253u mesh net fraction of 3 nets)

FRACTION WET WEIGHT = .0000 /.0250 M**2
FRACTION DRY WEIGHT = .0000 /.0250 M**2

ORGANISM CODE	- NAME	LIFE HISTORY STAGE	PARTS CODE	COUNT (PER SAMPLE FRACTION)	WET WT,GMS	COUNT (PER M**2)	WET WT,GMS
47	- Nematoda	C		1.	.000	40.	.000
5001	- Polychaeta	C		3.	.000	120.	.000
5103100104	- Littorina scutulata	~~1~~ egg		10.	.000	400.	.000
55	- Bivalvia	7		1.	.000	40.	.000
6113	- Podocopida	C		1.	.000	40.	.000
61180102	- Calanus sp.	F		2.	.000	80.	.000
6118120299	- Stephos pacificus	A		26.	.000	1040.	.000
6119	- Harpacticoida	F		1.	.000	40.	.000
611902	- Tegastidae	8		1.	.000	40.	.000
611909	- Ectinosomatidae	A		16.	.000	640.	.000
6119100194	- Harpacticus sp.-obscurus group	A		4.	.000	160.	.000
61191002	- Zaus sp.	8		1.	.000	40.	.000
61191301	- Tisbe sp.	A		26.	.000	1040.	.000
6119130201	- Scutellidium hippolytes	8		1.	.000	40.	.000
61191404	- Danielssenia sp.	8		1.	.000	40.	.000
6119150104	- Paralaophonte perplexa	A		1.	.000	40.	.000
6119280102	- Amonardia perturbata	A		2.	.000	80.	.000
6119280201	- Diosaccus spinatus	A		3.	.000	120.	.000
6119280905	- Stenhelia peniculata	A		4.	.000	160.	.000
6119281002	- Typhlamphiascus pectinifer	A		5.	.000	200.	.000
6119310102	- Dactylopusia vulgaris	A		43.	.000	1720.	.000
61193102	- Paradactylopodia sp.	A		9.	.000	360.	.000
61193104	- Diarthrodes sp.	A		3.	.000	120.	.000
6119310701	- Rhyncothalestris helgolandica	8		1.	.000	40.	.000
6120	- Cyclopoida	A		8.	.000	320.	.000
6120040101	- Corycaeus anglicus	A		3.	.000	120.	.000
6134	- Balanomorpha	E		3.	.000	120.	.000
6163120103	- Munna ubiquita	C		1.	.000	40.	.000

EPIBENTHIC PLANKTON ANALYSIS
****

IDENTIFICATION 98AP30
STATION DUWAMISH HEAD - GRAVEL
SAMPLE E 3

TIDE STAGE - NOT GIVEN
TIDE HEIGHT .0 METERS
COLLECTION TIME 1435 PST

ORGANISM CODE	- NAME	LIFE HISTORY STAGE	PARTS CODE	COUNT (PER SAMPLE FRACTION)	WET WT,GMS	COUNT (PER M**2)	WET WT,GMS
61690602	- Aoroides sp.	C		0.	.000	10.	.000
6169201299	- Pontogeneia sp. cf rostrata	A		2.	.000	80.	.000
61692602	- Photis sp.	7		1.	.000	40.	.000
61692604	- Gammaropsis sp.	A		7.	.000	280.	.000
6171010301	- Mayerella banksia	C		1.	.000	30.	.000
TOTAL				192.	.000	7680.	.000

Appendix C

Site #2 (Seacrest): 1999 Pea Gravel and Control (Mud)
Plot Sampling Results

EPIBENTHIC PLANKTON ANALYSIS
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****
* FRACTION SUMMARY *
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IDENTIFICATION 99MY24
STATION DUWAMISH HEAD MUD
SAMPLE E 1

TIDE STAGE NOT GIVEN
TIDE HEIGHT .0 METERS
COLLECTION TIME 0 PST

SPECIES DEFINITION -
TRUNCATED = NO
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

SAMPLE AREA = .1000 SQUARE METERS (M**2)
ABUNDANCES AND WEIGHTS ARE ADJUSTED TO A STANDARD SAMPLE OF .0250 SQUARE METERS

GEAR TYPE 62 (.1 M**2 plankton pump - 253u mesh net fraction of 3 nets)
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FRACTION WET WEIGHT = .0000 /.0250 M**2
FRACTION DRY WEIGHT = .0000 /.0250 M**2

ORGANISM CODE	- NAME	LIFE HISTORY STAGE	PARTS CODE	COUNT (PER STANDARD SAMPLE)	--- WET WT,GMS	COUNT (PER M**2)	--- WET WT,GMS
51	- Gastropoda	7		1.	.000	50.	.000
55	- Bivalvia	7		1.	.000	50.	.000
6118	- Calanoida	F2		3.	.000	100.	.000
61180505	- Pseudocalanus sp.	A		12.	.000	490.	.000
6118120299	- Stephos pacificus	A		9.	.000	350.	.000
61190301	- Porcellidium sp.	8		0.	.000	10.	.000
6119100194	- Harpacticus sp.-obscurus group	A		4.	.000	150.	.000
61191301	- Tisbe sp.	A		114.	.000	4570.	.000
6119280201	- Diosaccus spinatus	A		2.	.000	80.	.000
611931	- Thalestridae	F		5.	.000	200.	.000
6119310102	- Dactylopodia vulgaris	8		21.	.000	850.	.000
6119310105	- Dactylopodia paratisboides	8		6.	.000	250.	.000
61193102	- Paradactylopodia sp.	8		5.	.000	200.	.000
61193104	- Diarthrodes sp.	A		1.	.000	50.	.000
6119310701	- Rhyncothalestris helgolandica	8		3.	.000	100.	.000
6119311214	- Idomene purpurocincta	8		3.	.000	100.	.000
612014	- Cyclopinidae	A		5.	.000	200.	.000
6134	- Balanomorpha	72E		7.	.000	260.	.000
6169030202	- Amphilochus littoralis	A		1.	.000	50.	.000
61690602	- Aoroides sp.	7		0.	.000	10.	.000
6169201299	- Pontogeneia sp. cf rostrata	7		1.	.000	20.	.000
61692702	- Ischyrocerus sp.	7		1.	.000	50.	.000
6169371402	- Synchelidium shoemakeri	7		1.	.000	30.	.000
6169420602	- Parametophoxus fultoni	C		1.	.000	50.	.000
6174	- Euphausiacea	6		0.	.000	10.	.000
6179160499	- Eualus subtilis	C		0.	.000	10.	.000
TOTAL				207.	.000	8290.	.000

EPIBENTHIC PLANKTON ANALYSIS
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****
* FRACTION SUMMARY *
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IDENTIFICATION 99MY24
STATION DUWAMISH HEAD MUD
SAMPLE E 2

TIDE STAGE - NOT GIVEN
TIDE HEIGHT .0 METERS
COLLECTION TIME 0 PST

SPECIES DEFINITION -
TRUNCATED = NO
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

SAMPLE AREA = .1000 SQUARE METERS (M**2)
ABUNDANCES AND WEIGHTS ARE ADJUSTED TO A STANDARD SAMPLE OF .0250 SQUARE METERS

GEAR TYPE 62 (.1 M**2 plankton pump - 253u mesh net fraction of 3 nets)

FRACTION WET WEIGHT = .0000 /.0250 M**2
FRACTION DRY WEIGHT = .0000 /.0250 M**2

ORGANISM CODE	NAME	LIFE HISTORY STAGE	PARTS CODE	COUNT (PER STANDARD SAMPLE)	WET WT,GMS	COUNT (PER M**2)	WET WT,GMS
5001	Polychaeta	C		1.	.000	50.	.000
51	Gastropoda	7		1.	.000	20.	.000
5103100104	Littorina scutulata	+-egg		3.	.000	100.	.000
55	Bivalvia	7		1.	.000	30.	.000
6113	Podocopida	C		1.	.000	20.	.000
61180102	Calanus sp.	F		1.	.000	30.	.000
61180401	Paracalanus sp.	A		3.	.000	100.	.000
61180505	Pseudocalanus sp.	A		13.	.000	510.	.000
6118120299	Stephos pacificus	A		2.	.000	80.	.000
6118170101	Centropages abdominalis	F		0.	.000	10.	.000
6118290103	Acartia longiremis	8		1.	.000	40.	.000
6118290199	Acartia (Acartiura) spp.	A		2.	.000	60.	.000
6118300101	Tortanus discaudatus	F		1.	.000	20.	.000
611909	Ectinosomatidae	A		3.	.000	120.	.000
6119100194	Harpacticus sp.-obscurus group	A		1.	.000	40.	.000
61191002	Zaus sp.	F		1.	.000	20.	.000
61191301	Tisbe sp.	A		58.	.000	2300.	.000
6119150108	Paralaophonte hyperborea	8		1.	.000	40.	.000
61191802	Ameira sp.	8		1.	.000	20.	.000
611931	Thalestridae	F		9.	.000	360.	.000
6119310102	Dactylopodia vulgaris	8		21.	.000	820.	.000
61193102	Paradactylopodia sp.	8		2.	.000	60.	.000
61193104	Diarthrodes sp.	8		1.	.000	20.	.000
6119310701	Rhyncothalestris helgolandica	8		1.	.000	40.	.000
6119311214	Idomene purpurocincta	8		2.	.000	60.	.000
6120	Cyclopoida	8		1.	.000	20.	.000
612014	Cyclopinidae	A		3.	.000	120.	.000
612099	Poecilostomatoida	A		3.	.000	120.	.000
6134	Balanomorpha	72E		15.	.000	610.	.000
6169201299	Pontogeneia sp. cf rostrata	7		0.	.000	10.	.000
6169211008	Melita desdichada	7		1.	.000	20.	.000
6169420601	Metaphoxus frequens	7		0.	.000	10.	.000
6174	Euphausiacea	2		1.	.000	40.	.000
9999999999	Unidentified	6		1.	.000	20.	.000
TOTAL				149.	.000	5940.	.000

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* FRACTION SUMMARY *
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IDENTIFICATION 99MY24
STATION DUWAMISH HEAD MUD
SAMPLE E 3

TIDE STAGE - NOT GIVEN
TIDE HEIGHT .0 METERS
COLLECTION TIME 0 PST

SPECIES DEFINITION -
TRUNCATED = NO
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

SAMPLE AREA = .1000 SQUARE METERS (M**2)
ABUNDANCES AND WEIGHTS ARE ADJUSTED TO A STANDARD SAMPLE OF .0250 SQUARE METERS

GEAR TYPE 62 (.1 M**2 plankton pump - 253u mesh net fraction of 3 nets)

FRACTION WET WEIGHT = .0000 /.0250 M**2
FRACTION DRY WEIGHT = .0000 /.0250 M**2

ORGANISM CODE	- NAME	LIFE HISTORY STAGE	PARTS CODE	COUNT (PER STANDARD SAMPLE)	WET WT,GMS	COUNT (PER M**2)	WET WT,GMS
3701	- Hydrozoa	C		1.	.000	20.	.000
5001	- Polychaeta	C		9.	.000	350.	.000
51	- Gastropoda	7		3.	.000	110.	.000
5103100104	- Littorina scutulata	+-egg		2.	.000	60.	.000
55	- Bivalvia	7		2.	.000	90.	.000
6118	- Calanoida	2F		3.	.000	120.	.000
61180102	- Calanus sp.	F		3.	.000	100.	.000
61180505	- Pseudocalanus sp.	A		9.	.000	350.	.000
6118120299	- Stephos pacificus	A		2.	.000	80.	.000
6118290103	- Acartia longiremis	A		0.	.000	10.	.000
611909	- Ectinosomatidae	A		4.	.000	140.	.000
6119100194	- Harpacticus sp.-obscurus group	A		2.	.000	80.	.000
61191301	- Tisbe sp.	A		76.	.000	3040.	.000
61191404	- Danielssenia sp.	F		1.	.000	20.	.000
6119150108	- Paralaophonte hyperborea	8		1.	.000	20.	.000
61191507	- Normanella sp.	8		1.	.000	20.	.000
61191602	- Ameira sp.	8		1.	.000	20.	.000
6119280102	- Amonardia perturbata	8		1.	.000	40.	.000
61192802	- Diosaccus sp.	8		1.	.000	20.	.000
6119280201	- Diosaccus spinatus	8		0.	.000	10.	.000
6119280301	- Amphiascopsis cinctus	8		1.	.000	40.	.000
6119280905	- Stenhelia peniculata	8		1.	.000	20.	.000
6119281002	- Typhlamphiascus pectinifer	8		1.	.000	40.	.000
6119281299	- Amphiascoides sp. a	8		1.	.000	20.	.000
61192906	- Orthopsyllus sp.	8		1.	.000	20.	.000
611931	- Thalestridae	F		10.	.000	380.	.000
6119310102	- Dactylopodia vulgaris	8		22.	.000	860.	.000
6119310701	- Rhyncothalestris helgolandica	8		1.	.000	20.	.000
6119999999	- Ambunguipes rufocincta	8		1.	.000	20.	.000
61200899	- Euryte sp.	8		1.	.000	40.	.000
612014	- Cyclopinidae	8		1.	.000	40.	.000
6134	- Balanomorpha	72E		16.	.000	640.	.000
6154080102	- Cumella vulgaris	7		1.	.000	20.	.000
6163120103	- Munna ubiquita	7		1.	.000	30.	.000
6169030202	- Amphilochus littoralis	A		0.	.000	10.	.000
61690401	- Ampithoe sp.	7		0.	.000	10.	.000
61690602	- Aoroides sp.	7		0.	.000	10.	.000
6169371402	- Synchelidium shoemakeri	7		2.	.000	60.	.000
6169421999	- Eobrolgus chumashi	A		1.	.000	20.	.000
6171	- Caprellidea	7		0.	.000	10.	.000
6174	- Euphausiacea	+-egg		4.	.000	160.	.000
6174	- Euphausiacea	2		1.	.000	20.	.000
TOTAL				180.	.000	7190.	.000

1 EPIBENTHIC PLANKTON ANALYSIS
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* FRACTION SUMMARY *
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IDENTIFICATION 99MY24
STATION DUWAMISH HEAD GRAVEL
SAMPLE E 1

TIDE STAGE - NOT GIVEN
TIDE HEIGHT .0 METERS
COLLECTION TIME 0 PST

SPECIES DEFINITION -
TRUNCATED = NO
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

SAMPLE AREA = .1000 SQUARE METERS (M**2)
ABUNDANCES AND WEIGHTS ARE ADJUSTED TO A STANDARD SAMPLE OF .0250 SQUARE METERS

GEAR TYPE 62 (.1 M**2 plankton pump - 253u mesh net fraction of 3 nets)

FRACTION WET WEIGHT = .0000 /.0250 M**2
FRACTION DRY WEIGHT = .0000 /.0250 M**2

ORGANISM CODE	- NAME	LIFE HISTORY STAGE	PARTS CODE	COUNT (PER STANDARD SAMPLE)	WET WT,GMS	COUNT (PER M**2)	WET WT,GMS
5001	- Polychaeta	C		1.	.000	30.	.000
5103100104	- Littorina scutulata	r-egg		1.	.000	30.	.000
55	- Bivalvia	7		5.	.000	200.	.000
61180102	- Calanus sp.	F		1.	.000	20.	.000
61180401	- Paracalanus sp.	A		3.	.000	100.	.000
6118120299	- Stephos pacificus	A		8.	.000	300.	.000
61190201	- Tegastes sp.	8		38.	.000	1500.	.000
611909	- Ectinosomatidae	A		5.	.000	200.	.000
6119100194	- Harpacticus sp.-obscurus group	A		3.	.000	100.	.000
61191301	- Tisbe sp.	A		274.	.000	10950.	.000
6119150108	- Paralaophonte hyperborea	8		8.	.000	300.	.000
611920	- Diosaccidae	8		3.	.000	100.	.000
6119280102	- Amonardia perturbata	A		5.	.000	200.	.000
6119280201	- Diosaccus spinatus	A		4.	.000	140.	.000
6119280301	- Amphiascopsis cinctus	A		6.	.000	220.	.000
6119281002	- Typhlamphiascus pectinifer	A		3.	.000	100.	.000
611931	- Thalestridae	F		135.	.000	5400.	.000
6119310102	- Dactylopodia vulgaris	8		648.	.000	25900.	.000
61193104	- Diarthrodes sp.	8		8.	.000	300.	.000
612014	- Cyclopinidae	A		15.	.000	600.	.000
6134	- Balanomorpha	7E		2.	.000	70.	.000
61450101	- Nebalia sp.	C		0.	.000	10.	.000
6153	- Mysidacea-mysida	7		1.	.000	20.	.000
6154010105	- Lamprops quadriplicata	7		0.	.000	10.	.000
6169030202	- Amphilochus littoralis	7		0.	.000	10.	.000
61690602	- Aoroides sp.	7		9.	.000	370.	.000
6169201299	- Pontogeneia sp. cf rostrata	7		2.	.000	60.	.000
61692604	- Gammaropsis sp.	A		25.	.000	990.	.000
61692702	- Ischyrocerus sp.	7		7.	.000	270.	.000
6169371402	- Synchelidium shoemakeri	A		1.	.000	20.	.000
616943	- Pleustidae	7		0.	.000	10.	.000
6174	- Euphausiacea	2		3.	.000	100.	.000
617916	- Hippolytidae	7		1.	.000	30.	.000
6179221499	- Mesocrangon munitella	7		0.	.000	10.	.000
TOTAL				1217.	.000	48670.	.000

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* FRACTION SUMMARY *
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IDENTIFICATION 99MY24
STATION DUWAMISH HEAD GRAVEL
SAMPLE E 2

TIDE STAGE - NOT GIVEN
TIDE HEIGHT .0 METERS
COLLECTION TIME 0 PST

SPECIES DEFINITION -
TRUNCATED = NO
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

SAMPLE AREA = .1000 SQUARE METERS (M**2)
ABUNDANCES AND WEIGHTS ARE ADJUSTED TO A STANDARD SAMPLE OF .0250 SQUARE METERS

GEAR TYPE 62 (.1 M**2 plankton pump - 253u mesh net fraction of 3 nets)

FRACTION WET WEIGHT = .0000 /.0250 M**2
FRACTION DRY WEIGHT = .0000 /.0250 M**2

ORGANISM CODE	- NAME	LIFE HISTORY STAGE	PARTS CODE	COUNT (PER STANDARD SAMPLE)	WET WT,GMS	COUNT (PER M**2)	WET WT,GMS
5001	- Polychaeta	C		2.	.000	80.	.000
51	- Gastropoda	7		2.	.000	80.	.000
5103100104	- Littorina scutulata	+-egg		5.	.000	200.	.000
593001	- Halacaridae	C		1.	.000	40.	.000
6113	- Podocopida	C		1.	.000	40.	.000
6118	- Calanoida	2		4.	.000	160.	.000
61180102	- Calanus sp.	F		2.	.000	90.	.000
61180505	- Pseudocalanus sp.	A		13.	.000	520.	.000
6118120299	- Stephos pacificus	A		17.	.000	680.	.000
6118170101	- Centropages abdominalis	8		0.	.000	10.	.000
6118290103	- Acartia longiremis	8		0.	.000	10.	.000
6119	- Harpacticoida	F		1.	.000	40.	.000
61190201	- Tegastes sp.	8		1.	.000	40.	.000
611911	- Peltidiidae	8		0.	.000	10.	.000
61191301	- Tisbe sp.	A		49.	.000	1960.	.000
6119150108	- Paralaophonte hyperborea	A		4.	.000	160.	.000
6119180202	- Ameira longipes	8		1.	.000	40.	.000
6119280102	- Amonardia perturbata	A		2.	.000	90.	.000
6119280201	- Diosaccus spinatus	A		3.	.000	120.	.000
611931	- Thalestridae	F		20.	.000	800.	.000
6119310102	- Dactylopodia vulgaris	8		95.	.000	3800.	.000
61193102	- Paradactylopodia sp.	8		1.	.000	40.	.000
6119310701	- Rhyncothalestris helgolandica	8		1.	.000	40.	.000
6120	- Cyclopoida	8		0.	.000	10.	.000
6134	- Balanomorpha	2E7		15.	.000	600.	.000
616306	- Janiridae	C		1.	.000	40.	.000
61690602	- Acroides sp.	7		0.	.000	10.	.000
6169201299	- Pontogeneia sp. cf rostrata	A		0.	.000	10.	.000
61692702	- Ischyrocerus sp.	7		0.	.000	10.	.000
6169371402	- Synchelidium shoemakeri	A		0.	.000	10.	.000
6174	- Euphausiacea	+-egg		8.	.000	320.	.000
6174	- Euphausiacea	2		1.	.000	40.	.000
6179160499	- Eualus subtilis	C		0.	.000	10.	.000
TOTAL				253.	.000	10110.	.000

1 EPIBENTHIC PLANKTON ANALYSIS
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****
* FRACTION SUMMARY *
****

IDENTIFICATION 99MY24
STATION DUWAMISH HEAD GRAVEL
SAMPLE E 3

TIDE STAGE - NOT GIVEN
TIDE HEIGHT .0 METERS
COLLECTION TIME 0 PST

SPECIES DEFINITION -
TRUNCATED = NO
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

SAMPLE AREA = .1000 SQUARE METERS (M**2)
ABUNDANCES AND WEIGHTS ARE ADJUSTED TO A STANDARD SAMPLE OF .0250 SQUARE METERS

GEAR TYPE 62 (.1 M**2 plankton pump - 253u mesh net fraction of 3 nets)

FRACTION WET WEIGHT = .0000 /.0250 M**2
FRACTION DRY WEIGHT = .0000 /.0250 M**2

ORGANISM CODE	- NAME	LIFE HISTORY STAGE	PARTS CODE	COUNT (PER STANDARD SAMPLE)	WET WT,GMS	COUNT (PER M**2)	WET WT,GMS
5001	- Polychaeta	C		5.	.000	190.	.000
5103100104	- Littorina scutulata	+-egg		14.	.000	560.	.000
593001	- Halacaridae	C		3.	.000	100.	.000
6113	- Podocopida	C		13.	.000	500.	.000
6118	- Calanoida	F		3.	.000	100.	.000
61180102	- Calanus sp.	F		4.	.000	150.	.000
61180505	- Pseudocalanus sp.	A		5.	.000	200.	.000
6118120299	- Stephos pacificus	A		3.	.000	100.	.000
61190301	- Porcellidium sp.	8		5.	.000	200.	.000
6119100194	- Harpacticus sp.-obscurus group	A		3.	.000	100.	.000
611911	- Peltidiidae	8		1.	.000	20.	.000
61191301	- Tisbe sp.	A		283.	.000	11300.	.000
6119150108	- Paralaophonte hyperborea	A		10.	.000	400.	.000
6119280201	- Diosaccus spinatus	A		9.	.000	370.	.000
61192804	- Amphiascus sp.	8		3.	.000	100.	.000
611931	- Thalestridae	F		28.	.000	1100.	.000
6119310102	- Dactylopodia vulgaris	8		158.	.000	6300.	.000
612014	- Cyclopinidae	A		20.	.000	800.	.000
6134	- Balanomorpha	72E		89.	.000	3550.	.000
6153	- Mysidacea-mysida	7		1.	.000	20.	.000
6154080102	- Cumella vulgaris	8		0.	.000	10.	.000
61690602	- Aoroides sp.	7		0.	.000	10.	.000
6169201299	- Pontogeneia sp. cf rostrata	7		3.	.000	120.	.000
6169211008	- Melita desdichada	7		0.	.000	10.	.000
61692604	- Gammaropsis sp.	7		1.	.000	20.	.000
61692702	- Ischyrocerus sp.	7		4.	.000	140.	.000
6169420602	- Parametophoxus fultoni	C		0.	.000	10.	.000
6169421999	- Eobrolgus chumashi	7		0.	.000	10.	.000
61694305	- Pleusymtes sp.	7		0.	.000	10.	.000
6171	- Caprellidea	7		0.	.000	10.	.000
6174	- Euphausiacea	2		8.	.000	300.	.000
617916	- Hippolytidae	C		1.	.000	20.	.000
TOTAL				671.	.000	26830.	.000

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EPIBENTHIC PLANKTON ANALYSIS
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* SITE SUMMARY *
****

IDENTIFICATION 99MY24
STATION DUWAMISH HEAD MUD
FROM SAMPLES E 1 E 2 E 3

SPECIES DEFINITION -
TRUNCATED = NO
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

ABUNDANCES AND WEIGHTS ARE ADJUSTED TO AN AREA OF 1.0 SQUARE METERS

	MEAN	RANGE	S.D.	COEF.VAR
SAMPLE AREA (M**2)	.100	.100-.100	.000	.000
TOTAL WET WEIGHT (PER M**2)	.000	.000-.000	.000	.000
TOTAL ABUNDANCE (PER M**2)	7140.00	5940.00-8290.00	1175.80	.16
SAMPLE WET WEIGHT (PER M**2)	.000	.000-.000	.000	.000
SAMPLE DRY WEIGHT (PER M**2)	.000	.000-.000	.000	.000

ORGANISM NAME		NUMBERS/M**2				WET WEIGHT,GRAMS/M**2				AVG. BIOMASS		PERCENTAGES	
PARTS CODE	LH-STAGE	TOTAL	MEAN	RANGE	S.D.	TOTAL	MEAN	RANGE	S.D.	MEAN	S.D.	ABUN-DANCE	BIO-MASS
Hydrozoa	C	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Polychaeta	C	400.0	133.3	50.0 - 350.0	189.3	.000	.000	.000 - .000	.00	.0000	.0000	1.87	.00
Gastropoda	7	180.0	60.0	20.0 - 110.0	45.8	.000	.000	.000 - .000	.00	.0000	.0000	.84	.00
Littorina scutulata	+-egg	160.0	53.3	60.0 - 100.0	50.3	.000	.000	.000 - .000	.00	.0000	.0000	.75	.00

EPIBENTHIC PLANKTON ANALYSIS

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IDENTIFICATION 99MY24

STATION DUWAMISH HEAD MUD
FROM SAMPLES E 1 E 2 E 3

ORGANISM NAME		NUMBERS/M**2				WET WEIGHT,GRAMS/M**2				AVG. BIOMASS		PERCENTAGES	
PARTS CODE	LH-STAGE	TOTAL	MEAN	RANGE	S.D.	TOTAL	MEAN	RANGE	S.D.	MEAN	S.D.	ABUN-DANCE	BIO-MASS
Bivalvia	7	170.0	56.7	30.0 - 90.0	30.6	.000	.000	.000 - .000	.00	.0000	.0000	.79	.00
Podocopida	C	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Calanoida	F2	220.0	73.3	100.0 - 120.0	64.3	.000	.000	.000 - .000	.00	.0000	.0000	1.03	.00
Calanus sp.	F	130.0	43.3	30.0 - 100.0	51.3	.000	.000	.000 - .000	.00	.0000	.0000	.61	.00
Paracalanus sp.	A	100.0	33.3	100.0 - 100.0	57.7	.000	.000	.000 - .000	.00	.0000	.0000	.47	.00
Pseudocalanus sp.	A	1350.0	450.0	350.0 - 510.0	87.2	.000	.000	.000 - .000	.00	.0000	.0000	6.30	.00
Stephos pacificus	A	510.0	170.0	80.0 - 350.0	155.9	.000	.000	.000 - .000	.00	.0000	.0000	2.38	.00
Centropages abdominalis	F	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
Acartia longiremis	8A	50.0	16.7	10.0 - 40.0	20.8	.000	.000	.000 - .000	.00	.0000	.0000	.23	.00
Acartia (Acartiura) spp.	A	60.0	20.0	60.0 - 60.0	34.6	.000	.000	.000 - .000	.00	.0000	.0000	.28	.00
Tortanus discaudatus	F	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Porcellidiidae	8	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
Ectinosomatidae	A	260.0	86.7	120.0 - 140.0	75.7	.000	.000	.000 - .000	.00	.0000	.0000	1.21	.00
Harpacticus sp.-obscurus group	A	270.0	90.0	40.0 - 150.0	55.7	.000	.000	.000 - .000	.00	.0000	.0000	1.26	.00
Zaus sp.	F	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00

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IDENTIFICATION 99MY24

STATION DUWAMISH HEAD MUD
FROM SAMPLES E 1 E 2 E 3

ORGANISM NAME	PARTS CODE	LH-STAGE	NUMBERS/M**2 TOTAL	MEAN	RANGE	S.D.	WET WEIGHT,GRAMS/M**2 TOTAL	MEAN	RANGE	S.D.	AVG. BIOMASS MEAN	S.D.	PERCENTAGES ABUN-DANCE	BIO-MASS
Tisbe sp.		A	9910.0	3303.3	2300.0 - 4570.0	1157.7	.000	.000	.000 - .000	.00	.0000	.0000	46.27	.00
Danielssenia sp.		F	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Paralaophonte sp.		8	60.0	20.0	20.0 - 40.0	20.0	.000	.000	.000 - .000	.00	.0000	.0000	.28	.00
Laophontidae		8	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Ameira sp.		8	40.0	13.3	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.19	.00
Amonardia perturbata		8	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.19	.00
Diosaccus sp.		8	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Diosaccus spinatus		A8	90.0	30.0	10.0 - 80.0	43.6	.000	.000	.000 - .000	.00	.0000	.0000	.42	.00
Amphiascopsis cinctus		8	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.19	.00
Stenhelia peniculata		8	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Typhlamphiascus pectinifer		8	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.19	.00
Amphiascoides sp. a		8	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Canthocamptidae		8	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Thalestridae		F	940.0	313.3	200.0 - 380.0	98.7	.000	.000	.000 - .000	.00	.0000	.0000	4.39	.00
Dactylopusia vulgaris		8	2530.0	843.3	820.0 - 860.0	20.8	.000	.000	.000 - .000	.00	.0000	.0000	11.81	.00

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IDENTIFICATION 99MY24

STATION DUWAMISH HEAD MUD
FROM SAMPLES E 1 E 2 E 3

ORGANISM NAME		NUMBERS/M**2				WET WEIGHT,GRAMS/M**2				AVG. BIOMASS		PERCENTAGES	
PARTS CODE	LH-STAGE	TOTAL	MEAN	RANGE	S.D.	TOTAL	MEAN	RANGE	S.D.	MEAN	S.D.	ABUN-DANCE	BIO-MASS
Dactylopusia paratisboides	8	250.0	83.3	250.0 - 250.0	144.3	.000	.000	.000 - .000	.00	.0000	.0000	1.17	.00
Paradactylopodia sp.	8	260.0	86.7	60.0 - 200.0	102.6	.000	.000	.000 - .000	.00	.0000	.0000	1.21	.00
Diarthrodes sp.	A8	70.0	23.3	20.0 - 50.0	25.2	.000	.000	.000 - .000	.00	.0000	.0000	.33	.00
Rhyncothalestris helgolandica	8	160.0	53.3	20.0 - 100.0	41.6	.000	.000	.000 - .000	.00	.0000	.0000	.75	.00
Idomene purpurocincta	8	160.0	53.3	60.0 - 100.0	50.3	.000	.000	.000 - .000	.00	.0000	.0000	.75	.00
Ambunguipes rufocincta	8	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Cyclopoida	8	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Eurytе sp.	8	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.19	.00
Cyclopinidae	A8	360.0	120.0	40.0 - 200.0	80.0	.000	.000	.000 - .000	.00	.0000	.0000	1.68	.00
Cyclopoida	A	120.0	40.0	120.0 - 120.0	69.3	.000	.000	.000 - .000	.00	.0000	.0000	.56	.00
Balanomorpha	72E	1510.0	503.3	260.0 - 640.0	211.3	.000	.000	.000 - .000	.00	.0000	.0000	7.05	.00
Cumella vulgaris	7	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Munna ubiquita	7	30.0	10.0	30.0 - 30.0	17.3	.000	.000	.000 - .000	.00	.0000	.0000	.14	.00
Amphilochus littoralis	A	60.0	20.0	10.0 - 50.0	26.5	.000	.000	.000 - .000	.00	.0000	.0000	.28	.00
Ampithoe sp.	7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00

EPIBENTHIC PLANKTON ANALYSIS
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IDENTIFICATION 99MY24

STATION DUWAMISH HEAD MUD
FROM SAMPLES E 1 E 2 E 3

ORGANISM NAME		NUMBERS/M**2				WET WEIGHT,GRAMS/M**2				AVG. BIOMASS		PERCENTAGES	
PARTS CODE	LH-STAGE	TOTAL	MEAN	RANGE	S.D.	TOTAL	MEAN	RANGE	S.D.	MEAN	S.D.	ABUN-DANCE	BIO-MASS
Aoroides sp.	7	20.0	6.7	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Pontogeneia sp. cf rostrata	7	30.0	10.0	10.0 - 20.0	10.0	.000	.000	.000 - .000	.00	.0000	.0000	.14	.00
Melita desdichada	7	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Ischyrocerus sp.	7	50.0	16.7	50.0 - 50.0	28.9	.000	.000	.000 - .000	.00	.0000	.0000	.23	.00
Synchelidium shoemakeri	7	90.0	30.0	30.0 - 60.0	30.0	.000	.000	.000 - .000	.00	.0000	.0000	.42	.00
Metaphoxus frequens	7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
Parametophoxus fultoni	C	50.0	16.7	50.0 - 50.0	28.9	.000	.000	.000 - .000	.00	.0000	.0000	.23	.00
Eobrolgus chumashi	A	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Caprellidea	7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
Euphausiacea	+-egg	160.0	53.3	160.0 - 160.0	92.4	.000	.000	.000 - .000	.00	.0000	.0000	.75	.00
Euphausiacea	62	70.0	23.3	10.0 - 40.0	15.3	.000	.000	.000 - .000	.00	.0000	.0000	.33	.00
Eualus subtilis	C	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
Unidentified	6	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00

0 TOTAL NUMBER OF PLANKTON CATEGORIES 62

SHANNON-WEINER DIVERSITY INDEX NUMBERS 3.31
BIOMASS .00
BRILLOUIN-S DIVERSITY INDEX BASED ON NUMBERS 3.30

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* SITE SUMMARY *
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IDENTIFICATION 99MY24
STATION DUWAMISH HEAD GRAVEL
FROM SAMPLES E 1 E 2 E 3

SPECIES DEFINITION -
TRUNCATED = NO
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

ABUNDANCES AND WEIGHTS ARE ADJUSTED TO AN AREA OF 1.0 SQUARE METERS

	MEAN	RANGE	S.D.	COEF.VAR
SAMPLE AREA (M**2)	.100	.100-.100	.000	.000
TOTAL WET WEIGHT (PER M**2)	.000	.000-.000	.000	.000
TOTAL ABUNDANCE (PER M**2)	28536.67	10110.00-48670.00	19336.57	.68
SAMPLE WET WEIGHT (PER M**2)	.000	.000-.000	.000	.000
SAMPLE DRY WEIGHT (PER M**2)	.000	.000-.000	.000	.000

ORGANISM NAME		NUMBERS/M**2				WET WEIGHT,GRAMS/M**2				AVG. BIOMASS		PERCENTAGES	
PARTS CODE	LH-STAGE	TOTAL	MEAN	RANGE	S.D.	TOTAL	MEAN	RANGE	S.D.	MEAN	S.D.	ABUN-DANCE	BIO-MASS
Polychaeta	C	300.0	100.0	30.0 - 190.0	81.9	.000	.000	.000 - .000	.00	.0000	.0000	.35	.00
Gastropoda	7	80.0	26.7	80.0 - 80.0	46.2	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Littorina scutulata	+-egg	790.0	263.3	30.0 - 560.0	270.6	.000	.000	.000 - .000	.00	.0000	.0000	.92	.00
Bivalvia	7	200.0	66.7	200.0 - 200.0	115.5	.000	.000	.000 - .000	.00	.0000	.0000	.23	.00

EPIBENTHIC PLANKTON ANALYSIS
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IDENTIFICATION 99MY24
STATION DUWAMISH HEAD GRAVEL
FROM SAMPLES E 1 E 2 E 3

ORGANISM NAME	PARTS CODE	LH-STAGE	NUMBERS/M**2 TOTAL	NUMBERS/M**2 MEAN	NUMBERS/M**2 RANGE	NUMBERS/M**2 S.D.	WET WEIGHT,GRAMS/M**2 TOTAL	WET WEIGHT,GRAMS/M**2 MEAN	WET WEIGHT,GRAMS/M**2 RANGE	WET WEIGHT,GRAMS/M**2 S.D.	AVG. BIOMASS MEAN	AVG. BIOMASS S.D.	PERCENTAGES ABUN-DANCE	PERCENTAGES BIO-MASS
Halacaridae		C	140.0	46.7	40.0 - 100.0	50.3	.000	.000	.000 - .000	.00	.0000	.0000	.16	.00
Podocopida		C	540.0	180.0	40.0 - 500.0	277.8	.000	.000	.000 - .000	.00	.0000	.0000	.63	.00
Calanoida		2F	260.0	86.7	100.0 - 160.0	80.8	.000	.000	.000 - .000	.00	.0000	.0000	.30	.00
Calanus sp.		F	260.0	86.7	20.0 - 150.0	65.1	.000	.000	.000 - .000	.00	.0000	.0000	.30	.00
Paracalanus sp.		A	100.0	33.3	100.0 - 100.0	57.7	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Pseudocalanus sp.		A	720.0	240.0	200.0 - 520.0	262.3	.000	.000	.000 - .000	.00	.0000	.0000	.84	.00
Stephos pacificus		A	1080.0	360.0	100.0 - 680.0	294.6	.000	.000	.000 - .000	.00	.0000	.0000	1.26	.00
Centropages abdominalis		8	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Acartia longiremis		8	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Harpacticoida		F	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
Tegastes sp.		8	1540.0	513.3	40.0 - 1500.0	854.7	.000	.000	.000 - .000	.00	.0000	.0000	1.80	.00
Porcellidiidae		8	200.0	66.7	200.0 - 200.0	115.5	.000	.000	.000 - .000	.00	.0000	.0000	.23	.00
Ectinosomatidae		A	200.0	66.7	200.0 - 200.0	115.5	.000	.000	.000 - .000	.00	.0000	.0000	.23	.00
Harpacticus sp.-obscurus group		A	200.0	66.7	100.0 - 100.0	57.7	.000	.000	.000 - .000	.00	.0000	.0000	.23	.00
Peltidiidae		8	30.0	10.0	10.0 - 20.0	10.0	.000	.000	.000 - .000	.00	.0000	.0000	.04	.00
Tisbe sp.		A	24210.0	8070.0	1960.0 - 11300.0	5294.3	.000	.000	.000 - .000	.00	.0000	.0000	28.28	.00
Paralaophonte sp.		8A	860.0	286.7	160.0 - 400.0	120.6	.000	.000	.000 - .000	.00	.0000	.0000	1.00	.00

IDENTIFICATION 99MY24
STATION DUWAMISH HEAD GRAVEL
FROM SAMPLES E 1 E 2 E 3

ORGANISM NAME	PARTS CODE	LH-STAGE	NUMBERS/M**2 TOTAL	NUMBERS/M**2 MEAN	NUMBERS/M**2 RANGE	NUMBERS/M**2 S.D.	WET WEIGHT,GRAMS/M**2 TOTAL	WET WEIGHT,GRAMS/M**2 MEAN	WET WEIGHT,GRAMS/M**2 RANGE	WET WEIGHT,GRAMS/M**2 S.D.	AVG. BIOMASS MEAN	AVG. BIOMASS S.D.	PERCENTAGES ABUN-DANCE	PERCENTAGES BIO-MASS
Ameira longipes		8	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
Diosaccidae		8	100.0	33.3	100.0 - 100.0	57.7	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Amonardia perturbata		A	290.0	96.7	90.0 - 200.0	100.2	.000	.000	.000 - .000	.00	.0000	.0000	.34	.00
Diosaccus spinatus		A	630.0	210.0	120.0 - 370.0	138.9	.000	.000	.000 - .000	.00	.0000	.0000	.74	.00
Amphiascopsis cinctus		A	220.0	73.3	220.0 - 220.0	127.0	.000	.000	.000 - .000	.00	.0000	.0000	.26	.00
Amphiascus sp.		8	100.0	33.3	100.0 - 100.0	57.7	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Typhlamphiascus pectinifer		A	100.0	33.3	100.0 - 100.0	57.7	.000	.000	.000 - .000	.00	.0000	.0000	.12	.00
Thalestridae		F	7300.0	2433.3	800.0 - 5400.0	2573.6	.000	.000	.000 - .000	.00	.0000	.0000	8.53	.00
Dactylopusia vulgaris		8	36000.0	12000.0	3800.0 - 25900.0	12102.5	.000	.000	.000 - .000	.00	.0000	.0000	42.05	.00
Paradactylopodia sp.		8	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
Diarthrodes sp.		8	300.0	100.0	300.0 - 300.0	173.2	.000	.000	.000 - .000	.00	.0000	.0000	.35	.00
Rhyncothalestris helgolandica		8	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
Cyclopoida		8	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Cyclopinidae		A	1400.0	466.7	600.0 - 800.0	416.3	.000	.000	.000 - .000	.00	.0000	.0000	1.64	.00
Balaromorpha		7E2	4220.0	1406.7	70.0 - 3550.0	1875.0	.000	.000	.000 - .000	.00	.0000	.0000	4.93	.00
Nebalia sp.		C	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Mysidacea-mysida		7	40.0	13.3	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00

IDENTIFICATION 99MY24
STATION DUWAMISH HEAD GRAVEL
FROM SAMPLES E 1 E 2 E 3

ORGANISM NAME	PARTS CODE	LH-STAGE	NUMBERS/M**2 TOTAL	MEAN	RANGE	S.D.	WET WEIGHT,GRAMS/M**2 TOTAL	MEAN	RANGE	S.D.	AVG. BIOMASS MEAN	S.D.	PERCENTAGES ABUN-DANCE	BIO-MASS
Lamprops quadriplicata		7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Cumella vulgaris		8	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Janiridae		C	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
Amphilochus littoralis		7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Aoroides sp.		7	390.0	130.0	10.0 - 370.0	207.8	.000	.000	.000 - .000	.00	.0000	.0000	.46	.00
Pontogeneia sp. cf rostrata		7A	190.0	63.3	10.0 - 120.0	55.1	.000	.000	.000 - .000	.00	.0000	.0000	.22	.00
Melita desdichada		7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Gammaropsis sp.		A7	1010.0	336.7	20.0 - 990.0	565.9	.000	.000	.000 - .000	.00	.0000	.0000	1.18	.00
Ischyrocerus sp.		7	420.0	140.0	10.0 - 270.0	130.0	.000	.000	.000 - .000	.00	.0000	.0000	.49	.00
Synchelidium shoemakeri		A	30.0	10.0	10.0 - 20.0	10.0	.000	.000	.000 - .000	.00	.0000	.0000	.04	.00
Parametophoxus fultoni		C	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Eohrolgus chumashi		7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Pleustidae		7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Pleusymtes sp.		7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Caprellidea		7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Euphausiacea		+-egg	320.0	106.7	320.0 - 320.0	184.8	.000	.000	.000 - .000	.00	.0000	.0000	.37	.00
Euphausiacea		2	440.0	146.7	40.0 - 300.0	136.1	.000	.000	.000 - .000	.00	.0000	.0000	.51	.00

1 EPIBENTHIC PLANKTON ANALYSIS

IDENTIFICATION 99MY24
STATION DUWAMISH HEAD GRAVEL
FROM SAMPLES E 1 E 2 E 3

ORGANISM NAME	PARTS CODE	LH-STAGE	NUMBERS/M**2 TOTAL	MEAN	RANGE	S.D.	WET WEIGHT,GRAMS/M**2 TOTAL	MEAN	RANGE	S.D.	AVG. BIOMASS MEAN	S.D.	PERCENTAGES ABUN-DANCE	BIO-MASS
Hippolytidae	7C		50.0	16.7	20.0 - 30.0	15.3	.000	.000	.000 - .000	.00	.0000	.0000	.06	.00
Eualus subtilis	C		10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Mesocrangon munitella	7		10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00

0 TOTAL NUMBER OF PLANKTON CATEGORIES 58

SHANNON-WEINER DIVERSITY INDEX NUMBERS 2.74
BIOMASS .00
BRILLOUIN-S DIVERSITY INDEX BASED ON NUMBERS 2.74

EPIBENTHIC PLANKTON ANALYSIS
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****
* SITE SUMMARY *
****

IDENTIFICATION 89MY24
STATION DUWAMISH HEAD MUD
FROM SAMPLES E 1 E 2 E 3

SPECIES DEFINITION -
TRUNCATED = YES, BY 6
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

ABUNDANCES AND WEIGHTS ARE ADJUSTED TO AN AREA OF 1.0 SQUARE METERS

	MEAN	RANGE	S.D.	COEF.VAR
SAMPLE AREA (M**2)	.100	.100-.100	.000	.000
TOTAL WET WEIGHT (PER M**2)	.000	.000-.000	.000	.000
TOTAL ABUNDANCE (PER M**2)	7140.00	5940.00-8290.00	1175.80	.16
SAMPLE WET WEIGHT (PER M**2)	.000	.000-.000	.000	.000
SAMPLE DRY WEIGHT (PER M**2)	.000	.000-.000	.000	.000

ORGANISM NAME		NUMBERS/M**2				WET WEIGHT,GRAMS/M**2				AVG. BIOMASS		PERCENTAGES	
PARTS CODE	LH-STAGE	TOTAL	MEAN	RANGE	S.D.	TOTAL	MEAN	RANGE	S.D.	MEAN	S.D.	ABUN-DANCE	BIO-MASS
Hydrozoa	C	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Polychaeta	C	400.0	133.3	50.0 - 350.0	189.3	.000	.000	.000 - .000	.00	.0000	.0000	1.87	.00
Gastropoda	7	180.0	60.0	20.0 - 110.0	45.8	.000	.000	.000 - .000	.00	.0000	.0000	.84	.00
Mesogastropoda	+-egg	160.0	53.3	60.0 - 100.0	50.3	.000	.000	.000 - .000	.00	.0000	.0000	.75	.00
Bivalvia	7	170.0	56.7	30.0 - 90.0	30.6	.000	.000	.000 - .000	.00	.0000	.0000	.79	.00
Podocopida	C	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Calanoida	AF28	2450.0	816.7	660.0 - 940.0	142.9	.000	.000	.000 - .000	.00	.0000	.0000	11.44	.00

EPIBENTHIC PLANKTON ANALYSIS
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IDENTIFICATION 99MY24
STATION DUWAMISH HEAD MUD
FROM SAMPLES E 1 E 2 E 3

ORGANISM NAME	PARTS CODE	LH-STAGE	NUMBERS/M**2 TOTAL	MEAN	RANGE	S.D.	WET WEIGHT,GRAMS/M**2 TOTAL	MEAN	RANGE	S.D.	AVG. BIOMASS MEAN	S.D.	PERCENTAGES ABUN-DANCE	BIO-MASS
Harpacticoida		A8F	15290.0	5096.7	3900.0 - 6560.0	1349.9	.000	.000	.000 - .000	.00	.0000	.0000	71.38	.00
Cyclopoida		A8	540.0	180.0	80.0 - 260.0	91.7	.000	.000	.000 - .000	.00	.0000	.0000	2.52	.00
Balanomorpha		72E	1510.0	503.3	260.0 - 640.0	211.3	.000	.000	.000 - .000	.00	.0000	.0000	7.05	.00
Cumacea		7	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Asellota		7	30.0	10.0	30.0 - 30.0	17.3	.000	.000	.000 - .000	.00	.0000	.0000	.14	.00
Gammaridea		C7A	360.0	120.0	40.0 - 210.0	85.4	.000	.000	.000 - .000	.00	.0000	.0000	1.68	.00
Caprellidea		7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
Euphausiacea		+-egg	160.0	53.3	160.0 - 160.0	92.4	.000	.000	.000 - .000	.00	.0000	.0000	.75	.00
Euphausiacea		62	70.0	23.3	10.0 - 40.0	15.3	.000	.000	.000 - .000	.00	.0000	.0000	.33	.00
Pleocyemata-caridea		C	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
**NAME NOT FOUND (9999)		6	20.0	6.7	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00

0 TOTAL NUMBER OF PLANKTON CATEGORIES 18

SHANNON-WEINER DIVERSITY INDEX NUMBERS 1.62
BIOMASS .00
BRILLOUIN-S DIVERSITY INDEX BASED ON NUMBERS 1.62

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* SITE SUMMARY *
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IDENTIFICATION 99MY24
STATION DUWAMISH HEAD GRAVEL
FROM SAMPLES E 1 E 2 E 3

SPECIES DEFINITION -
TRUNCATED = YES, BY 6
LH-STAGE = EGGORNOT
PARTS CODE EXCLUDED

ABUNDANCES AND WEIGHTS ARE ADJUSTED TO AN AREA OF 1.0 SQUARE METERS

	MEAN	RANGE	S.D.	COEF.VAR
SAMPLE AREA (M**2)	.100	.100-.100	.000	.000
TOTAL WET WEIGHT (PER M**2)	.000	.000-.000	.000	.000
TOTAL ABUNDANCE (PER M**2)	28536.67	10110.00-48670.00	19336.57	.68
SAMPLE WET WEIGHT (PER M**2)	.000	.000-.000	.000	.000
SAMPLE DRY WEIGHT (PER M**2)	.000	.000-.000	.000	.000

ORGANISM NAME		NUMBERS/M**2				WET WEIGHT,GRAMS/M**2				AVG. BIOMASS		PERCENTAGES	
PARTS CODE	LH-STAGE	TOTAL	MEAN	RANGE	S.D.	TOTAL	MEAN	RANGE	S.D.	MEAN	S.D.	ABUN-DANCE	BIO-MASS
Polychaeta	C	300.0	100.0	30.0 - 190.0	81.9	.000	.000	.000 - .000	.00	.0000	.0000	.35	.00
Gastropoda	7	80.0	26.7	80.0 - 80.0	46.2	.000	.000	.000 - .000	.00	.0000	.0000	.09	.00
Mesogastropoda	+-egg	790.0	263.3	30.0 - 560.0	270.6	.000	.000	.000 - .000	.00	.0000	.0000	.92	.00
Bivalvia	7	200.0	66.7	200.0 - 200.0	115.5	.000	.000	.000 - .000	.00	.0000	.0000	.23	.00
Halacaridae	C	140.0	46.7	40.0 - 100.0	50.3	.000	.000	.000 - .000	.00	.0000	.0000	.16	.00
Podocopida	C	540.0	180.0	40.0 - 500.0	277.8	.000	.000	.000 - .000	.00	.0000	.0000	.63	.00
Calanoida	AF28	2440.0	813.3	420.0 - 1470.0	572.4	.000	.000	.000 - .000	.00	.0000	.0000	2.85	.00

1 EPIBENTHIC PLANKTON ANALYSIS
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IDENTIFICATION 99MY24
STATION DUWAMISH HEAD GRAVEL
FROM SAMPLES E 1 E 2 E 3

ORGANISM NAME		NUMBERS/M**2				WET WEIGHT,GRAMS/M**2				AVG. BIOMASS		PERCENTAGES	
PARTS CODE	LH-STAGE	TOTAL	MEAN	RANGE	S.D.	TOTAL	MEAN	RANGE	S.D.	MEAN	S.D.	ABUN-DANCE	BIO-MASS
Harpacticoida	A8F	72440.0	24146.7	7140.0 - 45410.0	19486.9	.000	.000	.000 - .000	.00	.0000	.0000	84.62	.00
Cyclopoida	A8	1410.0	470.0	10.0 - 800.0	410.7	.000	.000	.000 - .000	.00	.0000	.0000	1.65	.00
Balanomorpha	7E2	4220.0	1406.7	70.0 - 3550.0	1875.0	.000	.000	.000 - .000	.00	.0000	.0000	4.93	.00
Phyllocarida-leptostraca	C	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Mysidacea-mysida	7	40.0	13.3	20.0 - 20.0	11.5	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
Cumacea	78	20.0	6.7	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.02	.00
Asellota	C	40.0	13.3	40.0 - 40.0	23.1	.000	.000	.000 - .000	.00	.0000	.0000	.05	.00
Gammaridea	A7C	2100.0	700.0	40.0 - 1730.0	903.7	.000	.000	.000 - .000	.00	.0000	.0000	2.45	.00
Caprellidea	7	10.0	3.3	10.0 - 10.0	5.8	.000	.000	.000 - .000	.00	.0000	.0000	.01	.00
Euphausiacea	+-egg	320.0	106.7	320.0 - 320.0	184.8	.000	.000	.000 - .000	.00	.0000	.0000	.37	.00
Euphausiacea	2	440.0	146.7	40.0 - 300.0	136.1	.000	.000	.000 - .000	.00	.0000	.0000	.51	.00
Pleocyemata-caridea	7C	70.0	23.3	10.0 - 40.0	15.3	.000	.000	.000 - .000	.00	.0000	.0000	.08	.00

0 TOTAL NUMBER OF PLANKTON CATEGORIES 19

SHANNON-WEINER DIVERSITY INDEX NUMBERS 1.07
BIOMASS .00
BRILLOUIN-S DIVERSITY INDEX BASED ON NUMBERS 1.07

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